

# Index of Generic Names of Fossil Plants, 1820–1950

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# INDEX OF GENERIC NAMES OF FOSSIL PLANTS 1820-1950

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## ABSTRACT

This work comprises an index of generic names of fossil plants, exclusive of the diatoms, that have been published from 1820 through 1950. It is based on the U. S. Geological Survey's working Compendium Index of Paleobotany and its accompanying bibliography. Although several hundred genera have been added by the author, it is realized that the list is not complete, particularly for the past two decades.

An attempt has been made to cite for each genus a type species, or one that is representative. In addition a brief notation is given concerning the age, geographic origin, and taxonomic status of most of the fossils. For some plants this information is further supplemented with such notations as seemed desirable to aid most effectively those persons who may have occasion to seek the type of information that is presented. It may be emphasized that this is not a critical study but is intended rather as an informational source concerning the origin of the respective generic concepts.

The introduction includes a sketch of the historical origin of the Compendium and states in some detail the types of problems encountered in presenting the work in this form. The bibliography presents primarily the full citations of those references indicated in the index.

## INTRODUCTION

The Paleobotanical Library of the U. S. Geological Survey, Paleontology and Stratigraphy Branch, includes a card file index and bibliography of names assigned to fossil plants.<sup>1</sup> The Index was started in the latter part of the last century and by about 1933 it had developed to a point where it probably represented a compilation of binomials assigned to fossil plants since 1820 that is as nearly complete as is attainable.

After 1933 the indexing was carried on in a somewhat less thorough manner. However, in recognition of the unique importance of this reference source, effort is now being made to bring the Compendium Index up to date and to maintain it thereafter. Because of its importance and especially because of the little publicity that the index

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<sup>1</sup> Prepared by members of the Paleontology and Stratigraphy Branch, U. S. Geological Survey, *see* 1952, Availability of U. S. Geological Survey technical files in Paleontology: Geol. Soc. America Bull., v. 63, no. 5, p. 519-520; Jour. Paleontology, v. 26, no. 3, p. 535-536.

has received, it seems desirable to record something of its origin and development.

Microfilm copies of the complete index and accompanying bibliography are now available for sale on a cost basis.<sup>2</sup>

#### ACKNOWLEDGMENTS

The Geological Survey's Paleobotanical Library as well as the Compendium Index and bibliography were initiated chiefly through the efforts of Lester Frank Ward. Ward is well known for his historical and bibliographical works in the field of paleobotany, the most distinguished of these being a "Sketch of paleobotany" in the Fifth Annual Report of the Director of the U. S. Geological Survey, in 1885, and The Geographical Distribution of Fossil Plants, which appeared in the Eighth Annual Report in 1889. Shortly after his appointment as assistant geologist on the U. S. Geological Survey about 1881, Ward began work on a paleobotanical index that was apparently intended to include a citation of all fossil species believed to be of plant origin. This project was initiated, using quarto-size notebooks, and nine of these large volumes eventually were nearly filled. At present they are on file in the Paleobotanical Library.

Frank Hall Knowlton was appointed "aid in Botany" at the Smithsonian Institution in November 1884 and was transferred to the Geological Survey as assistant paleontologist in June 1889. I am not able to appraise Knowlton's influence in the early days of this bibliographic work although we have concrete evidence of his interest in it as well as a practical application in his paper, "A catalogue of the Cretaceous and Tertiary plants of North America," published in 1898. This was followed in 1919 by an amplified edition called "A catalogue of the Mesozoic and Cenozoic plants of North America."<sup>3</sup> A Supplement to that work was issued in 1944 by Robert Smith Lamotte.

David White started working for Lester Ward in May 1886 and was appointed to the Geological Survey the following October. White's contributions to the general progress of the Survey and the science are, of course, well known.<sup>4</sup> Through David White's efforts, Miss Charlotte H. Schmidt was brought in to carry on the bibliographic work after Lester Ward left the Survey.

The compilation of a large index in notebook form is a cumbersome task and the fact that it was rapidly becoming impossible is evident from a perusal of Ward's first volume, where the entries are excessively crowded. Probably through the interest and planning of Ward, White, and Knowlton this was abandoned and the work trans-

<sup>2</sup> See footnote 1.

<sup>3</sup> Knowlton, F. H., 1919, A catalogue of the Mesozoic and Cenozoic plants of North America: U. S. Geol. Survey, Bull. 696.

<sup>4</sup> Schuchert, Charles, 1936, Biographical memoir of David White: Natl. Acad. Sci. Mem. 9, v. 17, p. 189-221.



ferred to slips of paper, approximately 2½ by 8 inches, with an accompanying bibliography recorded on 4- by 6-inch cards. This transfer was apparently initiated about 1900. Considerable thought had been devoted to the work from the standpoint of its being a long-range project and with regard to ultimate publication. The first clear-cut evidence of this that I have found is a ten-page letter dated June 23, 1904 (files of the Paleobotanical Library, U. S. Geol. Survey), from chief geologist C. W. Hayes to Lester Ward. Because this letter may be taken as the starting point of the Compendium Index in its present form, it seems significant to record certain facts concerning the official Survey attitude toward the project as stated by Hayes. The instructions deal separately with the Index and bibliography. It was originally intended that the bibliography be published and that it should include all significant references to descriptions and figures of fossil plants.

The bibliography accompanying this present work is strictly subordinate to the Compendium Index and is by no means complete. This, however, need not be regarded as a violation of the original intention stated by Hayes. All concerned will agree that the index of plant names is the important feature of the project, and to reduce the cost of publication a bibliography has been compiled primarily to serve the needs of the index.

Regarding the index, Hayes notes that "Work should be continued upon the Index of Paleobotany along the same general lines as heretofore pursued, but with certain modifications indicated below." The modifications include the following instructions: Each slip should bear a complete reference to the species under consideration; "the type species of each genus should be determined by the currently accepted rules of nomenclature and should also be so marked, either by a conventional sign, or the word 'Type'"; the zone and locality should be given; in addition to the original publication, references should be given in which orthographical or nomenclatural changes are recorded; names of diatoms are to be omitted; and remarks concerning acceptable form of publication by the Geological Survey are included.

Apparently Lester Ward relinquished official charge of the project shortly after the date of the letter mentioned above, for in a second one from C. W. Hayes dated February 9, 1905, David White and F. H. Knowlton were appointed a "special committee to have charge of all Survey bibliographic work in paleobotany" and Miss Charlotte Schmidt was appointed to "continue work on the paleobotanical bibliography under the immediate supervision of this committee." Miss Schmidt continued in this capacity until her retirement on June 6, 1928. She was succeeded by Miss E. M. Thom during the period of December 1928 to July 1933.

During the years 1933-45 the progress of the Compendium remained nearly quiescent although additions to the bibliography were made by Roland W. Brown and Charles B. Read. From July 1945 until 1950, under the direction of Dr. Brown, Mrs. Marie Wandel worked part time at bringing the project up to date. It was largely through the continuing interest of Dr. Brown that an active program was ultimately re-established and that continuance of the project was assured by the assignment to it, in February 1951, of Mrs. Jane Evans. Mrs. Evans is now engaged, under the direction of Sergius H. Mamay, in the difficult task of keeping the index and bibliography up to date and gathering up the omissions of the past 20 years.

Finally, I should like to acknowledge with gratitude the assistance of the library staff of the Missouri Botanical Garden, St. Louis, where it was possible to check a great many of the references.

#### ORGANIZATION AND SCOPE OF THE COMPENDIUM INDEX

The Compendium Index consists of about 135,000 slips bearing the names of species of fossil plants or living plants that have been reported in fossil form. The arrangement is alphabetical according to genus, and the species are alphabetically arranged within each genus. Many species are represented by two or more slips corresponding to as many publications in which they are described. Consequently the 135,000 slips do not imply as many species. It is my estimate that there are about half that many represented.

After the first slip for each genus considered below the following information is recorded for each species: The genus, species, and author or authors; this is followed by an abbreviated bibliographic citation. In general this citation is sufficient to lead one directly to the original source, but I have found an appreciable number in which the abbreviation is too brief, and one must therefore refer to the accompanying bibliography of some 17,000 references where the title of the article and journal are given more fully. For most species a brief notation regarding the age and geographic location is also given on the slip.

As to the first slip for each genus, we may consider the two "kinds" of genera represented, those based on modern plants and those based on fossil plants. For the genera based on modern plants, only the genus and author are given. If further information is needed for such genera, one must refer to the Index Kewensis or other reference works dealing with living plants. For the genera based on fossil plants, this first slip cites a type species with its bibliographic data. This species is repeated in its respective alphabetical order. More will be said about the type species in the following section.

## PLAN OF THE GENERIC INDEX

The present task was undertaken with the knowledge that it probably would not be possible in the immediate future to publish formally the compendium in full, owing to financial reasons and the vast amount of editorial work that would be required. The present Generic Index was therefore prepared to supply basic information concerning the starting date of the names of all fossil genera, which it was felt would serve a useful purpose to working paleobotanists and which could be integrated into a complete index if such proved possible later. There are, therefore, several very important points which should be considered by those using this index.

The Generic Index is in no sense a critical treatment. The primary objective has been to cite for each genus a type or representative species that will serve as a much-needed basic reference for paleobotanical taxonomy. Two points may be stressed here. First, it should be noted that no botanical authority stands back of these proposed "types." The species cited here are mostly the ones that are, on somewhat casual inspection, presumed to be the types for the genera. For only a few species has critical opinion been available. Many revisions will be necessary because of initial errors or mistakes in subsequent interpretation. Second, the question will certainly be raised concerning the necessity of detailed editing if, indeed, the type species is already noted in the Compendium Index. This second point must be considered in some detail.

It was the intention of the present writer and his associates to cite useful basic information concerning the names for all fossil plant genera. Actually this is not always given in the Compendium Index in the "type slip." The latter in all or nearly all cases leads one to the original citation of the first binomial published for the genus. It is my estimate that from one-quarter to one-third of these are of no real value for the following reasons: In hundreds of cases they are nomina nuda that were followed (but not invariably) by valid descriptions in later publications; in many instances the original descriptions are so brief as to be of no real use; in hundreds of cases no illustrations are given or an illustration only is given. It is of course understood that illustrations are not required for valid publication before 1912; yet reference to an illustration or particular specimens that may be recovered and studied is usually necessary for satisfactory understanding of any fossil.

It therefore became evident, in spite of the genuinely monumental work of Lester Ward and Charlotte Schmidt, that the starting date of each generic name should be checked by reference to the original source. This has been done by the present writer for approximately 90 percent of the genera. The balance were not checked, chiefly because of the extreme rarity of some of the references.

There are two points in particular, bearing on valid publication, which deserve consideration. First, the concept of a "description" has certainly varied in the minds of different paleobotanists. These range from a short phrase, which may convey little or much, to lengthy ones of many pages. In the present work the term "nom. nud." is applied only where there is no description at all. Second, hundreds of new genera of fossil plants have been created via the "new combination" route. It seems to have been the delight of many paleobotanists of the past to create new names under the slightest pretext. From the standpoint of taxonomy, the fact that new genera have been set up on trivial grounds, is, however, not the most serious problem. The ways in which new combinations have been established are many and equally varied. Sometimes these have been made formally and in the most clear-cut fashion, often accompanied by additional description and illustrations. At the other extreme the generic name has been merely "suggested" as being more suitable for certain species, and it is sometimes difficult to know just how serious the author's intentions were.

Usage of names in the present report has been determined chiefly by the established conventions of the science. That is, it appears that most workers in the field in the past have required but little formality in this respect; they have not deemed it necessary that the author of a new genus (based on a previously described fossil) should cite the original source with any degree of formality. Actually no generic names that are included in the Compendium Index have been omitted.

The information given for each genus in the Generic Index is then, as follows: For the first described species of each genus, the genus, species, and authorship is given, followed by a date, page number, and reference to plate or text figures; this is followed by a brief notation concerning the affinities of the fossil (not recorded in the Compendium Index), the geological horizon and age, and the geographical location. If an illustration did not accompany the first valid description (before 1912), I have also cited the next reference in chronological order where an illustration appears. Other sources of information are also indicated where it was felt they would be useful.

Where a new genus was created by new combination, I have added a citation to the original description of the species. There are thus two "types" of records, examples of which are as follows:

*PITYOIDOLEPIS* Hollick and Jeffrey, 1909.

*Pityoidolepis statenensis* Hollick and Jeffrey, 1909, p. 54, pl. 9, figs. 13, 14;  
cone scale, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.

In this case we are dealing with a clear-cut new description and the reference may be consulted by referring to Hollick and Jeffrey for the year 1909 in the Bibliography.

*PASSALOSTROBUS* Endlicher, 1847.

*Passalostrobus tessellatus* (Bowerbank) Endlicher, 1847, p. 278. For *Cupressinites tessellatus* Bowerbank, 1840, p. 63, pl. 10, figs. 26, 27, 30, 31; cone, Coniferales; Eocene; Sheppey, Kent, England.

Reference to Endlicher for 1847 in the Bibliography leads to the original source of the genus, whereas reference to Bowerbank for 1840 leads to the original description of the species which is accompanied by illustrations. This second reference is sometimes omitted where the first presents an adequate description with illustration.

There are, necessarily, variations from these two patterns, and I should like to emphasize that my principal effort has been to present pertinent and significant information bearing on the initiation of each genus which will be of use in solving taxonomic problems. To do this, it is at least necessary to emphasize that every valid genus must include a species that is recognized as its nomenclatural type.

#### PROBLEMS IN NOMENCLATURE

The preparation of a work such as the present report reveals the greatness of some workers and the shortcomings of others; it displays the many pitfalls that all may stumble into; and it portrays with startling clarity the real character, or at least certain facets of character, of those who have contributed to or confused their science. It would not be polite to reveal all nor would it be to the point.

As indicated above, the Compendium is by no means complete after 1933 although an effort is now being made to remedy that defect. It seemed most desirable, however, to bring the Generic Index up to date insofar as possible at the time of its publication. The present writer has added names of several hundred genera although he is well aware that there are probably many proposed during the past two decades that are not included. The cooperation of all paleobotanists is invited to achieve this end, and it is planned that such omissions will be included in a later supplement.

There are of course many genera in which a type species means nothing. Two categories come to mind here; there are the dozens of genera based on minute fragments of fernlike foliage that display no significant characters and yield no clew to their affinities; there are also scores of genera based on highly problematical remains which, apparently for lack of a better guess, are called "algae." Undoubtedly many of these latter "genera" do not even represent organic remains.

The authors have clearly stated that some genera are not natural and a type species therefore cannot be established. For example, *Bennetticarpus*, Harris, T. M., 1932b, is presumed to be a bennettitalean fruit, but its more exact affinities are not known, and Harris (1932b, p. 101) states "*Bennetticarpus*, not being a natural genus, has no Type-species." For such genera I have simply cited the first species

described or one that is especially well described and illustrated. It thus serves, if not as a type species, as an informational source to the original treatment of the genus. Acceptance or rejection of Harris' philosophy in this and like cases is not a concern of the present work.

The establishment of genera and species is certainly justifiable when the fossil remains are well preserved even though the affinities cannot be determined, but there is no justification for setting up new names when the natural relationships cannot be determined because of poor preservation. Paleobotanists who cannot refrain from bringing such specimens into their laboratories should at least refrain from recording them in print.

Delayed publication of valid names is perhaps the most common cause of nomenclatural confusion. Some instances appear to have been unintentional whereas others clearly have been due to the author's hurry to see his binomials in print or to "stake out a claim" on a particular locality. Regardless of the reason it seems inexcusable. Nearly as bad is the publication of very brief descriptions designed to meet the minimum requirements of the rules until the author may, at his leisure (many years later or never), describe the fossils in proper fashion.

The case of *Botrychioxylon* may be cited as an example. The generic name was published with a brief account by Dukinfield Henry Scott in 1906; it was referred to in several publications through the next few years (Scott, 1907; Scott, 1909; Bower, 1911), but it was not until 1912 that a full account was given and a specific name applied.

*Burserites* Berry presents an interesting example. In 1921 Edward Wilbur Berry described *Burserites venezuelana* n. sp. and in 1924 appeared the description of *B. fayettensis* under the heading of *Burserites* n. gen. Apparently the latter (original) description was delayed in going to press until after the later described *B. venezuelana* appeared in print. Here it is the clear intention of the author that *B. fayettensis* should serve as the type for the genus and therefore should be accepted as such.

Perhaps the most serious violation of all rules, written and unwritten, is the publication of a generic name for possible future use; a few examples may be cited: Dawson (1881, p. 11) proposed the name *Isoetoides* for spores, compared with *Isoetes*, with no description or specific name, the name being simply "suggested . . . pending further investigation"; and Berry (1911, p. 242) in discussing the taxonomy of *Cladophlebis* suggested the possibility of transferring certain species to the new generic entity *Aspidiopteris*.

In the past, authors have not stated clearly that the genus they are describing is new. In this respect I feel that Miss Schmidt performed an especially remarkable task in seeking out the original source.

Many generic names have been duplicated or even triplicated, and again it is to Miss Schmidt's credit that she has been able to sort out the various species described and attribute them to the correct author's genus. Whether or not these are correct in every case in the Compendium Index, I am unable to say. This general problem is further complicated by the propensity of some writers to alter existing generic names very slightly and append their own names to them; the works of Schimper and Meschinelli are noteworthy in this respect. It must of course be remembered that rules of nomenclature were scarcely in existence and certainly not well agreed on at the time when these treatises appeared.

The correction of orthographic errors has resulted in no little confusion in the literature; for example, the multiplicity of spellings in cases such as *Lepidofloyos*—*Lepidophloios*—*Lepidophloyos* and *Cardiocarpon*—*Cardiocarpum*—*Cardiocrarpus* may be cited as typical. In most cases the generally accepted spelling has been adopted here. Although it is recognized that the International Rules of Botanical Nomenclature clearly allow correction of unintentional orthographic errors (1935 ed., sec. 13), it is the present writer's opinion that acceptance of the original spelling is preferable unless an especially bad misspelling is involved.

Undoubtedly the description of fragmentary and meaningless scraps of fossil plants has brought more richly deserved criticism to paleobotany than any other shortcomings of the science. Some workers admittedly consider it their duty to give a name to everything including inferior or poorly preserved material that conveys no knowledge to themselves or to others. This practice is not confined to the distant past.

Paleobotanists, particularly those dealing with remains of late Mesozoic and Cenozoic age, have always been concerned with the problem of whether or not to use generic names based on living plants. For example, is a maplelike leaf actually referable to *Acer* or, for reason of question, should it be assigned to a different genus called *Acerites* or *Aceriphyllum*, etc.? Similarly we have *Juglandinium* Unger, *Juglandoxylon* Kraus, *Juglansoxylon* Falqui, and *Jugloxylon* Stopes and Fujii, all of which are based on woods supposedly comparable with that of modern *Juglans*.

A very recent practice is the introduction by certain spore and pollen workers of the taxonomic entity "Nov. Sporomorph." Pollens are unique structures but no more deserving of a special taxonomic category than seeds, stems, leaves, or any other organs.

It is perhaps not out of order to comment briefly on the mode of publication of certain of the older works, for example, the monographic contributions of such paleobotanists as Sternberg, Brongniart,

Ettingshausen, Schimper, Lindley and Hutton, Saporta, Unger, and several others. Many of these were first issued in parts, either independently or in journals, over a period of several years and then bound into large volumes, and they have become available to many paleobotanists only in this latter form. In the "Bibliography" I have tried insofar as possible to give the exact date of publication of the separate parts of such works.

A considerable number of names retained in the Generic Index are based on remains that are probably not of plant origin, or even doubtfully organic. There are also some, such as *Palaeoxyris* and *Vetacapsula*, which were once held to refer to plants and now are definitely assigned as animals. It has seemed most expedient, for the benefit of those who are not familiar with such changes and doubtful cases, to include them.

#### GEOGRAPHIC AND GEOLOGIC NAMES

A point of considerable concern to the present writer has been that of citing geographical localities. The Compendium slips, and of course the original publications, bear innumerable place names such as Styria, Bohemia, Hesse, Saxony, Liguria, and many others which no longer appear on modern maps. These could of course be translated into the closest modern political equivalents, but whether these would mean anything in another 50 years is debatable. Most of these old names are readily located on C. S. Hammond's "Historical atlas," which is a small and inexpensive booklet; and, as many of them are smaller and more precisely defined geographical units than the countries into which they have since been incorporated, there seems to be no advantage in bringing them up to date.

Geologic names in this bulletin are those employed in the original sources, and their use here does not imply approval by the Geological Survey.

#### RECENT BIBLIOGRAPHIC LITERATURE

An earnest effort has been made to complete this Generic Index through the year 1950. However, as stated above there are undoubtedly some omissions and particularly for the past two decades. As an aid to those readers who may not be well acquainted with the recent literature in this field, it will be useful to cite the more comprehensive bibliographic literature. The publications referred to below will be found cited more fully in the "Bibliography."

In 1921 the National Research Council, Washington, D. C., started to issue annual reports on American paleobotany. These have continued up to the present and now cover paleobotanical work in both North and South America (see American Paleobotany Report, Na-



tional Research Council). Recent European paleobotany has been thoroughly reviewed in two comprehensive reports (1939-47 and 1948-49) issued by the Paleobotany Department of the Swedish Museum of Natural History under the editorship of Olof H. Selling (see Selling, O. H.). Corresponding reports for Britain have been edited by John Walton for the period 1939-51 (see British Paleobotanists). The Indian reports edited by Birbal Sahni and later by Rajendra Varma Sitholey, cover paleobotanical work in that area for the years 1940-50 (see Indian Paleobotany). The eastern Asiatic area is covered by Oishi's recent "Illustrated catalogue of East-Asiatic fossil plants" (see Oishi, Saburo, 1950). Finally may be mentioned Gothan's list of generic names of fossil plants proposed since 1900. This is not complete for that period, but it does present a very valuable contribution to our bibliographic literature (see Gothan, Walther, 1942b).



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## GENERIC INDEX OF FOSSIL PLANTS

This index contains notes on the valid date of establishment of the genus, the type (or a representative) species, and pertinent data pertaining to the latter. For a detailed consideration of the plan of presentation, see "Introduction."

### A

- AACHENOSAURUS** Smets, 1888.  
*Aachenosaurus multidentis* Smets, 1888, pl. 1. See *Aachenoxylon multidentis* (Smets) Hovelacque, 1889, p. 505.
- AACHENOXYLON** Hovelacque, 1890.  
*Aachenoxylon multidentis* (Smets) Hovelacque, 1890, p. 60, pl. 3; wood, dicotyledon; Upper Cretaceous; Moresnet, Belgium.
- ABAKANIELLA** Chachloff, 1939.  
*Abakaniella devonica* Chachloff, 1939, p. 91, pls. 1-3; Middle Devonian; Minusinsk Basin, Russia.
- ABELIELLA** Mägdefrau, 1937.  
*Abetiella riccioides* Mägdefrau, 1937, p. 60, pl. 5, fig. 1; fungus mycelium; Cretaceous; England.
- ABIETIPITES** Wodehouse, 1933.  
*Abietipites antiquus* Wodehouse, 1933, p. 491, figs. 15, 16; pollen, intermediate *Pinus-Tsuga*; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.
- ABIETITES** Hisinger, 1837.  
*Abietites sternerbergii* (Nilsson) Hisinger, 1837, p. 110, pl. 34, fig. 3.
- ABIETOPITYS** Kräusel, 1928.  
*Abietopitys perforata* (Gothan) Kräusel, in Kräusel and Range, 1928, p. 30, pl. 3, fig. 6; pl. 4, figs. 1-4; pl. 5, figs. 3-5; coniferous or cordallean stem; Karroo beds, Permian; German Southwest Africa.
- ABIETOXYLON** Houlbert, 1910.  
*Abietoxylon fulvense* Houlbert, 1910, p. 73, pl. 6; coniferous wood, compared with *Abies*; Tertiary; Manthelambossée-Paulmy, France.
- ABIOTCAULIS** Suzuki, 1910.  
*Abiotcaulis yezoensis* Suzuki, 1910, p. 181, pl. 7, fig. 112; petrified coniferous stem; Upper Cretaceous; Hokkaido, Japan.
- ABRONIA** Laurent, 1905.  
*Abronia bronni* Laurent, 1905, p. 161, pl. 12, fig. 7; pl. 13, figs. 1-17; pl. 14, figs. 6, 7, 12; pl. 15, figs. 5-7; pl. 16, figs. 5, 6; fruit, Nyctaginaceae; Phlocene; France.
- ACACIAEPHYLLUM** Fontaine, 1889.  
*Acaciaephyllum longifolium* Fontaine, 1889, p. 279, pl. 137, fig. 6; pl. 138, figs. 1-3; leaf, dicotyledon; Potomac group, Lower Cretaceous; Dutch Gap Canal, Va.
- ACACIAPHYLLITES** E. W. Berry, 1914.  
*Acaciaphyllites grevilleoides* E. W. Berry, 1914a, p. 45, pl. 9, figs. 9, 10; leaf, Mimosaceae; Black Creek formation, Upper Cretaceous; Middendorf, Chesterfield County, S. C.
- ACACTOXYLON** Schenk, 1883.  
*Acactoxylon antiquum* Schenk, 1883a, p. 9; wood; Lower Oligocene; Libyan Desert, Tunisia. Only illustrated species appears to be *Acactoxylon tenax* Felix, in Felix and Nathorst, 1893, p. 49, pl. 3, figs. 4, 6-8.
- ACANTHOCARPUS** Goeppert, 1865.  
*Acanthocarpus xanthioides* Goeppert, 1865a, p. 177, pl. 26, fig. 27; pl. 28, figs. 8, 9; seed?; Permian; Braunau, Bohemia.
- ACANTHOPHYLLITES** Grand'Eury, 1890.  
*Acanthophyllites nicolai* Grand'Eury, 1890, p. 262, fig. p. 263; Upper Carboniferous; Molières and Fontanes, France.
- ACANTHOPHYTON** Dawson, 1862.  
*Acanthophyton spinosum* Dawson, 1862, p. 324, pl. 12, fig. 6; psilophyte or fragment of fern rachis; Hamilton group, Devonian; New York.
- ACANTHOPTERIS** Sze, 1931.  
*Acanthopteris gothani* Sze, 1931, p. 53, pl. 7, figs. 2-4; Jurassic; Sunchiakou, Jehol province, China.
- ACANTHOTRILETES** Naumova, 1949.  
*Acanthotriletes primigenus* Naumova, 1949, p. 54, fig. 14; Lower Cambrian; USSR.
- ACERINIUM** Unger, 1842.  
*Acerinium danubiale* Unger, 1842b, p. 175; wood; Tertiary; Austria. See also Unger, 1847 (1841-47), p. 136, pl. 44, figs. 9-11.
- ACERIPHYTELLUM** Fontaine, 1889.  
*Aceriphyllum aralioides* Fontaine, 1889 p. 321, pl. 163, fig. 8; leaf, dicotyledon; Potomac group, Lower Cretaceous; "72nd mile post," near Brooke, Va.

**ACERITES** Viviani, 1833.

*Acerites ficifolia* Viviani, 1833, p. 131, pl. 11, fig. 5?; leaf, dicotyledon; Tertiary; Stradella, near Pavia, Italy.

**ACHAENITES** Alexander Braun, 1851.

*Achaenites ungeri* Alexander Braun, in Stizenberger, 1851, p. 83; dicotyledon; Miocene; Oeningen, Switzerland. See also Braun, Alexander, 1854, p. 147, pl. 3, fig. 18.

**ACHLYITES** Meschinelli, 1898.

*Achlyites penetrans* (Duncan) Meschinelli, 1898, p. 10, pl. 7, figs. 7-32; pl. 8, figs. 1-26; fungus, Phycomycete. Meschinelli erroneously attributes this genus to Nees as a fossil form of *Achlya* Nees.

**ACICULARIA** d'Archiac, 1843.

*Acicularia pavantina* d'Archiac, 1843, p. 386, pl. 25, fig. 8a; alga; Eocene; Pisseloup, near Pavant, Dépt. de l'Aisne, France.

**ACICULELLA** Pia, 1927.

*Aciculella bacillum* Pia, in Hirmer, 1927, p. 86; Dasycladaceae; Triassic. See also Pia, 1930, p. 180, fig. 1c.

**ACIPHYLLA** Hector, 1886.

*Actiphylla pungens* Hector, 1886, p. 61, fig. 24a; Cretaceous-Tertiary; Wangopeka, New Zealand.

**ACITHECA** Schimper, 1879.

*Acitheca polymorpha* (Brongniart) Schimper, in Schimper and Schenk, 1879 (1879-90), p. 91, fig. 66 (9-12); fertile fern leaflet, Marattiaceae; Upper Carboniferous.

**ACLISTOCHARA** Peck, 1937.

*Aclistochara bransoni* Peck, 1937, p. 87, pl. 14, figs. 8-11; oogonium, Characeae; Morrison formation, Jurassic?; 18 miles northwest of Rawlins, Wyo.

**ACOPHYLLUM** Zalesky, 1929.

*Acophyllum wolzi* Zalesky, 1929a, p. 191, pl. 16, fig. 1; cordatean? leaf fragment; Carboniferous; Donets [Donetz], Russia.

**ACOROPSIS** Conwentz, 1886.

*Acoropsis minor* Conwentz, 1886, p. 12, pl. 1, figs. 14-17; inflorescence in amber, Araceae; early Tertiary; west Prussia.

**ACOXYLON** Velenovsky and Viniklar, 1929.

*Acoxylon suspectum* Velenovsky and Viniklar, 1929, p. 25, pl. 17; fig. 11; pl. 20, fig. 1; pl. 22, figs. 1-4; incertae sedis; Cretaceous; Slivenec, Bohemia.

**ACOSAMITES** Zalesky, 1936.

*Acosamites elegans* Zalesky, 1936c, p. 249, figs. 5, 6; cycadophyte? foliage; Triassic; left bank river Nakaz, Bachkirie, Russia.

**ACREMONITES** Pia, 1927.

*Acremonites succineus* (Caspary) Pia, in Hirmer, 1927, p. 122; Mucedinaceae, Fungi Imperfecti; Eocene. For *Acremonium succineum* Caspary, 1907, p. 10, pl. 1, fig. 5.

**ACROCARPUS** Schenk, 1867.

*Acrocarpus cuneatus* Schenk, 1867, p. 134, pl. 20, figs. 9-12; fern? foliage; Rhætic; Oberwalz, near Bayreuth, Bavaria. [Caption to plate bears name *Acrop-teris cuneata*, apparently a misprint of the generic name.]

**ACROCOILA** Mueller, 1877.

*Acrocoila anodonta* Mueller, 1877a (1877-79), p. 180; Pliocene; Gulgong, Australia.

**ACROPTERIS**.

See *Acrocarpus* Schenk.

**ACROSTICHIDES** Fontaine, 1883.

*Acrostichides linnaeaeifolius* (Bunbury) Fontaine, 1883, p. 25, pl. 6, fig. 3; pl. 7, figs. 1-4; pl. 8, fig. 1; pl. 9, fig. 1; fern foliage; Mesozoic; "The Gowry," Black Heath, Va. A slightly emended version of *Acrostichites* Goeppert.

**ACROSTICHITES** Goeppert, 1836.

*Acrostichites williamsonis* (Brongniart) Goeppert, 1836, p. 286; fern foliage; Oolite, Jurassic; near Scarborough, England. For *Pecopteris williamsonis* Brongniart, 1828-38, p. 324, pl. 110, figs. 1, 2.

**ACROSTICHOPHYLLUM** Velenovsky, 1889.

*Acrostichophyllum cretaceum* Velenovsky, 1889, p. 28, pl. 2, figs. 22, 23; sterile fern? front fragment; Cretaceous; Vyserovic, Bohemia. [Name only given on page 28; description on page 5 under *Acrostichum cretaceum* Velenovsky.]

**ACROSTICHOPTERIS** Fontaine, 1889.

*Acrostichopteris longipennis* Fontaine, 1889, p. 107, pl. 170, fig. 10; pl. 171, figs. 5, 7; fern foliage; Potomac group, Lower Cretaceous; Baltimore, Md.

**ACROSTIGMA** Wood, 1860.

*Acrostigma* sp. Wood, 1860, p. 239. [A name suggested by Wood for possible reception of *Lepidodendron dubium*.]

**ACTINIDIOPHYLLUM** Nathorst, 1888.

*Actinidiophyllum* sp. Nathorst, 1888, p. 228, pl. 10, fig. 12; leaf, dicotyledon; Tertiary; Japan.

**ACTINOCARPUS** C. F. W. Braun, 1840.

*Actinocarpus mysticus* C. F. W. Braun, 1840, p. 105; nom. nud.

**ACTINOMYCITES** Ellis, 1916.

*Actinomyces* sp. Ellis, 1916, p. 729; fungus; Inferior Oolitic series, Jurassic; Dunliath, Great Britain.

**ACTINOMYCODIUM** Zalesky, 1915.

*Actinomycodium floccidum* Zalesky, 1915, p. 62, pl. 2, fig. 6; pl. 3, figs. 1-6; pl. 10, figs. 3, 4; pl. 12, fig. 4; Actinomy-cete; Carboniferous; Russia.

**ACTINOPHYLLUM** Phillips, 1848.

*Actinophyllum plicatum* Phillips, in Phillips and Salter, 1848, p. 386, pl. 30, fig. 4; alga? compared with *Acetabulum*; Devonian; near Stoke Edith, Woolhope district, Scotland.

**ACTINOPODIUM** Hoeg, 1942.

*Actinopodium nathorstii* Hoeg, 1942, p. 150, pls. 59-60; petrified stem, some similarity with *Schizopodium* of Harris; Devonian; Spitzbergen.

**ACTINOPORELLA** Rainerl, 1922.

Soc. Italiano sci. nat. Atti 1922, v. 61, p. 72, pl. 3, figs. 12-14 (not seen). See also Gothan, 1942b, p. 103.

**ACTINOPTERIS** Schenk, 1865.

*Actinopteris peltata* (Goeppert) Schenk, 1865, p. 23, pl. 6, figs. 3-5; similar to *Cyclopteris*.

**ACTINOSTROBITES** Endlicher, 1847.

*Actinostrobitis globosus* (Bowerbank) Endlicher, 1847, p. 273. For *Cupressinites globosus* Bowerbank, 1840, p. 52, pl. 10, figs. 12-14, 32, 33.

**ADELOCERCIS** Unger, 1845.

*Adelocercis radobojana* Unger, 1845, p. 245; nom. nud.; Leguminosae; Miocene; Radoboj, Croatia.

**ADELOPHYTON** Renault, 1900.

*Adelophyton jutleri* Renault, 1900, p. 424, pl. 6; pl. 7, fig. 1; petrified lycopod stem; Carboniferous (Culm); Alsace.

**ADENANTHEMUM** Conwentz, 1886.

*Adenanthemum iteoides* Conwentz, 1886, p. 92, pl. 9, figs. 15-25; flower, in amber, Saxifragaceae; early Tertiary, west Prussia.

**ADIANTES** Wurm, 1925.

*Adiantes* sp. Wurm, 1925, p. 189; Carboniferous (Culm); Frankenwald, Germany.

**ADIANTIDES** Schimper, 1869.

*Adiantides nervosus* (Brongniart) Schimper, 1869 (1869-74), p. 425. For *Sphenopteris nervosus* Brongniart, 1828a-38, p. 174, pl. 66, fig. 2. Based on *Adiantites* Goeppert, although authorship is claimed by Schimper.

**ADIANTITES** Goeppert, 1836.

*Adiantites oblongifolius* (Brongniart) Goeppert, 1836, p. 227, pl. 21, figs. 4, 5. [This species selected as the type because it is the first described and illustrated by Goeppert, and because it corresponds with modern usage.]

**ADIANTOPHYLLUM** Langeron, 1899.

*Adiantophyllum reticulatum* Langeron, 1899, p. 435, pl. 2, figs. 1, 2; ginkgophyte? leaf; Eocene; Sézanne, France.

**ADROPHYLLUM** Zalesky, 1937.

*Adrophyllum teschekardense* Zalesky, 1937b, p. 82, fig. 49; leaf fragment, incertae sedis; Permian; Russia.

**AECIDITES** Debey and Ettingshausen, 1859.

*Aecidites stellatus* Debey and Ettingshausen, 1859a, p. 212, pl. 3, figs. 2, 3; fungus; Cretaceous (Cenomanian); Aachen, Rhenish Prussia.

**AENIGMATOPHYLLUM** Hartung and Gothan, 1939.

*Aenigmatophyllum gothani* (Krestew) Hartung and Gothan, 1939, p. 520, fig. 1. For *Callipteridium gothani* Krestew, 1928, p. 577, pl. 39, fig. 1.

**AESCULIPHYLLUM** Nathorst, 1888.

*Aesculiphyllum majus* Nathorst, 1888, p. 200, pl. 1, fig. 3; *Aesculus*-like leaf; Tertiary; Japan.

**AESCULOPHYLLUM** Dawson, 1895.

*Aesculophyllum hastingsense* Dawson, 1895, p. 149, pl. 8, fig. 16; leaf fragment compared with *Aesculus*; Tertiary (Paleocene or Eocene); Burrard's Inlet, Vancouver, British Columbia. Uncertain whether or not this is intended as a new genus.

**AETHEOTESTA** Brongniart, 1874.

*Aetheotesta subglobosa* Brongniart, 1874, p. 260, pl. 23, figs. 16-18; silicified seed; Carboniferous; St.-Etienne, France.

**AETHOPHYLLUM** Brongniart, 1828.

*Aethophyllum stipulare* Brongniart, 1828d, p. 455, pl. 18, fig. 1; incertae sedis; Sultz-les-Bains, near Strasbourg.

**AGARICITES** Meschinelli, 1892.

*Agaricites wardianus* Meschinelli, in Saccardo, 1892, p. 745. See also Meschinelli, 1898, p. 1, pl. 1, figs. 1, 2; fungus; Tertiary; Chiavon, Italy. Meschinelli erroneously attributes this genus to Linnaeus, as a fossil form of *Agaricus* Linnaeus.

**AGARITES** Saporta, 1890?

*Agarites fenestratus* Saporta, 1890? (1886-91), p. 314, pl. 276, figs. 1-4; alga; Jurassic; Beaune, France.

**AGASOPTERIS** Zalesky, 1937.

*Agasopteris condomana* Zalesky, 1937c, p. 140, fig. 24; fern foliage; Permian; Osmovskiy, Russia.

**AGATHOXYLON** Hartig, 1848.

*Agathoxylon cordatum* Hartig, 1848c, p. 188; wood; Triassic (Keuper); Coburg, Germany.

**AGAVITES** Abich, 1857.

*Agavites araratica* Abich, 1857, p. 138, pl. 9, figs. 1-3; Miocene; Russian Armenia.

**AGAVITES** Visiani, 1869.

*Agavites prisca* Visiani, 1869, p. 237. See also Visiani, 1875, p. 465, pl. 25.

**AGNOPHYTON** Massalongo, 1850.

*Agnophyton aristatum* Massalongo, 1850, p. 29; alga; Eocene; Monte Bolca, Italy.

**AGNOTOCAULON** Fliche, 1910.

*Agnotocaulon mervilleense* Fliche, 1910, p. 252, pl. 25, figs. 3, 4; stem compression, incertae sedis; Triassic; Meurthe-et-Moselle, Vosges, France.

- AGROSTIDIUM** Massalongo, 1853.  
*Agrostidium priscum* Massalongo, 1853c, p. 130, pl. 3, figs. 1a-b; Eocene; Chivon, Italy.
- AILANTHIPITES** Wodehouse, 1933.  
*Ailanthipites berryi* Wodehouse, 1933, p. 512, fig. 44; pollen, Simarubaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.
- AILANTHOPHYLLUM** Dawson, 1890.  
*Ailanthophyllum incertum* Dawson, 1890, p. 88, fig. 25; leaf; Tertiary; Tranquille River, British Columbia.
- AILANTOIDITES** Thomson, 1950.  
*Ailantoidites* sp. Thomson, in Potonile, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 58; nom. nud., pollen, Simarubaceae; Miocene; Chatt-Aquitain, Germany.
- AIPTERIS** Zalesky, 1939.  
*Aipteris speciosa* Zalesky, 1939b, p. 348, fig. 27; fernlike foliage; Permian; Karanailera, USSR.
- AJUGINUCULA** Reid and Chandler, 1926.  
*Ajuginucula smithii* Reid and Chandler, 1926, p. 127, pl. 8, figs. 17, 18; nutlet, Labiatae; Oligocene; Isle of Wight, England.
- ALANGIOPHYLLUM** Potbury, 1935.  
*Alangiophyllum petiocalum* Potbury, 1935, p. 79, pls. 15-19; leaf, Cornaceae?; upper Eocene; La Porte, Plumas County, Calif.
- ALASITES** P. H. Fritel, 1923.  
Reference not located. Cited in Gothan, 1942b, p. 104.
- ALATAMPULLA** Miner, 1935.  
*Alatampulla bartlettii* Miner, 1935, p. 600, pl. 18, fig. 20; winged seed; Upper Cretaceous; Amlut, Disko Island, Greenland.
- ALATISPORITES** Ibrahim, 1933.  
*Alatisporites pustulatus* Ibrahim, 1933, p. 32, pl. 1, fig. 12; spore, Carboniferous.
- ALBERTIA** Schimper, 1837.  
*Albertia latifolia* Schimper, 1837, p. 13. See also Schimper and Mougeot, 1844, p. 17, pl. 22; Triassic; Sultz-les-Bains, Alsace.
- ALBUCASTRUM** Massalongo, 1859.  
*Albucastrum peranthodium* Massalongo, 1859a, p. 59, pl. 23, fig. 1; fruit, Liliaceae; Eocene; Italy.
- ALCHORNEITES** Langeron, 1899.  
*Alchorneites mallotoides* Langeron, 1899, p. 452, pl. 4, fig. 1; leaf, compared with *Alchornea* and *Mallotus*; Eocene; Sézanne, France.
- ALCICORNOPTERIS** Kidston, 1887.  
*Alcicornopteris convoluta* Kidston, 1887a, p. 152, pl. 8, figs. 11-15; fern? foliage; Calciferous Sandstone series, Lower Carboniferous; Berwickshire, Scotland.
- ALCYONIDIOPSIS** Massalongo, 1856.  
*Alcyonidiopsis longobardiae* Massalongo, 1856a, p. 48, pl. 7, figs. 1, 2.
- ALCYONIUM** Hisinger, 1823.  
*Alcyonium* sp. Hisinger, 1823, p. 89, pl. 3; Silurian (?); Christiania, Norway.
- ALECTORURUS** Schimper, 1869.  
*Alectorurus circinnatus* (Brongniart) Schimper, 1869 (1869-74), p. 203. For *Fucoides circinnatus* Brongniart, 1828a-38, p. 83, pl. 3, fig. 3; alga?; Silurian; Lake Wenern, Kinnakulle, Sweden.
- ALETES** Ibrahim, 1933.  
*Aletes* sp. Ibrahim, 1933, p. 37. Only information given is "Sporen ohne jede Dehizensmarke."
- ALETHOPTERIS** Sternberg, 1825.  
*Alethopteris lonchiticus* (Schlotheim) Sternberg, 1825 (1820-38, tentamen), p. xxi; fernlike foliage, probably Pteridosperm; Carboniferous; Saarbruck, Germany. Sternberg refers to pl. 1, fig. 22, of Schlotheim, 1804; latter is *Filicites lonchiticus* Schlotheim. Sternberg gives spelling as *lonchitidis* but Brongniart uses *lonchiticus*; see Brongniart, 1828a-38, p. 275, pl. 84, figs. 1-7.
- ALGACITES** Schlotheim, 1822.  
*Algacites orobiformis* Schlotheim, 1822, p. 43. For *Carpolithes orobiformis* Schlotheim, 1820, p. 419, pl. 27, fig. 2; Permian; Ilmenau, Prussian Saxony.
- ALGITES** Seward, 1894.  
*Algites valdensis* Seward, 1894a, p. 4, pl. 1, fig. 1; alga; Wealden; Ecclesbourne, near Hastings, England.
- ALISMACITES** Saporta, 1862.  
*Alismacites lancifolius* Saporta, 1862, p. 228; leaf, compared with *Alisma*; Tertiary; France.
- ALISMAPHYLLITES** Knowlton, 1917.  
*Alismaphyllites crassifolium* Knowlton, 1917, p. 286, pl. 55, fig. 1; leaf, Alismaceae?; Raton formation, Eocene; Trinidad, Colo.
- ALISMAPHYLLUM** E. W. Berry, 1911.  
*Alismaphyllum victoriamsoni* (Ward) E. W. Berry, 1911a, p. 452, pl. 79, fig. 5; leaf, Alismaceae; Patapsco formation, Lower Cretaceous; White House Bluff, Va.
- ALISPORITES** Daugherty, 1941.  
*Alisporites opti* Daugherty, 1941, p. 98, pl. 34, fig. 2; spore, incertae sedis; Chinle formation, Triassic; Arizona.
- ALLANTODIOPSIS** Knowlton and Maxon, 1919.  
*Allantodiopsis erosa* (Lesquereux) Knowlton and Maxon, in Knowlton, 1919, p. 61. For *Pteris erosa* Lesquereux, 1878a, p. 53, pl. 4, fig. 8; pinnule fragment; Tertiary; near Trinidad, N. Mex.

**ALLICOSPERMUM** Harris, 1935.

*Allicospermum cystum* Harris, 1935, p. 121, pl. 9, figs. 1-10, 13, 18; gymnosperm seed; late Triassic; Scoresby Sound, east Greenland.

**ALLOASTEROPHYLLITES** Geyler, 1879.

*Alloasterophyllites densifolius* (Grand'Eury) Geyler, 1879, p. 795. For *Asterophyllites densifolius* Grand'Eury, 1877, p. 300, pl. 32, fig. 2; Upper Carboniferous; Sagnat Mdl, Peron, France.

**ALLOOPTERIS** Henry Potonie, 1897.

*Alloopteris quercifolia* (Goeppert) Henry Potonie, 1897 (1897-99), p. 139, fig. 132. This appears to be valid date although name (*Aloopteris*) introduced by Potonie, 1894, p. xlviii.

**ALLOXYLON** Zalesky, 1927.

*Alloxyylon primordiale* Zalesky, 1927a, p. 45, pl. 28, figs. 1-10; coniferous wood; Permian; Aktyubinsk district, Tourgal province, Russia.

**ALMARGEMIA** Florin, 1933.

*Almargemia dentata* (Heer) Florin, 1933, p. 101, pl. 16, figs. 1-7; cycadophyte leaf; Cretaceous (Aptian); Almargem, Portugal.

**ALNIPHYLLUM** Nathorst, 1886.

*Alniphyllum* sp. Nathorst, 1886a, p. 53; nom. nud.

**ALNIPOLENITES** Robert Potonie, 1934.

*Alnipollenites versus* Robert Potonie, 1934, p. 58, pl. 2, figs. 13, 17, 18, 25, 26; pl. 6, fig. 28; pollen, Betulaceae; Tertiary (Braunkohle). See also Potonie, Robert, and Venitz, H., 1934, p. 25.

**ALNITES** Hisinger, 1837.

*Alnites friesii* (Nilsson) Hisinger, 1837, p. 112, pl. 34, fig. 8.

**ALNITES** Deane, 1902.

*Alnites latifolia* Deane, 1902a, p. 63, pl. 15, fig. 4; leaf fragment compared with *Alnus*; Tertiary; Wingello, New South Wales.

**ALNOPHYLLUM** Staub, 1887.

*Alnophyllum reussii* (Ettingshausen) Staub, 1887, p. 267. For *Alnites reussii* Ettingshausen, 1853, p. 39, pl. 31, figs. 13-17; leaf, Betulaceae; Tertiary; Haering, Tirol [Tyrol], Austria.

**ALNOXYLON** Felix, 1884.

*Alnoxyylon vasculosum* Felix, 1884, p. 10, pl. 1, fig. 1; wood; Tertiary; Medgyazo, Hungary.

**ALLOOPTERIS**.

See *Alloopteris* Henry Potonie.

**ALOITES** Visiani, 1869.

*Aloites italica* Visiani, 1869, p. 237; Tertiary; Sostizzo, Italy.

**ALSINITES** Cockerell, 1925.

*Alsinites revelatus* Cockerell, 1925, p. 7, pl. 1, fig. 2; plants with flowers, Alsinaceae; Eocene; Roan Creek opposite Salt Wash, Colo.

**ALSOPHILINA** Dormitzer, 1853.

*Alsophilina kauniciana* Dormitzer, in Krejčí, 1853, p. 28, pl. 1; Cretaceous; Kaunitz, Bohemia. See also Potonie, Henry, 1899, p. 67; and Posthumus, 1931.

**ALSOPHILITES** Hirmer, 1927.

*Alsophilites polonica* (Raciborski) Hirmer, 1927, p. 641; fertile foliage, Cyathaceae; Jurassic; Cracow, Poland.

**AMADOKIA** Zalesky, 1931.

Acad. sci. U. R. S. S. Bull. 1931b, p. 577; Lycopidiales; Upper Devonian (not seen). See also Gothan, 1942b, p. 104.

**AMANSITES** Brongniart, 1849.

*Amanites dentata* Brongniart, 1849, p. 58. For *Fucoides dentatus* Brongniart, 1828 (1828a-38), p. 70, pl. 6, figs. 9-12; graphtolite?; Ordovician (?); Pointe Levi, near Quebec, Canada.

**AMBAROXYLON** Houlbert, 1910.

*Ambaroxyylon lecointrae* Houlbert, 1910, p. 74, pl. 7; wood compared with *Liquidambar*; Tertiary; Manthelan-Bossée-Paulmy, France.

**AMBERITES** Lomax, 1911.

*Amberites* sp. Lomax, 1911, p. 128, pl. 5, figs. 18, 19; a name applied to amber-colored bodies in coal; Arley coal seam (and others), Upper Carboniferous; Atherton, Lancashire, England.

**AMDRUPA** Harris, 1932.

*Amdrupia stenodonta* Harris, 1932a, p. 29, pl. 3, fig. 4; gymnosperm leaf; *Leptodopteris* zone, Raetic; Scoresby Sound, east Greenland.

**AMEGHINOITES** Spegazzini, 1924.

*Ameghinoites desiderata* Spegazzini, 1924a, p. 102, fig. p. 103; leaf, dicotyledon; Eocene; Patagonia.

**AMESONEURON** Goeppert, 1852.

*Amesoneuron noeggerathiae* Goeppert, 1852a, p. 264, pl. 33, fig. 3a; fragment of palm leaf; Tertiary; Germany.

**AMICODOPHYLLUM**.

Error for *Ancistrophyllum*, in Fritsch, 1908, p. 23.

**AMMATOPHYLLUM** Zalesky, 1936.

*Ammatophyllum uninervium* Zalesky, 1936a, p. 223; Carboniferous; Kuznets Basin, Russia.

**AMMATOPSIS** Zalesky, 1937.

*Ammatopsis mira* Zalesky, 1937b, p. 78, fig. 44; shoot bearing long slender leaves, Coniferales; Permian; Russia.

**AMOMOCARPUM** Brongniart, 1828.

*Amomocarpum depressum* Brongniart, 1828b, p. 137. Apparently first illustrated species is *Amomocarpum affine* Sahl, 1938, p. 67, 99, figs. 6, 7.

**AMOMOPHYLLUM** Watelet, 1866.

*Amomophyllum tenua* Watelet, 1866, p. 73, pl. 17, figs. 3, 4; leaf fragments, Zingiberaceae?; Tertiary; Vervins, France.

**AMPELOCISSITES** E. W. Berry, 1929.

*Ampelocissites lytiensis* E. W. Berry, 1929a, p. 39, fig. 1; seed, Vitaceae; Wilcox group, Eocene; near Lytle, Atascosa County, Tex.

**AMPELOPHYLLITES** Knowlton, 1919.

*Ampelophyllites attenuatus* (Lesquereux) Knowlton, 1919, p. 67. For *Ampelophyllum attenuatum* Lesquereux, 1876b, p. 396. See also Lesquereux, 1876a, p. 354, pl. 2, fig. 3.

**AMPELOPHYLLUM** Massalongo, 1859.

*Ampelophyllum noeticum* Massalongo, 1859a, p. 89, pl. 37, figs. 1, 2; leaf and infructescence, Vitaceae; Eocene; Italy.

**AMPELOPHYLLUM** Lesquereux, 1876.

*Ampelophyllum firmus* Lesquereux, 1876b, p. 396; leaf; Cretaceous.

**AMPELOXYLON** Fliche, 1899.

*Ampeloxylon cineritarum* Fliche, 1899a, p. 321; wood; Pliocene; Pas de la Mouge, France. See also Laurent, 1905, p. 210, pl. 17, fig. 11.

**AMPHIBENNETITES** Fliche, 1896.

*Amphibennetites bleichert* Fliche, 1896, p. 163, pl. 14, fig. 1; pl. 5, fig. 2; cycadophyte cone; Cretaceous (Albien); Revigny, France. See also Seward, 1917, p. 418.

**AMPHIBRYOPHYLLUM** Debey, 1881.

*Amphibryophyllum carinatum* Debey, in Mourlon, 1881, p. 133; nom. nud.

**AMPHITOA** Pomel, 1849.

*Amphitoea ambigua* (Brongniart) Pomel, 1849, p. 353. For *Oulmites ambigua* Brongniart, in Cuvier and Brongniart, 1822, p. 558, pl. 8, fig. 6; Eocene; Grignon, France.

**AMPHITOITES** Desmarest, 1822.

*Amphitoites parisiensis* Desmarest, in Cuvier and Brongniart, 1822, p. 234, pl. 8, fig. 10.

**AMPHORIDIUM** Massalongo, 1852.

*Amphoridium valdense* Massalongo, 1852b, p. 177, figs. 1-5 [unnumbered plate]; lichen?; Jurassic; Monte Baldi, Italy.

**AMPHORISPERMUM** Harris, 1932.

*Amphorispermum ellipticum* Harris, 1932b, p. 15, fig. 4; seed, Caytoniales; *Lepidopteris* bed, Rhaetic; Scoresby Sound, east Greenland.

**AMYDROSTROBUS** Harris, 1935.

*Amydrostrobis groenlandicus* Harris, 1935, p. 148, pl. 29; male cone, some resemblance to *Pinus*; *Dictyophyllum* bed, *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**AMYELON** Williamson, 1874.

*Amyelon radicans* Williamson, 1874b, p. 67-68, pl. 7, fig. 46; pls. 8, 9; root, Cordaitales; Carboniferous; England. Williamson (1872, p. 436) introduced name *Amyelon* but no specific designa-

tion; in this reference he refers the fossil previously described by himself as *Dictyoxylon radicans* to *Amyelon*.

**AMYLOXYLON** Hartig, 1848.

*Amyloxyylon huttonii* Hartig, 1848a, p. 170; wood; Tertiary; Germany.

**AMYLOXYLUM**.

In Post and Kuntze, 1904, for *Amyloxyylon* Hartig.

**ANABACAULUS** Emmons, 1857.

*Anabacaulus duplicatus* Emmons, 1857, p. 26, fig. 6; Permian (?); Chatham County, N. C.

**ANABARA** Vologdin, Chernyshev, Kiparisova, 1937.

*Anabara plana* Vologdin, Chernyshev, and Kiparisova. This reference not checked; reported by J. H. Johnson, 1943, as follows: Vologdin, A., Chernyshev, B. B., and Kiparisova, D. D., Palaeontology of the Soviet Arctic: Arctic Inst. Trans., v. 91, p. 1-255; alga; Silurian; Soviet Arctic.

**ANABATHRA** Witham, 1833.

*Anabathra pulcherrima* Witham, 1833, pl. 8, figs. 7-12, pl. 16, fig. 7; Allenbank, Berwickshire, Scotland.

**ANACARDIOPHYLLUM** Ettingshausen, 1870.

*Anacardiophyllum dubium* Ettingshausen, 1870a, p. 90; leaf, Anacardiaceae; Miocene; Moskenberg, Styria.

**ANACARDIOXYLON** Felix, 1882.

*Anacardioxylon spondiaeforme* Felix, 1882a, p. 70; Tertiary; Antiqua, West Indies. See also Felix, 1883a, p. 16, pl. 2, figs. 7, 9.

**ANACARDITES** Saporta, 1861.

*Anacardites spectabilis* Saporta, in Heer, 1861, p. 149; leaf, Anacardiaceae; Tertiary. First illustrated species: *Anacardites alnifolius* Saporta, 1862, p. 201, pl. 2, fig. 1.

**ANACHOROPTERIS** Corda, 1845.

*Anachoropteris pulchra* Corda, 1845, p. 86, pl. 56; petiole with involuted vascular strand; Upper Carboniferous; Radnitz, Bohemia. See also Posthumus, 1931.

**ANARTHROCANNA** Goepfert, 1845.

*Anarthrocanna deliquescens* Goepfert, 1845, p. 379, pl. 25; Upper Carboniferous; village of d'Afonino, Siberia.

**ANCHICODIUM** J. H. Johnson, 1946.

*Anchicodium futille* J. H. Johnson, 1946, p. 1100, pl. 2, fig. 8; pl. 3, fig. 4; pl. 7, fig. 1; alga, Codiaceae; Wakarusa limestone and Auburn shale of Kansas usage, Pennsylvanian; Kansas.

**ANCISTROPHYLLUM** Goepfert, 1841.

*Ancistrophyllum stigmariaeforme* Goepfert, 1841 (1841c-46), p. 67, pl. 17, figs. 1-3; *Lonchopteris*-like foliage; Devonian; Landshut, Silesia.

**ANDRIANIA** Braun, 1848.

*Andriania daruthina* Braun, in Münster, 1843, p. 45, pl. 9, figs. 1, 2; Lower Lias (Lower Jurassic); Theta near Bayreuth, Bavaria. *Andriania polycarpa* Braun, 1840, p. 101; nom. nud.

**ANDROLEPIS** Nathorst, 1902.

*Androlepis ambigua* Nathorst, 1902b, p. 6, pl. 1, figs. 12, 13; fragment of cycadophyte microsporophyll; Rhaetic; Palsjo, Sweden.

**ANDROMEDITES** Ettlingshausen, 1851.

*Andromedites paradoxus* Ettlingshausen, 1851, p. 19, pl. 3, fig. 10; leaf, Ericaceae; Tertiary; Vindobonam, Austria.

**ANDROSTACHYS** Grand'Eury, 1877.

*Androstachys frondosus* Grand'Eury, 1877, pl. 17, fig. 3. [This generic name is apparently a mistake for *Schizostachys*. The binomial *Schizostachys frondosus* Grand'Eury appears in the text, p. 201, and refers to the figure noted above. See discussion by Schopf, 1948, p. 687.]

**ANDROSTROBUS** Schimper, 1870.

*Androstrobos zamioides* Saporta, in Schimper, 1870 (1869-74) p. 199, pl. 72, figs. 1-3; cycad cone similar to *Dioon* and *Zamia*; Jurassic (Bathonian); Étrocney, France.

**ANDROVETTIA** Hollick and Jeffrey, 1909.

*Androvettia statenensis* Hollick and Jeffrey, 1909, p. 22, pls. 3, 7, 28, 29; coniferous "leaves"; Cretaceous; Krelscheville, Staten Island, N. Y.

**ANEIMIDIUM** Schimper, 1869.

*Aneimidium mantelli* (Dunker) Schimper, 1869 (1869-74), p. 486, pl. 31, fig. 13; fern frond fragments, supposed similarity to *Aneimia*; Wealden; Borgloh, northern Germany.

**ANEIMITES** (Dawson) Ettlingshausen, 1865.

*Aneimites obtusolobus* (Naumann) Ettlingshausen, 1865, p. 249. For *Odonopteris obtusiloba* Naumann, in Gelnitz and Gutbier, 1849 (1848-49), p. 14, pl. 8, figs. 9-11. [The generic name originally suggested by Dawson, *Aneimites acadica* Dawson, 1860, p. 461, but used as a subgenus.]

**ANEUROPHYTON** Kräusel and Weyland, 1923.

*Aneurophyton germanicum* Kräusel and Weyland, 1923, p. 172, pl. 7, figs. 4-7; pl. 8, figs. 6-13; pl. 9, figs. 14-19; Psilophytales; Devonian; Germany.

**ANGARIDIUM** Zalesky, 1933.

*Angaridium bardense* Zalesky, 1933a, figs. 4-6; ginkgophyte? foliage; Permian; Kroutaia Katouchka, Russia.

**ANGARODENDRON** Zalesky, 1918.

*Angarodendron obrutchevi* Zalesky, 1918, p. 54, pl. 13, fig. 5; pl. 62; pl. 63; lycopod? stem impression; Carboniferous; Bedoby village; Kirghises Steppes, Russia.

**ANGAROPTERIDIUM** Zalesky, 1937.

*Angaropteridium cardiopteroides* (Schmalhausen) Zalesky, in Tchirkova, 1937, p. 218, figs. 10-15; fernlike pinnules; Permian; Petite Boukon, Russia. [The generic name previously mentioned, Zalesky, 1930b, p. 218; nom. nud.]

**ANGAROPTERIS** Chachlow and Pollak, 1936.

Neues Jahrb., 1936, Beil.-Band 76, Abt. B, p. 334; Pteridospermae; Permian (not seen). See also Gothan, 1942b, p. 105.

**ANGIODENDRON** Eichwald, 1860.

*Angiodendron orientale* Eichwald, 1860, p. 263, pl. 19, fig. 9; stem cast, incertae sedis; Carboniferous; Kaschkabash, near Artinsk, Russia.

**ANGIOPTERIDIUM** Schimper, 1869.

*Angiopteridium muensteri* (Goeppert) Schimper, 1869 (1869-74), p. 603, pl. 35, figs. 1-6; fern leaf, Marattiaceae; Rhaetic; Bayreuth and Bamberg, Bavaria; Steierdorf, Hungary. See note under *Marattiopsis*.

**ANGIOSPERMOPHYTON** Hoskins, 1923.

*Angiospermophyton americanum* Hoskins, 1923, p. 397, figs. 1-13; petrified medullous petiole; Coal No. 5, Pennsylvanian; Harrisburg, Ill.

**ANGIOTHECA** Schimper, 1879.

*Angiotheca angiotheca* (Grand'Eury) Schimper, in Schimper and Schenk, 1879 (1879-90), p. 91, fig. 66.

**ANISOPHYLLUM** Lesquereux, 1874.

*Anisophyllum semialatum* Lesquereux, 1874, p. 98, pl. 6, figs. 1-5; leaf, dicotyledon; Cretaceous; near Beatrice, Gage County, Nebr.

**ANKYROPTERIS** Stenzel, 1889.

*Ankyropteris brongniarti* (Renault) Stenzel, 1889, p. 29; coenopterid fern; Permian; Autun, France. For *Zygopteris brongniarti* Renault, 1869, p. 164, pls. 3-6. See also Renault, 1883, p. 101, pl. 16, fig. 1; and Posthumus, 1931.

**ANNALEPIS** Fliche, 1910.

*Annalepis zeilleri* Fliche, 1910, p. 272, pl. 27, figs. 3-5; lycopod cone scales?; Triassic; Meurthe-et-Moselle, Vosges, France.

**ANNONOXYLON** Boureau, 1950.

*Annonoxylon striatum* Boureau, 1950b, p. 393, pl. 21, figs. 1, 2; Eocene; Sahara, Africa.

**ANNULARIA** Sternberg, 1822.

*Annularia spinulosa* Sternberg, 1822 (1820-38), p. 32, pl. 19, fig. 4; articulate stem with foliage; Carboniferous.

**ANNULARIOPSIS** Zeiller, 1903.

*Annulariopsis inopinata* Zeiller, 1903, p. 132, pl. 35, figs. 2-7; *Annularia*-like foliage; Carboniferous; Tonkin and numerous other localities, see p. 137.

**ANNULARITES** Halle, 1927.

*Annularites ensifolius* Halle, 1927, p. 19, pls. 1-4; foliage, Equisetales; Upper Shihhotse series, Permian; central Shansi, China.

**ANOECTOMERIA** Saporta, 1865.

*Anoectomeria brongniartii* Saporta, 1865, p. 125, pl. 7, fig. 1; rhizome?, Nymphaeaceae; Tertiary; St.-Jean-de-Garguer, France.

**ANOMALOFILICITES** Hollick, 1916.

*Anomalofilicites monstrosus* Hollick, 1916, p. 474, pl. 31; fern frond with abnormal pinnæ; Fort Union formation, Eocene; Kern Ranch, Dawson County, Mont.

**ANOMALOPHYCUS** Fenton and Fenton, 1937.

*Anomalophycus compactus* Fenton and Fenton, 1937, p. 438, pl. 3, figs. 1, 2; calcareous alga; Allentown formation, Cambrian; Portland, Northampton County, Pa.

**ANOMALOPHYLLITES** Watelet, 1866.

*Anomalophyllites tricarimatus* Watelet, 1866, p. 100, pl. 28, fig. 105; leaf fragments, Palmaceae?; Tertiary; Belleu, France.

**ANOMALOXYLON** Felix, 1887.

*Anomaloxyton vicentinum* Felix, 1887a, p. 527, pl. 25, fig. 8; wood; Tertiary; Monte Grumi near Castelgomberto, Italy.

**ANOMALOXYLON** Gothan, 1910.

*Anomaloxyton magnoradiatum* Gothan, 1910, p. 11, pl. 1, fig. 9-11; pl. 2, figs. 2, 3; coniferous wood; Jurassic; Green Harbor, Spitzbergen.

**ANOMASPIS** Hollick and Jeffrey, 1909.

*Anomaspis tuberculata* Hollick and Jeffrey, 1909, p. 49, pls. 10, 25, 26; coniferous cone scales; Cretaceous; Kreisler-ville, Staten Island, N. Y.

**ANOMOPTERIS** Brongniart, 1828.

*Anomopteris mougeotii* Brongniart, 1828b, p. 69; fern foliage. See also Brongniart, 1832 (1828a-38), p. 258, pls. 79-81.

**ANOMORRHOEA** Eichwald, 1844.

*Anomorrhoa fischeri* Eichwald, 1844, p. 144; stem, Osmundaceae; Permian (Zechstein); Orenbourg, Russia. See also Eichwald, 1860 (1860-68), p. 102, pl. 4, figs. 3, 4; Kidston and Gwynne-Vaughan, 1908, p. 216; Posthumus, 1931.

**ANOMOZAMITES** Schimper, 1870.

*Anomozamites inconstans* (Goeppert) Schimper, 1870 (1869-74), p. 140; cycadophyte foliage; Rhaetic; Bayreuth Bavaria. For *Pterophyllum inconstans* Goeppert; first? illustration in Schenk, 1867 (1865-67), p. 171, pl. 37, figs. 5-9.

**ANONASPERMUM** Ball, 1931.

*Anonaspermum reidi* Ball, 1931, p. 121, pl. 20, figs. 5, 9, 11, 13; seeds, Anonaceae; Yegua formation, Eocene; Turkey Creek, Brazos County, Tex.

**ANOPTERIS** Schimper, 1869.

*Anopteris distans* (Presl) Schimper, 1869 (1869-74), p. 471, pl. 33, figs. 1, 2; fern foliage; Triassic (Keuper); Stuttgart.

**ANTARCTICOXYLON** Seward, 1914.

*Antarcticoxylon priestleyi* Seward, 1914, p. 17, pls. 4-8; gymnosperm stem; Priestley glacier, Antarctica.

**ANTEVSIA** Harris, 1937.

*Antevsia zeilleri* (Nathorst) Harris, 1937, p. 35; pteridosperm microsporangiate organ; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland. For *Antholithus zeilleri* Nathorst, 1908c, p. 20, pl. 2, figs. 59, 60; pl. 4.

**ANTHERANGIOPSIS** Nathorst, 1902.

*Antherangiopsis rediviva* Nathorst, 1902b, p. 20, pl. 1, figs. 22, 23; cycadophyte microsporophylls; Rhaetic; Bjuf, Sweden.

**ANTHICOCCLADUS** Zalesky, 1937.

*Anthicocladus fimbriatus* Zalesky, 1937b, p. 81, fig. 48; pteridosperm male inflorescence?; Permian; Matveyevo, USSR.

**ANTHITES** Schimper, 1874.

*Anthites gaudini* (Heer) Schimper, 1874, p. 419; flower, dicotyledon; Tertiary; near Lausanne, France.

**ANTHOCARPUS** Grand'Eury, 1877.

*Anthocarpus botryoides* Grand'Eury, 1877, p. 521; nom. nud.

**ANTHOCEPHALE** Bayer, 1893.

*Anthocephale bohemicum* Bayer, in Fric, 1893, p. 132, fig. 193; Cretaceous (Senonian); Priesen, Bohemia.

**ANTHODIOPSIS** Goeppert, 1864.

*Anthodopsis betnertiana* Goeppert, 1864, p. 85; Upper Carboniferous; Silesia? See also Goeppert, in Quenstedt, 1867, p. 912, pl. 86, fig. 57.

**ANTHOLITHES** Brongniart, 1822.

*Antholithes Uliacea* Brongniart, 1822, p. 320, pl. 14, fig. 7; a small "bud-like" impression showing no fertile parts and of unknown affinity. A "type" species here seems to be of little significance because of the wide diversity of fossils assigned to the genus. For example, compare *Antholithus noeggerathi* Renault, in Renault and Zeiller, 1888, p. 593, pl. 67, fig. 6; *Antholithes amissus* Heer, 1868, p. 139, pl. 23, fig. 12; *Antholithus arberi* Thomas, 1925, p. 327, pl. 14, figs. 33-40.

**ANTHOLITHUS.**

See *Antholithes* Brongniart.



**ANTHOMYCES** Gruss, 1930.

Wochenschr. Brauerl, 1930, Band 42, p. 15; fungus; Tertiary (not seen). See also Gothan, 1942b, p. 105.

**ANTHOPHYCUS** Piedboeuf, 1887.

*Anthophycus dechenianus* (Goeppert) Piedboeuf, 1887, p. 56, pl. 3.

**ANTHOPHYLLITES.**

*Anthophyllites devonicus* (probably error for *Antholithes devonicus* Dawson), in Le Conte, 1882, p. 330, fig. 385.

**ANTHOTYPOLITHES** Schlotheim, 1820.

*Anthotypolites ranunculiformis* Schlotheim, 1820, p. 423; described as ranunculaceous flower?; Permian; Frankenberg, Hesse.

**ANTHRACOCCHONDRUS** Kušta, 1898.

*Anthracochondrus nyranensis* Kušta, 1898, p. 220; Permian; Nyran, Bohemia. See also Kušta, in Ryba, 1904, p. 352, pl. 17, figs. 1, 2.

**ANTHRACOMYCES** Renault, 1898.

*Anthracomyces cannellenensis* Renault, 1898, p. 205, figs. 1-3; fungus mycellum? in cannel coal; Carboniferous; several localities cited.

**ANTHRACOPORELLA** Pla, 1920.

*Anthracoporella spectabilis* Pla, 1920, p. 15, pl. 1, figs. 7-11; alga, Siphonaceae Verticillatae; Carboniferous.

**ANTHROPHYOPSIS** Nathorst, 1878.

*Anthrophyopsis nilssoni* Nathorst, 1878a, p. 43, pl. 7, fig. 5; pl. 8, fig. 6; cycadophyte leaf fragment; Rhaetic; Bjuf, Sweden.

**APACHEA** Daugherty, 1941.

*Apachea arizonica* Daugherty, 1941, p. 55, pl. 9, fig. 2; sterile frond, Dipteridaceae; Chinle formation, Upper Triassic; Arizona.

**APALOXYLON** Renault, 1892.

*Apaloxyton rochei* Renault, 1892a, p. 157, pl. 5; cordaitan stem; Carboniferous; Autun, France.

**APEIBOPSIS** Heer, 1859.

*Apeibopsis gaudini* Heer, 1859, p. 40, pl. 118, figs. 24-26; fruits, Tillaceae; Tertiary; Lausanne, Switzerland.

**APHLEBIA** Presl, 1838.

*Aphlebia acuta* (Germar and Kaulfuss) Presl, in Sternberg, 1838 (1820-38), p. 112. For *Fucoides acutus* Germar and Kaulfuss, 1831, p. 230, pl. 66, fig. 7; Carboniferous; Germany.

**APHLEBIOCARPUS** Stur, 1877.

*Aphlebiocarpus schutzei* Stur, 1877, p. 304, pl. 27, figs. 1-6; fern foliage with associated sporangia; Lower Carboniferous (Culm); Altwasser, Silesia.

**APHLEBIOPTERIS** Gothan, and Zimmerman, 1932.

*Aphlebiopteris boegendorflana* Gothan and Zimmerman, 1932, p. 107, pl. 15, fig. 1; Upper Devonian; Upper Bögendorf, Silesia.

**APHRALYSIA** Garwood, 1914.

*Aphralysia carbonaria* Garwood, 1914, p. 269, pl. 21, figs. 3, 4; rock-building alga; Lower Carboniferous; Ravenstone-dale, Westmoreland, England.

**APHYLLOPTERIS** (Nathorst) Arnold, 1939.

*Aphylopteris delawarensis* Arnold, 1939, p. 292, pl. 10, figs. 2, 3; incertae sedis, Devonian; 4 miles north of Port Jervis, N. Y. *Aphylopteris* sp. Nathorst, 1915, p. 14, pls. 4, 5, 7.

**APHYLLOSTACHYS** Goeppert, 1865.

*Aphylostachys jugleriana* Goeppert, 1865a, p. 14, pl. 1; articulate cone infructescence; Lower Jurassic (Lias); Hannover, Germany.

**APHYLLUM** Artis, 1825.

*Aphyllum cristatum* Artis, 1825, p. 16, pl. 16; lycopod stem impression; Carboniferous; Banktop, Yorkshire, England.

**APHYLLUM** Unger, 1856.

*Aphyllum paradoxum* Unger, 1856, p. 175, pl. 11, figs. 1-4; incertae sedis; Upper Devonian; Saalfeld, Thuringia. Earlier citation: Unger, 1854, p. 599; nom. nud.

**APICULATASPORITES** Ibrahim, 1933.

*Apiculatasporites spinulistratus* Loose, in Ibrahim, 1933, p. 37. No figures given; Ibrahim refers to Neues Jahrb. 1932, Beil.-Band 67, Abt. B, p. 451, pl. 18.

**APICULATISPORITES** Ibrahim, 1933.

*Apiculatisporites aculeatus* Ibrahim, 1933, p. 23, pl. 6, fig. 57; spore; Carboniferous. [Generic concept based on *Triletes* VI in Bennie and Kidston, 1886, p. 109, pl. 3, figs. 6a-c.]

**APIDIUM** Stolley, 1896.

*Apidium kräusei* (Klesow) Stolley, 1896, p. 261, figs. 46, 99.

**APLOPHLEBIS** (Brongniart) Meneghini, 1857.

*Aplophlebis arborescens* (Schlotheim) Meneghini, 1857, p. 108, pl. D, fig. V5.

**APLUDOPHYTON** Massalongo, 1859.

*Apludophyton scleroides* Massalongo, 1859b, p. 22; nom. nud.

**APOCINOPHYLLUM.**

See *Apocynophyllum* Unger.

**APOCYNOCARPUS** Ettingshausen, 1887.

*Apocynocarpum sulcatum* Ettingshausen, 1887, p. 110, pl. 13, fig. 11; Apocynaceae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

**APOCYNOPHYLLUM** Unger, 1850.

*Apocynophyllum seyfriedii* Braun, in Unger, 1850a, p. 433. Apparently first illustrated species is *Apocynophyllum lanceolatum* Unger, 1850b, p. 125, pl. 14, fig. 14; leaf, Apocynaceae; Miocene; Radoboj, Croatia. Cited earlier as *Apocynophyllum*, Unger, 1845, p. 230; nom. nud.

**APOCYNOSPERMUM** Reid and Chandler, 1928.

*Apocynospermum striatum* Reid and Chandler, 1926, p. 118, pl. 8, fig. 3; seed, Apocynaceae; Bembridge beds, lower Oligocene; Isle of Wight, England.

**APOROXYLON** Unger, 1856.

*Aporoxylon primigenium* Unger, 1856, p. 181, pl. 13, figs. 3-11; stem of cordate? affinities; Upper Devonian; Saalfeld, Thuringia. [Binominal first cited in Unger, 1854; nom. nud.]

**APTERALETES** Zalesky, 1939.

*Apteraletes* Zalesky, 1939a, p. 326; nom. nud.

**APTEROMONOLETES** Zalesky, 1939

*Apteromonoletes* Zalesky, 1939a, p. 326; nom. nud.

**APTEROSTROBUS** Gothan and Nagel, 1921.

*Apterostrobis cedroides* Gothan and Nagel, 1921, p. 131, pl. 8; cone; Coniferales; Eocene.

**APTEROTRILETES** Zalesky, 1939.

*Apterotriletes* Zalesky, 1939a, p. 326; nom. nud.

**APTIANA** Stopes, 1912.

*Aptiana radiata* Stopes, 1912, p. 84, pls. 6-8; wood, numerous suggestions as to affinity, see Edwards, 1931, p. 20; Lower Cretaceous (Aptian); Isle of Wight, England.

**ARACEAEITES** Fritel, 1910.

*Araceaeites parisiense* Fritel, 1910, p. 29, pl. 22, fig. 1; spadix, Araceae?; Paleocene; Meudon, Vanves, France.

**ARACEOPHYLLUM** Kräusel, 1929.

*Araceophyllum engleri* Kräusel, 1929, p. 13, pl. 4, figs. 3, 4; leaf fragment; Araceae; Tertiary (Pliocene?); Sungi Tjaban, South Sumatra.

**ARACHNOXYLON** Read, 1938.

*Arachnoxyylon kopfi* (Arnold) Read, 1938, p. 602, figs. 4, 5; petrified stem, Psilophytales; Tully pyrites, Devonian; 1 mile east of Gooding's Landing, Canandaigua Lake, N. Y.

**ARAEIS** Stenzel, 1972.

*Aracis awonensis* (Vatelet) Stenzel, 1972, p. 71. For *Palmacites awonensis* Vatelet, 1866, p. 103, pl. 30, fig. 3; Eocene; Quincy-sous-le-Mont, France.

**ARALIAGEA** Velenovsky, 1882.

*Araliagea propinqua* Velenovsky, 1882, p. 217; nom. nud.

**ARALIACITES** Saporta, 1865.

*Araliacites cordatus* Saporta, 1865, p. 48; leaf, Araliaceae; Tertiary; France.

**ARALIAECARPUM** Menzel, 1913.

K. preuss. geol. Landesant., Jahrb., 1913, Band 34, p. 9, pl. 1, fig. 19; Araliaceae; lower Miocene (not seen). See also Gothan, 1942b, p. 106.

**ARALIAEPHYLLUM** Fontaine, 1889.

*Araliaephyllum obtusilobum* Fontaine, 1889, p. 317, pl. 163, figs. 1, 4; pl. 164, fig. 3; leaf; Potomac group, Lower Cretaceous; near Brooke, Va.

**ARALIANTHEA** Massalongo, 1893.

*Aralianthea brongniarti* Massalongo, in Meschinelli and Squinabol, 1893, p. 403. For *Fucoides obtusus* Brongniart, 1828a-38, p. 60, pl. 8, fig. 4; inflorescence, Araliaceae; Eocene; Monte Bolca, Italy. [Name given previously as *Aralianthea brongniarti* Massalongo, 1857b, p. 777, nom. nud.]

**ARALINIUM** Platen, 1908.

*Aralinium excellens* Platen, 1908, p. 59; wood, early Tertiary; California.

**ARALIOPHYLLUM** Ettingshausen, 1868.

*Araliophyllum dubium* Ettingshausen, 1868b, p. 867. For *Quinquefolium* sp. Ludwig, 1859, p. 145, pl. 58, fig. 8; leaf, dicotyledon?; Miocene; Muenzenberg, Hesse. [Unger, 1865 (1860-65), p. 72, refers to *Araliophyllum denticulatum* Ettingshausen but apparently the name had not been published.]

**ARALIOPSIS** Saporta and Marion, 1878.

*Araliopsis cretacea* (Newberry) Saporta and Marion, 1878, p. 78. For *Sassafras cretaceum* Newberry, in Dana, 1863, p. 471, fig. 746; see also Lesquereux, 1874, pl. 11, figs. 1, 2; pl. 12, fig. 2; leaf, Araliaceae; Cretaceous; Blackbend Hills, Nebr.

**ARALIOPSIS** E. W. Berry, 1911.

*Araliopsis cretacea* (Newberry) E. W. Berry, 1911b, p. 413; leaf, compared with modern *Sassafras*; Upper Cretaceous; Bull Mountain, Cecil County, Md.

**ARALIOPSOIDES** E. W. Berry, 1916.

*Araliopsoides breviloba* E. W. Berry, 1916a, p. 878, pl. 86, fig. 2; leaf, Araliaceae; Raritan formation, Upper Cretaceous; Bull Mountain, Cecil County, Md.

**ARALIPHYLLUM** Nathorst, 1888.

*Araliphyllum raumanni* Nathorst, 1888, p. 219, pl. 20, fig. 10; leaf, dicotyledon; Miocene; Mlogamura, Iyo province, Japan.

**ARALITES** Goeppert, 1854.

*Aralites lanceus* Goeppert, 1854, p. 130; Miocene; Bodenheim, Hesse; nom. nud.

**ARANETZIA** Zalesky, 1934.

*Aranetzia splendens* Zalesky, 1934b, p. 271, figs. 46-48; sphenopterid foliage; Permian; Pechora [Petchora] basin, Russia.

**ARAUCARIOCAULON** Lignier, 1907.

*Araucariocaulon breveradiatum* Lignier, 1907, p. 290, fig. 2; petrified stem, compared with *Araucarioxylon*; Upper Cretaceous (Cenomanian); Dives, France.

**ARAUCARIOPHLOIOS** Lignier, 1907.

*Araucariophloios breveradiatum* Lignier, 1907, p. 291. \* For *Araucariocaulon breveradiatum* Lignier, 1907, p. 290, pl. 19, figs. 33-43.

**ARAUCARIOPITYS** Jeffrey, 1907.

*Araucariopitys americana* Jeffrey, 1907, p. 435, pls. 28-30; araucarian wood; Cretaceous; Staten Island, N. Y.

**ARAUCARIOPSIS** Caspary, 1888.

*Araucariopsis macractis* Caspary, 1888, p. 45. For illustrations, see Caspary, 1889, p. 193, pl. 14, figs. 16-20.

**ARAUCARIOSTROBUS** Krasser, 1921.

*Araucariostrobus mandlii* Krasser, 1921b, p. 221; Jurassic; Nokolsk-Ussuryysk, Russia.

**ARAUCARIOXYLON** Kraus, 1870.

*Araucarioxylon carbonaceum* (Witham) Kraus, in Schimper, 1870 (1869-74), p. 381. For *Pinites carbonaceus* Witham, 1833, p. 73, pl. 11, figs. 6-9; Carboniferous; England.

**ARAUCARITES** Presl, 1838.

*Araucarites goepperti* Presl, in Sternberg, 1838 (1820-38), p. 204, pl. 39, fig. 4; cone, Coniferales; Tertiary?; Tirol.

**ARBERIA** David White, 1908.

*Arberia minasica* David White, 1908, p. 537, pl. 8, figs. 8-10; regarded as inflorescence of *Gangamopteris*; "Permian-Carboniferous"; near Minas, Santa Catharina, Brazil. [This binomial previously published as *Arberia minasica* I. C. White, 1906, p. 379; nom. nud.]

**ARBUTITES** Ettingshausen, 1868.

*Arbutites euri* Ettingshausen, 1868a, p. 236, pl. 39, fig. 14; leaf, Ericaceae; Miocene; Priesen, Bohemia.

**ARCELLITES** Miner, 1935.

*Arcellites disciformis* Miner, 1935, p. 600, pl. 20, figs. 61, 64-66; incertae sedis; Upper Cretaceous; Skansen, Disko Island, Greenland.

**ARCHAEOCALAMITES** Stur, 1875.

*Archaeocalamites radiatus* (Brongniart) Stur, 1875, p. 2, pl. 1, figs. 3-8; pls. 2-4; pl. 5, figs. 1, 2; articulate stems bearing filiform dichotomous leaves; Carboniferous (Culm); Altendorf, Mohradorf, Germany.

**ARCHAEOLITHOTHAMNIUM** Rothpletz, 1891.

*Archaeolithothamnium nummuliticum* (Gumbel) Rothpletz, 1891, p. 316, pl. 17, fig. 5; alga, Corallinaceae; Eocene. Correct genotype?

**ARCHAEOMNIUM** Britton, 1926.

*Archaeomnium patens* Britton, in Knowlton, 1926, p. 24, pl. 8, figs. 1, 2; moss; Mniaceae; Latah formation, Miocene; Spokane, Wash.

**ARCHAEOPHYTON** Britton, 1888.

*Archaeophyton newberryanum* Britton, 1888a, p. 89; plant?; Archaean; Sussex County, N. J. For full description, see Britton, 1888b, p. 123.

**ARCHAEOPITYS** Scott and Jeffrey, 1914.

*Archaeopitys eastmanii* Scott and Jeffrey, 1914, p. 345, pl. 38, figs. 17-19; petrified cordaitan stem; base of Waverley shale, Mississippian; Kentucky.

**ARCHAEOPODOCARPUS** Weigelt, 1930.

*Archaeopodocarpus germanicus* Weigelt, 1930, p. 269, pl. 1, figs. 2-7; pl. 3, fig. 1.

**ARCHAEOPTERIDIUM** Kidston, 1923.

*Archaeopteridium tschermaki* (Stur) Kidston, 1923a, p. 182, pls. 40, 41, 43; foliage of *Archaeopteris* type; Oil Shale group, Carboniferous Limestone, Lower Carboniferous; Scotland.

**ARCHAEOPTERIS** Dawson, 1871.

*Archaeopteris hibernica* (Forbes) Dawson, 1871, p. 48; "fern," at least one species of which has been demonstrated to be heterosporous; see Arnold, 1939; Devonian. For *Cyclopteris hibernica* Forbes, in Murchison, 1854, p. 255, fig. 51.

**ARCHAEORRHIZA** Torell, 1869.

*Archaeorrhiza tuberosa* Torell, 1869, p. 7; Cambrian; Lugnas, Sweden.

**ARCHAEOSIGILLARIA** Kidston, 1901.

*Archaeosigillaria vanuxemi* (Goeppert) Kidston, 1901, p. 39; sigillarian stem, said to lack lateral parichnos scar; Carboniferous. For *Sigillaria vanuxemi* Goeppert, 1852b, p. 249. For illustration, see Dawson, 1862, p. 307, pl. 12, fig. 7; and Kidston in Linnean Soc. London Jour., Botany, 1886, v. 21, p. 560, pl. 18.

**ARCHAEOSIGILLARIOPSIS** Gothan, 1928.

*Archaeosigillariopsis serotina* Gothan, 1928a, p. 1, pl. 1, figs. 1-4; pl. 2; lycopod stem impression; Carboniferous; Flöha, Saxony.

**ARCHAEOTHRIX** Kidston and Lang, 1921.

*Archaeothrix oscillatoriformis* Kidston and Lang, 1921, p. 875, pl. 8, figs. 89, 90; slender unbranched filaments, Cyanophyceae?; Devonian; Muir of Rhyntie, Aberdeenshire, Scotland.

**ARCHAEOXYLON** Kräusel, 1924.

*Archaeoxylon krasseri* Kräusel, 1924, p. 31, pl. 2; fragment of pteridophyte? stem showing cells with bordered pits; pre-Cambrian?; Bohemia.

**ARCHAEOZOON** Matthew, 1890.

*Archaeozoon acadense* Matthew, 1890b, p. 67; plant?; Laurentian; Green Head, St. John, New Brunswick, Canada.

**ARCHAGARICON** Hancock and Atthey, 1869.

*Archagaricon bulbosum* Hancock and Atthey, 1869, p. 226, pl. 10; fungus; Cramlington Black Shale, Upper Carboniferous; Cramlington, Newsham, Northumberland, England.

**ARCHAMPHIROA** Steinmann, 1926.

*Archamphiroa jurassica* Steinmann, in Jaworski, 1926, p. 139, figs. 1a, b; alga; Jurassic; Arroyo Negro, Argentina.

**ARCHIHICORIA** Barbour, 1898.

*Archihicoria siouxiensis* Barbour, 1898, p. 272, pl. 5; petrified kernel of fruit, compared with *Hicoria*; Miocene; Badlands of Hat Creek basin, Sioux County, Nebr.

**ARCTOBAIERA** Florin, 1936.

*Arctobaiera flettii* Florin, 1936b, p. 119, pls. 26-31; pl. 32, figs. 1-6; structurally preserved ginkgophyte foliage; Jurassic; Franz Joseph Land.

**ARCTODENDRON** Nathorst, 1919.

*Arctodendron kidstonii* Nathorst, 1919, p. 457. For *Dictyodendron kidstonii* Nathorst, 1914, p. 72, pl. 8, figs. 1-4; pl. 9, figs. 1-8; pl. 12, figs. 11-20; pl. 13, figs. 32-36.

**ARCTOPODIUM** Unger, 1856.

*Arctopodium insigne* Unger, 1856, p. 177, pl. 12, figs. 1, 2; regarded as identical with *Cladoxylon* (see discussion in Seward, 1917, p. 200); Upper Devonian; Saalfeld, Thuringia. See also *Posthumus*, 1931.

**ARCTOSTAPHYLOIDES** Kirchheimer, 1936.

*Arctostaphyloides globula* (Menzel) Kirchheimer, 1936b, p. 117, pl. 12, figs. 12a-g; fruit, Ericaceae; Tertiary (Braunkohle); Salzhausen, Germany.

**ARCTOXYLON** Kräusel, 1949.

*Arctoxylon magnoradiatum* (Gothan) Kräusel, 1949, p. 112, 186; coniferous wood; Lower Cretaceous or Jurassic.

**AROYOPTERIS** Zalesky, 1936.

*Aroyopteris asiatica* Zalesky, 1936a, p. 224, fig. 1; fern or pteridosperm; foliage; Carboniferous; Russia.

**ARDISIOPHYLLUM** Geyler, 1887.

*Ardisiophyllum* sp. Geyler, 1887a, p. 497, pl. 36, figs. 1-3; leaf fragments, Myrsinaceae?; Eocene; Labuan, Borneo.

**ARECIPITES** Wodehouse, 1933.

*Arecipites punctatus* Wodehouse, 1933, p. 497, fig. 22; pollen, Arecaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

**ARECITES** Squinabol, 1892.

*Arecites trabuccii* Squinabol, 1892, p. 71, pl. 28, fig. 5; leaf, Araceae; Tertiary; Santa Giustina, Italy.

**ARECOPSIS** Fritel, 1927.

*Arecopsis communis* Fritel, 1927, p. 118, fig. 1b; Upper Cretaceous; Faveau, Provence, France.

**ARGOPHYLLITES** Deane, 1902.

*Argophyllites levis* Deane, 1902a, p. 62, pl. 17, fig. 2; leaf fragment, compared with *Argophyllum*; Tertiary; Wingello, New South Wales.

**ARISAEMITES** Knowlton, 1896.

*Arisaemites* sp. Knowlton, in Lindgren, 1896, p. 889; Miocene; Independence Hill, Placer County, Calif.

**ARISTOLOCHIAEPHYLLUM** Fontaine, 1889.

*Aristolochiaephyllum crassinerve* Fontaine, 1889, p. 322, pl. 160, figs. 3-6; leaf; Potomac group, Lower Cretaceous; near Brooke, Va.

**ARISTOLOCHITES** Heer, 1866.

*Aristolochites dentata* Heer, in Capellini and Heer, 1866, p. 18, pl. 2, figs. 1, 2; Upper Cretaceous; Tekamah, Nebr.

**ARISTOLOCHOPSIS** Kuntze, 1904.

*Aristolochopsis* Kuntze, in Post and Kuntze, 1904, p. 44.

**ARISTOPHYCOS** Massalonge, 1858.

*Aristophycos agardhianus* Massalonge, 1858b, p. 745; alga; Tertiary; Italy.

**ARISTOPHYCUS** Miller and Dyer, 1878.

*Aristophycus ramosum* Miller and Dyer, 1878, p. 4, pl. 4, fig. 2; probably not of plant origin; Cincinnati group, Silurian; Cincinnati, Ohio.

**ARNOLDELLA** Read, 1936.

*Arnoldella minuta* Read, 1936a, p. 221, figs. 3, 4; petrified petiole, Pityeae; Upper Devonian; Junction City, Boyle County, Ky.

**AROIDES** Kutorga, 1838.

*Aroides crassipatha* Kutorga, 1838, p. 24. See Saporta and Marlon, 1885, p. 231, figs. 100b, 100c; seed?; Permian, West Ural Mts., Russia.

**ARONITES** Heer, 1855.

*Aronites dubius* Heer, 1855, p. 98, pl. 46, fig. 5; leaf fragment, Araceae?; Tertiary; Switzerland.

**ARONIUM** Ettingshausen, 1870.

*Aronium extinctum* Ettingshausen, 1870b, p. 872, pl. 1, fig. 32; root?; Araceae; Miocene; Radoboj, Croatia.

**ARPEXYLON** Williamson, 1872.

*Arpexylon simplex* Williamson, 1872, p. 438, fig. 1; coenopterid petiole; Calciferous Sandstone series, Lower Carboniferous; Burntisland, Scotland. *See also* Hirmer, 1927, p. 495; and Posthumus, 1931.

**ARTHRAIRIA** Billings, 1872.

*Arthrairia antiquata* Billings, 1872, p. 467, fig. 2; plant?; Silurian; Great Bell Island, Newfoundland, Canada.

**ARTHROCLADION** Sauveur, 1848.

*Arthrocladion rhodii* Sauveur, 1848, p. 2, pl. 65; fragment of decorticated stem?; Carboniferous; Belgium; nom. nud.

**ARTHRODENDROMYELON** Lignier, 1910.

*Arthrodendromylon morierei* Lignier, 1910a, p. 626; articulate stem cast?; Lower Jurassic (Lias); St.-Honorine-la-Guillaume, France.

**ARTHRODENDRON** Scott, 1900.

*Arthrodendron* sp. Scott, 1900b, p. 32. This name, proposed by Scott, was first introduced by Seward, 1898, p. 301, for a calamitean stem described by Williamson, 1871c. Seward, however, used the name as a subgenus.

**ARTHRODENDRON** Ulrich, 1904.

*Arthrodendron diffusum* Ulrich, 1904, p. 138, pl. 14, figs. 1-3; alga, possibly related to *Cymopolia* and *Corallina*; Yakutat formation, Lower Jurassic (Lias); Pogihsli Island, opposite village of Kodiak, Alaska.

**ARTHROON** Renault, 1894.

*Arthron rochei* Renault, 1894, p. 178; see also Renault, 1896, p. 435, figs. 85, 86; arthropod eggs or possibly of fungus origin?, parasite in *Lepidodendron*; Upper Carboniferous; Esnost and Combres, France.

**ARTHROPHYCUS** Hall, 1852.

*Arthropycus harlani* (Conrad) Hall, 1852, p. 5, pls. 1, 2; incertae sedis, worm tracks?; Medina sandstone, Silurian; Rochester, N. Y.

**ARTHROPITYOSTACHYS** Renault, 1896.

*Arthropityostachys borgiensis* Renault, 1896a, p. 133, pl. 61, figs. 1-4; calamitean cone; Upper Carboniferous; Borgis, France.

**ARTHROPITYS** Goeppert, 1864.

*Arthropitys bistriata* (Cotta) Goeppert, 1864, p. 185, pls. 32, 33; calamitean stem; Permian; Chemnitz, Germany.

**ARTHROPORELLA** Stolley, 1893.

*Arthroporella catenularia* Stolley, 1893, p. 145, pl. 7, figs. 9-10; siphonaceous alga; Upper Silurian; Holstein, Kiel, Prussia.

**ARTHROSTIGMA** Dawson, 1871.

*Arthrostigma gracile* Dawson, 1871, p. 41, pl. 13, psilophyte; Devonian; Gaspé, Canada.

**ARTHROTAXITES**.

*See* *Athrotaxites* Unger.

**ARTHROTAXOPSIS**.

*Arthrotaxopsis grandis* Fontaine; this name given in a list in Allan, Warren, and Rutherford, 1932, p. 243, apparently a mistake for *Athrotaxopsis*.

**ARTISIA** Sternberg, 1838.

*Artisia transversa* (Artis) Sternberg, 1838 (1828-38), p. 192, pl. 53, figs. 7-9; cordallean pith cast; Upper Carboniferous; England. [The binomial *Artisia interrupta* first appears in Anonymous, 1827, p. 134 (this is undoubtedly by Sternberg) and is a name given for *Sternbergia transversa* Artis, 1825, pl. 8.]

**ARTOCARPIDIUM** Unger, 1851.

*Artocarpidium integrifolium* Unger, 1851, p. 166, pl. 35, figs. 3, 4; leaf fragment, Artocarpaceae; Tertiary; Sotzka, Styria.

**ARTOCARPOIDES** Saporta, 1865.

*Artocarpoides perampila* Saporta, 1865, p. 46. Apparently first illustrated species: *Artocarpoides conocephaloidea* Saporta, 1868, p. 356, pl. 6, fig. 6; leaf, Artocarpaceae; Eocene, Sézanne, France.

**ARTOCARPOPHYLLUM** Crie, 1889.

*Artocarpophyllum damesii* Crie, 1889a, p. 90; nom. nud.

**ARTOCARPOPHYLLUM** Dawson, 1894.

*Artocarpophyllum occidentale* Dawson, 1894, p. 60, pl. 12, fig. 51; pl. 13, fig. 52; leaf fragment, incertae sedis; Cretaceous; Vancouver Colliery, Nanaimo, Vancouver Island.

**ARTOPHYCUS** J. H. Johnson, 1940.

*Artophycus columnaris* J. H. Johnson, 1940, p. 589, pl. 7, fig. 1; alga, probably Cyanophyceae; Weber formation, Pennsylvania; Trout Creek Pass, Chaffee County, Colo.

**ARUNDINARITES** Saporta, 1862.

*Arundinarites restiaceus* Saporta, 1862, p. 296 [142]; Tertiary; France.

**ARUNDINITES** Otto, 1854.

*Arundinites wohlfarthi* Otto, 1854 (1852-54), p. 27, pl. 4, fig. 2; pl. 7, figs. 1-5; stem fragments, incertae sedis; Cretaceous (Quadersandstein); Paulsdorf, Saxony.

**ASCHEMONIA** Dettmer, 1915.

*Aschemonia gigantea* Dettmer, 1915, p. 287, fig. p. 285; incertae sedis; Cretaceous (Cenomanian); Weissen Berge, near Prague, Bohemia.

**ASCLEPIADITES** MacGinitie, 1941.

*Asclepiadites laterita* MacGinitie, 1941, p. 157, pl. 44, fig. 6; leaf, Asclepiadaceae; Eocene; You Bet, Nevada County, Calif.

**ASCOSOMA** Lorenz, 1904.

*Ascosoma phaneroporata* Lorenz, 1904, p. 194; alga, Siphonaceae; Cambrian; Shantung, China.

- ASKISIELLA** Chachlof, 1939.  
*Askisiella ramosa* Chachlof, 1939, p. 91, pls. 1-3; Middle Devonian; Minussinsk Bassin, Russia.
- ASOLANUS** Wood, 1861.  
*Asolanus ornithiconoides* Wood, 1861a, p. 238, pl. 4, fig. 1; Pennsylvanian; Milnes mine, St. Clair, Pa.?
- ASOLENOXYLON** Renault, 1888.  
*Asolenoxylon* sp. Renault, 1883b, p. 1019; nom. nud.
- ASPASIA** Stefani, 1901.  
*Aspasia amplexans* Stefani, 1901, p. 75, pl. 11, figs. 1-4; incertae sedis; Lower Permian; Monte Vignale, Italy.
- ASPIDIARIA** Presl, 1838.  
*Aspidiaria schlothemiana* Presl, in Sternberg, 1838 (1820-38), p. 131, pl. 68, fig. 10; partly decorticated *Lepidodendron*.
- ASPIDIOIDES** Jaeger, 1827.  
*Aspidioides stuttgartensis* Jaeger, 1827, p. 32, pl. 8, fig. 1; sterile fern frond; Triassic; Stuttgart, Württemberg.
- ASPIDION** Zalesky, 1937.  
*Aspidion decemnerium* Zalesky, 1937b, p. 80, fig. 46; incertae sedis; Permian; Matveyevo, USSR.
- ASPIDIOPHYLLUM** Lesquereux, 1876.  
*Aspidiophyllum trilobatum* Lesquereux, 1876a, p. 361, pl. 2, figs. 1, 2; leaf, incertae sedis; Cretaceous; south of Fort Harker, Kans.
- ASPIDIOPSIS** Henry Potonie, 1893.  
*Aspidopsis confiroides* Henry Potonie, 1893a, p. 242, pl. 1, fig. 8; pl. 26; stem impression, incertae sedis; Permian (Rothliegendes); Manebach-Kammerberg, Germany.
- ASPIDOPTERIS** E. W. Berry, 1911.  
 Nom. nud.; a name suggested by Berry, E. W., 1911a, p. 242, for possible reception of certain species of *Cladophlebia*.
- ASPIDITES** Colla, 1829.  
*Aspidites filixmas* Colla, in Borson, 1829, p. 181.
- ASPIDITES** Goeppert, 1836.  
*Aspidites dentatus* Goeppert, 1836, p. 355, pl. 21, figs. 7, 8.
- ASPLENIODES** Koenig, 1825.  
*Asplenioides obtusum* Koenig, 1825, pl. 16, fig. 199; no description; fernlike foliage.
- ASPLENIOPTERIS** Sternberg, 1825.  
*Aspleniopteris difformis* Sternberg, 1825 (1820-38), Tentamen, p. xxi, pl. 24, fig. 1; fern? foliage; Tertiary (Braunkohle); Bohemia.
- ASPLENIOPTERIS** Fontaine, 1889.  
*Aspleniopteris pinnatifida* Fontaine, 1889, p. 118, pl. 22, figs. 1-3, 6, 7; fern foliage; Potomac group, Lower Cretaceous; Fredericksburg, Va.
- ASPLENIPHYLLUM** Hartung, 1940.  
*Aspleniphyllum foersteri* (Debey and Ettlingshausen) Hartung, 1940, p. 98; pl. 1, figs. 1-3, 5, 6; pl. 2, figs. 6, 7; Upper Cretaceous; Prince Boris mine, Bulgaria.
- ASPLENITES** Colla, 1829.  
*Asplenites trichomanes* Colla, in Borson, 1829, p. 33.
- ASPLENITES** Goeppert, 1836.  
*Asplenites heterophyllum* Goeppert, 1836, p. 278, pl. 18, fig. 1; fertile fern foliage; Charlottenbrunn, Silesia.
- ASSEIBOPSIS**.  
 Error for *Apeibopsis*, in Peola, 1901, p. 189.
- ASTELIAEPHYLLUM** Squinabol, 1892.  
*Astelaeophyllum italicum* Squinabol, 1892, p. 52, pl. 20, fig. 1; leaf, Draceneae; Tertiary; Santa Giustina, Italy.
- ASTEROCALAMITES** (Schimper) Zeiller, 1879.  
*Asterocalamites scrobiculatus* (Schlottheim) Zeiller, 1879, p. 17, pl. 159, fig. 2; articulate stem cast, vascular strands not alternating at node; Carboniferous; France.
- ASTEROCALAMITOPSIS** Gothan, 1949.  
*Asterocalamitopsis sphenophylloides* Gothan, 1949, p. 18, pl. 3, figs. 7-9; pl. 4, figs. 1-4; articulate stem and foliage impression; Lower Carboniferous; Dobrilugk, Germany.
- ASTEROCALYX** Ettlingshausen, 1888.  
*Asterocalyx stiriacus* Ettlingshausen, 1888, p. 231, pl. 3, figs. 1-4; leaf and inflorescence?; Dioscoreae; Miocene; Münzenberg, Styria.
- ASTEROCARPUS** Goeppert, 1836.  
*Asterocarpus sternbergii* Goeppert, 1836, p. 188, pl. 6, figs. 1-3; fertile fern foliage, Marattiaceae?
- ASTEROCELASTRUS** Velenovsky and Viniklar, 1926.  
*Asterocelastrus cretaceous* Velenovsky and Viniklar, 1926, p. 50, pl. 1, fig. 11; fruit, compared with *Pterocelastrus*; Cretaceous; Utruby, Bohemia.
- ASTEROCHLAENA** Corda, 1845.  
*Asterochlaena cottai* Corda, 1845, p. 81.  
 For *Tubicaulis ramosus* Cotta, 1832, p. 23, pl. 3, figs. 1-3; origin unknown. See also Goeppert, 1864-65, p. 41, pl. 8, fig. 1; pl. 9, fig. 1; and Posthumus, 1931.
- ASTEROCHLAENOPSIS** Sahní, 1930.  
*Asterochlaenopsis kirgisica* (Stenzel) Sahní, 1930, p. 401; tree fern, allied to *Asterochlaena* and "*Clepsydropsis*" *australis*; age unknown, possibly Permian; near Pawlodar on river Irtysh, near Akmolinsk, Kirges Steppes, west Siberia.

**ASTEROCYCLITES** Romanski, 1890.

*Asterocyclites* sp. Romanski, 1890, p. 144, pl. 19, fig. 3a; Lower Jurassic; Thian-Schan, Turkistan.

**ASTERODENDRON** Eichwald, 1846.

*Asterodendron issedonum* Eichwald, 1846, p. 562. See also Eichwald, 1851, p. 252, pl. 14, figs. 4-9.

**ASTERODISCUS** Zalesky, 1937.

*Asterodiscus disparis* Zalesky, 1937b, p. 78, fig. 45; lobed cupulelike organ; Permian; Russia.

**ASTROPHRAGMIUM** Reinsch, 1880.

*Asterophragmium superbum* Reinsch, 1880, p. 7, pl. 2, figs. 4, 5; Upper Carboniferous; Saarbruck, Rhenish Prussia.

**ASTROPHYCUS** Lesquereux, 1876.

*Asterophycus coxii* Lesquereux, 1876a, p. 139, pl. 2, figs. 1, 2; incertae sedis; Carboniferous; near New Harmony, Ind.

**ASTROPHYLLITES** Brongniart, 1822.

*Asterophyllites radiatus* Brongniart, 1822, p. 235, pl. 2, fig. 7; foliage; Carboniferous.

**ASTROPHYLOSTACHYS** Schimper, 1880.

*Asterophyllostachys binneyana* Schimper, in Schimper and Schenk, 1880 (1879-90), p. 169, 173, fig. 128(2); calamite cone, Upper Carboniferous.

**ASTROPHYLLUM** Schimper, 1869.

*Asterophyllum furcatum* (Lindley and Hutton) Schimper, 1869 (1869-74) p. 345. For *Solenites furcatus* Lindley and Hutton, 1831-37, pl. 209.

**ASTROPTERIS** Dawson, 1880.

*Astropteris noveboracensis* Dawson, 1880a, p. 476; stem, Cladoxyleae; Devonian; New York. See also Dawson, 1881b, p. 299, pl. 12, figs. 1-9.

**ASTROSOMA** Otto, 1854.

*Astrosoma radiceforme* Otto, 1854 (1852-54), p. 15, pl. 2, fig. 4; pl. 3, figs. 1, 2; described as "algae dubiae," probably not plant; Cretaceous (Quadersandstein); Königstein, Saxony.

**ASTROTHERCA** Presl, 1845.

*Asterotheca sternbergii* (Goepfert) Presl, in Corda, 1845, p. 89. For *Asterocarpus sternbergii* Goepfert, 1836, p. 188, pl. 6, figs. 1-4; fertile frond, Marattiaceae; Carboniferous.

**ASTROTHERITES** Cookson, 1947.

*Asterothyrites sinuatus* Cookson, 1947, p. 209, pl. 12, fig. 8; mycelium and ascumata, Microthyriaceae; Oligocene-Miocene; Yallourn and Hazelwood, Victoria.

**ASTEROXYLON** Kidston and Lang, 1920.

*Asteroxylon mackiei* Kidston and Lang, 1920b, p. 664, pls. 1-17; Psilophytales; Old Red Sandstone, Devonian; Muir of Rhynie, Aberdeenshire, Scotland.

**ASTRAPAEITES** Langeron, 1899.

*Astrapaetes pumicosus* Langeron, 1899, p. 448, pl. 4, fig. 2; leaf, compared with *Dombeya* and *Astrapaea*; Eocene; Sazanane, France.

**ASTROCARYOPSIS** Fliche, 1896.

*Astrocaryopsis sanctaemanehildae* Fliche, 1896, p. 276, pl. 13, figs. 5, 6; seed, incertae sedis; Upper Cretaceous (Cenomanian); Ste.-Maneould, France.

**ASTROCHARA** Stache, 1880.

*Astrochara liburnica* Stache, 1880, p. 201; nom. nud.

**ASTROCLADIUM** Braun, 1840.

*Astrocladium lineare* Braun, 1840, p. 94; nom. nud.

**ASTROCUPULITES** Halle, 1927.

*Astrocupulites acuminatus* Halle, 1927, p. 219, pl. 48, figs. 10, 11; "inflorescence"-bearing cupules; Lower Shihhotse series, Permian; Ch'en-chia-yu, central Shansi, China.

**ASTROMYELON** Williamson, 1883.

*Astromylon williamsonis* (Cash and Hicks) Williamson, 1883, p. 463, pl. 27; petrified calamite root; Halifax beds, Upper Carboniferous; England.

**ASTROPOLITHON** Dawson, 1878.

*Astropolithon hindii* Dawson, 1878, p. 88. See also Dawson, 1888, p. 30, fig. 9.

**ATACTOXYLON** Hartig, 1848.

*Atactoxylon linkii* Hartig, 1848a, p. 171; wood; Tertiary; Wetterau, Ratzburg, Germany.

**ATHROTAXIDIUM** Menzel, 1900.

*Athrotaxidium bilanicum* Menzel, 1900, p. 97, pl. 5, figs. 13-16; Oligocene; Preschen, Bohemia.

**ATHROTAXITES** Unger, 1849.

*Athrotaxites lycopodioides* Unger, 1849, p. 346, pl. 5, figs. 1, 2; foliage-bearing shoots and cones, Coniferales; Jurassic; Solenhofen, Bavaria.

**ATHROTAXOPSIS** Fontaine, 1889.

*Athrotaxopsis grandis* Fontaine, 1889, p. 240, pls. 114, 116, 185; foliage and cones, believed to be related to *Athrotaxis*; Potomac group, Lower Cretaceous; Fredericksburg, Va.

**ATOPOCHARA** Peck, 1938.

*Atopochara trivolvris* Peck, 1938, p. 174, pl. 28, figs. 8-12; oogonium, Charophyta; Trinity group, Lower Cretaceous; Irion County, Tex.

**ATRACYLIOPSIS** Pia, 1937?

*Atracyliopsis* sp. Pia, 1937, p. 829; Dasycladaceae; Paleozoic.

**ATTALEINITES** Tuzson, 1914.

*Attaleinites apiculata* Tuzson, 1914, p. 246, pl. 16, fig. 1; fragment of infructescence, Palmaceae?; Oligocene; Palvolgy valley near Budapest, Hungary.

**AUERBACHIA** Trautschold, 1870.

*Auerbachia echinata* Trautschold, 1870, p. 228, pl. 22, fig. 3; incertae sedis; Wealden; Tarjuchina-Berg, Russia.

**AULACOLEPIS** Ettlingshausen, 1895.

*Aulacolepis rhomboidalis* Ettlingshausen, 1895, p. 12, pl. 1, fig. 10; seed, Coniferales; Upper Cretaceous; Station Oxley, Australia. See also Ettlingshausen, 1893, p. 147; nom. nud.

**AULACOPHYCOS** Massalongo, 1859.

A generic name proposed for *Palaeophycus simplex* Hall, apparently intended as *Aulacophycus simplex* (Hall) Massalongo, in Massalongo and Scarabelli, 1859, p. 92.

**AULACOPHYCUS** Eichwald, 1860.

*Aulacophycus costatus* Eichwald, 1860, p. 50, pl. 1, fig. 1; incertae sedis; Carboniferous; Tarkhansk, Altai, Russia.

**AULACOPTERIS** Corda, 1847.

*Aulacopteris sackii* Corda, 1847, p. 17; nom. nud.

**AULACOPTERIS** Grand'Eury, 1877.

*Aulacopteris vulgaris* Grand'Eury, 1877, p. 125, pl. 12; fernlike foliage; Carboniferous; Loire, France. See also Posthumus, 1931.

**AULACOTHECA** Halle, 1933.

*Aulacotheca elongata* (Kidston) Halle, 1933, p. 30, pl. 7; figs. 7, 9; pteridosperm microsporangiate organ; Lower Yorkian, Carboniferous; Calderbank near Airdrie, Scotland.

**AULACOXYLON** Combes, 1907.

*Aulacoxylon sparnacense* Combes, 1907, p. 28, pl. 1, figs. 1-3; wood, dicotyledon; Eocene.

**AULARTHROPHYTON** Massalongo, 1857.

*Aularthrophyton formosum* Massalongo, 1857a, p. 570, pl. 1, figs. 1, 4; pl. 2, figs. 1, 2; pl. 3, figs. 1, 3; pl. 4, figs. 1, 2; pl. 5, figs. 1, 3; pl. 8, figs. 1-8; incertae sedis; Eocene; Monte Colle, Italy.

**AULOPHYCUS** Fenton and Fenton, 1939.

*Aulophycus repens* Fenton and Fenton, 1939, p. 104, fig. 5; pl. 7, figs. 1, 2; calcareous alga; Cambrian; head of Death Canyon, Teton Mts., Wyo.

**AUSTRELLA** Dana, 1849.

*Austrella rigida* Dana, 1849, p. 720, pl. 14, figs. 7, 8; Carboniferous; Newcastle, New South Wales.

**AUSTROCLEPSIS** Sahní, 1932.

*Austroclepsis australis* (Osborn) Sahní, 1932b, p. 274. For *Ankyropteris australis* Osborn, in Sahní, 1919, p. 82, pl. 4; Zygopterid fern; Carboniferous; Australia. See also Sahní, 1928; Sahní, 1932.

**AUTOPHYLLITES** Grand'Eury, 1890.

*Autophyllites furcatus* Grand'Eury, 1890, p. 225, pl. 17, figs. 9-19; articulate stem with foliage; Carboniferous; St.-Étienne, France.

**AUTUNIA** Krasser, 1921.

*Autunia milleryensis* (Renault) Krasser, 1921a, p. 20. For *Cycadospadia milleryensis* Renault, 1896, p. 329, pl. 73, figs. 1-7.

**AZOLLOPHYLLUM** Penhallow, 1890.

*Azollophyllum primaeum* Penhallow, in Dawson, 1890, p. 77, fig. 2; compared with *Azolla caroliniana* but apparently poorly preserved; Miocene; Stump Lake, British Columbia.

**B****BACCA** Engelhardt, 1922.

*Bacca diospyroides* Engelhardt, 1922, p. 77, pl. 23, fig. 17; lower Tertiary; Messel near Darmstadt, Hesse.

**BACCHARITES** Saporta, 1881.

*Baccharites aquensis* Saporta, 1881, p. 1132. For *Lomatites aquensis* Saporta, 1862, p. 253, pl. 7, fig. 10; Oligocene; Aix, Provence, France.

**BACCITES** Zenker, 1833.

*Baccites cacaoides* Zenker, 1833, p. 10, pl. 1, figs. 4-8; seed or fruit?; Tertiary (Braunkohle); Altenburg, Germany.

**BACHASUPTERIS** Zalesky, 1937.

*Bachasupteris lobata* Zalesky, 1937b, p. 589, figs. 4-7; fern pinnule fragments; Upper Devonian; near Bakhtcha and Grande Karakouba, Donets Basin, Russia.

**BACILLARITES** Karl Feistmantel, 1867.

*Bacillarites problematicus* Karl Feistmantel, 1867, p. 59; Pennsylvanian; Radnitz, Bohemia. See also Geinitz, 1870, p. 63, pl. 1, fig. 12.

**BACILLITES** Meschinelli, 1898.

*Bacillites permianensis* (Renault and Bertrand) Meschinelli, 1898, p. 67, pl. 19, fig. 12; Schizomycete, in coprolite; Permian; France.

**BACTRITES** E. W. Berry, 1924.

*Bactrites pandanifoliolus* E. W. Berry, 1924b, p. 52, pl. 7, figs. 1-6; leaf fragment, Palmaceae; Lisbon formation, Eocene; near Newton, Newton County, Miss.

**BACTRYLLIUM** Heer, 1853.

*Bactryllium canaliculatum* Heer, 1853, p. 125, pl. 0, fig. E; Upper Triassic (Keuper); Val Gorno, Austria.

**BAIERA** Braun, 1843.

*Baiera dichotoma* Braun, in Münster, 1843, p. 20, pl. 12, figs. 1-5; deeply dissected, apparently ginkgophyte leaf; Bayreuth and Strullendorf, Bavaria.

**BAIERELLA** Robert Potonie, 1933.

Preuss. geol. Landesanst. Inst. Paläobotanik u. Petrographie Brennst. 1933, Arb., Band 3, p. 249; Gymnospermae; Lower Jurassic (not seen). See also Gothan, 1942b, p. 108.



**BAIERIDIUM** Gothan and Gimm, 1930.

*Baieridium alphelbiaeforme* Gothan and Gimm, 1930, p. 62-63, pl. 9, figs. 4-6; Carboniferous; Linderberg near Ilmenau, Germany.

**BAIEROPSIS** Fontaine, 1889.

*Baieropsis expansa* Fontaine, 1889, p. 207, pls. 89-92; ginkophyte foliage; Potomac group, Lower Cretaceous; Fredericksburg, Va.

**BAJERA** Sternberg, 1825.

*Bajera Scanica* Sternberg, 1825 (1820-38). Tentamen, p. xxviii, pl. 47, fig. 2; in certae sedis.

**BALANITOCARPUM** Menzel, 1913.

*Balanitocarpum ovatum* Menzel, 1913, p. 36, pl. 4, fig. 15; fruit, Zygothylaceae; Tertiary (Braunkohle); Germany.

**BALANTITES** Goepfert, 1836.

*Balantites martii* Goepfert, 1836, p. 337, pl. 37, figs. 5, 6; sterile fern foliage; Waldenburg, Silesia.

**BALIOSTICHUS** Sternberg, 1833.

*Baliostichus ornatus* Sternberg, 1833 (1820-38), p. 31, pl. 25, fig. 3; defoliated twig, Coniferales?; Upper Jurassic; Solenhofen, Bavaria.

**BAMBUSITES** Ettingshausen, 1887.

*Bambusites arthrostylinus* Ettingshausen, 1887a, p. 95, pl. 9, figs. 1, 1a; leaf, Gramineae?; Eocene; Vegetable Creek, Australia.

**BAMBUSIUM** Unger, 1845.

*Bambusium sepultum* Unger, 1845 (1841-47), p. 128, pl. 40, figs. 1, 2; incertae sedis; Tertiary; Radoboj, Croatia.

**BANARAPHYLLUM** E. W. Berry, 1937.

*Banaraphyllum ovatum* E. W. Berry, 1937, p. 46, pl. 9, fig. 1; leaf, Flacourtiaceae; Paleocene; Cerro Funes, between Chubut and Santa Cruz, Patagonia.

**BANISTERIOPHYLLUM** Ettingshausen, 1886.

*Banisteriophyllum australiense* Ettingshausen, 1886, p. 125, pl. 14, fig. 13; leaf, Malpighiaceae; Eocene, Tingha, Australia.

**BANKSICARPUS** Velenovsky and Viniklar, 1927.

*Banksicarpus cretaceus* Velenovsky and Viniklar, 1927, p. 44, pl. 10, figs. 4, 5; infructescence, compared with *Banksia*; Cretaceous; Vyserovice, Bohemia.

**BANKSIAEIDITES** Cookson, 1950.

*Banksiaeidites minimus* Cookson, 1950, p. 169, pl. 1, figs. 8, 9; pollen, compared with *Banksia* and *Dryandra*; Tertiary (Oligocene-Miocene?); Yallourn and Yallourn North, Victoria.

**BANKSIAEPHYLLUM** Cookson, 1950.

*Banksiaephyllum angustum* Cookson, 1950, p. 146, pl. 1, figs. 1-10; mummified leaves, Proteaceae; Oligocene (Brown coal); Yallourn and Yallourn North, Victoria.

**BANKSIOXYLON** Crie, 1889.

*Banksioxylon australe* Crie, 1889a, p. 78; nom. nud.; Pleistocene, Australia.

**BANKSIPHYLLUM** Velenovsky, 1889.

*Banksiphyllum pusillum* Velenovsky, 1889, p. 53.

**BANKSITES** Saporta, 1861.

*Banksites integer* Saporta, in Heer, 1861, p. 138; Eocene; St. Zacharie, Provence, France. See also Saporta, 1863, p. 68, pl. 8, fig. 7.

**BARAGWANATHIA** Lang and Cookson, 1935.

*Baragwanathia longifolia* Lang and Cookson, 1935, p. 425, pls. 29-31; lycopod, leafy shoots with sporangia; Lower Ludlow, Silurian; Australia.

**BARAKARIA** Seward and Sahni, 1920.

*Barakaria dichotoma* (Feismantel) Seward and Sahni, 1920, p. 16, pl. 3, fig. 29; foliage, some resemblance to *Schizoneura*; Barakar beds, Lower Gondwana; Auranga coalfield, India.

**BARDELLA** Zalesky, 1937.

*Bardella splendida* Zalesky, 1937b, p. 76, fig. 43; shoots bearing leaves, Coniferales; Permian; Kroutala Katouchka, Russia.

**BARDIA** Zalesky, 1933.

Acad. sci. U. R. S. S. Bull., 1933a, p. 284; Pteridospermae; Permian (not seen). See also Gothan, 1942b, p. 108.

**BARDOCARPUS** Zalesky, 1937.

*Bardocarpus aliger* Zalesky, 1937b, p. 87, fig. 56; winged seed; Permian; Matveyevo, USSR.

**BARINOPHYTON** David White, 1905.

*Barinophyton richardsoni* David White, in Smith and White, 1905, p. 65, pl. 4, figs. 5-8; fertile fern? frond; Upper Devonian; Perry, Maine.

**BARINOSTROBUS** Kräusel and Weyland, 1941.

*Barinostrobus spicatus* (Dawson) Kräusel and Weyland, 1941, p. 51, pl. 13, figs. 10, 11; cone?, incertae sedis; Upper Devonian; Perry, Maine.

**BARRANDEINA** Stur, 1882.

*Barrandeina dusikana* (Krejčí) Stur, 1882, p. 362, pl. 3, figs. 3, 4; pl. 5; psilophyte; Devonian (Étage H-h); near Srbsko, Bohemia.

**BARREALIA** Frenguelli, 1942.

*Barrealia dichotoma* Frenguelli, 1942, p. 281, fig. 1, pl. 1, fig. 1; leaf, Matoniaceae?; Triassic; Argentina.

**BARSASSIA** Zalesky, 1933.

*Barsassia ornata* Zalesky, 1933c, p. 1387, fig. 1; mummified stem, Psilophytales?; Upper Devonian; Kuznets [Kousnetz], Russia.

**BASSANIA** Gasparis, 1895.

*Bassania keuperiana* Gasparis, 1895, p. 69, figs. a, b; Upper Triassic (Keuper); Bayreuth, Bavaria.

**BATHYPTERIS** Eichwald, 1860.

*Bathypteris rhomboidea* Eichwald, 1860, p. 96, pl. 4, figs. 1, 2; stem, Osmundaceae; Bjelbel, Orenbourg, Russia. See also Posthumus, 1931.

**BATODENDRON** Landsborough, 1844.

*Batodendron* sp. Landsborough, in Patrick, 1844, p. 290; nom. nud.

**BATODENDRON** Chachloff, 1921.

*Batodendron* sp. Chachloff, 1921, p. 19, figs. 23-25; Upper Devonian; Lake Balbach, Siberia.

**BAUHINITES** Seward and Conway, 1935.

*Bauhinites groenlandica* Seward and Conway, 1935, p. 25, fig. 21; leaf, compared with *Bauhinia glauca* Wall, Leguminosae; Cretaceous; Greenland.

**BEANIA** Carruthers, 1869.

*Beania gracilis* Carruthers, 1869, p. 98, pl. 4; infructescence, Cycadales; Jurassic; Gristhorpe, Yorkshire, England. For recent discussion and associated parts, see Harris, 1941.

**BEANIOPSIS** Ganju, 1944.

*Beaniopsis rajmahalensis* Ganju, 1944, p. 76, pl. 2, figs. 15, 16; fig. 2; seed-bearing cone resembling *Beania*, probably Cycadaceae; Jurassic; Onthea, Rajmahal Hills, India.

**BEATRICEA** Billings, 1857.

*Beatricea nodulosa* Billings, 1857, p. 344; *Incertae sedis*; Lower Silurian; Anticosti at Wreck Point, Canada.

**BEAUPREAIIDITES** Cookson, 1950.

*Beaupreaidites elegansiformis* Cookson, 1950, p. 168, pl. 1, figs. 2-4; pollen, compared with *Beauprea elegans*; Tertiary (Oligocene-Miocene?); many localities, southeastern Australia.

**BECHERA** Sternberg, 1825.

*Bechera ceratophylloides* Sternberg, 1825 (1820-38), Tentamen, p. xxx, pl. 35, fig. 3; roots, or poorly preserved articulate stem and leaf remains; Upper Carboniferous; Swina, Bohemia.

**BECKETTIA** Reid and Chandler, 1933.

*Beckettia mastitoides* Reid and Chandler, 1933, p. 456, pl. 25, figs. 28-36; endocarp, Cornaceae; London Clay, Eocene; Sheppey, Kent, England.

**BECKLESIA** Seward, 1895.

*Becklesia anomala* Seward, 1895, p. 179, pl. 14, figs. 2, 3; foliage, *incertae sedis*; Wealden; Ecclesbourne, near Hastings, England.

**BEDHEIMIA** Schuster, 1933.

*Beitr. Geologie Thüringen*, 1933, Band 3, p. 239; Lycopodiales; Keuper (not seen). See also Gothan, 1942b, p. 108.

**BEINERTIA** Goeppert, 1836.

*Beinertia gymnogammoides* Goeppert, 1836, p. 273, pl. 16, figs. 4, 5; sterile fern foliage; Charlottenbrunn, Silesia.

**BELEMNOPTERIS** Ottokar Feistmantel, 1876.

*Belemnopteris woodmasoniana* Ottokar Feistmantel, 1876, p. 371, pl. 20, figs. 1, 2; fern? foliage; Damuda series Gondwana system; Raniganj, India.

**BELENOPHYLLUM** Zalesky, 1928.

*Belenophyllum aericulum* Zalesky, 1928, p. 801; nom. nud.; Lower Carboniferous; North Caucasus.

**BELENOPTERIS** Zalesky, 1930.

*Belenopteris ivanovi* Zalesky, 1930f, p. 928; nom. nud.

**BELIDOXYLON** Hartig, 1848.

*Belidoxylon acerosa* (Unger) Hartig, 1848b, p. 138. For *Peuce acerosa* Unger, 1841 (1841-48), p. 14, pl. 3, figs. 1-44; Miocene; Wurmberg, Styria.

**BELODENDRON** Debey, 1848.

*Belodendron nesii* Debey, 1848, p. 121; nom. nud.

**BELONODENDRON** Marck, 1863.

*Belonodendron densifolium* Marck, 1863, p. 80, pl. 13, figs. 8, 9.

**BELTINA** Walcott, 1899.

*Beltina danai* Walcott, 1899, p. 239, pls. 25-27; considered by Walcott to be crustacean but by others to be alga (see Fenton and Fenton, 1931, p. 686); Greyson shales, Algonkian; Deep Creek Canyon, near Glenwood, Mont.

**BELZUNGIA** Morellet, 1908.

*Belzungia borneti* Morellet, 1908, p. 97, fig. 2; siphonaceous alga; Eocene (Thanetian); Boncourt, France.

**BERMBERGIA** Caspary, 1881.

*Bembergia pentatrias* Caspary, 1881, p. 29; Tertiary; Samland, Baltic Prussia.

**BENIZIA** Debey and Ettingshausen, 1859.

*Benizia calopteris* Debey and Ettingshausen, 1859b, p. 216, pl. 5, figs. 13-17; fertile fern frond fragment; Upper Cretaceous; Aachen, Rhenish Prussia.

**BENNETTICARPUS** T. M., Harris, 1932.

*Bennetticarpus oxylepidus* T. M. Harris, 1932b, p. 101, pl. 14, figs. 1-6, 11; fruit, Bennettitales; *Leptopteris* bed, Rhaetian; Scoresby Sound, east Greenland.

**BENNETTISTEMON** Harris, 1932.

*Bennettistemon ambium* Harris, 1932b, p. 98, pls. 11, 12; microsporophyll, Bennettitales; *Lepidopteris* bed, Rhaetian; Scoresby Sound, east Greenland.

**BENNETTITACEARUM** Gothan, 1914.

*Bennettitacearum* sp. Gothan, 1914, p. 132, pl. 27, fig. 5; cycadophyte cone fragment; Bavaetic; Wasserstuhl, near Rollhofen, Bavaria.

- BENNETTITANTHUS** Turutanova-Ketova, 1930.  
*Bennettitanthus masculinus* Turutanova-Ketova, 1930, p. 151, pl. 5, fig. 38; Jurassic, southwest Turkistan.
- BENNETTITES** Carruthers, 1870.  
*Bennettites sawbyanus* Carruthers, 1870, p. 698, pl. 57; cycadophyte trunk; Wealden; Brook Point, Isle of Wight, England.
- BENNETTITOLEPIS** Florin, 1933.  
*Bennettitolepis dactylota* (Harris) Florin, 1933, p. 34. For *Cycadospadix dactylota* Harris, 1932b, p. 97, pl. 10, figs. 1, 2; megasporophyll, Bennettitales; *Leptodopteris* bed, Rhaeto-Liassic; Scoresby Sound, east Greenland.
- BENSONIA** Buckman, 1845.  
*Bensonia ovata* Buckman, in Murchison, 1845, p. 93; "a parallel veined (aquatic?) endogen"; Stonesfield slate; Sevenhampton Common, England.
- BENSNINITES** Rina Scott, 1908.  
*Bensonites fusiformis* Rina Scott, 1908, p. 683, figs. 1-7; sporangia; Lower Carboniferous; Burntisland, Scotland.
- BENSTEDTIA** (Seward) Knowlton, 1911.  
*Benstedtia benstedti* (König) Knowlton, 1911, p. 468; coniferous stem fragment; Lower Greensand, Cretaceous; Kent, England. The generic name was assigned by Seward, 1896a, but no species designated; the taxonomy is reviewed by Knowlton, 1911, although Stopes, 1911, criticizes his treatment on the grounds that it "is not a recognizable species."
- BENTHAMIPHYLLUM** Velenovsky, 1889.  
*Benthamiphyllum dubium* Velenovsky, 1889, p. 58. For *Benthamia dubia* Velenovsky, 1887, p. 11, pl. 7, fig. 4; Upper Cretaceous; Vyserovice, Czechoslovakia.
- BERBERIDIPHYLLUM** Dusen, 1899.  
*Berberidiphyllum reflexum* Dusen, 1899, p. 106, pl. 8, fig. 11; leaf fragment, compared with *Berberis buxifolia* Lamarck; Oligocene; Río Guillermo, Chile.
- BERENDTIA** Goeppert, 1845.  
*Berendtia primuloides* Goeppert, in Berendt, 1845, p. 80, pl. 5, figs. 21-26; staminate flower, dicotyledon; Miocene; Prussia.
- BERGERIA** Presl, 1838.  
*Bergeria acuta* Presl, in Sternberg, 1838 (1820-38), p. 184, pl. 48, fig. 1a; impression of *Lepidodendron* leaf cushion; Carboniferous; Bohemia.
- BERGIOPHYTON** Kurtz, 1902.  
*Bergiophyton insigne* Kurtz, 1902, p. 211; nom. nud.
- BERGIOPTERIS** Kurtz, 1921.  
*Bergiopteris insignis* Kurtz, 1921, p. 149; "Permo-Carboniferous"; Argentina.
- BERNETTIA** Gothan, 1914.  
*Bernetia inopinata* Gothan, 1914, p. 58, pl. 27, figs. 1-4; pl. 34, fig. 3; cycadophyte? cone; Rhaetic; Nürnberg.
- BERNOULLIA** Heer, 1876.  
*Bernoullia helvetica* Heer, 1876a, p. 88, pl. 38, figs. 1-6; fertile fern foliage; Triassic; Switzerland.
- BERRIOCHLOA** Elias, 1932.  
*Berriochloa glabra* (Berry) Elias, 1932, p. 347, pl. 28, figs. 13-16; pl. 29, fig. 1; grass fruit, Hordeae?; near base of Ogallala formation, upper Miocene-lower Pliocene; Wallace County, Kans.
- BERRYA** Knowlton, 1930.  
*Berrya racemosa* Knowlton, 1930, p. 134, pl. 41, figs. 4, 5; raceme of fruits, incertae sedis; Denver formation, Upper Cretaceous; Golden, Colo.
- BERWYNIA** Hicks, 1882.  
*Berwynia carruthersi* Hicks, 1882, p. 100, pl. 3; arborescent lycopod stem; Silurian; North Wales.
- BETULAEPOLLENITES** Robert Potonie, 1934.  
*Betulaepollenites microexcelsus* Robert Potonie, 1934, p. 58, pl. 2, figs. 22, 27; pollen, Betulaceae; Miocene (Braunkohle).
- BETULINIUM** Unger, 1842.  
*Betulinium tenerum* Unger, 1842a, p. 101; wood, incertae sedis; Tertiary; Mecklenburg, Austria. See also Unger 1847 (1841-47), p. 118, pl. 34, figs. 8-10.
- BETULIPHYLLUM** Dusen, 1899.  
*Betuliphyllum patagonicum* Dusen, 1899, p. 102, pl. 10, figs. 15, 16; leaf, Betulaceae?; Oligocene; Punta Arenas, Chile.
- BETULITES** Goeppert, 1838.  
*Betulites salzhauseusis* Goeppert, 1838, p. 567, pl. 42; staminate inflorescence; Miocene; Salzhause, near Nedda, Wetterau, Hesse.
- BETULOIDITES** Thiergart, 1950.  
*Betuloidites* sp. Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 52, pl. C, fig. 17; pollen, Betulaceae; nom. nud.
- BETULOXYLON** Kaiser, 1880.  
*Betuloxylon oligocenicum* Kaiser, 1880b, p. 511; Betulaceae; Oligocene.
- BEVOCASTRIA** Garwood, 1931.  
*Bevocastria conglobata* Garwood, 1931, p. 141, pl. 12, figs. 1-3; alga; Tuedian, Lower Carboniferous; Hole of Lyne, northern Cumberland, England.
- BIARMELLA** Zalesky, 1939.  
*Biarmella triloba* Zalesky, 1939b, p. 353, fig. 32; fern? pinnule fragment; Permian; Tchekarda, USSR.

**BIARMOBAIERA** Zalesky, 1939.

*Biarmobateria uralensis* Zalesky, 1939b, p. 361, fig. 40; ginkgophyte? leaf fragment; Permian; Tchekarda, USSR.

**BIARMODENDRON** Zalesky, 1939.

*Biarmodendron foliosum* Zalesky, 1939b, p. 368, fig. 51; foliage twig, Coniferales; Permian; Matveyevo, USSR.

**BIARMOPTERIS** Zalesky, 1937.

*Biarmopteris pulchra* Zalesky, 1937b, p. 47, fig. 11; incertae sedis; Permian; near village of Matveyevo, USSR.

**BICARPELLITES** Perkins, 1904.

*Bicarpellites grayana* Perkins, 1904, p. 190, pl. 78, fig. 69; fruit; Tertiary; Brandon, Vt.

**BICORBULA** Condra and Elias, 1945.

*Bicorbula arizonica* Condra and Elias, 1945, p. 118, pl. 13, figs. 1-8; pl. 14, figs. 1-3; pl. 15, figs. 1-7; pl. 16, figs. 1, 2; bryozoan with algal association; Kaibab formation, middle Permian; east of Jacob's Lake, Ariz.

**BIDENTITES** Heer, 1859.

*Bidentites antiquus* Heer, 1859, p. 6, pl. 101, fig. 20; seed, Compositae; Tertiary; Oeningen, Switzerland.

**BIGNONICAPSULA** E. W. Berry, 1930.

*Bignonicapsula formosa* E. W. Berry, 1930, p. 132, pl. 43, fig. 3; large capsule containing winged seeds, Bignoniaceae; Wilcox group, lower Eocene; a quarter of a mile east of Denmark, Madison County, Tenn.

**BIGNONIOPHYLLUM** Ettingshausen, 1870.

*Bignoniophyllum getoniaeformis* Ettingshausen, 1870b, p. 881, pl. 1, figs. 6, 7; leaf, Bignoniaceae; Miocene; Radoboj, Croatia.

**BIGNONIPHYLLUM** Velenovsky, 1889.

*Bignoniophyllum cordatum* Velenovsky, 1889, p. 54.

**BIGNONITES** Saporta, 1861.

*Bignonites palaeospermus* Saporta, in Heer, 1861, p. 147; seed, Bignoniaceae; Tertiary. Apparently first illustrated species is *Bignonites americanus* Berry, 1925b, p. 176, pl. 2, fig. 12.

**BIGNONOIDES** E. W. Berry, 1923.

*Bignonoides orbicularis* E. W. Berry, 1923, p. 25, pl. 3, fig. 4; seeds, Bignoniaceae; Miocene; Palomares, Saravia estate, Caxaca, Mexico.

**BILIGNEA** Kidston, 1923.

*Bilignea solida* Kidston, in Scott, 1923, p. 134; pteridosperm? stem; Carboniferous; Ayrshire, Scotland. See also Scott, 1925, p. 579, pl. 3, figs. 22-37; pl. 4; pl. 5, fig. 35.

**BILLARDIERITES** Caspary, 1882.

*Billardierites longistylus* Caspary, 1882, p. 24; flower, in amber, Pittosporaceae; Miocene; Samland, Baltic Prussia. See also Conwentz, 1880, p. 80, pl. 8, figs. 16-19.

**BILOBITES** Dekay, 1824.

*Bllobites rugosa* (D'Orbigny) Saporta, 1870, p. 164, fig. 1; incertae sedis; Silurian. Not specifically named in Dekay, 1824.

**BIOBRIA** Elias, 1932.

*Biorbia rugosa* (Berry) Elias, 1932, p. 350, pl. 29; nutlets, Borraginaceae; Ogallala beds, early Pliocene; Wallace County, Kans., Yuma County, Colo.

**BIOTOCALAMITES** Grand'Eury, 1877.

*Biotocalamites* sp. Grand'Eury, 1877, p. 332; nom. nud.

**BJUVIA** Florin, 1933.

*Bjuvia simplex* Florin, 1933, p. 50, pl. 1, fig. 3; pl. 2, figs. 4-7; pl. 3, figs. 4-8; cycadophyte leaf; Rhaetic; Bjuv, Sweden.

**BLASARIA** Zalesky, 1934.

*Blasaria siberica* Zalesky, 1934a, figs. 1, 2; lycopod leaf base impression; Devonian; Russia.

**BLASTOLEPIS** Zigno, 1885.

*Blastolepis otozamites* Zigno, 1885, p. 174, pl. 42, fig. 9; cycadophyte seed; lower Oolite, Middle Jurassic; Salaorno Valley near Rovere di Velo, Italy.

**BLASTOPHRAGMIUM** Reinsch, 1880.

*Blastophragmium elegans* Reinsch, 1880, p. 6, pl. 1; pl. 2, fig. 1. See also Reinsch, 1881, p. 113, pl. 47, figs. 1-7; pl. 48, figs. 1-5; pl. 49, figs. 1-3; Upper Carboniferous; Saarbruck, Rhenish Prussia, etc.

**BLASTOPHYCUS** Miller and Dyer, 1878.

*Blastophycus diadematus* Miller and Dyer, 1878, p. 24, pl. 1, figs. 1, 2; plant?; Upper Ordovician; Cincinnati, Ohio.

**BLECHNOXYLON** Etheridge, 1899.

*Blechnoxylon talbragarensense* Etheridge, 1899b, p. 135; partly petrified fern stem with leaves attached showing development of secondary wood; "Permian-Carboniferous"; between Gulgong and Cockabutta Hill, county of Bligh, New South Wales.

**BLOSENBERGIA** Gothan, 1939.

*Blosenbergia gallwitziana* Gothan, in Gallwitz and Gothan, 1939, p. 763, pl. 49, figs. 9-19; lycopod or psilophyte? stem impression; Upper Devonian; Blosenbergl, Vogtland, Saxony.

**BOCKSCHIA** Goeppert, 1836.

*Bockschia flabellata* Goeppert, 1836, p. 176, pl. 1, figs. 1, 2; fertile fern frond; Waldenburg, Silesia.

**BOEGENDORFIA** Gothan and Zimmerman, 1932.

*Boegendorfia semiarticulata* Gothan and Zimmerman, 1932, p. 110, pl. 13, figs. 2, 3; pl. 15, fig. 6; pl. 17, figs. 3, 4; Upper Devonian; Upper Bögendorf, Silesia.

**BOLBOPODIUM** Saporta, 1874.

*Bolbopodium pictaviense* Saporta, 1874 (1873c-75), p. 258, pl. 118, fig. 2; cycad stem; Jurassic (Oxfordian); Montanais, near Poitiers, France.

**BOLIVIANA** Salter, 1860.

*Boliviana melocactus* Salter, 1860, p. 71, fig. 8, fig. 9; incertae sedis; Silurian?; Illimani, Bolivia.

**BOLONIA** Meunier, 1886.

*Bolonia lata* Meunier, 1886, p. 567, pl. 30, fig. 8; plant?; Upper Jurassic; Pas-de-Calais, France.

**BOMBACIPHYLLUM** Engelhardt, 1891.

*Bombaciphyllum opacum* Engelhardt, 1891, p. 669, pl. 8, fig. 9; leaf, Malvaceae; Tertiary; Caronel, Chile.

**BOMBACITES** E. W. Berry, 1916.

*Bombacites formosus* E. W. Berry, 1916a, p. 289, pl. 75, fig. 1; leaves, Bombacaceae; Lagrange formation, Wilcox group, lower Eocene; Puryear, Henry County, Tenn.

**BOMBACOPHYLLUM** Velenovsky, 1889.

*Bombacophyllum argillaceum* Velenovsky, 1889, p. 39.

**BONAVENTUREA** Debey and Ettingshausen, 1859.

*Bonaventurea cardinalis* Debey and Ettingshausen, 1859b, p. 203, pl. 3, figs. 2-9; fern frond and spores; Upper Cretaceous; Aachen, Rhenish Prussia.

**BORNIA** Sternberg, 1825.

*Bornia equisetiformis* (Schlotheim) Sternberg, 1825 (1820-38), Tentamen, p. xxviii. See Schlotheim, 1804, pl. 2, fig. 3. First illustrated after 1820 in Steiniger, 1841 (1840-41), fig. 13.

**BOROLDAIPHYCUS** Vologdin, 1948.

*Boroldaiaphycus borovikovi* Vologdin, 1948, p. 83, pl. 1; alga; Devonian; Russia.

**BOROVICZIA** Zalesky, 1905.

*Boroviczia karpinskii* Zalesky, 1905, p. 331, figs. 19-23; seeds; Lower Carboniferous; Russia. See Seward, 1917, p. 358.

**BORRAGINITES** Heer, 1859.

*Borriginites myosotiflorus* Heer, 1859, p. 17, pl. 103, fig. 19; flower, Borraginaceae; Tertiary; Oeningen, Switzerland.

**BOSTRICHOPHYTON** Squinabol, 1890.

*Bostrichophyton pantanelli* Squinabol, 1890, p. 183, pl. 7, fig. 5; alga?; Tertiary; Vallata, Valle del Tresinaro, Italy.

**BOSWORTHIA** Walcott, 1919.

*Bosworthia simulans* Walcott, 1919, p. 241, pl. 57, fig. 31; pl. 58, fig. 1; alga; Burgess shale, Stephen formation, Middle Cambrian; 1 mile northeast of Burgess Pass, above Field, British Columbia.

**BOTHRODENDRON** Lindley and Hutton, 1833.

*Bothrodendron punctatum* Lindley and Hutton, 1833, p. 1, pl. 81; stem compression; High Main coal seam, Carboniferous; Jarrow Colliery, England.

**BOTHROSTROBUS** (Nathorst) Zalesky, 1904.

*Bothrostrobus olryi* (Zeiller) Zalesky, 1904, p. 48, 107, pl. 6, figs. 4, 4a, 11, 12; cone of *Bothrodendron*; Upper Carboniferous; Marihay, Belgium. See also Nathorst, 1894, p. 43; Seward, 1910, p. 262.

**BOTRYCHIOPSIS** Kurtz, 1894.

*Botrychiopsis weissiana* Kurtz, 1894, p. 121, pl. 1; fern? foliage; "Permo-Carboniferous"; Retamito, San Juan province, Argentina.

**BOTRYCHIOXYLON** D. H. Scott, 1912.

*Botrychioxylon paradoxum* D. H. Scott, 1912, p. 373, pls. 37-41; coenopteris fern stem with secondary wood; Lower Coal Measures, Upper Carboniferous; Lancashire, England. The generic name was first given by Scott, 1906, p. 518, with a very brief description; later references were made as follows: Scott, 1907, p. 181; Scott, 1909, p. 318, 344; Bower, 1911, p. 546; however, it was not until 1912 that Scott assigned a specific name, described the fossil in detail, and presented illustrations. See also Posthumus, 1931.

**BOTRYOCOCCITES** C. E. Bertrand, 1898.

*Botryococcites largae* C. E. Bertrand, 1898, p. 182, pl. 5, fig. 30a; pl. 11, figs. 127-132; Oligocene; Bois d'Asson, France.

**BOTRYOCONUS** Goeppert, 1864.

*Botryoconus goldenbergi* Goeppert, 1864, p. 152; inflorescence, Cordatales; Upper Carboniferous. See also Grand'Eury, 1877, p. 279, pl. 33.

**BOTRYOPTERIS** Renault, 1875.

*Botryopteris forensis* Renault, 1875a, p. 202; petrified fertile frond, Coenopteridales; Upper Carboniferous; St.-Etienne, France. See also Renault, 1875b, p. 227, pl. 8; pl. 9, figs. 4, 7; pl. 11, fig. 20; Posthumus, 1931.

**BOTRYTITES** Meschinelli, 1892.

*Botrytites similis* (Menge and Goeppert) Meschinelli, in Saccardo, 1892, p. 789. For *Botrytis similis* Menge and Goeppert, in Goeppert, 1853, p. 453.

**BOTTGERIA** Crie, 1889.

*Bottgeria multiradiata* Crie, 1889b, p. 19; nom. nud. According to information received by Prof. L. F. Ward from Zeiller, all the specimens (of *Bottgeria*, *Feistmantelia*, *Martinia*, and *Taenioxylon*) of species discussed in this paper by Crie were lost, none of them having been described or figured.

**BOUEINA** Toulia, 1883.

*Boueina hochstetteri* Toulia, 1883, p. 1319, pl. 6, figs. 10a-c; pls. 7-9; Middle Jurassic (Oolite); Pirof near Sofia, Bulgaria.

**BOULAYA** (Carpentier) Halle, 1933.

*Boulaya fertilis* (Kidston) Halle, 1933, p. 25, pl. 6, figs. 4-9; text fig. 6; pteridosperm microsporangiate organ; Westphalien, Carboniferous; France, Germany, Holland, England. The genus created by Carpentier, 1925, but no specific entity assigned.

**BOWERBANKELLA** Reid and Chandler, 1933.

*Bowerbankella tillacoroidea* Reid and Chandler, 1933, p. 153, pl. 3, figs. 34-41; endocarp, Menispermaceae; London Clay, Eocene; Sheppey, Kent, England.

**BOWERBANKIA** Debey, 1849.

*Bowerbankia attenuata* Debey, 1849, p. 299; nom. nud.

**BOWERIA** Kidston, 1911.

*Boweria schatzarensis* (Stur) Kidston, 1911, figs. 5, 6; fern frond fragment, intermediate between botryopterid and modern leptosporangiate ferns?; Upper Carboniferous; Belgium.

**BOWMANITES** Binney, 1871.

*Bowmanites cambrensis* Binney, 1871, p. 59, pl. 10, figs. 1-3; cone, Sphenophyllales; Lower Coal Measures, Upper Carboniferous; near Pontypool, South Wales. See also Hoskins and Cross, 1943.

**BRACHYBACULITIES** Gruss, 1928.

*Brachybaculites*, 1928, Band 1, p. 514; alga; Devonian (not seen). See also Gothan, 1942b, p. 110.

**BRACHYCARPHIUM** Berkeley, 1849.

*Brachycarphum thomasi* Berkeley, 1849, p. 78. A name substituted for the earlier invalid name *Brachycladium thomasi* Berkeley, 1848, p. 382.

**BRACHYCLADITES** Meschinelli, 1892.

*Brachycladites thomasi* (Berkeley) Meschinelli, in Saccardo, 1892, p. 790. See also Meschinelli, 1898, p. 81, pl. 22, figs. 9, 10.

**BRACHYCLADIUM** Berkeley, 1848.

*Brachycladium thomasi* Berkeley, 1848, p. 382, pl. 11, fig. 2; fungus, compared with *Botrytis*, in amber; East Prussia. See *Brachycarphum*.

**BRACHYDACTYLUS** Reis, 1923.

*Brachydactylus radialis* Reis, 1923, p. 113, pl. 3, figs. 7-9; pl. 4, fig. 9; Tertiary; Rhenish Prussia.

**BRACHYOXYLON** Hollick and Jeffrey, 1909.

*Brachyoxylon notabile* Hollick and Jeffrey, 1909, p. 54, pls. 13, 14; araucarian wood; Cretaceous; Kreischerville, Staten Island, N. Y.

**BRACHYPHYLLUM** Brongniart, 1828.

*Brachyphyllum mamillare* Brongniart, 1828b, p. 109; twig and foliage, Coniferales; Jurassic (Oolitic).

**BRACHYRUSCUS** Cockerell, 1922.

*Brachyruscus allenii* Cockerell, 1922, p. 213, fig. 1; pistillate flower, Liliaceae; Miocene; Florissant, Colo.

**BRANDONIA** Perkins, 1904.

*Brandonia globulus* Perkins, 1904, p. 192, pl. 78, figs. 73, 74; fruit; Tertiary; Brandon, Vt.

**BRASENIOPSIS** Saporta, 1894.

*Braseniopsis venulosa* Saporta, 1894, p. 192, pl. 34, figs. 1-4; leaf, Nymphaeaceae; Mesozoic; Portugal.

**BRAVARDIA** Hauthal, 1902.

*Bravardia mendozensis* Hauthal, in Kurtz, 1902, p. 57; nom. nud.

**BREDAEA** Goeppert, 1857.

*Bredaea moroides* Goeppert, 1857, p. 56, pl. 1, figs. 6, 7; petrified wood, incertae sedis; Tertiary; Java.

**BRESCIPHYLLUM** Velenovsky, 1889.

*Bresciphyllum cretaceum* Velenovsky, 1889, pl. 5, figs. 2, 3; dicotyledonous leaf compared with *Brescia formosa*; Upper Cretaceous (Cenomanian); Lidic, Bohemia.

**BRETONTIA** Bertrand and Hovelacque, 1892.

*Bretontia hardingheni* Bertrand and Hovelacque, in Bertrand and Renault, 1892, p. 243, pl. 7, figs. 32-34; Carboniferous; Autun, France.

**BRIARDINA** (Munier-Chalmas) Morellet and Morellet, 1922.

*Briardina archiace* Munier-Chalmas, in Morellet and Morellet, 1922, p. 26 (type species?); Eocene; Gaas, France. [The generic name appears as NOM. nud. in Munier-Chalmas, 1877, p. 817.]

**BRIGHTONIA** Harris, 1932.

*Brightonia arota* Harris, 1932b, p. 119, pl. 10, microsporophyll, incertae sedis; *Leptopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**BRITTSIA** David White, 1899.

*Brittsia problematica* David White, 1899, p. 98, pl. 47; figs. 1-5; pl. 48, figs. 1-3; fernlike foliage; Pennsylvanian; 3½ miles southeast of Clinton, Mo.

**BROECKELLA** (Munier-Chalmas) Morellet and Morellet, 1922.

*Broeckella belgica* Munier-Chalmas, in Morellet and Morellet, 1922, p. 22, pl. 10, figs. 56-57, alga, Dasycladaceae; Eocene (Montien); Mons, Belgium.

**BRÖGGERIA** Nathorst, 1915.

*Bröggeria norvegica* Nathorst, 1915, p. 21, pl. 3, figs. 5-7; pl. 4, figs. 4-9; Devonian; Norway.

**BROMELIANTHUS** Massalongo, 1859.

*Bromelanthus heufferianus* Massalongo, 1859a, p. 62, pl. 36, figs. 2, 3; flower, Bromellaceae?; Eocene; Italy.

**BROMELITES** Schmalhausen, 1884.

*Bromelites dollinski* Schmalhausen, 1884, p. 296, pl. 30, fig. 7; Eocene; Kiev, Russia.

**BRONGNIARTITES** Unger, 1845.

*Brongniartites graecus* Unger, 1845, p. 264; wood; Tertiary; Lestos, Greece.

**BRONGNIARTITES** Zalesky, 1927.

*Brongniartites salicifolius* (Fischer) Zalesky, 1927a, p. 39, pl. 9, fig. 1; pl. 10, figs. 1-3; pl. 11, fig. 1; pl. 12, fig. 2; leaf, incertae sedis; Permian; Belebey district, Urals, Russia.

**BRONNITES** Unger, 1842.

*Bronnites antiquissimus* Unger, 1842, p. 102; wood; Tertiary; Antigua, West Indies.

**BRUKMANNIA** Sternberg, 1825.

*Bruckmannia tenuifolia* Sternberg, 1825 (1820-38), Tentamen, p. xxix, pl. 19, fig. 2; *Asterophyllites*-like foliage shoot; Carboniferous; Radnitz, Bohemia.

**BRUNSWICKIA** Wherry, 1916.

*Brunswickia dubia* Wherry, 1916, p. 329, pl. 30; leaves, incertae sedis; Brunswick formation, Triassic; three-quarters of a mile south of Sellersville station, Bucks County, Pa.

**BRYACITES** C. F. W. Braun, 1840.

*Bryacites lignitarum* C. F. W. Braun, 1840, p. 94; nom. nud. Braun attributes this genus to Brongniart.

**BRYASTERITES** Reinsch, 1881.

*Bryasterites* sp. Reinsch, 1881, p. 105, pl. 44, fig. 1; pl. 45, figs. 1-3; Permian; Stockholm, Württemberg.

**BRYOCARPUS** Debey, 1849.

*Bryocarpus monostachys* Debey, 1849, p. 299; nom. nud.

**BUBULCIA** Massalongo, 1857.

*Bubulcia globifera* (Sternberg) Massalongo, 1857b, p. 777. For *Sargassites globifera* Sternberg, 1833 (1820-38), p. 36, pl. 10, fig. 1.

**BUCHERIA** Dorf, 1933.

*Bucheria ovata* Dorf, 1933, p. 246, figs. 9-17; Psilophytales; Lower Devonian; Beartooth Butte, Wyo.

**BUCINELLA** Fucini, 1936.

Reference not seen. See Gothan, 1942b, p. 110.

**BUCKLANDIA** Presl, 1825.

*Bucklandia anomala* (Stokes and Webb) Presl, in Sternberg, 1825 (1820-38), Tentamen, p. xxxiii. For *Clathraria anomala* Stokes and Webb, 1825, p. 423; cycadophyte trunk; Wealden; Sussex, England. See also Seward, 1917, p. 575.

**BUDINGIA** Krasser, 1943.

*Budingia* sp. Krasser, 1943, p. 15, 1 pl.; Upper Permian; Wetterau, Germany.

**BURIADIA** Seward and Sahni, 1920.

*Buriadia heterophylla* (Feistmantel) Seward and Sahni, 1920, p. 12, pl. 2, figs. 20-25; *Voltzia*-like shoots, but with bifurcated leaves; Karharbari beds, "Permo-Carboniferous"; Burladi, India.

**BURSERICARPUM** Reid and Chandler, 1933.

*Bursericarpum angulatum* Reid and Chandler, 1933, p. 275, pl. 11, figs. 8-10; fruit, Burseraceae; London Clay, Eocene; Sheppey, Kent, England.

**BURSERITES** E. W. Berry, 1924.

*Burserites fayettenensis* E. W. Berry, 1924a, p. 175, pl. 41, figs. 7, 8; leaf, Burseraceae; Fayette sandstone, Eocene; Sabine Parish, La. [This description clearly bears the inscription "n. gen." and it seems evident that the species was intended as the genotype. However (apparently owing to delay in publication of the above) another species was described earlier: *B. venezuelana* Berry, 1921, p. 574, pl. 107, fig. 7; leaf, Burseraceae; Teritary; Betijoque, State of Trujillo, Venezuela.]

**BURTINIA** Endlicher, 1845.

*Burtinia faujasii* Endlicher, in Unger, 1845 (1841-47), p. lxxi. Apparently first illustration is in Weber, 1851, p. 45, pl. 1, fig. 7; palm fruit?; Tertiary. See also Endlicher, 1837 (1836-40), p. 257.

**BUTHOTREPHIS** Hall, 1847.

*Buthotrephis gracilis* Hall, 1847, p. 62, pl. 21, fig. 1; alga; Trenton limestone, Middle Ordovician; Jacksonburgh and Middleville, Herkimer County, N. Y.

**BUTOMITES** Velenovsky, 1889.

*Butomites cretaceus* Velenovsky, 1889, p. 25, pl. 3, figs. 10-13, 15; Upper Cretaceous; Vidovic, Bohemia.

**BYSMATOSPERMUM** Harris, 1935.

*Bysmatospermum macrotrachelum* Harris, 1935, p. 132, pl. 29; seed, Bennettitales? *Lepidopteris* zone, Raetic; Scoresby Sound, east Greenland.

**BYTHOCLADUS** Whitfield, 1894.

A name suggested by Whitfield, 1894, p. 353, as being more appropriate than *Buthograptus* but no specific entity assigned.

**BYTHOTREPHIS.**

An emended spelling for *Buthotrephis* Hall, in Eichwald, 1860 (1860-68), p. 56.

**C**

**CACTITES** Martius, 1822.

*Cactites giganteus* Martius, 1822, p. 139; Carboniferous; Silesia.

**CADIOSPORA** Kosanke, 1950.

*Cadiospora magna* Kosanke, 1950, p. 50, pl. 16, fig. 1; spore; LaSalle coal bed, Pennsylvania; Bureau County, Ill.

**CAENODENDRON** Zalesky, 1918.

*Caenodendron primaevum* Zalesky, 1918, p. 54, pl. 13, figs. 1-4; lycopod stem impression; Carboniferous; Kouou-Tchekou Basin, Russia.

**CAENOMYCES** E. W. Berry, 1916.

*Caenomyces laurinea* E. W. Berry, 1916b, p. 162, pl. 88, fig. 4; fungus, *Pyrenomyces*?; Wilcox group, lower Eocene; Oxford Gully, Lafayette County, Miss.

**CAENOPTERITES** Goeppert, 1836.

*Caenopterites volkmanni* Goeppert, 1836, p. 23. Goeppert refers to Volkman, 1720, pl. 12, fig. 5. Also described as *Sphenopteris volkmanniana* Goeppert, 1834, p. 12. See also Goeppert, 1836, p. 267.

**CAENOPYLON** Zalesky, 1911.

*Caenopylon scotti* Zalesky, 1911, p. 13, figs. 1-4; petrified cordaitan stem; Permian; Russia. See also Seward, 1917, p. 293; Scott, 1923, p. 283; Zalesky, 1927, p. 44.

**CAESALPINIOXYLON** Schenk, 1890.

*Caesalpinioxylon quirogae* Schenk, in Schimper and Schenk, 1890 (1879-90), p. 901, fig. 432; wood; Tertiary?; western Sahara on the coast near Huissli Aïssa.

**CAESALPINIOXYLON** Kräusel, 1922.

*Caesalpinioxylon Palembangense* Kräusel, 1922, p. 247, pl. 2, fig. 1; pl. 3, figs. 1, 2; pl. 7, figs. 6, 11; wood, *Caesalpineae*; Tertiary; Sumatra.

**CAESALPINITES** Saporta, 1862.

*Caesalpinites dispersus* Saporta, 1862, p. 289; leaf, compared with *Caesalpinia bahamensis*; Tertiary; Aix, Provence, France. See also Saporta, 1873, p. 125, pl. 18, fig. 30.

**CAESALPINIUM** Schleiden, 1855.

*Caesalpinium triolense* Schleiden, in Schmid and Schleiden, 1855; wood, said to resemble that of *Caesalpinia echinata*; Oligocene; Tyrol. Apparently first illustrated species: *Caesalpinium owentii* (Carruthers) Schuster, 1910, p. 8, pl. 2, figs. 10-12.

**CALADIOSOMA** E. W. Berry, 1925.

*Caladiosoma miocenica* E. W. Berry, 1925a, p. 38, pl. 5; leaf fragment, compared with *Caladium* and *Xanthosoma*, Araceae; Miocene; Trinidad, British West Indies.

**CALAMARIOPHYLLUM** Hirmer, 1927.

*Calamariophyllum lingulatum* (Germar) Hirmer, 1927, p. 452; articulate stem impression; Carboniferous. For *Equisetites lingulatus* Germar, 1845, p. 27, pl. 10.

**CALAMARIOPSIS** Henry Potonie, 1902.

*Calamariopsis* Henry Potonie, 1902, p. 797, no specific name assigned. This genus established for *Calamopsis* Solms, 1896, because of the earlier use of that name by Heer, 1859.

**CALAMITEA** Cotta, 1832.

*Calamitea striata* Cotta, 1832, p. 67, pl. 14; pl. 15, figs. 1, 2; petrified calamite stem; Permian; Chemnitz, Germany.

**CALAMITES** Schlotheim, 1820.

*Calamites cannaeformis* Schlotheim, 1820, p. 398, pl. 20, fig. 1; pith cast; Upper Carboniferous; Manebach, Wettin, Saxony. See also Seward, 1898, p. 295; and Kidston and Jongmans, 1917.

**CALAMITINA** C. E. Weiss, 1876.

*Calamitina göpperti* (Ettingshausen) C. E. Weiss, 1876, p. 127, pl. 17; calamitean stem; Carboniferous.

**CALAMITOMYELON** Lignier, 1910.

*Calamitomyelon morieret* Lignier, 1910b, p. 128, calamitean stem; Lower Jurassic (Middle Lias); St. Honorine-la-Guil-laume, France.

**CALAMOCADUS** Schimper, 1869.

*Calamocladus longifolius* (Brongniart) Schimper, 1869, p. 323, pl. 22, figs. 1-4; calamite foliage.

**CALAMODENDREA** Grand'Eury, 1877.

*Calamodendrea rhizobola* Grand'Eury, 1877, p. 296, pl. 31; calamitean roots; Carboniferous; Treve, Loire, France.

**CALAMODENDROFLOYOS** Grand'Eury, 1877.

*Calamodendroflojos cruciatus* (Sternberg) Grand'Eury, 1877, p. 203, pl. A, fig. 0; cortex of *Calamodendron*; Carboniferous; France.

**CALAMODENDRON** Brongniart, 1849.

*Calamodendron striatum* Brongniart, 1849, p. 50; petrified calamitean stem; Carboniferous. First? illustration in Mougéot, 1852, p. 32, pl. 5, figs. 1-4. See also Goeppert, 1864 (1864-65), p. 180, pls. 30, 31.

**CALAMODENDROPHYLLUM** Grand'Eury, 1879.

*Calamodendrophyllum bifurcatum* Grand'Eury, 1879, p. 579; calamitean foliage; Upper Carboniferous; Vendée, France.

**CALAMODENDROSTACHYS** Renault, 1890.

*Calamodendrostachys dubius* Renault, in Renault and Zeiller, 1890, p. 471, pl. 55, figs. 3-6; articulate cone impression; Carboniferous; Commeny, France.

**CALAMODENDROXYLON** Grand'Eury, 1877.

*Calamodendroxylon striatum* (Cotta) Grand'Eury, 1877, p. 291; wood of a calamite?; Carboniferous; Forchère, Loire, France.



**CALAMOPHLOIOS** E. A. N. Arber, 1916.

*Calamophloios rugosus* E. A. N. Arber, 1916, p. 141, pl. 8, fig. 9; calamitean stem impression; Red Clay series. Transition Coal Measures, Upper Carboniferous; Granville Pit, Old Hill, South Staffordshire, England.

**CALAMOPHYCUS** Lesquereux, 1877.

*Calamophycus septus* Lesquereux, 1877, p. 165; Lower Helderberg sandstone, Lower Devonian; Michigan.

**CALAMOPHYLLITES** Grand'Eury, 1877.

*Calamophyllites communis* Grand'Eury, 1877, p. 39. See also *Calamophyllites* sp. Grand'Eury, 1869, p. 708. First illustrated species appears to be *Calamophyllites geinitzi* Grand'Eury, 1890, p. 208, pl. 14, fig. 1. Articulate pith impression; Carboniferous.

**CALAMOPHYTON** Kräusel and Weyland, 1925.

*Calamophyton primaevum* Kräusel and Weyland, in Weyland, 1925, p. 43, fig. 12; Calamophytaceae; upper Middle Devonian; northwest Germany. See also Kräusel and Weyland, 1926.

**CALAMOPTUS** Williamson, 1869.

*Calamoptus* sp. Williamson, 1869b, p. 174. See also Williamson, 1871a, p. 506, pl. 23, fig. 1; and Williamson, 1871c; petrified calamite stem; Upper Carboniferous; England. See *Arthrodendron* Scott, 1900a; no specific name ever assigned to this fossil. Only specific name assigned to this (invalid) genus appears to be: *Calamoptus parrani* Grand'Eury, 1890, p. 211, pl. 14, figs. 6-8.

**CALAMOPTYS** Unger, 1856.

*Calamoptys saturni* Unger, 1856, p. 160, pl. 3, fig. 7; petrified stem, Calamophytaceae; Upper Devonian; Saalfeld, Thuringia. See also *Calamoptys saturni* Unger, 1854b, p. 599; nom. nud.

**CALAMOPSIS** Heer, 1859.

*Calamopsis bredana* Heer, 1859, p. 169, pl. 149; palm leaf; Miocene; Oeningen, Switzerland.

**CALAMOPTERIS** Unger, 1856.

*Calamopteris debilis* Unger, 1856, p. 158, pl. 2, figs. 1-7; petiole, Calamophytaceae; Upper Devonian; Saalfeld, Thuringia. See also *Calamopteris debilis* Unger, 1854, nom. nud.; and Posthumus, 1931.

**CALAMORRHIZA** Grand'Eury, 1877.

A name to which Grand'Eury, 1877, p. 26, assigned roots that apparently belonged to the Calamites; no specific entities mentioned.

**CALAMOSPORA** Schopf, Wilson, and Bental, 1944.

*Calamospora hartungiana* Schopf, in Schopf, Wilson, and Bental, 1944, p. 51, fig. 1; spore; middle McLeansboro formation, Pennsylvanian; Salt Fork of Vermillion River northwest of Fairmount, Vermillion County, Ill.

matton, Pennsylvanian; Salt Fork of Vermillion River northwest of Fairmount, Vermillion County, Ill.

**CALAMOSTACHYS** Schimper, 1869.

*Calamostachys typica* Schimper, 1869 (1869-74), p. 328, pl. 23; calamite cone.

**CALAMOSYRINX** Petzholdt, 1841.

*Calamosyrinx zwickaviensis* Petzholdt, 1841, p. 28, pl. 2; sigillarlan stem compression; Upper Carboniferous; Zwickau, Saxony.

**CALAMOSYRINX** Unger, 1856.

*Calamosyrinx devonica* Unger, 1856, p. 159, pl. 3, figs. 1-6; petiole, Calamophytaceae; Upper Devonian; Saalfeld, Thuringia. See also *Calamosyrinx devonica* Unger, 1854; nom. nud.

**CALAMOXYLON** Corda, 1838.

*Calamoxylon cycadeum* Corda, in Sternberg, 1838 (1820-38), p. 195, pl. 54, figs. 8-13; stele fragment of arborescent lycopod?; Carboniferous; Radnitz, Bohemia.

**CALATHELLA** Florin, 1929.

*Calathella kräusei* Florin, 1929a, p. 255, pl. 3, figs. 8-10; pl. 4, figs. 6-9; alga, Siphonocladales; upper Zechstein, Permian; Oberhessen, Büdingen, Germany.

**CALATHIOPS** Goeppert, 1865.

*Calathiops betnertiana* Goeppert, 1865a, p. 268, pl. 64, figs. 4-6; pteridosperm cupulate or microsporangiate? organ; Permian; near Rothwaltersdorf, Silesia.

**CALATHOSPERMUM** Walton, 1940.

*Calathospermum scoticum* Walton, 1940, p. 132, fig. 110; large pteridosperm cupule containing numerous seeds; Lower Carboniferous; Kilpatrick Hills, Scotland. For full treatment, see Walton, 1949.

**CALATOLOIDES** E. W. Berry, 1922.

*Calatoloides eocenicum* E. W. Berry, 1922a, p. 253, fig. 1; fruit, Icacinaceae; Wilcox group; Eocene; Freestone County, Tex.

**CALCIDELETRIX** Mägdefrau, 1937.

*Calcideletrix flexuosa* Mägdefrau, 1937, p. 57, pl. 4, fig. 4; fruit?; Cretaceous; Miskburg near Hannover, Germany.

**CALCIODINELLUM** Deflandre, 1947.

*Calciodinellum operosum* Deflandre, 1947, p. 1781, figs. 1-6; Dinoflagellate; Sahelien d'el Medhi, Oranie, Algeria.

**CALCIPHYTON** Kušta, 1892.

*Calciphyton praecambri* Kušta, 1892, p. 418, fig. p. 420.

**CALCISPHERA** Williamson, 1880.

*Calcisphaera laevis* Williamson, 1880, p. 521, pl. 20, fig. 70; plant?; Carboniferous; Rhydymwyn, near Mold, Flintshire, England.

**CALLEOPHYLLUM** Zalessky, 1939.

*Calleophyllum lobatum* Zalessky, 1939a, p. 370, fig. 53; incertae sedis; Permian; Matveyevo, Krasnaya Glinka, USSR.

**CALLIGONOPSIS** Massalongo, 1859.

*Calligonopsis strumphioides* Massalongo, 1859b, p. 55. For *Casuarina strumphioides* Massalongo, 1857b, p. 778.

**CALLIPITYS** Harris, 1935.

*Callipitys leptoderma* Harris, 1935, p. 110, pls. 19, 21; cone, Coniferales; *Thaumopteria* zone, Rhaetic; Scoresby Sound, east Greenland.

**CALLIPTERIDIUM** C. E. Weiss, 1870.

*Callipteridium sullivanii* (Lesquereux) C. E. Weiss, 1870a, p. 876, pl. 21, figs. 1-3; fernlike foliage; Carboniferous.

**CALLIPTERIS** Brongniart, 1849.

*Callipteris conferta* (Sternberg) Brongniart, 1849, p. 66. For *Neuropteris conferta* Sternberg, 1820-38, p. 75, pl. 22, fig. 5; fernlike foliage; Carboniferous; Ottendorf, Silesia.

**CALLISPHEMUS** Hoeg, 1938.

*Callisphenus gracilis* Hoeg, 1938, p. 43, pls. 1, 2; alga, probably Dasycladaceae; Wenlock, Silurian; east side island of Kommersey, near Holmestrand, Oslo Fjord, Norway.

**CALLISTEMOPHYLLUM** Ettingshausen, 1853.

*Callistemophyllum verum* Ettingshausen, 1853, p. 83, pl. 27, figs. 11, 12; leaf, Myrtaceae; Tertiary; Haering, Tirol, Austria.

**CALLITHAMNOPSIS** Whitfield, 1894.

*Callithamnopsis fruticosa* (Hall) Whitfield, 1894, p. 354, pl. 11, figs. 4-8; alga; Trenton group, Ordovician; Platteville, Wis.

**CALLITRITES** Endlicher, 1847.

*Callitrites brongniartii* Endlicher, 1847, p. 274. For *Equisetum brachyodon* Brongniart, 1882, p. 329, pl. 16, fig. 3; coniferous foliage and cones; Eocene; near Paris, France. See also *Callitrites brongniartii* Endlicher in Goeppert, 1850, p. 179, pl. 17, figs. 9-12.

**CALLITROXYLON** Hartig, 1848.

*Callitroxylon ayckei* (Goeppert) Hartig, 1848a, p. 140. For *Taxites aycket* Goeppert, 1840, p. 77, and 1841a, p. 730, pl. 17, figs. 10-12; wood; Tertiary; Germany.

**CALLIXYLON** Zalesky, 1911.

*Callixylon trifolievii* Zalesky, 1911, p. 29, pl. 4, figs. 1-3; cordaitan wood with bordered pits of tracheids characteristically grouped; Devonian. See also Arnold, 1930.

**CALLORITES** Flore, 1932.

Soc. naturalisti Napoli Boll., 1932, v. 43, p. 153; fungi; Eocene (not seen). See Gothan, 1942b, p. 111.

**CALLOXYLON** Andra, 1848.

*Calloxyylon hartigii* Andra, 1848, p. 633, pl. 5, figs. 7-12; coniferous wood; Tertiary; Bruckdorf, Saxony.

**CALOPTERIS** Corda, 1845.

*Calopteris dubia* Corda, 1845, p. 88, pl. 19, figs. 1b, 3; petiole; Upper Carboniferous; Radnitz, Bohemia. See also Hirmer, 1927, p. 540; and Posthumus, 1931.

**CALOTHRICITES** C. E. Bertrand, 1913.

*Calothricites alexinatia* C. E. Bertrand, 1913, p. 357, pl. 4, figs. 1-16; alga, Cyanophyceae?; Tertiary; Alexinat, Serbia.

**CALVARINUS** Reid and Reid, 1910.

*Calvarinus reticulatus* Reid and Reid, 1910, p. 169, pl. 15, figs. 18-20; nutlet, Boraginaceae; Upper Oligocene; Bovey Tracey, Devon, England.

**CALYOITES**.

See *Calycithes*, Massalongo. Original spelling was *Calycithes*, but Massalongo and other authors adopted *Calycites*.

**CALYCITHES** Massalongo, 1850.

*Calycithes pentasepalus* Massalongo, 1850, p. 72. Apparently first species illustrated is *Calycites lythroides* Visiani and Massalongo, 1856, p. 242, pl. 13.

**CALYCOCARPUS** Goeppert, 1850.

*Calycocarpus thujoides* Goeppert, 1850, p. 180, pl. 18, fig. 5; *Thuja*-like fruit; Upper Carboniferous; Charlottenbrunn, Silesia.

**CALYCOPHYSOIDES** Berry, 1924.

*Calycophysoides balli* Berry, 1924b, p. 6, figs. 1, 2; human artifact; Foard County, Tex. See also Berry, in Torrey, v. 37, p. 108.

**CALYMMATOTHECA** Stur, 1877.

*Calymmatotheca stangeri* Stur, 1877, p. 151, pls. 8, 9; stem, foliage, cupulate organs, Pteridospermae; Carboniferous (Culm); Hruschau, Witkowitz, Moravia. See also Zeller, 1883, p. 182.

**CALYPTOPHYCUS** J. H. Johnson, 1940.

*Calypthophycus verrucatus* J. H. Johnson, 1940, p. 590, pl. 10, figs. 1-3; calcareous alga, probably Cyanophyceae; Weber formation, Pennsylvanian; Mule Shoe Gulch, Park County, Colo.

**CAMASIA** Walcott, 1914.

*Camasia spongiosa* Walcott, 1914, p. 115, pl. 9, figs. 1, 2; pl. 12, figs. 1, 2; pl. 20, figs. 2-6; alga, Cyanophyceae?; Beltian series, Alkonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

**CAMBROPORELLA** Korde, 1950.

*Cambroporella tuvensis* Korde, 1950, p. 371, figs. 1-3; alga, Dasycladaceae; Lower Cambrian; Russia.

**CAMPOXYLON** Hartig, 1848.

*Campoxyylon hoedlianus* (Unger) Hartig, 1848a, p. 138; wood; Tertiary; Germany. For *Peuce hoedliana* Unger, 1839, p. 13; and 1842 (1841-47), p. 26, pl. 10, figs. 1-4.

**CAMPTERONEURA** Debey, 1849.

*Campteroneura paradoxa* Debey, 1849, p. 299; nom. nud.

**CAMPTOPHYLLUM** Nathorst, 1875.

*Camptophyllum schimperi* Nathorst, 1875, p. 389. See also Nathorst, 1876, p. 69, pl. 16, figs. 13-16; Rhaetic; Palsjo, Sweden.

**CAMPTOPTERIS** Presl, 1838.

*Camptopteris münsteriana* Presl, in Sternberg, 1838 (1820-38), p. 168, pl. 33, fig. 9; leaf impression, dicotyledon?

**CAMPYLOPHYLLUM** Gothan, 1914.

*Campylophyllum hormanni* Gothan, 1914, p. 53, pls. 31-33, 39; cycadophyte? foliage; Rhaetic; Nürnberg, Germany.

**CAMPYLOSPERMUM** Chandler, 1925.

*Campylospermum hordwellensis* Chandler, 1925, p. 16, pl. 1, figs. 6a-c; fruit, Araceae; Upper Eocene; Hordle, Hampshire, England.

**CANCELLOPHYCUS** Saporta, 1872.

*Cancellophycus lasinus* Saporta, 1872a-73, p. 135, pl. 5, alga; Jurassic; Digne, France.

**CANNOPHYLLITES** (Brongniart) Nilsson, 1832.

*Cannophyllites septentrionalis* Nilsson, 1832, p. 346, pl. 1, fig. 9; Lower Cretaceous; Hoganas, Sweden. See also *Cannophyllites virletii* Brongniart, 1828; nom. nud.

**CANTHELIOPHORUS** Bassler, 1919.

*Cantheliophorus linearifolius*. (Lesqueux) Bassler, 1919, p. 97, pl. 9, figs. 1, 2, 8-10; pl. 11, figs. 34-37; lycopod cone scale and sporangium (probably *Lepidocarpon*); coal B8, Pennsylvania; Boston mine, Pittston, Luzerne County, Pa. See also Schopf, 1941b, p. 559.

**CANTHIDIUM** Unger, 1850.

*Canthidium radobojanum* Unger, 1850, p. 429; Rubiaceae; Croatia.

**CANTIA** Stopes, 1915.

*Cantia arborescens* Stopes, 1915, p. 260, pls. 26-28; wood, dicotyledon; Folkestone beds, Lower Greensand, Cretaceous; near Ightham, Kent, England.

**CANTIOCARPUM** Reid and Chandler, 1933.

*Canticarpum celastroides* Reid and Chandler, 1933, p. 820, pl. 14, figs. 29-33; fruit, Celastraceae; London Clay, Eocene; Minster, Kent, England.

**CANTIOCARPA** Reid and Chandler, 1933.

*Canticarpa sheppeyensis* Reid and Chandler, 1933, p. 258, pl. 10, figs. 1-5; fruit, Rutaceae; London Clay, Eocene; Sheppey, Kent, England.

**CANTISOLANUM** Reid and Chandler, 1933.

*Cantisolanum daturoides* Reid and Chandler, 1933, p. 484, pl. 28, figs. 10-12; fruit, Solanaceae; London Clay, Eocene; Sheppey, Kent, England.

**CANTITILIA** Reid and Chandler, 1933.

*Cantitilia polysperma* Reid and Chandler, 1933, p. 393, pl. 20, figs. 4-11; fruit, Tillaceae; London Clay, Eocene; Sheppey, Kent, England.

**CAPPARIDIUM** Kuntze, 1904.

*Capparidium* Kuntze, in Post and Kuntze, 1904, p. 98.

**CAPPARIDOCARPUS** Berry, 1924.

*Capparidocarpus sphericus* Berry, 1924a, p. 166, pl. 55, figs. 4-9; fruit, Cappridaceae?; Lagrange formation, Eocene; Hickman, Fulton County, Ky.

**CAPPARIDOXYLON** Schenk, 1883.

*Capparidoxylon getnitzii* Schenk, 1883a, p. 12, pl. 1, figs. 3, 4; wood; Oligocene?; near Cairo, Egypt.

**CAPPARITES** E. W. Berry, 1919.

*Capparites cynphylloides* E. W. Berry, 1919a, p. 95, pl. 22, fig. 1; leaf, Cappridaceae; Tuscaloosa formation, Upper Cretaceous; Shirleys Mill, Fayette County, Ala.

**CAPRIFOLIIPITES** Wodehouse, 1933.

*Caprifoliipites viridifluminis* Wodehouse, 1933, p. 518, fig. 54; pollen, Caprifoliaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

**CAPSULOCARPUS** E. W. Berry, 1939.

*Capsulocarpus dakotensis* E. W. Berry, 1939, p. 332, figs. 1-4; podlike capsule, Bignoniaceae?; Cretaceous; half a mile north of Springfield; Brown County, Minn.

**CARACUBOXYLON** Zalesky, 1930.

*Caracuboxylon bakhasuense* Zalesky, 1930g, p. 1011, pl. 1; petrified stem, Cordaitales; Devonian; Donets, Russia.

**CARAGANDITES** Zalesky, 1933.

*Caragandites rugosus* Zalesky, 1933b, p. 1385, fig. 1; incertae sedis; Lower Carboniferous; Karaganda, Russia.

**CARATCHETOPTERIS** Zalesky, 1932.

Soc. géol. France Bull, 1932, sér. 5°, tome 2, p. 322, fig. 10; pteridophyte; Permian; Russia (not seen). See Gothan, 1942b, p. 112.

**CARBONACARPA**, John Smith, 1896.

*Carbonacarpa annandalensis* John Smith, 1896, p. 321, pl. 7, figs. 20-23; incertae sedis; Upper Carboniferous; Annandale, near Kilmarnock, Scotland.

**CARDIOCARPON** Brongniart, 1828.

First valid description appears to be *Cardiocarpon acutum* Lindley and Hutton, 1833 (1831-37), p. 209, pl. 76; seed casts; Carboniferous; England. Brongniart, 1828b, p. 87, lists five species but all nom. nud.; later Brongniart, 1881, p. 37, described petrified species. See Seward, 1917, p. 334. Various spelled as *Cardiocarpum* and *Cardiocarpus*, the latter being adopted by Brongniart, 1881, and by most recent writers.

**CARDIOGLOSSUM** Koidzumi, 1934.

*Cardioglossum antiquum* (Kawasaki) Koidzumi, 1934, p. 113: For *Giganopteris antiqua* Kawasaki, 1932 (1929-34), p. 34, pl. 100, figs. 2, 3; Jido series, Lower Permian; Tae-dong, Korea.

**CARDIONEURA** Zalesky, 1934.

*Cardioneura amadoca* Zalesky, 1934d, p. 1108, figs. 4-6; neuropterid foliage; Donets, Russia.

**CARDIOPTERIDIUM** Nathorst, 1914.

*Cardiopteridium spetsbergense* Nathorst, 1914, p. 16, pl. 1, figs. 9-15; pl. 8, figs. 5, 6; pl. 9, figs. 14-26; fernlike foliage; Paleozoic; Spitzbergen.

**CARDIOPTERIS** Schimper, 1869.

*Cardiopteris polymorpha* (Goeppert) Schimper, 1869 (1869-74), p. 452; *Neuropteris*-like foliage; lowermost Carboniferous. For *Cyclopteris polymorpha* Goeppert, 1859, p. 502, pl. 38, figs. 5a, 5b.

**CARNOCONITES** Srivastava, 1944.

*Carnoconites compactum* Srivastava, 1944, p. 75, pl. 2, fig. 12; female cone of *Pentoxylon*; Jurassic; Santal Parganas District, Behar, India. Brief description with no specific name and no illustrations in Srivastava, 1935, p. 285. See also Srivastava, 1946, p. 204, pl. 5, figs. 46-68. For full consideration of *Pentoxyleae*, see Sahni, 1948.

**CAROLITES** Spegazzini, 1924.

*Carolites patagonica* Spegazzini, 1924a, p. 100, fig. 101; leaf, dicotyledon; Eocene; Patagonia.

**CAROLOPTERIS** Debey and Ettingshausen, 1859.

*Carolopteris aquensis* Debey and Ettingshausen, 1859b, p. 206, pl. 3, figs. 20-27; fern pinnales; Upper Cretaceous; Aachen, Rhenish Prussia.

**CARPANNULARIA** Elias, 1931.

*Carpannularia americana* Elias, 1931, p. 118, pls. 12, 13; pl. 14, figs. 1, 3, 4; pl. 15; *Annularia*-like foliage shoots with seeds said to be attached; lower Pennsylvanian; near Clinton, Henry County, Mo.

**CARPANTHOLITES**.

See *Carpantholithes*.

**CARPANTHOLITHES** Goeppert, 1838.

*Carpantholithes berendtii* Goeppert, 1838, p. 571, pl. 42, figs. 36, 37; flower; Miocene; Danzig, Baltic Prussia.

**CARPENTERELLA** (Munier-Chalmas) Morellet and Morellet, 1922.

*Carpenterella jonesi* Morellet and Morellet, 1922, p. 20, pl. 1, figs. 77-80; Dasycladaceae; Eocene; Beynes, France. [*Carpenterella* first cited in Munier-Chalmas, 1877, p. 817; nom. nud.]

**CARPENTERIANTHUS** Borsuk, 1935.

USSR, Central Geol. et Prosp. Inst. Trans., 1935, v. 37A, p. 21; Hydrangeaceae; Tertiary (not seen). See Gothan, 1942b, 112.

**CARPENTIERIA** Nemejc and Augusta, 1934.

*Carpentieria marocana* Nemejc and Augusta, 1934, p. 1, figs. 1a, b.

**CARPINIPHYLLUM** Nathorst, 1888.

*Carpiniphyllum pyramidale* (Goeppert) Nathorst, 1888, p. 217, pl. 8, figs. 1-3, 6-8; leaf, dicotyledon; Tertiary; Japan.

**CARPINITES** Goeppert and Berendt, 1845.

*Carpinites dubius* Goeppert and Berendt, in Berendt, 1845, p. 85, pl. 4, figs. 29-31; pistillate ament?, Fagaceae; Miocene; Baltic Prussia.

**CARPINOXYLON** Vater, 1884.

*Carpinoxylon compactum* Vater, 1884, p. 848, pl. 29, figs. 28, 29; wood; Cretaceous (Lower Cenomanian); Helmstedt, Brunswick.

**CARPITES** Schimper, 1874.

*Carpites pruniformis* (Heer) Schimper, 1874, p. 421; seed, incertae sedis; Miocene; Oeningen, Switzerland. For *Carpolithes pruniformis* Heer, 1859, p. 139, pl. 141, figs. 18-30; pl. 68, fig. 5b.

**CARPODIUM** Zalesky, 1934.

USSR, Central Sci. Geol. Research Inst. Geol. Survey Sec., 1934, p. 12; Gymnospermae; Upper Carboniferous (not seen). See Gothan, 1942b, p. 112.

**CARPOLITHES** Schlotheim, 1820.

Many species of fossil seeds based on impressions, compressions, and casts have been assigned to *Carpolithus* of Linnaeus and *Carpolithes* of Schlotheim. As *Carpolithes* is a repository for seeds and supposed seeds from almost every geological horizon that cannot be assigned to a natural plant group, a type species can hardly be of significance. For further discussion, see Seward, 1917, p. 364, 497.

**CARRADORITES** Massalongo, 1859.

*Carradorites eseri* (Unger) Massalongo, in Massalongo and Scarabelli, 1859, p. 91. Specific name spelled "*escheri*" by Massalongo but is for *Caulerpites eseri* Unger, 1850a, p. 3.

- CARYAEPOLLENITES** Robert Potonie, 1934.  
*Caryaepollenites simplex* Robert Potonie, in Potonie, Robert, and Venitz, H., 1934, p. 21, pl. 2, figs. 28-30; pollen, Juglandaceae; Miocene; Oberlausitz, Germany.
- CARYOJUGLANS** Kirchheimer, 1936.  
*Caryojuglans quadrangula* Kirchheimer, 1936a, p. 82, pl. 12, figs. 36a-1; fruit, Juglandaceae; Tertiary (Braunkohle); Borna and Meuselwitz, Germany.
- CARYOTISPERMUM** Reid and Chandler, 1933.  
*Caryotispermum cantiense* Reid and Chandler, 1933, p. 104, pl. 1, figs. 11, 12; seed, Palmae; London Clay, Eocene; Sheppey, Kent, England.
- CASEA** Newberry, 1853.  
*Casea membranacea* Newberry, 1853, p. 106; compared with *Cyclopteris*; Pennsylvanian; Middlebury, Ohio.
- CASSIOPHYLLUM** Geyler, 1887.  
*Cassiophyllum* sp. Geyler, 1887a, p. 504, pl. 39, figs. 7, 8.
- CASSIOXYLON** Felix, 1882.  
*Cassioxyton anomalum* Felix, 1882a, p. 69; wood; Tertiary; Antigua, West Indies. See Felix, 1883, p. 15, pl. 2, figs. 3, 5.
- CASTALITES** Hollick, 1930.  
*Castalites ordinarius* Hollick, 1930, p. 76, pl. 41, fig. 7; leaf, Nymphaeaceae; Upper Cretaceous; Williams coal mine, Yukon River.
- CASTANEOIDITES** Robert Potonie, 1950.  
*Castaneoidites exactus* Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 56, pl. B, fig. 30; pollen, Fagaceae; Pliocene, Chatt-Aquitain, Germany.
- CASTELLINIA** Massalongo, 1852.  
*Castellinia macrocarpa* Massalongo, 1852c, p. 206; Eocene; Monte Bolca, Italy.
- CASUARINITES** Schlotheim, 1820.  
*Casuarinites equisetiformis* Schlotheim, 1820, p. 397, for illustrations Schlotheim refers to his 1804, pl. 2, fig. 3; *Asterophyllites*-type foliage; Upper Carboniferous; Wettin, Manebach, Saxony.
- CASUARINITES** Goeppert and Stache, 1855.  
*Casuarinites tugleri* Goeppert and Stache, 1855, p. 42; inflorescence, Casuarinaceae?; Upper Triassic (Keuper); Enger, Prussia.
- CASUAROXYLON** Goeppert and Stache, 1855.  
*Casuaroxylon anglia* Goeppert and Stache, in Stache, 1855, p. 42; locality and horizon unknown.
- CATENARIA** Sternberg, 1825.  
*Catenaria decora* Sternberg, 1825 (1820-38), Tentamen, p. xxv, pl. 52, fig. 1; articulate? stem; Carboniferous.
- CATHAYSIOPTERIS** Koidzum, 1934.  
*Cathaysiopteris whittei* (Halle) Koidzum, 1934, p. 113. For *Gigantopteris whittei* Halle, 1927, p. 173, pl. 47, figs. 1-9; Lower Shihhotse series, Lower Permian; Central Shansi, China.
- CATHISPERMUM** Reid and Chandler, 1933.  
*Cathispermum pulchrum* Reid and Chandler, 1933, p. 317, pl. 14, figs. 23-28; fruit, Celastraceae; London Clay, Eocene; Sheppey, Kent, England.
- CAUDAEOPHYLLUM** Achepohl, 1883.  
*Caudaeophyllum longifolium* Achepohl, 1883, p. 115; calamitean roots?; Upper Carboniferous; Westphalia.
- CAUDEX** Lesquereux, 1883.  
*Caudex spinosus* Lesquereux, 1883, p. 91. For *Caulinites spinosa* Lesquereux, 1874, p. 115; stem, incertae sedis; Cretaceous; near Fort Harker, Kans.
- CAULERPIDES** Schimper, 1869.  
*Caulerpides pyramidalis* (Sternberg) Schimper, 1869 (1869-74), p. 160. For *Caulerpites pyramidalis* Sternberg, 1833 (1820-38), p. 21, pl. 6, fig. 2. Justification for Schimper's claim to this genus is not clear, for it is admittedly based on Sternberg's *Caulerpites*.
- CAULERPITES** (Brongniart) Sternberg, 1833.  
*Caulerpites lycopodioides* (Brongniart) Sternberg, 1833 (1820-38), p. 20. For *Fucoides lycopodioides* Brongniart, 1828 (1828a-38), p. 72, pl. 9, fig. 3.
- CAULINITES** Brongniart, 1828.  
*Caulinites parisiensis* (Deslarest) Brongniart, 1828b, p. 115, leaf, monocotyledon. See also Cuvier and Brongniart, 1822, p. 234, pl. 8, fig. 10.
- CAULOMATITES** C. F. W. Braun, 1847.  
*Caulomatites zamites* C. F. W. Braun, 1847, p. 85; nom. nud.
- CAULOMORPHA** Saporta, 1886-91.  
*Caulomorpha locardi* Saporta, 1886-91, p. 83, pl. 236, fig. 2; stem impression, incertae sedis; Jurassic (Kimmeridgian); Orbagnoux, France.
- CAULOOPSIS** Gothan and Hartung, 1949.  
*Caulopsis punctata* Gothan and Hartung, in Gothan, 1949, p. 27, pl. 3, figs. 4-6.
- CAULOPTERIS** Lindley and Hutton, 1832.  
*Caulopteris primaeva* Lindley and Hutton, 1832 (1831-37), p. 121, pl. 42; tree-fern trunk impression; Upper Carboniferous; Radstock, near Bath, England. See also Posthumus, 1931.
- CAULOXYLON** Cribbs, 1939.  
*Cauloxylon ambiguum* Cribbs, 1939, p. 440, figs. 1-24; petrified cordaitan stem; Reeds Spring limestone, Mississippian; Missouri.

**CAXTONIA** Reid and Chandler, 1933.

*Caxtonia glandulosa* Reid and Chandler, 1933, p. 265, pl. 10, figs. 17-19; carpel, Rutaceae?; London Clay, Eocene; Minster, Kent, England.

**CAYEUXIA** Frollo, 1938.

*Cayeuxia moldavica* Frollo, 1938, p. 269, pl. 1; calcareous alga; Upper Jurassic; eastern Carpathians.

**CAYTONANTHUS** Harris, 1937.

*Caytonanthus arberti* (Thomas) Harris, 1937, p. 40; microsporangiate organ, Caytoniales; Jurassic; Cayton Bay, Yorkshire, England. For *Antholithus arberti* Thomas, 1925, p. 327, pl. 14.

**CAYTONIA** Thomas, 1925.

*Caytonia sewardi* Thomas, 1925, p. 315, pls. 12, 13, 15; seed-bearing organ, Caytoniales; Middle Estuarine series, Middle Jurassic; Cayton Bay, Yorkshire, England.

**CEDRELOPHYLLUM** Deane, 1902.

*Cedrelophyllum antiqua* Deane, 1902a, p. 63, pl. 15, fig. 1; leaf, Meliaceae?; Tertiary; Wingello, New South Wales.

**CEDRELOSPERMITES** Saporta, 1894.

*Cedrelospermites venulosus* Saporta, 1894, p. 98, pl. 16, fig. 21; winged seed, dicotyledon; Cretaceous; Quinta-do-Leiriao, Portugal.

**CEDRELOSPERMUM** Saporta, 1889.

*Cedrelopermum aquense* Saporta, 1889, p. 93, pl. 18, fig. 11; winged weed, Cedrelaceae; Tertiary; Aix, Provence, France.

**CEDRIPITES** Wodehouse, 1933.

*Cedripites eocenicus* Wodehouse, 1933, p. 490, fig. 13; *Cedrus*-like pollen; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

**CEDRITES** R. W. Brown, 1935.

*Cedrites primevus* R. W. Brown, 1935, p. 445, fig. 11; mold of cone, possibly related to *Cedrus*; Lower Cretaceous; bank of Anacostia River, three-quarters of a mile beyond the District of Columbia line, Maryland.

**CEDROIDITES** Thiergart?, 1950.

*Cedroidites* sp. Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 47.

**CEDROPHLOIOS** Fliche, 1896.

*Cedrophloios brecheri* Fliche, 1896, p. 258, pl. 12, fig. 4; pl. 14, fig. 3; petrified coniferous bark? Cretaceous (Albian); Villotte, France.

**CEDROSTROBUS** Stöpes, 1915.

*Cedrostrobus leekensbyi* (Carruthers) Stöpes, 1915, p. 143, fig. 59; cone, Coniferales; Lower Greensand, Cretaceous; Shanklin, Isle of Wight, England.

**CEDROXYLON** Kraus, 1870.

*Cedroxylon withami* Kraus, in Schimper, 1870 (1869-74), p. 370; Carboniferous; England. For *Peuce withami* Lindley and Hutton, 1831-33, p. 73, pls. 23, 24.

**CELASTRINANTHIUM** Conwentz, 1886.

*Celastrinanthium hauehornei* Conwentz, 1886, p. 76, pl. 8, figs. 10-13; fruit, in amber, Celastraceae; early Tertiary; West Prussia.

**CELASTRINITES** Saporta, 1865.

*Celastrinites venulosus* Saporta, 1865, p. 52; leaf, Celastraceae; Tertiary; France. See also Saporta, 1868, p. 412, pl. 36, figs. 12, 13.

**CELASTRINOXYLON** Schenk, 1888.

*Celastrinoxylon affine* Schenk, 1888, p. 21; wood; Tertiary; Egypt; nom. nud.

**CELASTROCARPUS** E. W. Berry, 1930.

*Celastracarpus eocenicus* E. W. Berry, 1930, p. 97, pl. 25, figs. 26-29; capsule, Celastraceae; Wilcox group, Eocene; Saulsbury station, Hardeman County, Tenn.

**CELASTROPHYLLUM** Goeppert, 1854.

*Celastrphyllum attenuatum* Goeppert, 1854, p. 52, pl. 14, fig. 89; leaf, Celastraceae; Tertiary; Java. See also *Celastrphyllum attenuatum* Goeppert, 1853, p. 435; nom. nud.

**CELLULOXYLON** Dawson, 1881.

*Celluloxylon primaevum* Dawson, 1881b, p. 302. See also Dawson, in Penhallow, 1893a, p. 115, pl. 15, fig. 1; pl. 17, figs. 5, 6; pl. 18, figs. 7, 8; pl. 16, fig. 4. Earliest reference: Dawson, 1880a, p. 476; nom. nud.; Devonian; New York.

**CELTIDOPHYLLUM** Krasser, 1896.

*Celtidophyllum praeaustrale* Krasser, 1896, p. 130, pl. 16, figs. 8-14; leaf, Ulmaceae; Cretaceous; Konstanz. This appears to be the correct citation for the type species although the presentation is confused. The caption to figures bears the name *Celtidophyllum cretaceum*. Earlier, Krasser (1880) gave the name *Celtidophyllum cretaceum* as a nom. nud.; in his "Register," 1896, p. 151, he indicates that *Celtidophyllum* = *Celtidophyllum*.

**CELTIDOPHYLLUM**.

See *Celtidophyllum* Krasser.

**CELTITIS** Tuzson, 1909.

*Celtitis kleinii* Tuzson, 1909, p. 376; Pliocene; Balaton Lake, Sümeg, Hungary.

**CELYPHINIA** Mueller, 1871.

*Celyphinia mocoysi* Mueller, 1871 (1871-82), p. 40, pl. 5.

**CENANGITES** Meschinelli, 1892.

*Cenangites piri* (Ludwig) Meschinelli, in Saccardo, 1892, p. 775; fungus, Discomycete; central Germany. See also Meschinelli, 1898, p. 50, pl. 15, fig. 32.

**CEPHALOPTERIS** Nathorst, 1914.

*Cephalopteris mirabilis* Nathorst, in Bureau, 1914, p. 23, pl. 1 bis, figs. 3, 4, 4a; microsporangiate organ, Pteridospermeae; Upper Devonian; Ancenis, France. Earlier given as *Cephalopteris mirabilis* Nathorst, 1910, p. 277; nom. nud.

**CEPHALOTAXITES** Heer, 1883.

*Cephalotaxites insignis* Heer, 1883, p. 10, pl. 53, fig. 12; fertile (seed) shoot, Coniferales; Upper Cretaceous; Patoot, Greenland.

**CEPHALOTAXOPSIS** Fontaine, 1889.

*Cephalotaxopsis magnifolia* Fontaine, 1889, p. 236, pls. 104-108; foliage-bearing twigs, Coniferales; Potomac group, Lower Cretaceous; Fredericksburg, Va.

**CEPHALOTAXOSPERMUM** E. W. Berry, 1910.

*Cephalotaxospermum carolinianum* E. W. Berry, 1910a, p. 187; fruit, Taxaceae; Black Creek formation, Upper Cretaceous; Hale County, Ala.

**CEPHALOTHECA** Nathorst, 1902.

*Cephalotheca mirabilis* Nathorst, 1902a, p. 15, pl. 1, figs. 18-35; fern? (sporangial clusters borne on under side of rachis near junction with stem); Upper Devonian; Bear Island, Norway.

**CERAMITES** Liebmann, 1845.

*Ceramites hisingeri* Liebmann, in Forchhammer, 1845, p. 162; alga, Rhodophyceae; Silurian; Bornholm and Scania, Sweden.

**CERAMITES** Massalongo, 1859.

*Ceramites sphacelarioides* Massalongo, 1859b, p. 11. For *Monemites sphacelarioides* Massalongo, 1850, p. 24.

**CERATONIOPHYLLUM** Kirchheimer, 1930.

*Ceratoniphyllum schottleri* Kirchheimer, 1930b, p. 113, pl. 13, figs. 2a-d.

**CERATOPHYCUS** Schimper, 1879.

*Ceratophycus bicornia* Schimper, in Schimper and Schenk, 1879 (1879-90), p. 59; alga, Cylindritaceae.

**CERATOPHYLLITES** Unger, 1845.

*Ceratophyllites faujasii* (Brongniart) Unger, 1845 (1841-47), p. 77. For *Asterophyllites faujasii* Brongniart, 1822, p. 306; Eocene; Roche-Sauce, Vivarais, France.

**CERATOSTROBUS** Velenovsky, 1885.

*Ceratostrobos sequoiaephyllus* Velenovsky, 1885a, p. 24, pl. 12, figs. 14-16; foliage shoot and fragmentary cone; Cretaceous; Lipenec, Bohemia.

**CERATOZAMITES** Meschinelli, 1889.

*Ceratozamites vicetinus* Meschinelli, 1889, p. 9, pl. 6, figs. 1, 2.

**CERCOSPORITES** Salmon, 1903.

*Cercosporites* sp. Salmon, 1903, p. 128, figs. 6-9; fungus, Dematiaceae, Fungi Imperfecti; Miocene; Melilli, Italy.

**CERCOSPORITES** Stopes, 1913.

*Cercosporites corioccocus* (Bayer) Stopes, 1913, p. 276, fig. 24; fungus, Hyphomycetes; Perucur Beds, Upper Cretaceous; Vyserovic and Kounic, Bohemia.

**CHAETHOMITES** Pampaloni, 1902.

*Chaethomites intricatus* Pampaloni, 1902, p. 127, pl. 10, fig. 11; fungus perithecium; Miocene?; Sicily.

**CHABAKOVIA** Vologdin, 1939.

*Chabakovia ramosa* Vologdin, 1939, p. 256, pl. 2, fig. 4; pl. 12, fig. 3a; pl. 11, figs. 1, 2, 3a; small dendritic thallus, compared with *Epiphyton*; Middle Cambrian; South Urals.

**CHAETOCCLADUS** Whitfield, 1894.

*Chaetocladius plumula* Whitfield, 1894, p. 356, pl. 11, figs. 11-13; marine alga; Trenton group, Ordovician; Platteville, Wis.

**CHAETOPHORITES** Fliche, 1886.

*Chaetophorites tertiaris* Fliche, 1886, p. 353; Oligocene; Riedlsheim near Mulhouse, France.

**CHAETOSPHAERITES** Felix, 1894.

*Chaetosphaerites bilychnis* Felix, 1894a, p. 272, pl. 19, fig. 4; fungus spores, compared with *Chaetosphaeria*; Eocene; Perekeschkul near Baku, Transcaucasia. Meschinelli, 1898, p. 17, erroneously attributes this genus to Tulasne.

**CHAMAECYPARTES** Endlicher, 1847.

*Chamaecyparites hardtii* (Goeppert) Endlicher, 1847, p. 277. For *Cupressites hardtii* Goeppert, 1837, p. 429; Oligocene; Bavaria. For illustrations, see Ettlinghausen, 1851, p. 157, pl. 23, fig. 18.

**CHANGARNIERA** Saporta, 1885.

*Changarniera inquirenda* Saporta, 1885, p. 1442; leaf, "proangiosperm"; Jurassic (Corallian); Auxey, France. See also Saporta, 1889 (1886-91), p. 246, pl. 265, figs. 1-3; pl. 266, figs. 1, 2.

**CHANSITHECA** Rege, 1920.

*Chansitheca palaeosilvana* Rege, 1920, p. 193, pl. 9, figs. 6, 7; fertile fern foliage; Carboniferous.

**CHARACEITES** Tuzson, 1914.

*Characeites verrucosa* Tuzson, 1914, p. 234, pl. 13, fig. 1; oogonium, Charophyta; Eocene; Estergom, Hungary.

**CHARAXIS** Harris, 1939.

*Charaxis durlstonense* Harris, 1939, p. 67, pl. 16, fig. 10; vegetative organs, Characeae; Purbeck beds, Jurassic; Dorset, England. Harris lists six other species as new combinations with the comment: "As this is probably an artificial genus, it would be meaningless to select a type species."

**CHARPENTIERIA** Unger, 1845.

*Charpentieria nivium* Unger, 1845 (1841-47), p. xc; wood, Pliocene; Lemberg, Galicia, Austria.

**CHASMATOPTERIS** Zalesky, 1931.

*Chasmatopteris principalis* Zalesky, 1931b, p. 715, pls. 1, 2; petrified stem, Osmundaceae; Permian; Russia.

**CHAUVINIOPSIS** Saporta, 1872.

*Chauviniopsis peltati* Saporta, 1872a-73, p. 119, pl. 8, fig. 2; alga; Jurassic; Maninghen, near Wimille, France.

**CHEILANTHITES** Goepfert, 1836.

*Cheilanthites mantelli* (Brongniart) Goepfert, 1836, p. 231; sphenopterid foliage; Carboniferous; Tilgate Forest, Sussex, England. For *Sphenopteris mantelli* Brongniart, 1828a-38, p. 170, pl. 45, figs. 3-7.

**CHEILOLEPTITES** Saporta, 1861.

*Cheileleptites dispersus* Saporta, in Heer, 1861, p. 151; fern; Tertiary; nom. nud.

**CHEIROLEPIS** Schimper, 1870.

*Cheirolepis münsteri* (Schenk) Schimper, 1870 (1869-74), p. 248; coniferous twigs; Rhaetic; near Bayreuth, Bavaria.

**CHEIROSTROBUS** Scott, 1897.

*Cheirostrobos pettycurensis* Scott, 1897b, p. 421; petrified articulate cone; Calcareous Sandstone series, Lower Carboniferous; Pettycur, near Burntisland, Scotland. See also Scott, 1898b, pls. 1-6.

**CHELEPTERIS** Corda, 1845.

*Chelepteris voltzii* (Schimper and Mougeot) Corda, 1845, p. 76. For *Cauleopteris voltzii* Schimper and Mougeot, 1844, p. 65, pls. 30-31; Triassic (Gres Bigarre); Gottenhausen, Alsace-Lorraine. See also Posthumus, 1931.

**CHENOPODITES** Saporta, 1889.

*Chenopodites helicoides* Saporta, 1889, p. 26, pl. 17, figs. 6, 7; seeds, Chenopodiaceae; Tertiary; Aix, Provence, France.

**CHINLEA** Daugherty, 1941.

*Chinlea campi* Daugherty, 1941, p. 45, pl. 4, fig. 4; stem, Osmundaceae; Chinle formation, Triassic; Arizona.

**CHIROPTERIS** Kurr, 1858.

*Chiropteris digitata* Kurr, in Bronn, 1858, p. 143, pl. 12; leaf, incertae sedis; Lettenkohlen-Sandstein, Triassic.

**CHITOSPERMUM** Harris, 1935.

*Chitospermum stercococcus* Harris, 1935, p. 134, pl. 29; seed, incertae sedis; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**CHLAMIDOSTACHYS** White, 1937.

*Chlamidostachys chesterianus* White, 1937, p. 38, pl. 8, figs. 11, 17-19, 21; cone impression, *Sphenophyllum* type?; Fayetteville shale, Mississippian; Bob Kidd Hollow, 3.2 miles southwest of Prairie Grove, Ark.

**CHLAMYDOCARPUS** Goepfert, 1864.

*Chlamydocarpus palmaeformis* Goepfert, 1864, p. 150, pl. 27, fig. 17; seed; Permian; near Braunau, Bohemia.

**CHLOEPHYCUS** Miller and Dyer, 1878.

*Chloephycus plumosum* Miller and Dyer, 1878, p. 3, pl. 4, fig. 1; incertae sedis; Cincinnati group, Silurian; Cincinnati, Ohio.

**CHLORELLOPSIS** Reiss, 1923.

*Chlorellopsis colonata* Reiss, 1923, p. 107, pl. 3, figs. 1, 2, 9; pl. 4, figs. 3-6; pl. 5, figs. 2-6.

**CHLOROTYLITES** Howe, 1932.

*Chlorotylites berryi* Howe, 1932a, p. 220, figs. 1-3; silicified alga, Chlorophyceae; Sucarnooche clay, lower Eocene; Sumter County, Ala.

**CHOFFATIA** Saporta, 1894.

*Choffatia francheti* Saporta, 1894, p. 150, pl. 24, fig. 8; pl. 26, figs. 19-22; plant of *Salvinia*-like habit; Cretaceous; Portugal.

**CHONDRIDES** Schimper, 1869.

*Chondrides furcatus* (Brongniart) Schimper, 1869 (1869-74), p. 163, pl. 3, fig. 8.

**CHONDRITES** Sternberg, 1833.

*Chondrites targionii* (Brongniart) Sternberg, 1833 (1820-38), p. 25. For *Fucoides targionii* Brongniart, 1828a-38, p. 56, pl. 4, figs. 2-6; alga?; England.

**CHONDROPHYTON** Saporta and Marion, 1885.

*Chondrophyton dissectum* Saporta and Marion, 1885, p. 120, fig. 126; leaf, dicotyledon.

**CHONDROPOGON** Squinabol, 1890.

*Chondropogon inorosolense* Squinabol, 1890, p. 181, pl. 11, fig. 3; alga?; Tertiary; Morosolo, Italy.

**CHORDITES** Fliche, 1905.

*Chordites lebruni* Fliche, 1905a, p. 50, pl. 4, fig. 1; alga, Phaeophyceae?; Triassic (upper Muschelkalk); Meurthe-et-Moselle, France. Briefly described but no species cited in Fliche, 1903.

**CHORDOPHYLLITES** Tate, 1876.

*Chordophyllites cicatricosus* Tate, in Tate and Blake, 1876, p. 474, pl. 14, fig. 9; incertae sedis; Lower Jurassic (Lias); Old Nab, Staithes, Yorkshire, England.

**CHORIONOPTERIS** Corda, 1845.

*Chorionopteris gleichenioides* Corda, 1845, p. 90, pl. 54, figs. 10-16; petrified fern pinnules with synangia; Carboniferous; Radnitz, Bohemia. See also Posthumus, 1931.

**CHROOCOCCITES** Reinsch, 1881.

*Chroococcites* sp. Reinsch, 1881, p. 48, pl. 11, figs. 11-28; pl. 7c, figs. 3, 5, 6; Upper Carboniferous; Mittelbexbach, Bavaria.

**CHRYSODIOPTERIS** Saporta, 1894.

*Chrysodiopteris marchantiaeformis* Saporta, 1894, p. 41, pl. 4, figs. 9, 17; fern foliage; Jurassic; Cabanas-de-Torres, Portugal.



- CHRYSTOTHECA** Miner, 1935.  
*Chrysotheca diskoensis* Miner, 1935, p. 590, pl. 18, figs. 1-10; perianth?, Jungermanniales; Upper Cretaceous; Amlsut, Disco Island, Greenland.
- CHUARIA** Walcott, 1928.  
*Chuaria* sp. Walcott, in White, 1928, p. 389; alga; pre-Cambrian; Grand Canyon, Ariz.
- CIBOTIOCAULIS** Ogura, 1927.  
*Cibotiocaulis tateiwa* Ogura, 1927, p. 364, pl. 3, figs. 13-15; pl. 7; petrified tree-fern stem, Cyatheaceae?; Lower Kyongsang formation, Jurassic; Syong-jye Gun, North Kyong-sang Do, Korea.
- CICATRICOSISPORITES** Robert Potonie and Gelletich, 1933.  
*Cicatricosisporites dorogensis* Robert Potonie and Gelletich, 1933, p. 522, pl. 1, figs. 1-5; Eocene; Dorog, Hungary.
- CINCHONIDIUM** Unger, 1850.  
*Cinchonidium racemosum* Unger, 1850a, p. 430; fruit, Rubiaceae; Miocene; Radoboj, Croatia. *See also* Unger, 1865 (1860-65), p. 11, pl. 3, figs. 1, 2, 6.
- CINGULARIA** C. E. Weiss, 1871.  
*Cingularia typica* C. E. Weiss, 1871, p. 138, pl. 14, fig. 4; fragment of articulate cone; Upper Carboniferous; Steinbachstollen, Rhenish Prussia. *See also* Renault, 1882, p. 144, and later works.
- CINNAMOMIPHYLLUM** Nathorst, 1888.  
*Cinnamomiphyllum* sp. Nathorst, 1888, p. 9, pl. 1, figs. 7-11; leaf, dicotyledon; Tertiary; Japan.
- CINNAMOMOPHYLLUM** Kräusel and Weyland, 1950.  
*Cinnamomophyllum (Cinnamomum) scheuchzeri* (Heer) Kräusel and Weyland, 1950, p. 68, pl. 11, fig. 7; pl. 16, figs. 1-6; pl. 17, figs. 1, 4-6; Tertiary; Regis mine near Altenburg, Germany.
- CINNAMOMOIDES** Seward, 1925.  
*Cinnamomoides newberryi* (Berry) Seward, 1925, pl. C, fig. 29; Cretaceous; Atanikerdluk, Greenland.
- CIRCIDOXYLON** Platen, 1908.  
*Circidoxylon zirkeli* Platen, 1908, p. 139, pl. 2, figs. 5, 6; wood; Tertiary; Nebraska.
- CIRCOPOROXYLON** Kräusel, 1949.  
*Circoporoxylon goepperti* (Conwentz) Kräusel, 1949, p. 115. For *Glyptostroboxylon goepperti* Conwentz, 1885, p. 445; lower Oligocene; Katapuliche, Argentina. *See also* Kräusel, 1919b, p. 211.
- CIRRATRIRADITES** L. R. Wilson and Coe, 1940.  
*Cirratriradites maculatus* L. R. Wilson and Coe, 1940, p. 183, pl. 1, fig. 7; spore; Des Moines group, Pennsylvanian; Green County coal mine, Franklin Township, Green County, Iowa.
- CISSITES** Debey, 1866.  
*Cissites aceroides* Debey, in Capellini and Heer, 1866, p. 11, pl. 2, fig. 5.
- CISSOPHYLLUM** Ettingshausen, 1887.  
*Cissophyllum malvernium* Ettingshausen, 1887b, p. 171, pl. 5, fig. 8; leaf fragment, Ampelideae; Eocene; Malvern Hills, New Zealand.
- CISTELITES** Heer, 1878.  
*Cistelites sachalinensis* Heer, 1878c, p. 59, pl. 15, fig. 12; nom. nud.; Miocene; Island of Sachalin, Mgratsch, Siberia.
- CISTINOCARPUM** Conwentz, 1886.  
*Cistinocarpum roemeri* Conwentz, 1886, p. 59, pl. 6, figs. 10-15; fruit, in amber, Cistaceae; early Tertiary; west Prussia.
- CISTOCARPUM** Menzel, 1913.  
*Cistocarpum decemvalvulatum* Menzel, 1913, p. 49, pl. 5, fig. 5; capsule, Cistaceae; Tertiary (Braunkohle); Germany.
- CITROPHYLLUM** E. W. Berry, 1909.  
*Citrophylum aligerum* (Lesquereux) E. W. Berry, 1909, p. 258, pl. 18a, figs. 1-8; leaf, compared with *Citrus*; Raritan formation, Upper Cretaceous; South Amboy, N. J.
- CLADIOCARYA** Reid and Chandler, 1926.  
*Cladiocarya foveolata* Reid and Chandler, 1926, p. 77, pl. 4, figs. 22, 23; fruit, Cyperaceae; Bembridge beds, Oligocene; Isle of Wight, England.
- CLADISCOTHALLUS** Renault, 1896.  
*Cladiscothallus keppeni* Renault, 1896a, p. 554, figs. 146, 147; alga?; Upper Devonian or Lower Carboniferous; Ryazan and Tula, Russia.
- CLADISCUS** Grand'Eury, 1877.  
*Cladiscus schnorrianus* (Geinitz) Grand'Eury, 1877, p. 382. Generic name given but no species cited in Anonymous, 1872, p. 403.
- CLADITES** D. H. Scott, 1930.  
*Cladites bracteatus* D. H. Scott, 1930, p. 342, figs. 1-12; petrified shoot, Cordaitales?; Lower Coal Measures, Upper Carboniferous; Shore, Littleborough, Lancashire, England.
- CLADOCEDROXYLON** Felix, 1882.  
*Cladocedroxylon auerbachii* (Ludwig) Felix, 1882b, p. 265, pl. 2, fig. 5. For *Pinus auerbachii* Ludwig, 1863, p. 275, pl. 46, figs. 5-7; Permian; Lithwinsk, etc., Perm [Molotov], Russia.
- CLADOCUPRESSOXYLON** Felix, 1882.  
*Cladocupressoxylon protolaria* Felix, 1882a, p. 46; coniferous wood; Oligocene.
- CLADOPHLEBIDIUM** Sze, 1931.  
*Cladophlebidium wongi* Sze, 1931, p. 4, pl. 2, fig. 4.

**CLADOPHLEBIS** Brongniart, 1849.

*Cladophlebis albertsii* (Dunker) Brongniart, 1849, p. 107. For *Neuropteris albertsii* Dunker, 1846, p. 8, pl. 7, fig. 6; fernlike foliage; Wealden?; Germany.

**CLADOPHORITES** Reiss, 1923.

*Cladophorites dubius* Reiss, 1923, p. 116, pl. 5, figs. 14, 15.

**CLADOSPORITES** Felix, 1894.

*Cladosporites bipartitus* Felix, 1894a, p. 276, pl. 19, fig. 1; fungus conidia, compared with *Cephalothecium* and *Cladosporium*; Eocene; Perekeschkul near Baku, Transcaucasia. This genus erroneously attributed to Link by Meschinelli, 1898, p. 80.

**CLADOSTROBUS** Zalesky, 1918.

*Cladostrobos lutugini* Zalesky, 1918, p. 7, pl. 54, figs. 6, 6a; incertae sedis; Carboniferous; near village Vasskino, Kuznets Basin, Russia.

**CLADOTHECA** Halle, 1911.

*CladotECA undans* (Lindley and Hutton) Halle, 1911a, p. 4, pls. 1, 2; fertile fern frond, Osmundaceae or Schizaeaceae?; Jurassic; Gristhorpe Bay, Yorkshire, England.

**CLADOTHRICINIUM** Zalesky, 1915.

*Cladotricinium pancratovi* Zalesky, 1915, p. 55, pl. 10, figs. 1, 2; Trichobacterinae?; Carboniferous; Russia.

**CLADOTHRYS** Renault, 1899.

*Cladotrys martyi* Renault, 1899, p. 894, figs. 3-6, 29, 30; pl. 8, figs. 7, 8; bacteria; Pleistocene; Aulne, France.

**CLADOXYLON** Unger, 1856.

*Cladoxylon mirabile* Unger, 1856, p. 178, pl. 12, figs. 6, 7; pteridosperm?; stems with complex stelar organization; Upper Devonian; Saalfeld, Thuringia. This binomial first used by Unger, 1854a; nom. nud.

**CLASTERIA** Dana, 1849.

*Clasteria australis* Dana, 1849, p. 719, pl. 14, figs. 3-5; Upper Carboniferous; New South Wales.

**CLASTEROSPORITES** Pia, 1927.

*Clasterosporites eocaenicus* (Fritzel and Vigulier) Pia, in Hirmer, 1927, p. 123, ber), Cistaceae; early Tertiary; west fig. 113; Dematiaceae, Fungi Imperfecti, in rhizome of *Equisetum noviodunense*; Eocene.

**CLATHRARIA** Brongniart, 1822.

*Clathraria brardii* Brongniart, 1822, p. 222, pl. 12, fig. 5; sigillarian stem fragment; Upper Carboniferous; Terrasson, Dépt. Dordogne, France.

**CLATHROPHYLLUM** Heer, 1862.

*Clathrophyllum meriani* (Brongniart) Heer, in Müller, Albrecht, 1862, p. 54. See also Heer, 1864-65, p. 54, pl. 2, fig. 10; Upper Triassic (Keuper); Rütthard, Switzerland.

**CLATHROPODIUM** Saporta, 1873-75.

*Clathropodium trigeri* Saporta, 1873c-75, p. 288, pl. 122, figs. 1-3; petrified cycadophyte trunk; Jurassic; Sarthe, France.

**CLATHROPTERIS** Brongniart, 1828.

*Clathropteris meniscioides* Brongniart, 1828b, p. 62, fern foliage; Lower Jurassic (Lias)?; Scania, Sweden. See also Brongniart, 1828-38, p. 380, pl. 134.

**CLAUSENISPERMUM** Reid and Chandler, 1933.

*Clausenispermum dubium* Reid and Chandler, 1933, p. 264, pl. 10, figs. 15, 16; seed, Rutaceae; London Clay, Eocene; Sheppey, Kent, England.

**CLAVATOR** Reid and Groves, 1924.

*Clavator reedii* Groves, 1924, p. 116; Characeae; Purbeck beds, Jurassic; Dorset, England. See also Clavator sp. Reid and Groves, 1916, p. 252, pl. 8.

**CLAVIJOPSIS** Schindehutte, 1907.

*Clavijopsis staubi* Schindehutte, 1907, p. 62, pl. 12, figs. 2a-c.

**CLEMENTSIELLA** Elias, 1942.

*Clementsella laminarum* (Cockerell) Elias, 1942, p. 103, pl. 4, figs. 3, 4; grass fruit; upper Oligocene or lower Miocene; Florissant, Colo.

**CLEPSYDROPSIS** Unger, 1856.

*Clepsydropsis antiqua* Unger, 1856, p. 165, pl. 7, figs. 1-13; coenopterid fern petiole; Upper Devonian; Saalfeld, Thuringia. This binomial given by Unger, 1854; nom. nud. For later accounts, see Hirmer, 1927; Sahni, 1928, 1932b.

**CLETHRAECARPUM** Menzel, 1913.

*Clethraecarpum asepalum* Menzel, 1913, p. 55, pl. 5, figs. 27, 28; fruit, Clethraceae; Tertiary (Braunkohle); Germany.

**CLEVEA** Crie, 1889.

*Clevea americana* Crie, 1889b, p. 23; nom. nud.

**CLIMACIOPHYTON** Steinmann and Elberskirch, 1929.

*Climaciophyton trifoliatum* Steinmann and Elberskirch, 1929, p. 49, pl. 2, fig. 3.

**CLOSTEROXYLON** Hartig, 1848.

*Closteroxylon lindleyanum* Hartig, 1848a, p. 170; wood; Tertiary; Germany.

**CLOUGHTONIA** Halle, 1911.

*Coughtonia rugosa* Halle, 1911b, p. 2, pls. 1-2; cycadophyte? leaflets; Jurassic (Middle Estuarine shales); Cloughton Wyke, Yorkshire, England.

**CLUSIAPHYLLUM** E. W. Berry, 1930.

*Clusiaphyllum eocenicum* E. W. Berry, 1930, p. 113, pl. 18, fig. 2; leaf fragment, Guttiferae; Wilcox group, Eocene; Nevada County, Ark.

**CLYPEINA** Michelin, 1845.

*Clypeina marginoporella* Michelin, 1845 (1840-47), p. 177, pl. 46, fig. 27; alga, Dasycladaceae; Upper Cretaceous; near d'Étampes (Seine-et-Oise), France.

**COCCOLOBITES** Visiani, 1858.

*Coccolobites massalongiana* Visiani, 1858, p. 440, pl. 4, fig. 1; Eocene; Monte Promina, Italy.

**COCCOLOBITES** E. W. Berry, 1916.

*Coccolobites cretaceus* E. W. Berry, 1916a, p. 830, pl. 68, fig. 1; leaf, Polygonaceae; Magothy formation, Upper Cretaceous; Grove Point, Cecil County, Md. See also Berry, 1914b, p. 298; nom. nud.

**COCCOPLASMIUM** Reinsch, 1881.

*Coccoplasmium* sp. Reinsch, 1881, p. 31, pl. 7, figs. 3-10; pl. 7a, figs. 1-3; Upper Carboniferous; Mittelbronn, Württemberg.

**COCCULITES** Heer, 1874.

*Cocculites kanti* Heer, 1874b, p. 21; Menispermaceae; Miocene; Greenland; nom. nud.

**COCCULOPHYLLUM** Velenovsky, 1889.

*Cocculophyllum cinnamomeum* Velenovsky, 1889, p. 54. For *Cocculus cinnamomeus* Velenovsky, 1885a, p. 65, pl. 8, figs. 16-21; Upper Cretaceous; Lipenec, Bohemia.

**COCHLIOCARPUS** Visiani, 1858.

*Cochliocarpus scorpiuroides* Visiani, 1858, p. 44, pl. 2, fig. 6; Eocene; Monte Promina, Italy.

**COCITES** Bronn, 1838.

*Cocites* sp. Bronn 1838 (1837-38), p. 861; palm? fruits.

**COCCOOPSIS** Fliche, 1896.

*Coccoopsis zeillertii* Fliche, 1896, p. 271, pl. 12, figs. 5, 6; pl. 13, figs. 1, 2; seed, Palmaceae; Cretaceous; Argers and Chaudefontaine, near Ste. Menesould, France. See also *Coccoopsis* sp. Fliche, 1894, p. 889.

**CODITES** Sternberg, 1833.

*Codites serpentinus* Sternberg, 1833 (1820-38), p. 20, pl. 3, fig. 1; incertae sedis; Jurassic; Solenhofen, Bavaria.

**CODONOPHORA** Massalongio, 1857.

*Codonophora turbinata* (Brongniart) Massalongio, 1857b, p. 778. For *Fucoides turbinatus* Brongniart, 1823, p. 314, pl. 20, fig. 1; Eocene; Monte Bolca, Italy.

**CODONOPHYCUS** Fenton and Fenton, 1939.

*Codonophycus austini* Fenton and Fenton, 1939, p. 113, pl. 11, figs. 1-3; alga; Madison formation, Mississippian; Horse Creek, Bald Mtn. quadrangle, Big Horn Mts., Wyo.

**CODONOPHYTON** Nothorst, 1902.

*Codonophyton epiphyticum* Nothorst, 1902a, p. 45, pl. 8, figs. 1, 2; pl. 13, figs. 9-15; incertae sedis; Upper Devonian; Bear Island, Norway.

**CODONOSPERMUM** Brongniart, 1874.

*Codonospermum anomalum* Brongniart, 1874, p. 258, pl. 23, figs. 9-12; silicified seed; Carboniferous; St.-Étienne, France.

**CODONOTHECA** Sellards, 1903.

*Codonotheca caduca* Sellards, 1903, p. 90, pl. 8; pteridosperm microsporangiate organ; Pennsylvanian; Mazon Creek, Ill.

**COELOSPHAERIDIUM** Roemer, 1885.

*Coelospaeridium cyclocrinophitum* Roemer, 1885, p. 57, pl. 27, fig. 1.

**COENOXYLON**.

Error in Seward, 1917, p. 293, for *Caenoxylon*, Zalessky.

**COLACITES** Reinsch, 1881.

*Colacites* sp. Reinsch, 1881, p. 70, pl. 16, fig. 1; pl. 16a, figs. 6-8; Upper Carboniferous; Zwickau, Saxony.

**COLEOPHYLLITES** Grand'Eury, 1877.

*Coleophyllites zeaeformis* Grand'Eury, 1877, p. 39, calamitean foliage?; Carboniferous; Beraudiere, Loire, France. For *Poacites zeaeformis* Schlotheim, 1820, p. 416, pl. 26, fig. 2.

**COLLENELLA** J. H. Johnson, 1942.

*Collenella guadalupensis* J. H. Johnson, 1942, p. 212, pl. 7, fig. 3; lime-secreting alga; Yates sandstone, Permian; south side Dark Canyon, Guadalupe Mts., N. Mex.

**COLLENIA** Walcott, 1914.

*Collenia undosa* Walcott, 1914, p. 113, pl. 13, figs. 1, 2; pl. 14, figs. 1, 2; alga; Beltian series, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

**COLOMBRICARPUM** E. M. Reid, 1933.

*Colombicarpum biloculare* E. M. Reid, 1933, p. 212, pl. 14, figs. 10-13; fruit, Anacardiaceae; Tertiary; Colombia.

**COLPODEXYLON** Banks, 1944.

*Colpodexylon deatsii* Banks, 1944, p. 651, figs. 1-15, 17, 19, 21, 24, 25; lycopod with lobed xylem strand and three-forked leaves; Delaware River flags, lower Upper Devonian; 1 mile southeast of Pond Eddy, Sullivan County, N. Y.

**COLPOSpermum** Renault, 1890.

*Colpospermum sulcatum* Renault, in Renault and Zeiller, 1890, p. 653, pl. 72, figs. 63-66; seed; Carboniferous; Commeny, France.

**COLPOXYLON** Brongniart, 1849.

*Colpoxyylon aeduense* Brongniart, 1849, p. 109. See also Renault, 1880, p. 78, pl. 11, fig. 8; and Renault, 1896, p. 299; petrified stem, Medulloseae; Permian; Autun, France.

**COLUMNARIA** Sternberg, 1825.

*Columnaria intacta* Sternberg, 1825, (1820-38), Tentamen, p. xxv.

**COLYMBETES** Stopes, 1915.

*Colymbetes eduardi* Stopes, 1915, p. 314, pls. 31, 32; petrified cycadophyte trunk; Lower Greensand, Cretaceous; locality unknown.

**COLYMBOSXYLON** Hartig, 1848.

No species assigned but apparently intended as *Colymbosylon cretacea* (Corda) Hartig, 1848a, p. 140. For *Peuce cretacea* (Corda) Endlicher, 1847, p. 296. For *Pinus cretacea* Corda, in Reuss, 1845-46, p. 91, pl. 47, figs. 1-6.

**COMATES** Reinsch, 1881.

*Comates* sp. Reinsch, 1881, p. 92, pl. 31a, figs. 8-10; Upper Carboniferous; England.

**COMBRETACINIUM** Felix, 1894.

*Combretacinium quisqualoides* Felix, 1894a, p. 90, pl. 10, fig. 1; compared with *Quiaqualis pubescens*; Sumgait series, Eocene; Caucasus.

**COMBRETANTHITES** E. W. Berry, 1913.

*Combretanthites eocenica* E. W. Berry, 1913, p. 262, pl. 21; flower, Combretaceae; Wilcox group, Eocene; Grand Junction, Fayette County, Tenn.

**COMBRETIPHYLLUM** Menzel, 1909.

*Combretiphyllum acuminatum* Menzel, 1909, p. 402, pl. 2, fig. 7; leaf fragment, Anonaceae or Moraceae?; lower Tertiary; Kamerun, Africa.

**COMEPHYLLUM** Emmons, 1857.

*Comephyllum cristatum* Emmons, 1857, p. 128, fig. 97; incertae sedis; Triassic; Chatham County, N. C.

**COMIA** Zalesky, 1934.

*Comia pereborensis* Zalesky, 1934b, p. 268, figs. 44, 45; fernlike foliage; Permian; Pechora basin, Russia.

**COMIPTERIDIUM** Zalesky, 1934.

*Comipteridium dobroljubovae* Zalesky, 1934b, p. 253, fig. 22; fern?; frond fragment; Permian; Pechora basin, Russia.

**COMMELINACITES** Caspary, 1881.

*Commelinacites dichorisandroides* Caspary, 1881, p. 29.

**COMPSOPTERIS** Zalesky, 1934.

*Compsopteris adzvensis* Zalesky, 1934b, p. 264, figs. 38, 39; alethopterid foliage; Permian; Pechora basin, Russia.

**COMPSOTESTA** (Brongniart) Bertrand, 1910.

*Compsotesta brongniarti* Bertrand, 1910, p. 129, pl. 14; petrified seed; Carboniferous; Grand Croix, France.

**COMPSOXYLON** Zalesky, 1927.

*Compsoxylon montevertet* Zalesky, 1927a, p. 46, pl. 29, figs. 8-10; Permian; Samara, southeast Russia.

**COMPTONIOPTERIS** Marlon, 1890.

*Comptoniopteris provincialis* Marlon, 1890, p. 1053; Polypodiaceae; Cretaceous; Martigues, France. First species illustrated: *Comptoniopteris cercalina* Saporta, 1894, p. 129, pl. 26, fig. 24.

**COMPTONIPHYLLUM** Nathorst, 1888.

*Comptoniphyllum naumannii* Nathorst, 1888, p. 202, pl. 18, fig. 2; leaf, compared with *Myrica*; Miocene; Moriyo-shimura, Senbokugori, Ugo province, Japan.

**COMPTONITES** Hisinger, 1837.

*Comptonites antiquus* (Nilsson) Hisinger, 1837, p. 111. See also Stur, 1863, p. 57, fig. 7.

**COMPTOSPERMUM** Grand'Eury, 1877.

*Comptospermum jarensae* (Brongniart) Grand'Eury, 1877, p. 184; seed; Carboniferous; France.

**CONCHOCARYON** Mueller, 1879.

*Conchocaryon smithii* Mueller, 1879 (1871-82), p. 39, pl. 17, figs. 4, 5; Pliocene; Gulgong, Australia.

**CONCHOPHYLLUM** Schenk, 1883.

*Conchophyllum richthofeni* Schenk, 1883c, p. 223, pl. 42, figs. 21-26; foliage shoots, Coriariatales?; Carboniferous; Kal-ping in Tshill, China.

**CONCHOPTERIS**.

Probably error for *Lonchopteris*, in Britton, 1862, p. 20.

**CONCHOTHECA** Mueller, 1873.

*Conchotheca rotundata* Mueller, 1873 (1871-82), p. 41, pl. 6, figs. 9-11; Pliocene; Nintingbool, Victoria, Australia.

**CONCHYOPHYCUS** Saporta, 1872.

*Conchyophycus marcignyanus* Saporta, 1872a-73, p. 151, pl. 11; alga; Jurassic; Marcigny-sous-Thil, France.

**CONDRUSIA** Stockmans, 1946.

*Condrusia rumex* Stockmans, 1946a, p. 1, fig. 2; Upper Devonian; Belgium. For full account, see Stockmans, 1948, p. 57, pl. 11, figs. 4-12.

**CONDYLITES** Thistleton-Dyer, 1872.

*Condylites squamatus* Thistleton-Dyer, 1872, p. 195, pl. 5, fig. 7; coniferous twig?; Jurassic; Solenhofen, Bavaria.

**CONFERVITES** Brongniart, 1828.

*Confervites thoreaciformis* Brongniart, 1828 (1828a-38), p. 86, pl. 9 bis, figs. 3-4; alga?; Tertiary; Monte Bolca, near Verona, Italy.

**CONFEROIDES** Jaeger, 1827.

*Confervoides arenaceus* Jaeger, 1827, p. 34, pl. 8, fig. 2; alga?; Upper Triassic (Keuper); Ilsfeld, Württemberg.

**CONIFERITES** Unger, 1839.

*Coniferites lignitum* Unger, 1839b, p. 13; Miocene; Peggan, Styria. Apparently only species illustrated is *Coniferites? verticillatus* Tate in Johnston, 1853, p. 309, pl. 13, figs. 8, 8a; articulate stem impression?; Upper Carboniferous; Lammerton, England. Doubtful that these two species are closely related.

**CONIFEROCAULON** Fliche, 1900.

*Coniferoaulon colymbaeforme* Fliche, 1900, p. 16, figs. 1-3 [unnumbered plate]; stem, Coniferales; Cretaceous; France.

**CONIFEROMYELON** Fliche, 1908.

*Coniferomyelon conchylianum* Fliche, 1908, p. 211, pl. 18, figs. 2-3; stem cast, Coniferales?; Triassic; Meurthe-et-Moselle, France.

**CONIFEROXYLON** G. F. Beck, 1945.

*Coniferoxylon krausei* (Felix) G. F. Beck, 1945, p. 94; a genus established for "anomalous" coniferous wood.

**CONIOPTERIS** Brongniart, 1849.

*Coniopteris murrayana* Brongniart, 1849, p. 75. For *Pecopteris murrayana* Brongniart, 1828a-38, p. 358, pl. 126, figs. 1-5; fernlike foliage; Jurassic; Scarborough, Yorkshire, England.

**CONITES** Sternberg, 1823.

*Conites bucklandi* Sternberg, 1823 (1820-38), p. 39, pl. 30; cone, Coniferales?

**CONNARACANTHIUM** Conwentz, 1886.

*Connaracanthium roureoides* Conwentz, 1886, p. 104, pl. 10, figs. 17-21; inflorescence (in amber), Connaraceae; early Tertiary; West Prussia.

**CONNAROPHYLLUM** Ettingshausen, 1903.

*Connarophyllum crassinervium* Ettingshausen, in Krasser, 1903, p. 858; nom. nud.

**CONOCARPITES** E. W. Berry, 1919.

*Conocarpites formosus* E. W. Berry, 1919a, p. 127, pl. 28, fig. 9; leaf, Combretaceae; Tuscaloosa formation, Upper Cretaceous; Glen Allen, Fayette County, Ala.

**CONOPHOROIDES** Koenig, 1825.

*Conophoroides anthemis* Koenig, 1825, pl. 16, fig. 200; no description; later transferred to *Lepidostrobos anthemis* (Koenig) Kidston, 1886, p. 197.

**CONOPHYTON** Maslov, 1937.

*Conophyton lituus* Maslov, 1937b, p. 344, pl. 4, figs. 2, 3; calcareous alga?; Lower Cambrian; Aldan River, western Baikal, USSR.

**CONOSPERMITES** Ettingshausen, 1867.

*Conospermities hakeaeifolius* Ettingshausen, 1867, p. 254, pl. 3, figs. 4, 12; leaf, Proteaceae; Upper Cretaceous; Niederschoena, Saxony.

**CONOSPERMOPHYLLUM** Velenovsky, 1889.

*Conospermophyllum hakeaeifolium* Velenovsky, 1889, p. 53.

**CONOSTICHUS** Lesquereux, 1876.

*Conostichus ornatus* Lesquereux, 1876a, p. 142, pl. 1, fig. 6; incertae sedis; Pennsylvanian; Indiana.

**CONOSTOMA** Williamson, 1876.

*Conostoma oblonga* Williamson, 1876a, p. 71; seed; Upper Carboniferous; Oldham, England. See also Williamson, 1877, p. 268, pl. 12, figs. 80, 81, 86.

**CONSTANTINUM** Unger, 1863.

*Constantinium proteoides* Unger, in Tschihatchef, 1863, p. 517; wood, Proteaceae; Tertiary; Lake Derkos, Thrace. See also Tschihatchef, 1866, p. 322, pl. 17, figs. 1, 2.

**CONVALLARITES** Brongniart, 1828.

*Convallarites erecta* Brongniart, 1828d, p. 455, pl. 19; articulate stem and leaves?; Triassic; Sultz-les-Bains, near Strasbourg.

**COOKSONIA** Lang, 1937.

*Cooksonia pertoni* Lang, 1937, p. 250, pl. 8, figs. 4-19; pl. 9, figs. 20-27; small leafless plant, Psilophytales?; Devonian, Devonian; Perton Quarry, Saltwells, South Pembrokeshire, England.

**COPIAPAEA** Solms-Laubach, 1899.

*Copiapaea plicatella* Solms-Laubach, 1899, p. 594, pl. 13, figs. 8-11; leaf fragments; Rhaetic; La Tenera, Chile.

**COPPERIA** Walcott, 1914.

*Copperia tubiformis* Walcott, 1914, p. 110, pl. 19, figs. 1-3; alga; Newland limestone, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

**COPROSMAEPHYLLUM** Deane, 1904.

*Coprosmaephyllum ovatum* Deane, 1904, p. 212, pl. 20, figs. 1-3; leaf, compared with *Coprosma*; Tertiary; Sentinel Rock, Otway Coast, Victoria.

**COPROSMITES** Hector, 1880.

*Coprosmites oblongifolia* Hector, 1880, p. 49; nom. nud.

**CORALLINITES** Unger, 1847.

*Corallinites arbuscula* Unger, 1847 (1841-47), p. 127, pl. 39, fig. 6; alga?; Jurassic; Pechgraben near Weiher, Austria.

**CORAPHYTON** Steinmann and Elberskirch, 1929.

*Coraphyton problematicum* Steinmann and Elberskirch, 1929, p. C59, fig. 22, pl. 2, figs. 9, 10; Lower Devonian; Wahnbahtals near Sieburg, Germany.

**CORCHORITES** Ettingshausen and Gardner, 1879.

*Corchorites quadricostatus* Ettingshausen and Gardner, in Ettingshausen, 1879, p. 395; nom. nud.

**CORCHORITES** Deane, 1902.

*Corchorites crenulata* Deane, 1902a, p. 62, pl. 17, fig. 1; leaf, compared with *Corchorus cunninghamii*; Tertiary; Wingello, New South Wales.

**CORDAIANTHOPSIS** Fliche, 1910.

*Cordaianthopsis minieri* Fliche, 1910, p. 267, pl. 27, fig. 2; inflorescence, Cordaitales?; Triassic; Haute-Saone, Vosges, France.

**CORDAIANTHUS** Grand'Eury, 1877.

*Cordaianthus gemmifer* Grand'Eury, 1877, p. 228, pl. 26, figs. 4-7; inflorescence, Cordaitales; Carboniferous; France.

**CORDAICARPON** H. B. Geinitz, 1862.

*Cordaicarpus cordai* H. B. Geinitz, 1862, p. 150. For *Carpolithes cordai* Geinitz, 1855, p. 41, pl. 2, figs. 7-16; seed compressions, thought by Geinitz to be seed of *Cordaites principalis*; Upper Carboniferous; Zaukerode, Saxony. See also Seward, 1917, p. 334, 338. Spelling *Cordaicarpus* adopted by many later writers.

**CORDAICARPUS**.

See *Cordaicarpus*.

**CORDAICLADUS** Grand'Eury, 1877.

*Cordaicladus subchnorrianus* Grand'Eury, 1877, p. 243, pl. 28, figs. 1, 2; Cordaite stem cast; Carboniferous; France.

**CORDAIFLOYOS** Grand'Eury, 1877.

*Cordaifloyos* sp. Grand'Eury, 1877, p. 250; stem impression, Cordaitales; Carboniferous; France.

**CORDAIOPSIS** Renault, 1896.

*Cordaiopsis elliptica* Renault, 1896a, p. 344, pl. 86, figs. 12, 13; vegetative bud, Cordaitales?; Carboniferous; Les Chevrots, France.

**CORDAIPHLOEUM** Grand'Eury, 1877.

*Cordaiphloeum* sp. Grand'Eury, 1877, p. 509; nom. nud.

**CORDAISPERMUM** Renault, 1881.

*Cordaispermum guttberti* (Geinitz) Renault, 1881, p. 103, pl. 14, fig. 7; seed, Cordaitales; Upper Carboniferous; St.-Étienne, France. See also Seward, 1917, p. 335.

**CORDAISTROBUS** Lesquereux, 1878.

*Cordaistrobus grand'euryi* Lesquereux, 1878b, p. 328; Pennsylvanian; Cannelton, Beaver County, Pa. See also Lesquereux, 1879, pl. 82, figs. 3, 4a.

**CORDAITANTHUS** Ottokar Feistmantel, 1876.

*Cordaitanthus communis* Ottokar Feistmantel, 1876c, p. 272, pl. 61, figs. 1-4; inflorescence, Cordaitales.

**CORDAITES** Unger, 1850.

*Cordaites borassifolia* (Sternberg) Unger, 1850a, p. 277. For *Flabellaria borassifolia* Sternberg, 1822 (1820-38), p. 32, pl. 18; foliage; Upper Carboniferous; Swina, Bohemia. [*Flabellaria borassifolia* later was changed to *Pychnophyllum borassifolia* by Brongniart (1849) after Corda had shown that it was not a palm. Thus both *Pychnophyllum* and *Cordaites* are based

on the same specimen and Seward, 1917, p. 223, notes: "It has recently been proposed to revive the forgotten designation *Pychnophyllum*, but the reasons given are hardly likely to induce botanists to discard the familiar generic name which perpetuates the memory of Corda."]

**CORDAIXYLON** Grand'Eury, 1877.

*Cordaixylon* sp. Grand'Eury, 1877, p. 257.

First? illustrated account is for *Cordaioxylon credneri* Morgenroth, 1883, p. 306, pls. 3, 4. Note misspelling of generic name here.

**COREMATOCLADUS** Ruedemann, 1909.

*Corematocladus densa* Ruedemann, 1909, p. 206, pl. 3, figs. 1-5; alga, Florideae?; Trenton limestone, Ordovician; Glen Falls, N. Y.

**CORMARAUCARIOXYLON** Lignier, 1907.

*Cormaraucarioxylon crasseradiatum* Lignier, 1907, p. 305; pl. 20, figs. 53-57; pl. 21, figs. 62-64, 69; pl. 23, fig. 82; coniferous wood; Upper Jurassic (Oxfordian); Trouville, France.

**CORMOCEDROXYLON** Felix, 1882.

*Cormocedroxylon jurense* (Rouillier and Fahrenkohl) Felix, 1882b, p. 264; coniferous wood; Jurassic; Khorochovo, Russia.

**CORMOCORDAITES** Grand'Eury, 1890.

*Cormocordaites* sp. Grand'Eury, 1890, p. 314, pl. 7, fig. 11; partly petrified cordaitean stem; Upper Carboniferous; St.-Étienne, France.

**CORMOCUPRESSINOXYLON**.

*Cormocupressinoxylon ucranicum*, in Hofmann, 1884b, p. 171. Mistake? or emended spelling for *Cormocupressoxylon ucranicum* (Goeppert) Felix, 1882b, p. 267.

**CORMOCUPRESSOXYLON** Felix, 1882.

*Cormocupressoxylon protolaria* Felix, 1882a, p. 46; coniferous wood; Oligocene.

**CORNOPHYLLUM** Newberry, 1895.

*Cornophyllum vetustum* Newberry, 1895, p. 119, pl. 19, fig. 10; leaf, Cornaceae; Cretaceous; Woodbridge, N. J.

**CORNOXYLON** Conwentz, 1882.

*Cornoxylon erraticum* Conwentz, 1882, p. 157, wood; Pleistocene (erratic derived from an earlier formation); Holstein. See also Conwentz, in Vater, 1884, p. 846, pl. 29, fig. 27.

**CORNUCARPUS** E. A. N. Arber, 1914.

*Cornucarpus acutum* (Lindley and Hutton) E. A. N. Arber, 1914, p. 89, pl. 6, fig. 14; platyspermic seed; Carboniferous.

**CORONELIA** Florin, 1940.

*Coronelia mollinae* Florin, 1940c, p. 20, pl. 3, figs. 3-10; pl. 4, figs. 1-8; pl. 5, figs. 1-4; Eocene; Coronel, Dept. Coronel, Chile.

**CORTICITES** Rossmassler, 1840.

*Corticites lenticellus* Rossmassler, 1840, p. 41, pl. 12, fig. 56; Miocene; Altsattel, Bohemia.

**CORYDOPODIUM** Derville, 1931.

*Corydopodium pruvosti* Derville, 1931, p. 63, pl. 5, figs. 17, 18; pl. 6, figs. 20-24; pl. 7, figs. 25-28; pl. 9, figs. 33, 34; alga, Myxophyceae; Carboniferous; Bas-Boulonnais, France.

**CORYLIPOLENITES** Robert Potonie, 1934.

*Corylipollenites coryphaeus* Robert Potonie, 1934, p. 53, pl. 2, fig. 10; pollen, Betulaceae; Miocene.

**CORYLITES** J. S. Gardner, 1887.

*Corylites macquarrii* (Forbes) J. S. Gardner, 1887, p. 290, pl. 15, fig. 3; *Corylus*-like leaf; Miocene; Atanekerdluk, Isle of Mull, Scotland.

**CORYLOIDITES** Thiergart, 1950.

*Coryloidites* sp. Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 53, pl. C, fig. 18; pollen, Betulaceae; Pliocene; Lippe; no description.

**CORYLOPSITES** Mathiesen, 1932.

*Corylopsites groenlandicus* Mathiesen, 1932, p. 16, figs. 5-10; wood, compared with *Corylopsis*; early Tertiary; Cape Dalton, east Greenland.

**CORYNECARPUS** C. F. W. Braun, 1840.

*Corynecarpus grandis* C. F. W. Braun, 1840, p. 105, nom. nud.

**CORYNEPTERIS** Bally, 1860.

*Corynepteris stellata* Bally, 1860, p. 238, pl. 21, figs. 1a-c; fragment of fertile fern-like frond; Carboniferous; Ballygiltenan Lower, near Glin, County Limerick, Ireland.

**CORYNOPHYLLITES** Zalesky, 1937.

*Corynophyllites setiformis* Zalesky, 1937b, p. 43, fig. 6; stem-bearing filiform foliage, Equisetales; Permian; Russia.

**COSCLEYA** Kidston, 1914.

*Coscleya glomerata* Kidston, 1914, p. 97, pl. 5, figs. 4, 4a, 5, 6; pl. 10, fig. 4; fertile frond fragment, Pteridospermae?; "Ten-foot Ironstone Measures," Upper Carboniferous; Cosely near Dudley, Staffordshire, England.

**COSTARITES** Debey, 1848.

*Costarites undulatus* Debey, 1848, p. 115; nom. nud.

**COTTAEA** Goepfert, 1836.

*Cottaea danaeoides* Goepfert, 1836, p. 452; Upper Triassic (Keuper); Stuttgart, Württemberg. For illustrations Goepfert refers to Jaeger, 1827, pl. 7, fig. 6. See also Posthumus, 1931.

**COTTAITES** Unger, 1842.

*Cottaites lapidariorum* Unger, 1842b, p. 176; wood, Leguminosae; Tertiary; Gleichenberg, Styria. See also Unger, 1854b, p. 182, pl. 7, figs. 1-3. This species removed to *Ulmintum* by Edwards, 1931, leaving type species(?) as *Cottaites robustior* Unger, 1842b, p. 176.

**CRANMERIA** Reid and Chandler, 1933.

*Cranmeria trilocularis* Reid and Chandler, 1933, p. 424, pl. 22, figs. 22-28; fruit, Lythraceae?; London Clay, Eocene; Minster, Kent, England.

**CRASPEDOSPERMA** Zalesky, 1937.

*Craspedosperma bardacanum* Zalesky, 1937b, p. 87, fig. 58, seed; Permian; Matveyevo, USSR.

**CRASSULITES** Laurent, 1899.

*Crassulites* sp. Laurent, 1899, p. 145, pl. 14, figs. 31, 31a; stem and foliage compared with *Sedum*; Tertiary; Celas, France.

**CRATOPLEURA** Weber, 1892.

*Cratopleura holsatica* Weber, 1892, p. 128, pls. 4, 5; seed, Nymphaeaceae; Interglacial.

**CREDNERIA** Zenker, 1833.

*Credneria integerrima* Zenker, 1833a, p. 17, pl. 2, fig. F; leaf, dicotyledon; Upper Cretaceous; Blankenburg, Germany.

**CREMATOPTERIS** Schimper and Mougeot, 1844.

*Crematopteris typica* Schimper and Mougeot, 1844, p. 74, pl. 35; Triassic; Soultz-les-Bains, Alsace.

**CREPIDOPTERIS** Presl, 1838.

*Crepidopteris marginata* (Brongniart) Presl, in Sternberg, 1838 (1820-38), p. 119; alethopterid foliage. See also Brongniart, 1834 (1828-38), pl. 87, fig. 2.

**CRETOVARIVM** Stopes and Fujii, 1910.

*Cretovarium japonicum* Stopes and Fujii, 1910, p. 70, pl. 9, figs. 58-60; angiosperm ovary compared with *Aletris* (Liliaceae); Upper Cretaceous; Hokkaido, Japan. See Stopes and Fujii, 1909, p. 559; nom. nud.

**CRINANTHUS** Massalongo, 1859.

*Crinanthus fenizianum* Massalongo, 1859a, p. 61, pl. 36, fig. 1; fruit?, Liliaceae; Eocene; Italy.

**CRINITES** Tate, 1853.

*Crinites lanceolata* Tate, in Johnston, 1853, p. 304, pl. 13, fig. 6; leaf? fragment, incertae sedis; Upper Carboniferous; England.

**CRINOPHYLLUM** Achepohl, 1833.

*Crinophyllum* sp. Achepohl, 1833, p. 96, pl. 32, fig. 12; calamitan roots?; Upper Carboniferous; Westphalia.

**CROMYODENDRON** Presl, 1838.

*Cromyodendron radnicense* Presl, in Sternberg, 1838 (1820-38), p. 193.  
For *Scitamineites musaeformis* Sternberg, 1825 (1820-38), Tentamen, p. xxxvi, pl. 5, figs. 2a-b.

**CROSSOCHORDA** Schimper, 1879.

*Crossochorda scotica* (MacCoy) Schimper, in Schimper and Schenk, 1879 (1879-90), p. 52, fig. 40; alga, Chordophyceae?; Silurian.

**CROSSOTHECA** Zeiller, 1883.

*Crossotheca crepini* Zeiller, 1883, p. 181, pl. 9, figs. 1-9; pteridosperm microsporangiate organ; Carboniferous. For recent detailed consideration of the genus, see Kidston, 1923b, p. 326.

**CROSSOTOLEPIS** Fliche, 1899.

*Crossotolepis perroti* Fliche, 1899b, p. 474, pl. 12, fig. 2; seed cone, Coniferales; Oligocene; near Embrun, France.

**CROSSOZAMIA** Pomel, 1849.

*Crossozamia moreana* Pomel, 1849, p. 343; cycadophyte leaf; Jurassic; St. Mihiel, France.

**CROTONOPHYLLUM** Velenovsky, 1889.

*Crotonophyllum cretaceum* Velenovsky, 1889, p. 20, pl. 5, figs. 4-11; leaf, compared with *Croton* (Euphorbiaceae); Upper Cretaceous; Vyserovic, Bohemia.

**CROWELLA** Reid and Chandler, 1933.

*Crowella globosa* (Bowerbank) Reid and Chandler, 1933, p. 216, pl. 7, figs. 6-11; fruit, Lauraceae; London Clay, Eocene; Sheppey, England.

**CRUZIANA** d'Orbigny, 1842.

*Cruziana rugosa* (Cordier) d'Orbigny, 1842, p. 30, pl. 1, fig. 1.

**CRYPTOCARYOIDES** E. W. Berry, 1937.

*Cryptocaryoides marisantisimensis* E. W. Berry, 1937, p. 47, pl. 6, fig. 3; leaf, compared with *Cryptocarya*, *Aniba* (Lauraceae); Paleocene; Cerro Funes, between Chubut and Santa Cruz, Patagonia.

**CRYPTOMERIOPSIS** Stöpes and Fujii, 1910.

*Cryptomeriopsis antiqua* Stöpes and Fujii, 1910, p. 52, pl. 1, fig. 11; pl. 6, figs. 35-41; coniferous shoot, compared with *Cryptomeria* (Taxodiaceae); Upper Cretaceous; Hokkaido, Japan. Earlier citation: Stöpes and Fujii, 1909, p. 559, nom. nud.

**CRYPTOMERITES** Brongniart, 1849.

*Cryptomerites ulmanni* (Bronn) Brongniart, 1849, p. 123. For *Cupressites ulmanni* Bronn, 1837 (1837-38), p. 42, pl. 8, fig. 5; coniferous seeds.

**CRYPTOPHYLLITES** R. M. Johnston, 1888.

*Cryptophyllites tasmanica* R. M. Johnston, 1888, pl. 22, fig. 13; Carboniferous?; Campanian, Mt. Wellington, Tasmania.

**CRYPTOPLASMIUM** Reinsch, 1881.

*Cryptoplasmium* sp. Reinsch, 1881, p. 36, pl. 8a, figs. 9, 10; Middle Triassic; Rothenburg, Franconia.

**CRYPTOTHECIUM** Hübener, 1851.

*Cryptothecium antediluvianum* Hübener, in Weber, 1851, p. 228; moss; Oligocene; Wohlscheld, Rhenish Prussia.

**CRYPTOXYLON** Kidston, 1897.

*Cryptoxylon forjarense* Kidston, 1897, p. 361, pls. 8, 9; stem, incertae sedis; Lower Old Red Sandstone, Devonian; Reswallie, near Forfar, Scotland.

**CRYPTOZOON** Hall, 1884.

*Cryptozoon proliferum* Hall, 1884, pl. 6, description on unnumbered page opposite pl. 6; alga?; Greenfield, Saratoga County, N. Y.

**CTENIDIOPSIS** Raciborski, 1894.

*Ctenidiopsis grojecensis* Raciborski, 1894, p. 204, pl. 19, figs. 4-7.

**CTENIDIUM** Heer, 1881.

*Ctenidium integerrimum* Heer, 1881, p. 17, pl. 16, figs. 4-11; cycadophyte frond; Cretaceous; Almargem, Portugal.

**CTENIS** Lindley and Hutton, 1834.

*Ctenis falcata* Lindley and Hutton, 1834 (1831-37), p. 63, pl. 103; cycadophyte leaf; Jurassic; Gristhorpe Bay, Yorkshire, England.

**CTENOPHYLLUM** Schimper, 1870.

*Ctenophyllum braunianum* (Goeppert) Schimper, 1870 (1870-72), p. 143; cycadophyte foliage; Rhaetic; Bayreuth, Silesia. For *Pterophyllum braunianum* Goeppert, 1844, p. 134. See also Schenk, 1867 (1865-67), p. 164, pl. 38, figs. 1-10.

**CTENOPSIS** E. W. Berry, 1911.

*Ctenopsis latifolia* (Fontaine) E. W. Berry, 1911a, p. 349, pl. 55, figs. 1, 2; foliage, Bennettitales; Patuxent formation, Lower Cretaceous; Fredericksburg, Va.

**CTENOPTERIS** Saporta, 1872.

*Ctenopteris cycadea* (Brongniart) Saporta, 1872a-73, p. 355, pl. 40, figs. 2-5; pl. 41, figs. 1, 2; cycadophyte leaves; Jurassic; Moselle, France.

**CTENOZAMITES** Nathorst, 1886.

*Ctenozamites cycadea* (Brongniart) Nathorst 1886c, p. 122. For illustrations, see Schenk, 1887, p. 5, pl. 3, figs. 11-16; pl. 4, fig. 18; pl. 6, fig. 30; pl. 7, fig. 36.

**CUCUBALITES** Goeppert, 1838.

*Cucubalites goldfussii* Goeppert, 1838, p. 570, pl. 42, fig. 3; flower; Miocene; Röttgen, near Bonn, Rhenish Prussia.



**CUCUMITES** Bowerbank, 1840.

*Cucumites variabilis* Bowerbank, 1840, p. 91, pl. 13, figs. 1-34; fruit, Cucurbitaceae; London Clay, Eocene; Sheppey, Kent, England.

**CUCURBITARIOPSIS** Richard Beck, 1882.

*Cucurbitariopsis congregata* Richard Beck, 1882, p. 752; fungus; Oligocene; Brandis, near Leipzig.

**CUCURBITES** E. W. Berry, 1929.

*Cucurbitites compressus* E. W. Berry, 1929b, p. 168, pl. 3, figs. 14, 15; seed, Cucurbitaceae; Tertiary; Belén, Peru.

**CULGOWERIA** Florin, 1936.

*Culgoweria mirabilis* Florin, 1936b, p. 133, pl. 33, figs. 3-12; pl. 34; pl. 35, figs. 1, 2; petrified ginkgophyte foliage; Franz Joseph Land.

**CULMITES** Brongniart, 1822.

*Culmites nodosus* Brongniart, 1822, p. 215, pl. 12, fig. 1; articulate? stem cast; Eocene; near Paris, France.

**CUNEATOPTERIS** Henry Potonie, 1903.

*Cuneopteris elegans* (Brongniart) Henry Potonie, 1903, p. 16. For *Sphenopteris elegans* Brongniart, 1829 (1828a-38), p. 172, pl. 53, figs. 1, 2.

**CUNNINGHAMIOSTROBUS** Stopes and Fujii, 1910.

*Cunninghamiostrobos yabariensis* Stopes and Fujii, 1910, p. 52, pl. 5, figs. 27-34; petrified cone, compared with *Cunninghamia* (Taxodiaceae); Upper Cretaceous, Hokkaido, Japan. Earlier citation: Stopes and Fujii, 1909, p. 559, nom. nud.

**CUNNINGHAMITES** Presl, 1838.

*Cunninghamites oxycedrus* Presl, in Sternberg, 1838 (1820-38), p. 203, pl. 48, fig. 3; pl. 49, fig. 1; coniferous shoots; Lower Cretaceous; Saxony. See discussion by Seward, 1919, p. 433.

**CUPANITES** Schimper, 1874.

*Cupanites miocenicus* (Ettingshausen) Schimper, 1874 (1869-74), p. 170; leaves, Sapindaceae?; near Vienna, Austria. For *Cupanoides miocenicus* Ettingshausen, 1851, p. 22, pl. 5, fig. 1.

**CUPANOIDES** Bowerbank, 1840.

*Cupanoides lobatus* Bowerbank, 1840, p. 69, pl. 2, figs. 1, 2; capsule; London Clay, Eocene; Sheppey, Kent, England.

**CUPRESSINANTHUS** Caspary, 1886.

*Cupressinanthus polysaccus* Caspary, 1886, p. 6; male cone, Coniferales; Tertiary; Samland, Baltic Prussia. See also Caspary, 1907, p. 122, pl. 21.

**CUPRESSINITES** Bowerbank, 1840.

*Cupressinites globosus* Bowerbank, 1840, p. 52, pl. 10, figs. 12-14, 32, 33; cones, resembling *Cupressus* (Cupressaceae); London Clay, Eocene; Sheppey, Kent, England.

**CUPRESSINOCAULON**.

Probably error for *Cupressinoxylon*, in Tasche, 1854, p. 92.

**CUPRESSINOCLADUS** Seward, 1919.

*Cupressinocladus salicornoides* (Unger) Seward, 1919, p. 307, fig. 752; coniferous twigs; Tertiary.

**CUPRESSINOSTROBUS** Penny, 1947.

*Cupressinostrobos delawarensis* Penny, 1947, p. 285, figs. 4, 6, 7, 17; seed cones, Coniferales; Magothy formation, Upper Cretaceous; Deep Cut, west of Summit Bridge, Del.

**CUPRESSINOXYLON** Goeppert, 1850.

*Cupressinoxylon subaequale* Goeppert, 1850, p. 202, pl. 27, figs. 1-5; coniferous wood; Tertiary. Of the species described by Goeppert, this is the first which is in any way adequately illustrated.

**CUPRESSITES** Brongniart, 1828.

*Cupressites hulmanni* Brongniart, 1828b, p. 109. See Brongniart, 1837 (1837-38), p. 42, pl. 8, fig. 5; leafy coniferous twig and cone?

**CUPRESSOXYLON** Kraus, 1870.

*Cupressoxylon ucranicum* (Goeppert) Kraus, in Schimper, 1870 (1869-74), p. 374; coniferous wood; Cretaceous; Ukraine. For *Cupressinoxylon ucranicum* Goeppert, 1850, p. 201, pl. 26, figs. 1-4.

**CUPULICARPUS** Velenovsky and Viniklar, 1929.

*Cupulicarpus fechtneri* Velenovsky and Viniklar, 1929, p. 28, pl. 21, figs. 4, 5; *Castanea*-like "cupule"; Cretaceous; Silvenec, Bohemia.

**CUPULINA** (Kidston) Paul Bertrand, 1913.

*Cupulina filicoides* Kidston, in Bertrand, Paul, 1913, p. 135; nom. nud.

**CURIONIA** Sordelli, 1896.

*Curionia triumphilina* Sordelli, 1896, p. 31, pl. 7, fig. 3; incertae sedis; Permian; Colombine, Val Trompia, Italy.

**CUSSONIPHYLLUM** Velenovsky, 1889.

*Cussoniphyllum partitum* Velenovsky, 1889, p. 22, pl. 5, fig. 1; leaves, compared with *Cussonia specata* (Araliaceae); Upper Cretaceous; Bohdankov, Bohemia.

**CYATHEITES** Goeppert, 1836.

*Cyatheetes schlotheimii* Goeppert, 1836, p. 320. For *Pecopteris cyathea* Brongniart, 1828a-38, p. 307, pl. 101, figs. 1-4; pecopterid foliage; Carboniferous; St. Etienne, France.

**CYATHEOPTERIS** Schimper, 1869.

*Cyatheetopteris tessellata* (Schimper and Mougeot) Schimper, 1869 (1869-74), p. 704; tree fern stem, Cyatheaceae? For *Caulopteris tessellata* Schimper and Mougeot, 1844, p. 64, pl. 29. See also Posthumus, 1931.

**CYATHOCARPUS** C. E. Weiss, 1869.

*Cyathocarpus arborescens* (Schlotheim) C. E. Weiss, 1869, p. 84. For *Filicites arborescens* Schlotheim, 1820, p. 404; see also Schlotheim, 1832, p. 7, pl. 8, fig. 13.

**CYATHOCAULIS** Ogura, 1927.

*Cyathocaulis naktongensis* Ogura, 1927, p. 352, pl. 2; pl. 3, figs. 7-12; pls. 4-6; petrified tree fern stem, Cyatheaceae?; Lower Kyong-sang formation, Upper Jurassic; Chhill-Kok Gun, North Kyong-sang Do, Korea.

**CYATHODENDRON** Arnold, 1945.

*Cyathodendron texanum* Arnold, 1945, p. 24, pls. 3-6; petrified tree fern, Cyatheaceae; probably from Fayette formation, lower upper Eocene; 10 miles north of Roma, Starr County, Tex.

**CYATHOIDES** E. W. Berry, 1922.

*Cyathoides thyrsopteroides* E. W. Berry, 1922d, p. 119, pl. 1, figs. 1-3; fern frond fragments, Cyatheaceae; Tertiary; Chile.

**CYATHOPHYCUS** Walcott, 1883.

*Cyathophycus reticulatus* Walcott, 1883, p. 18, pl. 2, fig. 16; Utica slate, Silurian; Trenton, Oneida County, N. Y.

**CYATHORACHIS** Ogura, 1927.

*Cyathorachis fujitana* Ogura, 1927, p. 368, pl. 8; petrified tree fern petioles, Cyatheaceae?; Upper Cretaceous; Yubari and Ikushumbets, Ishikari province, Hokkaido, Japan.

**CYATHOTRACUS** Watson, 1906.

*Cyathotrachus altus* Watson, 1906, p. 3, pls. 1-3; Upper Foot mine, Upper Carboniferous; Shore, England.

**CYCADANGIUM** Ogura, 1932.

*Cycadangium compactum* Ogura, 1932b, p. 455, pl. 22, figs. 1-4; cycadophyte sporangia on sporophyll; Cretaceous; Hokkaido, Japan.

**CYCADEA** Capellini and Solms-Laubach, 1892.

*Cycaea imolensis* Capellini and Solms-Laubach, 1892, p. 42; Lower Cretaceous; Imolene, Italy.

**CYCADEACITES** Morris, 1841?

*Cycadeacites? columnaris* (Presl) Morris, 1841, p. 115. For *Cycadites columnaris* Presl, in Sternberg, 1820-38, p. 194, pl. 47, figs. 1-6. [It is difficult to determine whether Morris actually uses the generic designation *Cycadeacites* (which he attributes to Presl). The name appears as a page heading in Sternberg, 1820-38, p. 194, but *Cycadites* is actually employed in the binomials listed. Morris lists as page heading both *Cycadeacites* and *Cycadites*, but his binomials which follow are cited as "*C. columnaris*" etc.]

**CYCADELLA** Ward, 1900.

*Cycadella reedit* Ward, 1900b, p. 264, pl. 15; petrified cycadophyte trunk; Jurassic; Freezeout Hills, Carbon County, Wyo.

**CYCADEOCARPUS** Dawson, 1873.

*Cycadeocarpus columbianus* Dawson, 1873, p. 69, pl. 1; petrified cycad seed; Lower Cretaceous or Jurassic; Skidegate Channel, Queen Charlotte Islands, British Columbia. Dawson also describes and figures petrified petioles and leaves as "probably belonging to the same species."

**CYCADEOIDEA** Buckland, 1828.

*Cycadeoidea megalophylla* Buckland, 1828, p. 397, pls. 47, 48 (1829); petrified cycadeoid trunk; Jurassic; Isle of Portland, England.

**CYCADEOMYELON** Saporta, 1873-75.

*Cycadeomyelon hettangense* Saporta, 1873c-75, p. 333, pl. 119, fig. 5; cycadophyte? stem; Jurassic; Hettange near Metz, France.

**CYCADEORACHIS** Stopes, 1915.

No specific name given; listed as "Pseudogenus," Stopes, 1915, p. 53, fig. 15; cycadophyte rachis; Lower Greensand, Cretaceous; Kentish Rag, Maidstone, England.

**CYCADEOSPERMUM** Saporta, 1874.

*Cycadeospermum hettangense* Saporta, 1874 (1873c-75), p. 238, pl. 116, fig. 6; cycad? seed; Jurassic (upper Lias); Hellange, France.

**CYCADEOSTROBUS** Carruthers, 1867.

*Cycadeostrobus ovatus* Carruthers, 1867b, p. 6, pl. 57, figs. 1, 2; cycad cone cast; Wealden; Brook Point, Isle of Wight, England.

**CYCADINOCARPUS** Schimper, 1870.

*Cycadinocarpus keuperianus* (Schenck) Schimper, 1870 (1869-74), p. 208, pl. 72; cycad seed?; near Würzburg.

**CYCADINOCARPUS** Renault, 1896.

*Cycadinocarpus angustodensis* (Brongniart) Renault, 1896a, p. 385, pl. 85, figs. 1-4; silicified seed; Cordes, Dracy-Saint-Loup, France.

**CYCADITES** Sternberg, 1825.

*Cycadites nilsoni* Sternberg, 1825 (1820-38), Tentamen, p. xxxii, pl. 47; cycadophyte frond; Cretaceous; Hör, Sweden. According to Seward, 1917, p. 558, the specimens on which Sternberg's genus was based have been shown to be referable to other genera, and, "As employed by Brongniart and other authors *Cycadites* stands for fossil fronds agreeing in habit with the pinnate leaves of recent species of *Cycas* \* \* \* the presence of a single median in the linear pinnae is generally regarded as an essential feature."

**CYCADITES** Buckland, 1836.

*Cycadites megalophyllus* Buckland 1836, p. 497, pl. 60; petrified cycadophyte trunk; Isle of Portland, England.

**CYCADIUM** Guillard, 1839.

*Cycadium cyprinopholis* Guillard, 1839, p. 129, pl. 3, Carboniferous; Mines of Rivede-Gler, France.

**CYCADOCARPIDIUM** Nathorst, 1886.

*Cycadocarpidium erdmanni* Nathorst, 1886c, p. 91, pl. 26, figs. 15-20; cycad megasporophyll; Rhaetic; Bjuf, Sweden.

**CYCADOCAULUM** Frentzen, 1932.

*Cycadocaulum rhaeticum* Frentzen, 1932, p. 86, pl. 2, fig. 3; Rhaetic; Swabia, Nürtingen, Germany.

**CYCADOCEPHALUS** Nathorst, 1902.

*Cycadoccephalus seawardi* Nathorst, 1902b, p. 7, pl. 1, figs. 7-10; cycadophyte cone compression; Rhaetic; Bjuf, Sweden.

**CYCADOPILIX** Kuntze, 1904.

*Cycadopilix*, Kuntze, in Post and Kuntze, 1904, p. 156.

**CYCADOLEPIS** Saporta, 1873-75.

*Cycadolepis villosa* Saporta, 1873c-75, p. 201, pl. 114, fig. 4; cycadophyte bud scale?; Jurassic; Orbagnoux, France.

**CYCADOPHYCOS** Massalongo, 1859.

Apparently intended as *Cycadophycos pteroides* (Sternberg) Massalongo, in Massalongo and Scarabelli, 1859, p. 91. For *Caulerpites pteroides* Sternberg, 1820-38, p. 21, pl. 24, fig. 5.

**CYCADOPHYLLUM** Bornemann, 1856.

*Cycadophyllum elegans* Bornemann, 1856, p. 73, pl. 6, figs. 9-13; Upper Triassic (Keuper); Johannisthal near Mühlhausen, Prussia.

**CYCADOPITES** Wodehouse, 1933.

*Cycadopites* sp. Wodehouse, 1933, p. 484, figs. 1-3; cyad pollen; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

**CYCADOPSIS** Debey, 1848.

*Cycadopsis aquisgranensis* (Goeppert) Debey, 1848, p. 140. For *Pinites aquisgranensis* Goeppert, 1842b, p. 151, pl. 54, figs. 1-17; Upper Cretaceous (Senonian); near Kunraad, Belgium.

**CYCADOPTERIS** Zigno, 1853.

*Cycadopteris ungeri* Zigno, 1853, p. 349. Apparently first species illustrated is *Cycadopteris brauniana* Zigno, 1861, p. 580, pls. 4-6; fern? foliage; Middle Jurassic (Oolite); Monte Pernigotti, Italy.

**CYCADOPTERIS** Schimper, 1869.

*Cycadopteris leckenbyi* (Bean) Schimper, 1869 (1869-74), p. 487; cycadophyte foliage; Jurassic; Scarborough, England. For *Ctenis leckenbyi* Bean, in Leckenby, 1863, p. 78, pl. 10, fig. 1.

**CYCADORACHIS** Saporta, 1873.

*Cycadorachis armata* Saporta, 1873a, p. 121. See also Saporta, 1874 (1873c-75), p. 196, pl. 117, fig. 1; fragment of cycadophyte rachis; Jurassic; Armaille, near Belley, France.

**CYCADOSPADIIX** Schimper, 1870.

*Cycadospadiix hennocqueti* (Pomel) Schimper, 1870 (1869-74), p. 207, pl. 72; *Cycas*-like megasporophyll; Lower Jurassic (Lias); Moselle, France.

**CYCADOXYLON** Renault, 1879.

*Cycadoxylon fremyi* Renault, 1879, p. 283, pl. 14, figs. 9-16; cycadlike wood; Permian; France.

**CYCLANTHODENDRON** Sahní and Surange, 1944.

*Cyclanthodendron sahnii* (Rode) Sahní and Surange, 1944, p. 84, figs. 3-8; petrified stem, Cyclanthaceae; Deccan Intertrapean series, Eocene; Mohgaon Kalan, India.

**CYCLOCARPON** Goeppert and Fiedler, 1857.

*Cyclocarpon nummularium* Goeppert and Fiedler, in Fiedler, 1857, p. 292, pl. 28, fig. 47; seed?; Carboniferous; Saarbrücken.

**CYCLOCARPUS** C. F. W. Braun, 1840.

*Cyclocarpus radiatus* C. F. W. Braun, 1840, p. 96; nom. nud.

**CYCLOCLADIA** Lindley and Hutton, 1834.

*Cyclocladia major* Lindley and Hutton, 1834 (1831-37), p. 137, pl. 130; lycopod stem impression?; Bensham coal seam, Upper Carboniferous; Jarrow Colliery, England.

**CYCLODENDRON** Kräusel, 1928.

*Cyclo dendron leslii* (Seward) Kräusel, in Kräusel and Range, 1928, p. 21, pl. 1, fig. 3-10; lycopod stem compression; Karroo beds, Permian; German Southwest Africa.

**CYCLOIS** Stenzel, 1872.

*Cyclois varians* (Corda) Stenzel, 1872, p. 72. For *Palmacites varians* Corda, 1846, p. 87, pl. 47, figs. 7-9; Upper Cretaceous (Cenomanian); Kutschlin near Billin, Bohemia.

**CYCLOITES** Gruss, 1928.

*Palaeobiologica*, 1928, Band 1, p. 516; alga?; Devonian (not seen). See also Gothan, 1942b, p. 117.

**CYCLOPITYS** Schmalhausen, 1879.

*Cycloptys nordenskiöldi* (Heer) Schmalhausen, 1879, p. 41, pl. 1, fig. 4b; pl. 2, fig. 1c; pl. 5, figs. 2d, 3b, 6b, 10; articulate foliage; Permian; Russia.

**CYCLOPTERIS** Brongniart, 1830.

*Cyclopteris reniformis* Brongniart, 1830 (1828a-38), p. 216, pl. 61, fig. 1; fernlike pinnule; Carboniferous.

**CYCLOSPERMUM** Seward, 1917.

*CyclospERMUM tenuis* (Brongniart) Seward, 1917, p. 341. For *Cyclocarpus nummularis* Brongniart, 1881, pl. 4.

**CYCLOSTIGMA** Haughton, 1860.

*Cyclostigma kiltorkense* Haughton, 1860, p. 222; for illustration, see Haughton, 1859, pl. 40, fig. 1; decorticated lycopod stem; Upper Devonian; Kiltorcan, County Kilkenny, Ireland. See also Seward, 1910, p. 251.

**CYCLOTHECA** Kidston, 1888.

*CyclotheCA biseriata* Kidston, 1888, p. 515, pl. 21, figs. 10-12; sporangia, Marattiaeeae; shales above "Killorgue" coal, Upper Carboniferous; Ellismuir, Baillieston, Lanarkshire, Scotland.

**CYCLOZAMIA** Pomel, 1849.

*Cyclozamia insignis* Pomel, 1849, p. 345; cycadophyte leaf; Jurassic; Seyssel, France. The use of this binomial is vague; the description is headed "*Zamites insignis* ou *Cyclozamia insignis* Pom."

**CYLINDRITES** Goeppert, 1841.

*Cylindrites spongoides* Goeppert, 1841a, p. 115, pl. 46, figs. 1-5; Cretaceous; near Bunzlau, Silesia.

**CYLINDROPLASMIUM** Reinsch, 1881.

*Cylindroplasmium* sp. Reinsch, 1881, p. 44, pl. 10b, fig. 1; pl. 10c, fig. 3; Silurian; Illinois.

**CYLINDROPODIUM** Saporta, 1873-75.

*Cylindropodium liasinum* Saporta, 1873c-75, p. 268, pl. 118, fig. 3; pl. 119, figs. 1, 2; pl. 124, figs. 3, 4; cycadophyte trunk; Jurassic; near Lunéville, France.

**CYMODECITES** Bureau, 1886.

*Cymodecites parisiensis* (Brongniart) Bureau, 1886, p. 192. See Squinabol, 1900, p. 44, pl. 5, fig. 2; Naladaceae; Eocene; Arthon, France.

**CYMOGLOSSA** Schimper, 1869.

*Cymoglossa goepperti* (Morris) Schimper, 1869 (1869-74), p. 553; pecopteridlike foliage; Orenbourg, Russia. For *Pecopteris goepperti* (Morris) Brongniart, 1848, pl. A, figs. 2a-c; pl. F, figs. 1a-c, 1e.

**CYNAROCEPHALUS** Kerner, 1916.

*Cynarocephalus schuberti* Kerner, 1916, p. 190; Tertiary; Cetina Valley, Italy.

**CYNOMETROXYLON** Chowdhury and Ghosh, 1946.

*Cynometroxylon indicum* Chowdhury and Ghosh, 1946, p. 435, pls. 10, 11; wood, compared with *Cynometra* (Caesalpiniaceae); Upper Miocene; Nalalung, Assam, India. Preliminary note in Chowdhury and Ghosh, 1939.

**CYPARISSIDIUM** Heer, 1874.

*Cyparissidium gracile* Heer, 1874a, p. 74, pl. 17, figs. 5b, 5c; pls. 19, 20, 21; cones and foliage-bearing shoots, Taxodiaceae; Cretaceous; Kome, Greenland.

**CYPERACITES** Schimper, 1870.

*Cyperacites dubius* (Heer) Schimper, 1870 (1869-74), p. 413. For *Cyperites dubius* Heer, 1855, p. 75, pl. 27, fig. 8; Cyperaceae; Tertiary; Oeningen, Switzerland.

**CYPERITES** Lindley and Hutton, 1832.

*Cyperites bicarinata* Lindley and Hutton, 1832 (1831-37), p. 123, pl. 43; lycopod leaf; Carboniferous; Leebotwood Coal Pit, England.

**CYPEROCARPUS** Pax, 1906.

*Cyperocarpus uncinatus* Pax, 1906, p. 279, pl. 4, figs. 10, 11; fruit, Cyperaceae.

**CYPEROCAULON** Lingelsheim, 1917.

*Cyperocaulon pazianum* Lingelsheim, 1917, p. 545, figs. 1-3; Tertiary; Monte Szentgyorgy near Tapelcza, Hungary.

**CYPHOPTERIS** Presl, 1838.

*Cyphopteris punctulata* (Brongniart) Presl, in Sternberg, 1838 (1820-38), p. 121; alethopterid foliage. See also Brongniart, 1828-38, pl. 93, figs. 1, 2.

**CYPSELITES** Heer, 1859.

*Cypselites naegellii* Heer, 1859, p. 2, pl. 101, fig. 1; fruit, Compositae; Tertiary; Oeningen, Switzerland.

**CYRRHITES** Heer, 1859.

*Cyrrhites oeningensis* Heer, 1859, p. 136, pl. 140, fig. 55; incertae sedis; Tertiary; Oeningen, Switzerland.

**CYSTIPHYCUS** Herzer, 1901.

*Cystiphyucus latifrons* Herzer, 1901, p. 23, fig. 1; "fucoid"; Carboniferous; Marietta, Ohio.

**CYSTORRHIZA** Massalongo, 1859.

*Cystorrhiza pillularioides* Massalongo, 1859, p. 20; Marsileaceae; Eocene; Monte Bolca, Italy; nom. nud.

**CYSTOSEIRITES** Sternberg, 1833.

*Cystoseirites partschii* Sternberg, 1833 (1820-38), p. 35, pl. 11, fig. 1; alga, some resemblance to *Sargassum*?; Miocene; Szakadat, Transylvania.

**CYSTOSEIRITES** C. F. W. Braun, 1840.

*Cystoseirites lancifolius* C. F. W. Braun, 1840, p. 93; nom. nud.

**CYSTOSPORITES** Schopf, 1938.

*Cystosporites breertonensis* Schopf, 1938a, p. 40, pl. 1, figs. 10, 11; pl. 3, fig. 5; pl. 8, figs. 1-4; spore; Carbonate formation, Pennsylvanian; Illinois.

**CZEKANOWSKIA** Heer, 1876.

*Czekanowskia setacea* Heer, 1876c, p. 68, pl. 5, figs. 1-7; pl. 6, figs. 1-6; pl. 10, fig. 11; pl. 12, fig. 5b; pl. 13, fig. 10c; fascicles of filiform leaves, Ginkgophyte; Jurassic.

## D

**DACRYDITES** Marik, 1901.

*Dacrydites incertus* Marik, 1901, p. 10, pl. 1, fig. 20; Cretaceous (Cenomanian); Slivenec, Bohemia.

**DACTYLODISCUS** Renault, 1899.

*Dactylodiscus triangularis* Renault, 1899, p. 977, pl. 17, fig. 12; Tertiary; Asson, France.

**DACTYLOIDITES** Hall, 1886.

*Dactyloidites bulbosus* Hall, 1886, p. 160, pl. 11; marine alga?; Paleozoic; Middle Granville, Washington County, N. Y.

**DACTYLOPHYCUS** Miller and Dyer, 1878.

*Dactylophycus tridigitatum* Miller and Dyer, 1878, p. 1, pl. 3, fig. 2; incertae sedis; Cincinnati group, Silurian; Cincinnati, Ohio.

**DACTYLOPHYLLUM** Read, 1934.

*Dactylophyllum johnsoni* Read, 1934, p. 91, pl. 18, figs. 2, 3; leaf of *Baiera* type; Weber (?) formation; lower Pennsylvanian; Bed 17 of Evans Peak section, Mosquito Range, Colo.

**DACTYLOPORA** Lamarck, 1838.

*Dactylopora cylindracea* Lamarck, in Bronn, 1838, p. 885, pl. 35, figs. 27a, 27b; alga, Dasycladaceae; Lower Eocene; Versailles, France.

**DACTYLOPORELLA** Guembel, 1871.

*Dactyloporaella cylindracea* (DeFrance) Guembel, 1871, p. 263, pl. D, figs. 9a, 9b.

**DACTYLOPORUS** Herzer, 1893.

*Dactyloporus archaeus* Herzer, 1893b, p. 289, pl. 13; fungus, Polyporaceae?; Carboniferous; Tuscarawas County, Ohio.

**DACTYLOPTERIS** Goeppert, 1852.

*Dactylopteris stiehleriana* Goeppert, 1852b, p. 166, pl. 13, fig. 6; fernlike? foliage.

**DACTYLOTHECA** Zeller, 1883.

*Dactylothea dentata* (Brongniart) Zeller, 1883, p. 184, pl. 9, figs. 12-15; fertile fern frond; Carboniferous. For recent discussion, see Radforth, 1938, 1939.

**DACTYOLEPIS** Hollick and Jeffrey, 1909.

*Dactyolepis cryptomerioides* Hollick and Jeffrey, 1909, p. 52, pl. 10, figs. 12, 13; cone scales, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.

**DADOXYLON** Endlicher, 1847.

*Dadoxylon withami* (Lindley and Hutton) Endlicher, 1847, p. 298. For *Pinites withami* Lindley and Hutton, 1831-37, p. 9, pl. 2; Upper Carboniferous; Craigleith, Scotland. See also Frentzen, 1931.

**DAEDALEITES** Meschinelli, 1892.

*Daedaleites quercinus* (Massalongo) Meschinelli, in Saccardo, 1892, p. 747; fungus in oak wood; Quarternary; Italy. See also Meschinelli, 1898, p. 6.

**DAEDALUS** Roualt, 1850.

*Daedalus newtoni* Roualt, 1850, p. 737; Silurian; Brittany.

**DAIMONELIX** Barbour, 1892.

*Daimonelix circumaxilis* Barbour, 1892, p. 314, pls. 1, 3; fig. 10; a problematical fossil considered by some authors to be of plant origin; Miocene; near Harrison, Sioux County, Nebr. For recent review, see Schultz, 1942.

**DALBERGOPHYLLUM** Ettingshausen, 1886.

*Dalbergiophyllum affine* Ettingshausen, 1886, p. 134, pl. 151, figs. 21, 22; leaf, Papilionaceae; Eocene; Vegetable Creek, New South Wales.

**DALBERGITES** Kuntze, 1904.

*Dalbergites* Kuntze, in Post and Kuntze, 1904, p. 162.

**DALBERGITES** E. W. Berry, 1916.

*Dalbergites ellipticifolius* E. W. Berry, 1916b, p. 247, pl. 54, fig. 10; leaf, Papilionaceae; Grenada formation, lower Eocene; Grenada, Grenada County, Miss.

**DALIOSTROBUS**.

*Daliostrobos sternbergii*; probably error for *Doliostrobos*, in Henry Potonie, 1893b, p. 223.

**DALYIA** Walcott, 1919.

*Dalyia racemata* Walcott, 1919, p. 237, pl. 55, fig. 4; pl. 56, fig. 1; alga, Rhodometaceae; Stephen formation, Middle Cambrian; Burgess Pass fossil quarry, above Field, British Columbia.

**DAMMARITES** Presl, 1838.

*Dammarites albens* Presl, in Sternberg, 1838 (1820-38), p. 203, pl. 52, figs. 11, 12; cone, Coniferales; Cretaceous (Cenomanian); Neubidschow, Bohemia.

**DAMMAROPHYLLUM** Velenovsky, 1889.

*Dammarophyllum striatum* Velenovsky, 1889, p. 7. For *Podozamites striatus* Velenovsky, 1885, p. 10, pl. 2, fig. 8; Upper Cretaceous; Liebenau, Bohemia.

**DANAEIDES** Schimper, 1869.

*Danaeides asplenioides* (Goeppert) Schimper, 1869 (1869-74), p. 616. For *Danaeites asplenioides* Goeppert, 1836, p. 380, pl. 19, figs. 4, 5; fertile fernlike foliage; Carboniferous; Charlottenbrunn, Silesia.

**DANAEITES** Goeppert, 1836.

*Danaeites asplenioides* Goeppert, 1836, p. 380, pl. 19, figs. 4, 5; fertile fernlike foliage; Carboniferous; Charlottenbrunn, Silesia.

**DANAEOPSIS** Heer, 1864.

*Danaeopsis marantacea* Heer, in Schenk, 1864a, p. 303, pl. 48, fig. 1.

**DAPHNITES** Ettingshausen, 1867.

*Daphnites goepperti* Ettingshausen, 1867, p. 253, pl. 2, fig. 8; leaf, Daphnoideae?; Cretaceous; Aigen, Austria.

**DAPHNOGENE** Unger, 1845.

*Daphnogene cinnamomeifolia* (Brongniart) Unger, 1845, p. 227. For *Phyllites cinnamomeifolia* Brongniart, 1828b, p. 209. See also Unger, 1851, p. 168, pl. 39, figs. 7-9; leaf, dicotyledon; Miocene; Rado-boj, Croatia.

**DAPHNOPHYLLUM** Heer, 1869.

*Daphnophyllum fraasi* Heer, 1869c, p. 17, pl. 6, figs. 1, 2; Cretaceous (Cenomanian); Moletain, Moravia.

**DASYCLADITES** Fucini, 1936.

Reference not seen. See Gothan, 1942b, p. 117.

**DASYPHYLLUM** Nathorst, 1886.

*Dasyphyllum rigidum* Nathorst, 1886c, p. 112, pl. 26, figs. 1-5; incertae sedis; Rhætic; Bjuf, Sweden. See also *Dasyphyllum rigidum* Nathorst, 1878, p. 12; nom. nud.

**DASYPORELLA** Stolley, 1893.

*Dasyoporella silurica* Stolley, 1893, p. 139, pl. 8, figs. 1-6; siphonaceous alga; Silurian.

**DAUBREEIA** Zeiller, 1888.

*Daubreeia pateraeformis* (Germar) Zeiller, in Renault and Zeiller, 1888, p. 10, pl. 41, fig. 1; cyclopterid leaflet; Carboniferous; Commeny, France.

**DAVALLITES** Dawson, 1883.

*Davallites richardsoni* Dawson, 1883, p. 25, pl. 5, figs. 18, 18a, 18b; fertile fern foliage; Upper Cretaceous; Protection Island, British Columbia. This species appears to be the first described. Earliest reference is *Davallites delicatulus* Braun, 1840, p. 96; this species and five others nom. nud.

**DAVIDOIDEA** Thomas Johnson, 1937.

*Davidoidea hebridica* Thomas Johnson, 1937, p. 330, pl. 21, fig. 3; leaf, Nys-saceae; Tertiary; Scotland.

**DAVISELLA** Reid and Chandler, 1933.

*Davisella ehretioides* Reid and Chandler, 1933, p. 483, pl. 28, figs. 6-9; Boraginaceae; London Clay, Eocene; Harefield, Middlesex, England.

**DAWSONITES** Halle, 1916.

*Dawsonites arcuatus* Halle, 1916, p. 24, pl. 3, figs. 1-9; pl. 4, figs. 18-21; psilophyte; Lower Devonian; Røragen, Norway.

**DEBEYA** Miquel, 1853.

*Debeya serrata* Miquel, 1853, p. 38, pl. 1, fig. 1; leaf, Artocarpeae? (Moraceae); Upper Cretaceous (Senonian); near Kunraad, Belgium.

**DECAGONOCARPUS** Renault, 1890.

*Decagonocarpus olivaeformis* Renault, in Renault and Zeiller, 1890, p. 651, pl. 72, fig. 56; seed; Carboniferous; Commeny, France.

**DECAPLATYSPERMUM** Reid and Chandler, 1933.

*Decaplatyspermum bowerbanksi* Reid and Chandler, 1933, p. 256, pl. 9, figs. 23-29; fruit, Linaceae?; London Clay, Eocene; Sheppey, Kent, England.

**DECHENIA** Goeppert, 1842.

*Dechenia euphorboides* Goeppert, 1842 (1841-46), p. 77, pl. 3, fig. 1; incertae sedis; Devonian; Landshut, Silesia.

**DELESSERITES** Sternberg, 1833.

*Delesserites lamourouxii* (Brongniart) Sternberg, 1833 (1820-38), p. 32. For *Fucoides lamourouxii* Brongniart, 1828a-38, p. 64, pl. 8, fig. 2.

**DELESSERITES** Ruedemann, 1925.

*Delesserites salicifolia* Ruedemann, 1925, p. 8, pl. 1, fig. 2; alga?; Utica shale, Ordovician; New York.

**DELGADOA** Heer, 1881.

*Delgadoa occidentalis* Heer, 1881, p. 6, pl. 6, figs. 4-8; pl. 7; fern?, compared with *Jamesonia imbricata* Hooker; Jurassic; San Pedro near Cintra, Portugal.

**DELGADOPSIS** Saporta, 1894.

*Delgadopsis rhizostigma* Saporta, 1894, p. 141, pls. 23, 25, 26; leaf, incertae sedis; Cretaceous; Portugal.

**DELTOIDOSPORA** Miner, 1935.

*Deltoidospora hallii* Miner, 1935, p. 618, pl. 24, figs. 7, 8; spore, Gleicheniaceae?; Kootenai formation, Lower Cretaceous; Cascade County, Mont.

**DELTOLEPIS** Harris, 1942.

*Deltolepis credipota* Harris, 1942a, p. 573, figs. 3, 4; bud scale, referred to *Androlepis* and *Beania*; Middle Estuarine, Jurassic; Cayton Bay, Yorkshire, England.

**DEMETRIA** Zalesky, 1930.

*Demetria amadoca* Zalesky, 1930d, p. 231, pl. 1, fig. 8; lycopod stem similar to *Lepidodendron*; Lower Carboniferous; Staro-Beshev, Donets, Russia.

**DENDRACTIS** Reiss, 1923.

*Dendractis brevis* Reiss, 1923, p. 111, pl. 3, figs. 2-4?, 5, 6; pl. 4, figs. 5, 6; Tertiary; Rhenish Bavaria.

**DENDRAENA** Němejc, 1934.

*Dendraena pinnatiflobata* Němejc, 1934, p. 3, figs. 1, 2; figs. 7-12 [unnumbered plate]; sphenopterid foliage-bearing sporangia; Carboniferous; Central Bohemia.

**DENDROPHYCUS** Lesquereux, 1884.

*Dendrophycus acorti* Lesquereux, 1884, p. 699, pl. 88, fig. 1; marine alga; No. 11 Mauch Chunk shale, Pennsylvanian; bluffs of the Susquehanna above Pitts-ton, Pa.

**DENDROPLASMIUM** Reinsch, 1881.

*Dendroplasmium* sp. Reinsch, 1881, p. 30, pl. 3, figs. 1-5; Upper Carboniferous; Zwickau, Saxony.

**DENDROPTERIDIUM** Bancroft, 1932.

*Dendropteridium cyatheoides* Bancroft, 1932a, p. 251, pls. 9, 10; petrified stem, Cyatheaceae; late Tertiary; near Butandiga, Mount Elgon, British East Africa.

**DENSOSPORITES** Willard Berry, 1937.

*Densosporites covensis* Willard Berry, 1937, p. 157, fig. 11; spore; Pennington coal, Mississippian; Cranmore Cove, Rhea County, Tenn.

**DEPAZITES** Meschinelli, 1892.

*Depazites acericola* (Saporta) Meschinelli, in Saccardo, 1892, p. 785. See also Meschinelli, 1898, p. 71, pl. 20, fig. 3; fungus, Sphaeropsidaceae.

**DERBYELLA** David White, 1908.

*Derbyella aurita* David White, 1908, p. 545, pl. 9, figs. 1, 1a, 2, 2a, 3; reproductive organs of *Gangamopteris obovata*; "Permo-Carboniferous"; northeast of Minas, Brazil. Earlier citation: *Derbyella aurita* I. C. White, 1906, p. 379; nom. nud.

**DERMATOPHYLLITES** Goeppert and Berendt, 1845.

*Dermatophyllites stilligerus* Goeppert and Berendt, 1845, p. 76, pl. 5, figs. 48-50; leaf, Ericaceae; Miocene; Prussia.

**DESMIA** Eichwald, 1860.

*Desmia fistulosa* Eichwald, 1860, p. 101, pl. 18, figs. 8, 9; petrified stem, incertae sedis; Permian; Kargala, Orenbourg, Russia. Earlier reference: *Desmia fistulosa* Eichwald, in Mercklin, 1856, p. 82; nom. nud. See also Posthumus, 1931.

**DESMIOPHYLLUM** Lesquereux, 1878.

*Desmiophyllum gracile* Lesquereux, 1878b, p. 333; Pennsylvanian; Cannelton, Beaver County, Pa. See also Lesquereux, 1879, pl. 82, fig. 1.

**DESMODITES** Unger, 1839.

*Desmodites radobojensis* Unger, 1839a, p. 104; Miocene; Radoboj, Croatia.

**DESMODOPHYLLUM** Unger, 1850.

*Desmodophyllum viticinoides* Unger, 1850a, p. 487; leaf, Leguminosae; Miocene; Radoboj, Croatia.

**DESMOPHLEBIS** Brongniart, 1849.

*Desmophlebis flexuosa* (Goeppert) Brongniart, 1849, p. 152; apparently for *Alethopteris flexuosa* in Goeppert, 1836, p. 308, although Goeppert attributes the species to Sternberg (1820-38), who figures *Pecopteris flexuosa* (Goeppert) on pl. 33, fig. 1; fernlike foliage; Triassic (Keuper); Reindorf near Bamberg, Bavaria.

**DESMOPTERIS** Stur, 1883.

*Desmopteris alethopteroides* (Ettingshausen) Stur, 1883, p. 701. For *Asplenites alethopteroides* Ettingshausen, 1854, p. 41, pl. 19, fig. 5; Carboniferous; Swina near Radnitz, Bohemia.

**DEWALQUEA** Saporta and Marlon, 1873.

*Devalquea haldemiana* (Debey) Saporta and Marlon, 1873, p. 60, pl. 7, fig. 1; Tertiary?; Haldem, Westphalia.

**DIACHAENITES** Alexander Braun, 1859.

*Diachaenites heeri* Alexander Braun, in Heer, 1859, p. 25, pl. 104, fig. 22; fruit, Umbelliferae?; Tertiary; Oeningen, Switzerland. Earlier reference: Stizenberger, 1851, p. 89; nom. nud.

**DICALAMOPHYLLUM** Sterzel, 1880.

*Dicalamophyllum altendorfsense* Sterzel, 1880, p. 13, pl. 2, figs. 17-21, 25, 26; Permian; Altendorf near Chemnitz, Germany.

**DICERAS** Velenovsky, 1889.

*Diceras cenomanicus* Velenovsky, 1889, p. 14, pl. 2, figs. 5-7; shoots and cones, Taxodiaceae; Cretaceous (Cenomanian); Vyserovic, Bohemia.

**DICERATOSPERMA** H. N. Andrews, 1941.

*Diceratosperma carpenteriana* H. N. Andrews, 1941, p. 379, pl. 15, figs. 8-10; platyspermic seed associated with *Dichophyllum moorei*; Victory Junction member of Stanton limestone, Missouli group; Pennsylvanian; 6 miles northwest of Garnett, Kans.

**DICHONEURON** Saporta and Marlon, 1885.

*Dichoneuron hookeri* Saporta and Marlon, 1885, p. 231, fig. 100a. Earlier reference: *Dichoneuron hookeri* Saporta, 1878, p. 872; nom. nud.

**DICHOPHLEBIS**.

Error for *Dicrophlebis*, in Bigsby, 1878, p. 375.

**DICHOPTERIS** Zigno, 1864.

*Dichopteris vistanica* Zigno, 1864, p. 218, pl. 11, figs. 1-3; pl. 12, fig. 1; fern frond, dichotomously branching rachis; Jurassic (Oolite); Val d'Assa, Vicetina, Italy.

**DICHOTOZAMITES** E. W. Berry, 1911.

*Dichotozamites cycadopsis* (Fontaine) E. W. Berry, 1911a, p. 365, pl. 77, figs. 2, 3; cycad? foliage; Patapsco formation, Lower Cretaceous; Mt. Vernon near Brooke, Va.

**DICKSONIOPSIS** E. W. Berry, 1911.

*Dicksoniopsis vernonensis* (Ward) E. W. Berry, 1911a, p. 237, pl. 27, figs. 3, 4; frond, Cyatheaceae; Arundel formation, Lower Cretaceous; Arlington, Md.

**DICKSONIOPTERIS** Nathorst, 1890.

*Dicksoniopteris naumannii* Nathorst, 1890, p. 51, pl. 5, fig. 4; sterile fern foliage; Mesozoic; Yaklomura, Haginodani, Japan.

**DICKSONITES** Sterzel, 1881.

*Dicksonites pluckeneti* (Schlotheim) Sterzel, 1881, p. 226; Permian; Lungau, Saxony. See also Sterzel, 1883, p. 282, 318, pl. 6, figs. 1-6.

**DICLIDOCARYA** E. Reid, 1920.

*Dictidocarya gibbosa* E. Reid, 1920, p. 82, pl. 4, figs. 23-25; seed, family uncertain; Pliocene; Pont-de-Gail, France.

**DICOTYLOPHYLLUM** Saporta, 1894.

*Dicotylophyllum cerciforme* Saporta, 1894, p. 147, pl. 26, fig. 14; leaf, dicotyledon; Cretaceous; Portugal.

**DICOTYLOPHYLLUM** Bandulska, 1923.

*Dicotylophyllum stopei* Bandulska, 1923, p. 244, 433, pl. 20, figs. 1-4; leaf, dicotyledon; Eocene; Bournemouth, England.

**DICRANITES** Klebs, 1907.

*Dicranites casparyi* Klebs, in Caspary, 1907, p. 52, pl. 7, figs. 42-45; Tertiary; Baltic Prussia.

**DICRANOPHYLLUM** Grand'Eury, 1877.

*Dicranophyllum gallicum* Grand'Eury, 1877, p. 275, pl. 14, figs. 8-10; shoot bearing filiform dichotomizing leaves; Carboniferous; St.-Étienne, France.

**DICRANOPHYTON** Zalesky, 1937.

Paleophytographica, p. 10: Moskva, Akad. Nauk SSSR, 1937 (not seen). See Gothan, 1942b, p. 118.

**DICRANOPTERIS** Zalesky, 1937.

*Dicranopteris regia* Zalesky, 1937b, p. 48, figs. 13-15; sphenopterid foliage; Permian; Matveyevo, Russia.

**DICROIDIOPSIS** Frenguelli, 1943.

*Dicroidiopsis incisa* (Du Toit) Frenguelli, 1943a, p. 288, fig. 22; pteridosperm? foliage; Molteno beds, upper Keuper, Triassic; Konings Kroon, Cape Colony.

**DICROIDIDIUM** Gothan, 1912.

*Dicroidium odontopteroides* (Morris) Gothan, 1912, p. 78, pl. 16, fig. 5; pteridosperm? foliage; Rhætic; South Africa.

**DICROPHLEBIS** (Brongniart) Meneghini, 1857.

*Dicrophlebis affinis* (Schlotheim) Meneghini, 1857, p. 108, pl. D, fig. V4. See also Brongniart, 1849, p. 74.

**DICROPTERIS** Pomel, 1849.

*Dicropteris laciniata* Pomel, 1849, p. 339; fern; Jurassic; St. Mihiel, France.

**DICTIOPHRAGMIUM** Reinsch, 1881.

*Dictiophragmium* sp. Reinsch, 1881, p. 99, pl. 34, fig. 1; pl. 35, figs. 1, 2; Upper Carboniferous; Newcastle, England.

**DICTUOLITES** Conrad, 1838.

*Dictuolites beckii* Conrad, 1838, p. 113; Silurian; New York. See also Conrad, in Hall, 1843, p. 48, pl. 1, fig. 1.

**DICTYOCALAMITES** E. A. N. Arber, 1912.

*Dictyocalamites burri* E. A. N. Arber, 1912, p. 97, pl. 5, figs. 1, 3, 5; calamitean stem impression; Upper Carboniferous; Barfreton, Kent coalfield, England.

**DICTYOCALIPTRIDIUM** Jongmans and Gothan, 1935.

*Dictyocaliptridium sundaicum* Jongmans and Gothan, 1935, p. 137, pl. 44, figs. 3, 4; fern foliage; Upper Carboniferous; Residentie Djambi, Mengkarang, Sumatra.

**DICTYOCORDAITES** Dawson, 1889.

*Dictyocordaites lacoii* Dawson, 1889, p. 3, fig. [unnumbered]; cordaites stem and leaf compression; Upper Devonian; Meshoppen, Wyoming County, Pa.

**DICTYODENDRON** Landsborough, 1844.

*Dictyodendron patricii* Landsborough, in Patrick, 1844, p. 287, pl. 5, fig. 1; stem cast?; Carboniferous; Ardeer, Ayrshire, England.

**DICTYODENDRON** Eichwald, 1860.

*Dictyodendron leuchtenbergii* Eichwald, 1860, p. 247, pl. 19, figs. 5, 6; pl. 20, figs. 9-11; coniferous wood; Carboniferous; Artinsk, Russia.

**DICTYODENDRON** Nathorst, 1914.

*Dictyodendron kidstonii* Nathorst, 1914, p. 72, pl. 8, figs. 1-4; pl. 9, figs. 1-8; pl. 12, figs. 11-20; pl. 13, figs. 32-36; stem cast; Paleozoic; Spitzbergen.

**DICTYODORA** C. E. Weiss, 1884.

*Dictyodora liebeana* (Geinitz) C. E. Weiss, 1884a, p. 84, pl. 11; pl. 12, figs. 1-5; plant?; Lower Carboniferous (Culm); Thuringia.

**DICTYOPHLOIS** Foerste, 1916.

*Dictyophlois reticulata* Foerste, 1916, p. 675, pl. 33; rhizophore compared with *Stigmaria*; Carboniferous; Sample, Breckenridge County, Ky.

**DICTYOPHYCUS** Ruedemann, 1931.

*Dictyophycus gracilis* Ruedemann, 1931, p. 1, pls. 1, 2; alga?; Burgess shale, Middle Cambrian; Burgess Pass, near Field, British Columbia.

**DICTYOPHYLLUM** Lindley and Hutton, 1834.

*Dictyophyllum rugosum* Lindley and Hutton, 1834 (1831-37), p. 65, pl. 104; fern leaf, Dipterisinae; Jurassic (Oolite); Yorkshire, England.

**"DICTYOPHYLLUM"** Sze, 1933.

*"Dictyophyllum"* Sze, 1933, p. 14, pl. 4, figs. 12, 13; leaf fragment, incertae sedis; Paleozoic; Kuangyuen, China. Cited doubtfully as a new genus.

**DICTYOPHYTON** Hall, 1863.

*Dictyophyton newberryi* Hall, 1863, p. 76, pl. 4, figs. 1-3; Chemung group, Devonian; Cuyahoga Falls, Richfield, Ohio.



- DICTYOPLASMIUM** Reinsch, 1881.  
*Dictyoplasmitum* sp. Reinsch, 1881, p. 41, pl. 10b, figs. 7, 8; pl. 15, fig. 3; Upper Carboniferous; Zwickau, Saxony.
- DICTYOPORUS** Mägdefrau, 1937.  
*Dictyoporus nodusus* Mägdefrau, 1937, p. 55, pl. 4, fig. 10; plant?; Cretaceous (Upper Senonian); Misburg near Hannover.
- DICTYOPTERIDIUM** Ottokar Feistmantel, 1880.  
*Dictyopteridium sporiferum* Ottokar Feistmantel, 1880 (1880-81), p. 14, pl. 23A, figs. 4-6, 14; Permian; Talchir and Gopalprasad, India.
- DICTYOPTERIS** Gutbier, 1835.  
*Dictyopteris brongniartii* Gutbier, 1835, p. 63, pl. 11, figs. 7, 9, 10; Upper Carboniferous; Zwickau, Saxony.
- DICTYOSPORITES** Felix, 1894.  
*Dictyosporites oculatus* Felix, 1894a, p. 277, pl. 19, fig. 2; fungus conidia, compared with *Septosporidium*; Eocene; Perekeschul, near Baku, Transcaucasia. Meschinelli, 1898, p. 79, erroneously attributes this genus to Corda.
- DICTYOTESTA** Gothan, 1941.  
*Dictyotesta lonchopteroides* Gothan, 1941, p. 279, figs. a, b; described as seed of *Lonchopteris rugosa*; Carboniferous; Aachen, Rhenish Prussia.
- DICTYOTHALAMUS** Goeppert, 1864.  
*Dictyothalamus schrollianus* Goeppert, 1864, p. 164, pl. 24, figs. 4-6; pl. 25, figs. 1-4; microsporangiate inflorescence?; Permian.
- DICTYOTITES** (Brongniart) Massalongo, 1859.  
*Dictyotites brongniartii* Massalongo, 1859, p. 51, pl. 14, fig. 1; alga?; Italy.
- DICTYOXYLON** Williamson, 1869.  
*Dictyoxyylon oldhamium* (Binney) Williamson, 1869a, p. 66, pl. 20, figs. 3, 4; pteridosperm stem, see *Lyginopteris*; Carboniferous; England. See also Seward, 1917, p. 38.
- DICTYOXYLON** Brongniart, 1872.  
*Dictyoxyylon* sp. Brongniart, in Renault, 1872, p. 1295; silicified sigillarian? trunk; Upper Carboniferous; Autun, France.
- DICTYOZAMITES** (Oldham) Medlicott and Blanford, 1879.  
*Dictyozamites falcatus* (Morris) Medlicott and Blanford, 1879, p. 142, pl. 8, fig. 6. For *Dictyopteris falcata* Morris, in Oldham and Morris, 1863, p. 38, pl. 24, figs. 1, 1a.
- DIDYMOPHYLLON** Goeppert, 1841.  
*Didymophyllum schottini* Goeppert, 1841a (1841-46), p. 69; decorticated lycopod stem?; Devonian; Landshut, Silesia.
- DIDYMOSORUS** Debey and Ettingshausen, 1859.  
*Didymosorus comptonifolius* Debey and Ettingshausen, 1859b, p. 186, pl. 1, figs. 1-5; foliage, Gleicheniaceae; Upper Cretaceous; Aachen, Rhenish Prussia. Earlier citation: *Didymosorus comptoniaefolius* Debey, 1849, p. 299; nom. nud.
- DIDYMOTHECA** Goeppert, 1864.  
*Didymotheca cordata* Goeppert, 1864, p. 178, pl. 26, fig. 24; pl. 28, figs. 12, 13; seed?; Permian; Braunau, Bohemia.
- DIEMENIA** Ettingshausen, 1887.  
*Diemenia speciosa* Ettingshausen, 1887a, p. 108, pl. 11, figs. 7-9; leaf, Lauraceae; Eocene; Vegetable Creek, near Emma-ville, New South Wales.
- DIEUNE** Mueller, 1874.  
*Dieune pluriovulata* Mueller, 1874, p. 22, fig. 9, figs. 1-4; angiosperm fruit, affinities uncertain; lower Pliocene; Had-don, Victoria.
- DIFURCOSPHEPHOPHYLLUM** Lotsy, 1909.  
*Difurcosphephenophyllum fertile* (Scott) Lotsy, 1909, p. 526, fig. 350III. For *Sphenophyllum fertile* Scott, 1905. See also Leclercq, 1936.
- DIGITELLA** Morellet and Morellet, 1913.  
*Digitella dactyloporoides* Morellet and Morellet, 1913, p. 28, figs. 14-16; alga, Bornetellaceae; Tertiary; Échampées, near Lizy-sur-Ourcq, France.
- DIGITOLITHUS** Fritsch, 1908.  
*Digitolithus rugatus* Fritsch, 1908, p. 23, fig. 7; Silurian; Vorder-Treban, Bohemia.
- DIGONOSPERMUM** Renault, 1907.  
*Digonospermum grilleti* Renault, in Bertrand, C. E., 1907, p. 222.
- DICHNIA** Read, 1936.  
*Dichnia kentuckiensis* Read, 1936, p. 151, pls. 30-33; petrified stem, *Eu-Calamopitys* group; Upper Devonian; Kentucky.
- DILLENIAECARPUM** Weyland, 1948.  
*Dilleniaecarpum rottense* Weyland, 1948, p. 138, pl. 22, fig. 9; figs. 10-12; infructescence, Dilleniaceae; Tertiary; Rott, Siebengebirge, Germany.
- DILLENITES** E. W. Berry, 1916.  
*Dillenites microdentatus* (Hollick) E. W. Berry, 1916a, p. 291, pl. 75, fig. 3; pl. 77, fig. 1; leaves, Dilleniaceae; Wilcox group, lower Eocene; Couthatta, Red River Parish, La.
- DIOLOGOPTERIS** Grand'Eury, 1877.  
*Dilopteris orbicularis* Grand'Eury, 1877, p. 521; nom. nud.
- DIMERIPTERIS** Schmalhausen, 1894.  
*Dimeripteris fasciculata* Schmalhausen, 1894, p. 30, pl. 1, figs. 10, 11; *Telan-gium*-like microsporangiate organs; Upper Devonian; Donets, Russia.

**DIMORPHOSIPHON** Hoeg, 1927.

*Dimorphosiphon rectangulare* Hoeg, 1927, p. 4, pls. 1-3; petrified alga, Codiaceae; Middle Ordovician; south of Bergvikén. Island of Helgøen, Norway.

**DIMORPHOSTROMA** Reils, 1921.

*Dimorphostroma varians* Reils, 1921, p. 313; Tertiary; Rhenish Bavaria. See also Reils, 1923, pl. 4, fig. 12.

**DINEURON** Renault, 1896.

*Dineuron pteroides* Renault, 1896a, p. 22, fig. 19; coenopterid fern petiole; Esnost, France. See also Posthumus, 1931.

**DIOONIPITES** Wodehouse, 1933.

*Dioonipites* sp. Wodehouse, 1933, p. 484, figs. 4, 5; cycad pollen; Parachute Creek member, Green River formation. Eocene; Colorado and Utah.

**DIOONITES** Miquel, 1851.

Designation of a type species is problematical. *Dioonites feneonis* (Brongniart) Miquel, 1851b. For *Zamia feneonis* Brongniart, 1828b, p. 99, illustrated in Miller, 1857, p. 69, fig. 36. Other species described by Emmons, 1856, 1857; and Schenk, 1871.

**DIOONITOCARPIDIUM** Lillienstern, 1923.

*Dioonitocarpidium pennaeforme* (Schenk) Lillienstern, 1923, p. 103, pls. 5, 6; fig. 1; cycadophyte megasporophyll; Upper Triassic (Keuper); Estenfeld, Bavaria. For *Dioonites pennaeformis* Schenk, 1864b.

**DIOONOPTERIS** Goeppert, 1864.

*Dioonopteris permica* Goeppert, 1864, p. 126, pl. 13, figs. 3, 4; leaf fragment; Permian; Braunau, Bohemia.

**DIOSCORITES** Saporta, 1863.

*Dioscorites resurgens* Saporta, 1863, p. 42, pl. 4, fig. 5; leaf, Dioscoreae; Tertiary; France.

**DIOSCOROIDES** Fritel, 1904.

*Dioscoroides lyellii* (Watelet) Fritel, 1904, p. 233, figs. 1, 2; Eocene; Belleu, Paris, France.

**DIOSPYROPHYLLUM** Velenovsky, 1889.

*Diospyrophyllum provectum* Velenovsky, 1889, p. 50. For *Diospyros provecta* Velenovsky, 1884, p. 49, pl. 8, fig. 1-5, 10; Upper Cretaceous; Melnik, near Liebenau, Bohemia.

**DIPHYLLITES** Heer, 1883.

*Diphyllites membranaceus* Heer, 1883, p. 45, pl. 60, fig. 4a; leaf fragment, Leguminosae; Upper Cretaceous; Patoot, Greenland.

**DIPLASIOPHYLLUM** Frenguelli, 1943.

*Diplasiophyllum hughesi* (Feistmantel) Frenguelli, 1943a, p. 299, figs. 23, 24; sterile fern? frond; Rhaetic to Keuper; China, India, South Africa.

**DIPLASTEROTHECA** Hirmer, 1927.

*Diplasterotheca exigua* (Renault) Hirmer, 1927, p. 585; fertile pectopterid foliage; Permian; Autun, France. For *Pecopteris exigua* Renault, 1883, p. 115, pl. 19, figs. 13-18. Hirmer refers to Renault in Zeller, 1890, p. 70-72.

**DIPLAZITES** Goeppert, 1836.

*Diplazites emarginatus* Goeppert, 1836, p. 274, pl. 16, fig. 12; fern pinnules; Carboniferous.

**DIPLOCYMA** Steinmann and Elberskirch, 1929.

*Diplocyma elberskirchianum* Steinmann and Elberskirch, 1929, p. C57, fig. 21; Lower Devonian; Wahnachtals near Sieburg, Germany.

**DIPLODENDRON** Eichwald, 1846.

*Diplodendron hastatum* Eichwald, 1846, p. 456. See also Eichwald, 1860, p. 225, pl. 17, figs. 3, 4; fern or cycadophyte stem?; upper Paleozoic; mines of Kloutschewsk, Orenbourg, Russia.

**DIPLODICTYUM** Braun, 1843.

*Diplodictyum obtusilobum* Braun, in Münster, 1843 (1839-43), p. 14, pl. 13, figs. 11, 12; Jurassic; Bayreuth, Bavaria.

**DIPLOLABIS** Renault, 1896.

*Diplolabis forensis* Renault, 1896a, p. 14, figs. 6-10; coenopterid fern.

**DIPLOMASTIXIA** Kirchheimer, 1934.

*Diplomastixia carinata* Kirchheimer, 1934b, p. 789, fig. 17; fruit, Cornaceae; Tertiary (Braunkohle); Germany.

**DIPLOPHACELUS** Corda, 1845.

*Diplophacelus arboreus* Corda, 1845, p. 87, pl. 55; fern petiole; Upper Carboniferous; Radnitz, Bohemia.

**DIPLOPHRAGMIUM** Reinsch, 1881.

*Diplophragmium* sp. Reinsch, 1881, p. 102; pl. 41, fig. 6; pl. 42, figs. 1-5; pl. 43, figs. 1-5; Pennsylvanian; Swickau, Saxony.

**DIPLOPHYLLUM** Velenovsky and Viniklar, 1929.

*Diplophyllum cretaceum* Velenovsky and Viniklar, 1929, p. 25, pl. 17, fig. 10; pl. 19, fig. 10; pl. 20, fig. 5; leaf, Leguminosae?; Cretaceous; Cernikov, Bohemia.

**DIPLOPORA** Schafhautil, 1863.

*Diplopore annulata* Schafhautil, 1863, p. 324, pl. 65e, fig. 6; alga, Dasycladaceae.

**DIPLOPTERIDIUM** Walton, 1931.

*Diplopteridium tellianum* (Kidston) Walton, 1931, p. 349, pl. 23; sphenopterid foliage, probably bore *Telangium*-like fructifications; Lower Carboniferous; Gwaenysgor, Flintshire, England.

**DIPLOTEROTESTA** Nathorst, 1914.

*Diplopterotesta spitzbergensis* (Heer) Nathorst, 1914, p. 36, pl. 15, figs. 77-82; winged seed; Paleozoic; Robert-Tal, Spitzbergen.

**DIPLOSPORITES** Pia, 1927.

*Diplosporites ovalis* (Renault) Pia, in Hirmer, 1927, p. 122; Fungi Imperfecti, Mucedinaceae; Oligocene; Asson, France. For *Diplosporium ovale* Renault, 1899, p. 978, pl. 17, fig. 13.

**DIPLOTAXIS** Wood, 1861.

A generic name proposed for possible future reception of certain species of *Syringodendron*, Wood, 1861a, p. 238.

**DIPLOTEGIUM** Corda, 1845.

*Diplotegium brownianum* Corda, 1845, p. 112, pl. 59, figs. 3-7; incertae sedis; Upper Carboniferous; Radnitz, Bohemia.

**DIPLOTESTA** Brongniart, 1874.

*Diploresta grand'euryana* Brongniart, 1874, p. 261, pl. 21, figs. 12-14; silicified seed; Carboniferous; St.-Etienne, France.

**DIPLOTHECA** Kidston, 1903.

*Diplothea stellata* Kidston, 1903a, p. 131; fructification allied to *Calymmatotheca* Stur; Machrihanish Water, Scotland. See also Kidston, 1906, p. 431, figs. 11a-e.

**DIPLOTHMEMA** Stur, 1877.

*Diplothmema patentissimum* (Ettingshausen) Stur, 1877, p. 128. For *Rhodea patentissima* Ettingshausen, in Stur, 1875, pl. 9; pteridosperm? foliage; Carboniferous (Culm); Altendorf.

**DIPLOXYLON** Corda, 1840.

*Diploxyton elegans* Corda, 1840, p. 25, pl. 1; Upper Carboniferous; Chomle, Bavaria.

**DIPTERIPHYLLUM** Krasser, 1896.

*Dipteriphyllum cretaceum* (Velenovsky) Krasser, 1896, p. 123, pl. 15, fig. 7.

**DIPTERITES** Kuntze, 1904.

*Dipterites* Kuntze in Post and Kuntze, 1904, p. 179.

**DIPTEROCARPACEOPHYLLUM** Kräusel, 1929.

*Dipterocarpaceophyllum sumatrense* Kräusel, 1929, p. 33, pl. 6, fig. 6; leaf fragment, Dipterocarpaceae; Pliocene?; Sungi Tjaban, Palembang, South Sumatra.

**DIPTEROCARPOPHYLLUM** Edwards, 1923.

*Dipterocarpophyllum gregoryi* Edwards, 1923, p. 160, pl. 5, fig. 2; leaf, Dipterocarpaceae; Tertiary; three-quarters of a mile north of Tichara village, southeast Burma.

**DIPTEROCARPOXYLON** Holden, 1916.

*Dipterocarpoxyton burmense* Holden, 1916, p. 271, pl. 29, figs. 1-5; wood, considered to be related to *Hopea* or *Shorea* (Dipterocarpaceae); Tertiary; Burma. See also Edwards, 1931.

**DIPTEROSPERMUM** Goeppert, 1851.

*Dipterospermum bignonioides* Goeppert, in Weber, 1851, p. 223, pl. 25, fig. 5; seed impression, Bignoniaceae; Tertiary.

**DISCINITES** Karl Feistmantel, 1880.

*Discinites bohemicus* Karl Feistmantel, 1880, p. 303, fig. [unnumbered] p. 299; Upper Carboniferous; Bohemia.

**DISCITES** Harris, 1931.

*Discites minutus* Harris, 1931b, p. 6, pl. 7; liverwort?; *Thaumatopteris* zone, Rhætic; Scoresby Sound, east Greenland.

**DISCOPHORITES** Heer, 1877.

*Discophorites angustilobus* Heer, 1877a, p. 145, pl. 58, figs. 18, 19; alga?; Cretaceous; St. Denis, Canton Freiburg, Switzerland.

**DISCOPHYCUS** Walcott, 1883.

*Discophycus typicalis* Walcott, 1883, p. 19, pl. 2, figs. 18, 18a; Utica slate, Silurian; Trenton, Oneida County, N. Y.

**DISCOPHYLLUM** Hall, 1847.

*Discophyllum peltatum* Hall, 1847, p. 277, pl. 75, fig. 3; plant or coral?; Hudson River group, Ordovician (?); Troy, N. Y.

**DISCOPTERIS** Stur, 1883.

*Discopteris karwinensis* Stur, 1883, p. 693, figs. 17a, 17b; fertile fern pinnule; Upper Carboniferous; Kattowitz, Silesia.

**DISCOSTACHYS** Grand'Eury, 1890.

*Discostachys cebennensis* Grand'Eury, 1890, pl. 8, fig. 2; described in text, p. 306 as *Androstachys cebennensis* Grand'Eury, but this is apparently a mistake. Grand'Eury's use of these names is quite confused; see *Androstachys*.

**DISCOSTROBUS** Krasser, 1906.

*Discostrobus argunensis* Krasser, 1906, p. 628, pl. 4, figs. 11-14; incertae sedis; Jurassic; Durol on Argun River, Transbaikalia.

**DISOMA** Zalesky, 1915.

Russia, Comité géol. Mém., nouv. sér., no. 139, p. 30, St. Petersburg; Flagellatae; Permian (not seen). See Gothan, 1942b, 119.

**DISPHENOPHYLLUM** Lotsy, 1909.

*Disphenophyllum romerii* (Solms-Laubach) Lotsy, 1909, p. 525, fig. 349.

**DISSOCLADELLA** Pia, 1936.

*Dissocladdella savitriæ* Pia, in Rao and Pia, 1936, p. 15, pl. 1, figs. 1-4; pl. 3, fig. 4; alga, Dasycladaceae; Miniyur group, uppermost Cretaceous; Trichinopoly district, India.

**DISTICHOPHYLLITES** Dusen, 1899.

*Distichophyllites microphyllus* Dusen, 1899, p. 105, pl. 11, fig. 11; small coniferous? foliage shoot; Oligocene; Río Condor, Chile.

**DISTICHOPHYTUM** Mägdefrau, 1938.

*Distichophytum mucronatum* Mägdefrau, 1938, p. 247, pl. 2, fig. 4; text fig. 3; Psilophytales; Lower Devonian; near Hahnenklee, Germany.

**DISTICHOPTERIS** Yabe and Shimakura, 1940.

*Distichopteris heteropinna* Yabe and Shimakura, 1940b, p. 179, pl. 16; fernlike foliage; Lungtan coal series, Permian; Lungtan coal mine, Chuyunghsien, Kiangsu, China.

**DISTICHOSTROBUS** Velenovsky and Viniklar, 1929.

*Distichostrobos pusillus* Velenovsky and Viniklar, 1929, p. 30, pl. 21, figs. 6, 7; inflorescence, compared with *Myrica*; Cretaceous; Sliveneč, Bohemia.

**DISTRIGOPHYLLUM** Heer, 1876.

*Distrigophyllum bicarinatum* (Lindley and Hutton) Heer, 1876a, p. 39, pl. 17, fig. 10; leaf of arborescent lycopod?; Carboniferous; Switzerland.

**DJAMBIOXYLON** Kräusel, 1922.

*Djambioxylon sumatrense* Kräusel, 1922, p. 272, pl. 2, fig. 2; pl. 5, fig. 7; wood; Sapindaceae?; Tertiary; Sumatra.

**DOBROGEITES** Simionescu, 1940.

*Dobrogeites vinussayi* simionescu, 1940, p. 1, 3 pls.; alga; Mesozoic; Rumania.

**DODONAEITES** Saporta, 1865.

*Dodonaeites decaisnei* Saporta, 1865, p. 184, pl. 9, fig. 13; fruit, Sapindaceae; Miocene; Armissan, France.

**DOLATOPHYCUS** Fenton and Fenton, 1937.

*Dolatophycus expansus* Fenton and Fenton, 1937, p. 437, pl. 2, figs. 1, 2; alga; Allentown limestone, Cambrian; Raubsville, Northampton County, Pa.

**DOLEROPHYLLUM** Saporta, 1878.

*Dolerophyllum goepperti* (Eichwald) Saporta, 1878a, p. 872; Permian; Russia. For *Noeggerathia goepperti* Eichwald, 1860 (1860-68), p. 253, pl. 18, figs. 1-3.

**DOLEROPTERIS** Grand'Eury, 1877.

*Doleropteris cuneata* Grand'Eury, 1877, p. 195, pl. 16; fernlike? foliage; Carboniferous; Loire, France.

**DOLEROTHECA** Halle, 1933.

*Dolerotheca fertilis* (Renault) Halle, 1933, p. 44, pls. 9, 10; spore-bearing organ, Whittleseyinae; Upper Carboniferous; St.-Etienne, France.

**DOLICHITES** Unger, 1850.

*Dolichites europaeus* Unger, 1850a, p. 489; Miocene; Radoboj, Croatia. Earlier citation: Unger, 1839, p. 104; nom. nud. For illustrations, see Unger 1863 (1860-65), p. 25, pl. 6, figs. 6, 7.

**DOLIOSTROBUS** Marlon, 1884.

*Doliosstrobos sternbergi* (Corda) Marlon, 1884, p. 823; Coniferales; Tertiary; France. For *Araucaria sternbergii* Corda, 1842b, p. 63, pl. 1.

**DOMBEYOPSIS** Unger, 1850.

*Dombeyopsis lobata* Unger, 1850, p. 447. See also Unger, 1848, p. 47; nom. nud.

**DOMBEYOXYLON** Schenk, 1883.

*Dombeyoxylon aegyptiacum* Schenk, 1883a, p. 13. "Compared by Schenk with the wood of the Sterculiaceae, and especially with the recent genera *Ruizia* and *Guazuma*; by Felix with *Guazuma*; and by Schuster with *Eriodendron*," Edwards, 1931; Oligocene?; Egypt. See also Schenk, in Schuster, 1910, p. 12, pl. 3, fig. 18.

**DONEZELLA** Maslov, 1929.

*Donezella lutugini* Maslov, 1929, p. 125, pl. 71, figs. 5-9; Carboniferous; Donets Basin, Irmenski mine, Russia.

**DORATOPHYLLUM** Harris, 1932.

*Doratophyllum astartensis* Harris, 1932a, p. 36, pls. 2, 3; cycadophyte leaf; *Lepidopteris* bed, Rhaetic; Scoresby Sound, east Greenland.

**DORYANTHITES** Berry, 1911.

*Doryanthites cretacea* Berry, 1911b, p. 406, leaf, monocotyledon; Black Creek formation, Upper Cretaceous; North Carolina. See also Berry, 1914, p. 108, pl. 17, fig. 3.

**DORYCORDAITES** Zeiller, 1888.

*Dorycordaites palmaeformis* (Goeppert) Zeiller, 1888 (1886-88), pl. 93, figs. 1, 2; cordaitan leaf; mines of Meurchin, Upper Carboniferous; Pas-de-Calais, France. Generic name first introduced by Grand'Eury, 1877, p. 214.

**DOTHIDITES** Meschinelli, 1892.

*Dothidites acericola* (Heer) Meschinelli, in Saccardo, 1892, p. 771. See also Meschinelli, 1893, p. 44, pl. 14, fig. 15; fungus, on fossil maple leaf; Switzerland.

**DRACAENITES** Saporta, 1861.

*Dracaenites sepultus* Saporta, in Heer, 1861, p. 144; stem impression, Monocotyledon; Oligocene; Aix, Provence, France.

**DRACAENOPHYLLUM** Massalongo, 1858.

*Dracaenophyllum venetum* Massalongo, 1858b, p. 792.

**DREPANOLEPIS** Nathorst, 1897.

*Drepanolepis angustior* Nathorst, 1897, p. 21, pl. 1, figs. 16, 17; incertae sedis; Middle Jurassic; Cape Boheman, Spitzbergen.

**DREPANOPHYCUS** Goeppert, 1852.

*Drepanophycus spinaceiformis* Goeppert, 1852b, p. 92, pl. 41, fig. 1; psilophyte stem impression; Devonian; Hackenburg, Hesse.

**DREPANOZAMITES** Harris, 1932.

*Drepanozamites nilssonii* (Nathorst) Harris, 1932, p. 83, pls. 7, 8; leaf, incertae sedis; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**DRIMYSOPHYLLUM** Kirchheimer, 1937.

*Drimysophyllum succineum* Kirchheimer, 1937, p. 474, figs. 7, 8; leaf, Magnoliaceae; Tertiary; Germany.

**DRUPA** Lesquereux, 1861.

*Drupa rhabdosperma* Lesquereux, 1861b, p. 716, fig. 150; seed, incertae sedis; Tertiary; Brandon, Vt.

**DRYANDROIDES** Unger, 1850.

*Dryandroides grandis* Unger, 1850a, p. 428; leaf, Proteaceae; Eocene; Sotzka, Styria. See also Unger, 1851, p. 169, pl. 41, figs. 11-14.

**DRYANDROPHYLLUM** Velenovsky, 1889.

*Dryandrophyllum cretaceum* Velenovsky, 1889, p. 53.

**DRYOBALANOXYLON** Berger, 1923.

*Dryobalanoxylon toblerti* (Kräusel) Berger, 1923, p. 146; wood, dicotyledon; Tertiary; Sumatra. For *Dipterocarposylon toblerti* Kräusel, 1922, p. 263, pl. 1, fig. 5; pl. 2, fig. 6, etc.

**DRYOBALANUS** Landgrebe, 1842.

*Dryobalanus basalticus* Landgrebe, 1842, p. 813, pl. 11A, figs. 1-3; fruit, Fagaceae; Oligocene; Hersfeld near Homberg, Hesse.

**DRYOPHYLLUM** Debye, 1865.

*Dryophyllum subcretaceum* Saporta, 1865, p. 46; leaf, dicotyledon; Eocene; Sézanne, France. See also Saporta, 1868, p. 347, pl. 26, figs. 1-3.

**DRYOPTERITES** E. W. Berry, 1911.

*Dryopterites macrocarpa* (Fontaine) E. W. Berry, 1911a, p. 261; foliage, Polypodiaceae; Patuxent formation, Lower Cretaceous; Dutch Gap, Va. For *Aspidium macrocarpum* Fontaine, 1889, p. 103, pl. 17, fig. 2.

**DRYOXYLON** Schleiden, 1853.

*Dryoxyton jenense* Schleiden, in Schmid, 1853, p. 28; wood, compared with *Salix*?; Middle Triassic (Lower Muschelkalk); Wogau near Jena, Germany. First? illustrated species: *Dryoxyton chitaense* Yasui, 1928, p. 438, pl. 19, figs. 78, 79. See also Bancroft, 1932b.

**DUISBERGIA** Kräusel and Weyland, 1929.

*Duisbergia mirabilis* Kräusel and Weyland, 1929, p. 333, pls. 9-12; figs. 18, 19; Devonian; near Elberfeld, Germany.

**DULAURENSIA** E. M. Reid, 1930.

*Dulaurensia pulchra* E. M. Reid, 1930, p. 52, pl. 2, figs. 1-11; fruit, Epacridaceae; Tertiary (Eocene?); St. Tudy near Quimper, France.

**DUNSTANIA** Reid and Chandler, 1933.

*Dunstanian ettingshauseni* (Gardner) Reid and Chandler, 1933, p. 459, pl. 25, figs. 41-47; endocarp, Cornaceae; London Clay, Eocene; Sheppey, Kent, England.

**DUKANIA** Kirchheimer, 1935.

*Durania ehrenbergi* Kirchheimer, 1935, p. 291, fig. 7; seed, Symplocaceae; Tertiary; Konzendorf, Germany.

**DURVILLIDES** Squinabol, 1888.

*Durvillides eocenicus* Squinabol, 1888, p. 560, pl. 14, figs. 1, 2; alga, incertae sedis; Eocene; Liguria, Boccadasse, Italy.

**DUTOITIA** Hoeg, 1931.

*Dutoitia pulchra* Hoeg, 1931, p. 92, fig. 1; Psilophytales; Lower or Middle Devonian; between Knysna and Port Elizabeth, near Cape Town, South Africa.

**DVINOPTERIDIUM** Zalessky, 1937.

*Dvinopteridium edemskii* Zalessky, 1937a, p. 18, figs. 3, 4; fern foliage; Permian; Iesiptzevo village, Tantarlen, Russia.

**DYCTUOCAULUS** Emmons, 1856.

*Dyctucaulus striatus* Emmons, 1856, p. 293, pl. 1, fig. 3; incertae sedis; Permian; Farmville, N. C.

**DYOTHECA** Hartung, 1938.

Sachs. geol. Landesanst. Abh., Band 18, p. 92 (not seen). See Gothan, 1942b, p. 120.

**DYSTACTOPHYCUS** Miller and Dyer, 1878.

*Dystactophycus mamillanum* Miller and Dyer, 1878, p. 3, pl. 3, fig. 4; plant?, appears similar to the problematical *Conostichus*; Cincinnati group, Silurian; near Morrow, Ohio.

**E**

**EBENACITES** Saporta, 1861.

*Ebenacites rugosus* Saporta, in Heer, 1861, p. 147; calyx, Ebenaceae; Eocene; Aix, Provence, France.

**EBENOXYLON** Felix, 1882.

*Ebenoxylon diospyroides* Felix, 1882a, p. 71, fig. 3; Tertiary; Antigua, West Indies.

**EBORACIA** Thomas, 1911.

*Eboracia lobifolia* (Phillips) Thomas, 1911, p. 388, fig. p. 387; fertile fern frond; Jurassic; Yorkshire, England.

**ECHINOCARPEOPSIS** Langeron, 1900.

*Echinocarpeopsis fastigata* Langeron, 1900, p. 346, pl. 2, fig. 9; leaf, compared with *Echinocarpus*; Eocene; Sézanne, France.

**ECHINOCARPUS** Emmons, 1857.

*Echinocarpus* sp. Emmons, 1857, p. 111, fig. 79; incertae sedis, described as "dry carpel, or seed vessel"; Triassic; Haw River, N. C.?

**ECHINOSTACHYS** Brongniart, 1828.

*Echinostachys oblongus* Brongniart, 1828a, p. 457, pl. 20, fig. 2; incertae sedis; Triassic; Sultz-les-Bains, Alsace-Lorraine, France.

**ECHINOSTIPES** Pomel, 1849.

*Echinostipes nidiformis* (Brongniart) Pomel, 1849, p. 346. For *Mantellia nidiformis* Brongniart, 1828, p. 101. See also Carruthers, 1870, p. 702, pl. 63, fig. 1.

- ECHINOSTROBUS** Schimper, 1870.  
*Echinostrobus sternbergii* Schimper, 1870 (1869-74), p. 331, pl. 75, figs. 21-24; cone-bearing twigs, Coniferales; Jurassic; Solenhofen, Bavaria.
- ECHITONIUM** Unger, 1839.  
*Echitonium superstes* Unger, 1839, p. 103; Miocene; Radoboj, Croatia.
- EDRAXYLON** Williamson, 1872.  
*Edraxyton* sp. Williamson, 1872, p. 438, fig. 3; petiole of *Lyginopteris*; Upper Carboniferous; Oldham, England. See also Seward, 1917, p. 38, 47.
- EHRETIAECARPUM** Menzel, 1913.  
*Ehretiaecarpum parvulum* Menzel, 1913, p. 61, pl. 5, fig. 35; fruit, Boraginaceae; Tertiary (Braunkohle), near Herzogenrath, Germany.
- EICHWALDIA** Zalesky, 1927.  
*Eichwaldia biarmica* Zalesky, 1927a, p. 40, pl. 12, fig. 3; Permian; southeast Russia.
- EISDENIA** Stockmans, 1936.  
*Eisdenia aacheniana* Stockmans, 1946b, p. 23, pl. 1, fig. 1; Senonian; Elsden, Belgium.
- EISOETHECARYON** Mueller, 1877.  
*Eisothecaryon semiseptatum* Mueller, 1877a (1877-79), no. 68, p. 178, pl. 15, figs. 1-5; upper Pliocene; Golgong, Australia.
- EKSDALIA**.  
 Error for *Eskdalia* Kidston, in Posthumus, 1931, p. 106.
- ELAEAGNITES** Heer, 1870.  
*Elaeagnites campanulatus* Heer, 1870, p. 58, pl. 12, fig. 11; calyx; Miocene; Cape Staratschin, Spitzbergen.
- ELAEOCARPEOPSIS** Langeron, 1900.  
*Elaeocarpeopsis decora* Langeron, 1900, p. 347, pl. 1, fig. 4; leaf, compared with *Echinocarpus*; Eocene; Sézanne, France.
- ELAEOCARPITES** Kuntze, 1904.  
*Elaeocarpites* Kuntze, in Post and Kuntze, 1904, p. 193.
- ELAEODENDROXYLON** Platen, 1908.  
*Elaeodendroxylon polymorphum* Platen, 1908, p. 120; wood; Miocene; Aemthyst Mtn., Yellowstone Park, Wyo. See also Platen, 1909, p. 245, figs. 157-159.
- ELAIOIDES** Unger, 1850.  
*Elatoides fontanesia* Unger, 1850a, p. 432, leaf, Oleaceae; Miocene; Galicia. See also Unger, 1850b, p. 125, pl. 14, fig. 12.
- ELASMOPHYCOS** Massalongo, 1859.  
*Elaemophycos cuneifolius* (Kurr) Massalongo, in Massalongo and Scarabelli, 1859, p. 92. For *Laminarites cuneifolius* Kurr, 1845, p. 13, pl. 2, fig. 2.
- ELATERITES** L. R. Wilson, 1943.  
*Elaterites triferns* L. R. Wilson, 1943, p. 523, figs. 1-6; spores with elaters; Des Moines group, Pennsylvanian; What Cheer, Keokuk County, Iowa.
- ELATIDES** Heer, 1876.  
*Elatides ovalis* Heer, 1876c, p. 77, pl. 14, fig. 2; cone, Coniferales; Upper Jurassic; Ust-Balei, Siberia. [In 1876 Heer described *Elatides ovalis*, *E. brandtiana*, and *E. falcata*, the first two being based on cones whereas the last was based on a small twig with foliage. Nathorst, 1897, included all of these species under *E. curvifolia* (Dunker) Nathorst, 1897, p. 35, pl. 1, figs. 25-27; pl. 2, figs. 3-5.]
- ELATOCLADUS** Halle, 1913.  
*Elatocladus heterophylla* Halle, 1913, p. 84, pl. 8, figs. 12-14, 17-25; coniferous foliage shoots; Jurassic; Hope Bay, Graham Land, Antarctic.
- ELATOXYLON** Hartig, 1848.  
 Hartig, 1848b, p. 139 proposed this genus for certain species included in *Thuoxylon* and presumably intended this new combination as *Elatoxylon juniperinum* (Unger) Hartig. For *Thuoxylon juniperinum* Unger, 1854c, p. 172, pl. 1, figs. 1-3.
- ELEOXYLON** Brongniart, 1849.  
 No new combination actually cited but evidently intended as *Eleoxylon acerosum* (Unger) Brongniart, 1849. For *Peuce acerosa* Unger, 1841 (1841-47), p. 14, pl. 3, figs. 1-4; coniferous wood; Miocene; Wurmberg, Styria. Renault, 1885, p. 166 cites *Eleoxylon acerosum* (Unger) Brongniart.
- ELEUTHEROPHYLLUM** Stur, 1877.  
*Eleutherophyllum mirabile* (Sternberg) Stur, 1877, p. 65, pl. 18, figs. 1-7; articulate stem; Carboniferous (Culm).
- ELONGATOSPORITES** Willard Berry, 1937.  
*Elongatosporites reticulatus* Willard Berry, 1937, p. 158, fig. 12; spore; Pennington coal, Mississippi; Cranmore Cove, Rhea County, Tenn.
- ELTOVARIA** David White, 1929.  
*Eltovaria bursiformis* David White, 1929, p. 114, pl. 50, fig. 4; pteridosperm? cupule with seeds; Hermit shale, Permian; on Bright Angel Trail, below El Tovar, Ariz.
- EMBOLIANTHEMUM** Corda, 1874.  
*Embolianthemum truncatum* Corda, in Feistmantal, Ottokar, 1874, p. 37; Upper Carboniferous; Bras, Bohemia.
- EMBOTHRIOPHYLLUM** Dusen, 1899.  
*Embothriophyllum dubium* Dusen, 1899, p. 104, pl. 10, fig. 6; leaf compared with *Embothrium lanceolatum* Ruiz and Pavon; Oligocene; Río de las Minas near Punta Arenas, Chile.

**EMBOTHRIOPSIS** Hollick, 1912.

*Embothriopsis presagita* Hollick, 1912, p. 159, pl. 165, fig. 1; leaf, Proteaceae; Raritan formation, Upper Cretaceous; Glen Cove, Long Island, N. Y.

**EMBOTHRITES** Unger, 1850.

*Embothrites borealis* Unger, 1850a, p. 428; Proteaceae; Eocene; Sotzka, Styria. See also Unger, 1851, p. 171, pl. 42, figs. 10-12.

**EMPLECTOPTERIDIUM** Kawasaki, 1934.

*Emplectopteridium alatum* Kawasaki, 1934 (1927-34), p. 143, pl. 52, figs. 138, 139; fern or pteridosperm foliage; Jido series, Bed D, Carboniferous; Kaech'ön, North Korea.

**EMPLECTOPTERIS** Halle, 1927.

*Emplectopteris triangularis* Halle, 1927, p. 122, pl. 31; pteridosperm foliage; Lower Shihhotse series; Permian; central Shansi, China.

**ENANTIOBLASTOS** Goeppert and Berendt, 1845.

*Enantioblastos viscidoides* Goeppert and Berendt, in Berendt, 1845, p. 76, pl. 6, figs. 6, 7; fruit, Lorantheae; Miocene; Prussia.

**ENANTIOPHYLLITES** Goeppert and Berendt, 1845.

*Enantiophyllites sendelii* Goeppert and Berendt, in Berendt, 1845, p. 79, pl. 5, fig. 57; leaves, Leguminosae?; Miocene; Prussia.

**ENCEPHALARTOPSIS** Fontaine, 1889.

*Encephalartopsis nervosa* Fontaine, 1889, p. 174, pls. 70-72; cycadophyte leaf fragments; Potomac group, Lower Cretaceous; Fredericksburg, Va.

**ENCOELITES** Sternberg, 1833.

*Encoelites mertensii* Sternberg, 1833 (1820-38), p. 33, pl. 3, fig. 2; incertae sedis; Jurassic; Solonhofen, Bavaria.

**ENCOELOCLADIUM** Zigno, 1856.

*Encoelocladium tortuosum* Zigno, 1856 (1856-68), p. 7. For *Caulerpites tortuosus* Presl, in Sternberg, 1820-38, p. 103, pl. 29, fig. 1; alga; Jurassic; Solonhofen, Bavaria.

**ENDOCALAMITES** Grand'Eury, 1877.

*Endocalamites approximatus* (Schlotheim) Grand'Eury, 1877, p. 47. For *Calamites approximatus* Schlotheim, see Brongniart, 1828-38, p. 133, pl. 24; pl. 15, figs. 7, 8.

**ENDOGENITES** Brongniart, 1822.

*Endogenites echinatus* Brongniart, 1822, p. 301, pl. 16, fig. 2; cycad? trunk; Eocene; near Solissons, France.

**ENDOGENOPHYLLITES** McCoy, 1870.

*Endogenophyllites wellingtonensis* McCoy, in Wintle, 1870, p. 2; nom. nud.

**ENDOLEPIS** Schleiden, 1846.

*Endolepis vulgaris* Schleiden, in Schmid and Schleiden, 1846, p. 72, pl. 5, fig. 25.

**ENDOSPORITES** L. R. Wilson and Coe, 1940.

*Endosporites ornatus* L. R. Wilson and Coe, 1940, p. 184, pls. 1, 2; spore; Des Moines group, Pennsylvanian; What Cheer, Keokuk County, Iowa.

**ENDOXYLON** Scott, 1925.

*Endoxylon zonatum* (Kidston) Scott, 1925, p. 579, pl. 3, figs. 19-21; petrified stem, Calamopityeae; Carboniferous Limestone series, Lower Carboniferous; Dalry, Ayrshire, Scotland. For *Calamopitys zonata* Kidston, in Scott, 1923, p. 133.

**ENGELHARDTIOIDITES** Robert Potonie, 1950.

*Engelhardtioidites microcoryphaeus* Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 51, pl. B, fig. 8; pl. C, fig. 16; pollen, Juglandaceae; Miocene; Chatt-Aquitana, Germany.

**ENIGMOCARPON** Sahni and Rode, 1937.

*Enigmocarpum parifol* Sahni and Rode, 1937, p. 168, pl. 1, figs. 8-15; petrified fruit; Lythraceae; Deccan Intertrappean series, Tertiary, probably Miocene; Mohgaon Kalan, 18 miles east of Chhindwara, India. Brief description without illustrations in Sahni, 1934, p. 317; full description in Sahni, 1943.

**ENIGMOPHYTON** Hoeg, 1942.

*Enigmophyton superbum* Hoeg, 1942, p. 88, pls. 36-40; Devonian; Planterygen, Spitzbergen.

**ENISEIELLA** Maslov, 1939.

*Eniseiella asteroides* Maslov, 1939, p. 288, pl. 1, figs. 1-6; pl. 2, figs. 1, 3-5; alga; lower Paleozoic; North Yenisei, USSR.

**ENTOMOLEPIS** Saporta, 1865.

*Entomolepis cynarocephala* Saporta, 1865, p. 55, pl. 2, fig. 3; cone, Coniferales; Miocene; Armissan, France.

**ENTONEURON** Geyler, 1875.

*Entoneuron mclastomaceum* Geyler, 1875, p. 78, pl. 2, fig. 3; leaf fragment, Menispermaceae; Eocene; Pengaron, Borneo.

**ENTOSTROMIUM** Reinsch, 1881.

*Entostromium* sp. Reinsch, 1881, p. 55, pl. 12, figs. 1-9; Upper Carboniferous; Zwickau, Saxony.

**ENYGMATOSTROBUS** Kryshstofovich, 1915.

*Enygmastrobos doktorowskyi* Kryshstofovich, 1915, p. 106, pl. 5, figs. 3-6; Jurassic; Tyrmalfutz, Amur River, Siberia.

**EOACHRAS** E. W. Berry, 1915.

*Eoachras eocenica* E. W. Berry, 1915, p. 210, pl. 1; seed, compared with *Achras zapote* (Sapotaceae); Eocene; near Lexington, Holmes County, Miss.

**EOANGIOPTERIS** Mamay, 1950.

*Eoangiopteris andrewsii* Mamay, 1950, p. 440, pl. 9; petrified spore-bearing organs, Marattiaceae; Des Moines group, Pennsylvanian; Urbandale coal mine, Des Moines, Iowa.

**EOCLADOPHORA** Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 121.

**EOCLATHRUS** Squinabol, 1888.

*Eoclathrus fenestratus* Squinabol, 1888, p. 552, pl. 16, fig. 3; alga?; Tertiary; Genoa, Italy.

**EOCLEPSYDROPSIS** Bertrand, 1909.

A name proposed by Bertrand for a hypothetical early zygoterid; Bertrand, 1909, p. 256.

**EOGLOBELLA** Bradley, 1931.

*Eoglobella longipes* Bradley, 1931, p. 44, pl. 22, fig. 3; alga?; Green River formation, Eocene; Asphalt Tunnel, Garfield County, Colo.

**EOHEPATICA** Heard and Jones, 1931.

*Eohepatica dyfriensis* Heard and Jones, 1931b, p. 330; liverwort, compared with *Marchantia*; Lower Downtonian, Silurian?; Llandovery district, Wales.

**EOHYPSPERPA** Reid and Chandler, 1933.

*Eohypserpa parsoni* Reid and Chandler, 1933, p. 168, pl. 4, figs. 13-21; fruit, Menispermaceae; London Clay, Eocene; Sheppey, Kent, England.

**EOLIRION** Schenk, 1869.

*Eolirion primigenium* Schenk, 1869, p. 20, pl. 7, fig. 4; palm leaf; Lower Cretaceous (Urgonian); Groditschitz, Austrian Silesia.

**EOMASTIXIA** Chandler, 1926.

*Eomastixia bilocularis* Chandler, 1926, p. 37, pl. 6, figs. 6a-c; endocarp, Cornaceae; upper Eocene; Hordle, Hampshire, England.

**EOPHYTON** Torell, 1867.

*Eophyton unnaeanum* Torell, 1867, p. 36, pl. 2, fig. 3; pl. 3, figs. 1-3; Lower Cambrian and Silurian; near Billingen, Sweden.

**EOPTERIS** Saporta, 1878.

*Eopteris andegavensis* Saporta in Crle, 1878, p. 687; Lower Silurian; France. See also Saporta, 1878b, p. 769, fig.

**EOPUNTIA** Chaney, 1944.

*Eopuntia douglassii* Chaney, 1944, p. 507, pls. 1-5; stem and fruit impressions, Cactaceae; Middle Eocene; eastern Utah.

**EORHACHIS** Arnold, 1945.

*Eorhachis lomarioides* Arnold, 1945, p. 11, pl. 2; petrified fernlike petiole: Green River formation, Eocene; Eden valley petrified forest, 28 miles east of Farson, Sweetwater County, Wyo.

**EORHAMNIDIUM** E. W. Berry, 1919.

*Eorhamnidium cretaceum* E. W. Berry, 1919a, p. 113, pl. 28, fig. 10; leaf, Rhamnaceae; Tuscaloosa formation, Upper Cretaceous; Cottondale, Tuscaloosa County, Ala.

**EOSPERMATOPTERIS** Goldring, 1924.

*Eospermatopteris textilis* (Dawson) Goldring, 1924, p. 68, pls. 2-6; tree-fern stem casts; Upper Devonian; Gilboa, N. Y.

**EOSTROBILUS** Theron, 1900.

*Eostrobilus gelisii* Theron, 1900, p. 112, fig. 109; Lower Carboniferous; Cabrières, France.

**EOTAXITES** Brongniart, 1875.

*Eotaxites* sp. Brongniart, 1875, p. 1021; leaves, incertae sedis; Upper-Carboniferous; near Moulins, France.

**EOZANTHOXYLON** Reid and Chandler, 1933.

*Eozanthoxylon glandulosum* Reid and Chandler, 1933, p. 263, pl. 10, figs. 13, 14; fruit, Rutaceae; London Clay, Eocene; Sheppey, Kent, England.

**EPHEDRITES** Goeppert and Berendt, 1845.

*Ephedrites johannicus* Goeppert and Berendt, in Berendt, 1845, p. 105, pl. 4, figs. 8-10; pl. 5, fig. 1; portion of shoot, Ephedraceae?; Miocene; Prussia.

**EPHEDROPSIS** Velenovsky and Viniklar, 1926.

*Ephedropsis strobilifera* Velenovsky and Viniklar, 1926, p. 44, pl. 4, figs. 5-12; pl. 3, fig. 7; seed cone, Taxodiaceae; Cretaceous; Vyserovice and Lipenec, Bohemia.

**EPIMASTOPORA** Pia, 1922.

Reference not seen. See Pia, in Zeitschr. Induktive Abstammungs, Band 30, p. 63, Berlin. See also Johnson, J. H., 1946.

**EPIPHYTON** Bornemann, 1886.

*Epiphyton flabellatum* Bornemann, 1886, p. 16, pl. 1, figs. 9-10; alga; Cambrian; Cuccuru, near Iglesias, Sardinia.

**EPIPOLAIA** C. E. Bertrand, 1898.

*Epipolaia boweri* C. E. Bertrand, 1898, p. 179, pl. 11, figs. 119-124; thallophyte, incertae sedis; Carboniferous; Broxburn, Scotland.

**EQUIHENIA** Meunier, 1886.

*Equihenia rugosa* Meunier, 1886, p. 567, pl. 29, fig. 4; plant or worm? tracks; Upper Jurassic; Equihen, Pas-de-Calais, France.

**EQUISETIDES** Schimper, 1869.

*Equisetides giganteus* (Lindley and Hutton) Schimper, 1869 (1869-74), p. 286.

See also Lindley and Hutton, 1831-37, pl. 114.



**EQUISETINA** Zalessky, 1939.

*Equisetina magnivaginata* Zalessky, 1939b, p. 329, figs. 1-3; articulate stem fragment; Permian; Matveyevo, Kroutaia Katouchka, USSR.

**EQUISETITES** Sternberg, 1833.

*Equisetites münsteri* Sternberg, 1833 (1820-38), p. 43, pl. 16, figs. 1-5; stems with foliage and terminal cone of *Equisetum*-like plant; Upper Triassic (Keuper); Strullendorf near Bamberg, Germany.

**EQUISETOSPORITES** Daugherty, 1941.

*Equisetosporites chinleana* Daugherty, 1941, p. 63, pl. 34, fig. 4; spore with elaters, Equisetaceae; Triassic; near Holbrook, Ariz.

**EQUISETOSTACHYS** Jongmans, 1927.

*Equisetostachys* sp. Jongmans, 1927b, p. 48; nom. nud.

**EREMOPHYLLUM** Lesquereux, 1874.

*Eremophyllum fimbriatum* Lesquereux, 1874, p. 107, pl. 8, fig. 1; leaf, dicotyledon; Cretaceous; near Decatur, Nebr.

**EREMOPTERIS** Schimper, 1869.

*Eremopteris artemisiaefolia* (Sternberg) Schimper, 1869 (1869-74), p. 416, pl. 30, fig. 4; fernlike foliage; Carboniferous; Newcastle, England.

**ERETMONIA** DuToit, 1932.

*Eretmonia natalensis* DuToit, 1932, p. 381, pl. 40, figs. 9-12; staminate sporangio-phores of *Glossopteris*?; Beaufort series, Karroo system, Upper Permian; Bergville, Natal.

**ERETMOPHYLLUM** Thomas, 1914.

*Eretmophyllum pubescens* Thomas, 1914, p. 259, pl. 6; leaf, Ginkgoales; Gristhorpe plant bed, Jurassic; Cayton Bay, Yorkshire, England.

**ERICIPHYLLUM** Conwentz, 1886.

*Ericiphyllum ternatum* Conwentz, 1886, p. 114, pl. 11, figs. 11-13; shoot bearing foliage, in amber, Ericaceae; early Tertiary; West Prussia.

**ERICIPITES** Wodehouse, 1933.

*Ericipites longisulcatus* Wodehouse, 1933, p. 517, fig. 52; pollen, Ericaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

**ERIOTESTA** Brongniart, 1874.

*Eriotesta velutina* Brongniart, 1874, p. 256, pl. 23, figs. 4, 5; silicified seed; Carboniferous; St.-Étienne, France.

**ERISIPHITES** Pampaloni, 1902.

*Erisiphites melilli* Pampaloni, 1902, p. 125, pl. 10, fig. 8; fungus perithecia; Miocene?; Melilli, Sicily.

**ERISTOPYHTON** Zalessky, 1911.

*Eristopyhton betnertianum* (Goeppert) Zalessky, 1911, p. 27, pl. 3, figs. 3-6; pl. 4, figs. 5, 7; petrified cordaitan stem; Lower Carboniferous.

**ERNESTIA** Florin, 1927.

*Ernestia filiciformis* (Schlotheim) Florin, 1927, p. 4; Coniferales; Lower Permian; widely distributed in central, western, southern Europe. See also Florin, 1929b, p. 404. This generic name proved to be preoccupied and was changed to *Ernestiodendron*, see below.

**ERNESTIODENDRON** Florin, 1934.

*Ernestiodendron filiciforme* (Schlotheim) Florin, 1934, p. 469. For *Ernestia filiciformis* (Schlotheim) Florin, 1927, p. 4. See also Florin, Rudolf, 1939, *Palaentographica*, Band 85, Abt. B, p. 176.

**ERVITES** Saporta, 1862.

*Ervites primaeus* Saporta, 1862, p. 287, pl. 14, fig. 9; fruit, Leguminosae; Tertiary; Provence, France.

**ERYSIPHITES** Meschinelli, 1898.

*Erysiphites protogaeus* (Schmalhausen) Meschinelli, 1898, p. 15, pl. 9, fig. 4; Pyrenomycete; Tertiary.

**ERYTHRINOXYLON** Falqui, 1907.

*Erythrinoxylon latiporosum* Falqui, 1907, p. 11; wood; Oligocene; Sardegna, Italy.

**ESCALLONITES** Kuntze, 1904.

*Escallonites* Kuntze, in Post and Kuntze, 1904, p. 207.

**ESCALONIIPHYLLUM** Dusen, 1899.

*Escaloniphyllum* sp. Dusen, 1899, p. 102, pl. 11, fig. 5; small leaf fragment compared with *Acallonia serrata* Smith; Oligocene; Chile.

**ESKDALIA** Kidston, 1903.

*Eskdalia minuta* Kidston, 1903a, p. 750, pl. 1, figs. 4-8; fern? stem compression; Cementstone series, Lower Carboniferous; near Holystone, Northumberland.

**ETAPTERIS** Paul Bertrand, 1907.

*Etapteris tubicaulis* (Goeppert) Paul Bertrand, 1907, p. 776; coenopterid petiole; Lower Carboniferous; Falkenberg, Silesia. For *Zygoteris tubicaulis* Goeppert, 1852b, p. 137, pl. 11, figs. 1-3. See also Bertrand, 1909, p. 72; Posthumus, 1931.

**ETERODICTYON** Peruzzi, 1881.

*Eterodictyon textum* (Heer) Peruzzi, 1881, p. 8, pl. 1, fig. 7; incertae sedis.

**ETHERIDGEA** Ettingshausen, 1893.

*Etheridgea subglobosa* Ettingshausen, 1893, p. 141. See also Ettingshausen, 1895, p. 46, pl. 4, fig. 3; fruit, Tiliaceae; Upper Cretaceous; Ipswich Road, Bahnstation, Australia.

**ETTINGSHAUSENIA** Stiehler, 1857.

*Ettingshausenia cuneifolia* (Bronn) Stiehler, 1857, p. 67. For *Credneria cuneifolia* Bronn, 1838 (1837-38), p. 533, pl. 28, fig. 11; Cretaceous (Cenomanian); Niederschoena, Saxony.

**EUCALYPTOPHYLLUM** Fontaine, 1889.

*Eucalyptophyllum oblongifolium* Fontaine, 1889, p. 325, pl. 162, fig. 4; leaf fragment, affinities with *Eucalyptus*?; Potomac group, Lower Cretaceous; near Brooke, Va.

**EUDAPHNIPHYLLUM** Conwentz, 1886.

*Eudaphniphyllum nathorsti* Conwentz, 1886, p. 95, pl. 10, fig. 1; leaf, in amber, Thymelaceae; Tertiary; West Prussia.

**EUEINITZIA** Hollick and Jeffrey, 1909.

*Eueinitzia proxima* Hollick and Jeffrey, 1909, p. 43, pls. 10, 25; cone scales, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.

**EUGENIAITES** Loubiere, 1933.

Soc. géol. France Bull. 1933, sér., 5<sup>e</sup>, tome 3, p. 128; Myrtaceae; Tertiary (not seen). See Gothan, 1942b, p. 122.

**EULEPIDOPHLOIOS** Sterzel, 1907.

*Eulepidophloios laricinus* (Sternberg) Sterzel, 1907, p. 730; Carboniferous; Offenbourg, Baden. See Sternberg, 1825 (1820-38), Tentamen, p. xiii, pl. 11, figs. 2-4.

**EULITHOTHAMNION?**

*Eulithothamnion suganum* (Rothpletz) Trabucco, 1900, p. 715, pl. 11, fig. 12; alga; Miocene; Italy. Earliest reference?

**ENUMENSTERIA** Rothpletz, 1896.

*Enumensteria flagellaria* (Sternberg) Rothpletz, 1896, p. 858. For *Münsteria flagellaria* Sternberg, 1833 (1820-38), p. 32, pl. 7, fig. 3; alga?; Eocene; Vienna.

**EUPEOPTERIS** Kidston, 1925.

*Eupeopteris bucklandi* (Brongniart) Kidston, 1925, p. 554, pls. 120, 122; pectopterid foliage; Radstockian series, Upper Carboniferous; Camerton, England.

**EUPHORBIOIDES** Weber, 1855.

*Euphorbioides prisca* Weber, 1855, p. 155, pl. 30, fig. 1; inflorescence. Euphorbiaceae; Miocene; Rhenish Prussia.

**EUPHORBIOPHLOIOS** Langeron, 1899.

*Euphorbiophloios sezannensis* Langeron, 1899, p. 451, pl. 5, fig. 4; stem impression, Euphorbiaceae?; Eocene; Sézanne, France.

**EUPHORBIOPHYLLUM** Ettingshausen, 1853.

*Euphorbiophyllum stillingoides* Ettingshausen, 1853, p. 77, pl. 26, figs. 1, 2; leaf, Euphorbiaceae; Tertiary; Haering, Austria.

**EUPHORBIOSPERMUM** Reid and Chandler, 1933.

*Euphorbiospermum eocenicum* Reid and Chandler, 1933, p. 290, pl. 12, figs. 20-25; seed, Euphorbiaceae; London Clay, Eocene; Minster, Kent, England.

**EUPHORBIOTHECA** Reid and Chandler, 1933.

*Euphorbiothea sheppeyensis* Reid and Chandler, 1933, p. 284, pl. 12, figs. 1-5; fruit, Euphorbiaceae; London Clay, Eocene; Sheppey, Kent, England.

**EUPHORBIOXYLON** Felix, 1887.

*Euphorbioxyylon speciosum* Felix, 1887a, p. 525, pl. 25, figs. 4, 6, 7; wood, Euphorbiaceae; Tertiary?; Sabanilla, Colombia.

**EUPHORBITES** Martius, 1822.

*Euphorbites cicatricosus* Martius, 1822, p. 141. See also Artis, 1825, p. 15, pl. 15; sigillarian stem compression; Upper Carboniferous; England.

**EUPHORBOCARPUM** Knowlton, 1917.

*Euphorbocarpum richardsoni* Knowlton, 1917, p. 328, pl. 96, figs. 3, 4; fruit, Euphorbiaceae; Raton formation, Eocene; 5 miles south of Aguilar, Colo.

**EUPHORIAECARPUM** Menzel, 1913.

*Euphoriaecarpum litchiiforme* Menzel, 1913, p. 43, pl. 4, figs. 28, 19; seed, Sapindaceae; Tertiary (Braunkohle); near Herzogenrath, Prussia.

**EUPHORIOPSIS** Massalongo, 1852.

*Euphoriopsis phaetontis* Massalongo, 1852a, p. 14, pl. 2, fig. 5; leaf, Sapindaceae.

**EUPSARONIUS** Presl, 1847.

*Eupsaronius carbonifer* (Corda) Presl, 1847, p. 289. For *Psaronius carbonifer* Corda, 1845, p. 95, pl. 28, figs. 1-4; *Psaronius* stem; Upper Carboniferous; Radnitz, Bohemia.

**EUROTITES** Meschinelli, 1892.

*Eurotites elegans* (Goeppert and Menge) Meschinelli, in Saccardo, 1892, p. 750. See also Meschinelli, 1898, p. 15; Pyrenomycete. For *Eurotium elegans* Goeppert and Menge, in Goeppert, 1853, p. 453.

**EURYCYCADOLEPIS** Seward, 1917.

*Eurycyadolepis jenkinsiana* (Tate) Seward, 1917, p. 496; cycad cone scale?; Uitenhage series, Wealden; Cape Colony, South Africa. For *Cyclopteris jenkinsiana* Tate, 1867, p. 130, pl. 6, fig. 4.

**EURYPHYLLUM** Ottokar Feistmantel, 1879.

*Euryphyllum whittianum* Ottokar Feistmantel, 1879, p. 26, pl. 21, figs. 1, 1a; leaf; Karharbari beds, Lower Gondwana; Burliadi, India.

**EURYSACIS** Schulze, 1887.

*Eurysacis squamosa* (Heer) Schulze, 1887, p. 18. For *Cunninghamites squamosus* Heer, 1871b, p. 9, pl. 1, figs. 5-7.

**EURYSOLENPORA** Dietrich, 1930.

*Eurysolenpora polypora* (Quenstedt) Dietrich, 1930, p. 104, pl. 4; plant?; Jurassic.

**EUSARCOPHYLLUM** Zalesky, 1933.

*Eusarcophyllum amadocum* Zalesky, 1933c, p. 1390, figs. 4, 5; lycopod stem fragments?; Carboniferous?; Chakhtionki, Donets, Russia.

**EUSPHENOPTERIS** (Weiss) Kidston, 1882.

*Eusphenopteris tenella* (Brongniart) Kidston, 1882, p. 7, pl. 1, figs. 1-5; fertile fernlike frond, referred tentatively to Hymenophyllaceae; Upper Carboniferous; Yorkshire, England.

**EUTHYTHYRITES** Cookson, 1947.

*Euthythyrites oleinites* Cookson, 1947, p. 210, pl. 12, figs. 12, 13; ascomata, Microthyriaceae; Oligocene-Miocene; Yallorn and Hazelwood, Victoria.

**EVIOSTACHYA** Stockmans, 1948.

*Eviostachya hoefti* Stockmans, 1948, p. 64, pl. 10, figs. 2-5a; Upper Devonian; Belgium.

**EVODIOXYLON** Chiarugi, 1933.

*Evodioxylon owent* (Carruthers) Chiarugi, 1933, p. 137, pl. 20, fig. 2; pl. 21, figs. 1-4; pl. 22, figs. 1-3; dicotyledonous wood; Miocene and Cretaceous; ScecGure, southern Italian East Africa (Somaliland) and Gargerre, Garseale, northern Italian East Africa. For *Caesalpinioxylon owent* (Carruthers) Edwards, 1931.

**EXCIPULITES** Goepfert, 1836.

*Excipulites neesii* Goepfert, 1936, p. 262, pl. 36, fig. 4; perithecial organs on *Hymenophyllites* foliage; Upper Cretaceous; Waldenburg, Silesia. Meshinelli, 1892, p. 788, erroneously attributes this genus to Fries.

**EXOGENITES** Fischer de Waldheim, 1826.

*Exogenites* sp. Fischer de Waldheim, 1826, p. 18, plate [unnumbered]; Tertiary; near Moscow, Russia.

**F**

**FABOIDEA** Bowerbank, 1840.

*Faboidea longiuscula* Bowerbank, 1840, p. 104, pl. 15, figs. 1, 2; seed, Leguminosae?; Eocene; Sheppy, Kent, England.

**FAGITES** Goepfert, 1844.

*Fagites gypsaceus* Goepfert, in Wimmer, 1844, p. 219; nom. nud? Possibly intended as new name for the leaf described as *Fagus sylvatica* in Goepfert, 1842b, p. 219, pl. 67, fig. 1.

**FAGOPHYLLUM** Nathorst, 1888.

*Fagophyllum gottscheti* Nathorst, 1888, p. 199, pl. 17, fig. 2; leaf, Miocene; Moriyo-shimura, Ugo province, Japan.

**FAGOPSIS** Hollick, 1909.

*Fagopsis longifolia* (Lesquereux) Hollick, 1909, p. 2, figs. 1, 2; leaf, Fagaceae; Miocene; Florissant, Colo.

**FAGOXYLON** Stopes and Fujii, 1910.

*Fagoxylon hokkaidense* Stopes and Fujii, 1910, p. 64, pl. 8, figs. 50-53; wood; Upper Cretaceous; Hokkaido, Japan. See also Edwards, 1931.

**FANEROTHECA** Frangueilli, 1944.

*Fanerotheca exstans* Frangueilli, 1944b, p. 393, pls. 1-4; microsporangiate organ, Pteridospermae; Triassic; Cacheuta, Argentina.

**FASCICULITES** Cotta, 1832.

*Fasciculites didymosolen* (Sprengel) Cotta, 1832, p. 47, pl. 9, figs. 3, 4.

**FASCIOSTELOPTERIS** Stopes and Fujii, 1910.

*Fasciosteleopteris tanslettii* Stopes and Fujii, 1910, p. 15, pl. 2, figs. 2, 3; dictyostelic fern stem, Cyatheaceae?; Upper Cretaceous; Hokkaido, Japan.

**FASCITES** Reinsch, 1881.

*Fascites* sp. Reinsch, 1881, p. 34, pl. 7a, figs. 7-10; pl. 7b, figs. 3, 4; pl. 10, figs. 5-8; Triassic (Keuper); Basel, Switzerland.

**FAVULARIA** Sternberg, 1825.

*Favularia obovata* Sternberg, 1825 (1820-38), Tentamen, p. xlii, a genus established for species which are now included in *Sigillaria*

**FAYOLIA** Renault and Zeiller, 1884.

*Fayolia dentata* Renault and Zeiller, 1884b, p. 1393, figs. 1, 2; fish egg capsule (described as a plant). For recent discussion of *Fayolia* and related fossils, see Brown, R. W., 1950.

**FEAGONIUM** Unger, 1847.

*Fegonium vasculosum* Unger, 1847 (1841-47), p. 103, pl. 27, figs. 7-9; Tertiary; Freystadt, Austria. Originally described by Unger, 1839b, as *Phegonium*; in 1884 Vater introduced *Phegonium* as "gen. nov." noting that Unger's *Phegonium* belongs to *Plataninum*. See discussion in Edwards, 1931, p. 40.

**FEILDENIA** Heer, 1878.

*Feildenia rigida* Heer, 1878a, p. 20, pl. 1, figs. 3-11; pl. 2, fig. 1; pl. 8, fig. 1; Miocene; Grinnell Land, Arctic Ocean.

**FEILDENIOPSIS** Fontaine, 1889.

*Feildenopsis crassineris* Fontaine, 1889, p. 205, pl. 85, fig. 5; leaf fragment, incertae sedis; Potomac group, Lower Cretaceous; Virginia.

**FEISTMANTELIA** Crie, 1889.

*Feistmantelia americana* Crie, 1889b, p. 23; nom. nud. See note under *Bottgeria*.

**FEISTMANTELIA** Ward, 1899.

*Feistmantelia oblonga* Ward, 1899, p. 693, pl. 169, fig. 19; seed, compared with *Araucarites*; Lower Cretaceous; Black Hills, S. Dak.

**FEISTMANTELIA** Zeiller, 1902.

*Feistmantelia bengalensis* Zeiller, 1902, p. 34, pl. 4, figs. 9, 10; cupular organ, Pteridospermae; Lower Gondwana; Passerabhua, India. See Seward, 1917, p. 140. See also *Ottokaria*, Zeiller, 1902.

**FELIXIA** Platen, 1908.

*Felixia latiradiata* Platen, 1908, p. 66, pl. 2, figs. 3, 4; wood, Leguminosae; Miocene-Pliocene; California.

**FERONIA** Carpentier, 1927.

*Feronia sewardi* Carpentier, 1927, p. 27, pl. 4, figs. 1-4; Wealden; Feron, Mon-faux, France.

**FERUGLIOA** Frenguelli, 1944.

*Feruglioa samaroides* Frenguelli, 1944b, p. 403, text fig. 1; pls. 1, 2; seeds, Cystospermaceae?; Triassic; Chubut, Argentina.

**FICHTELITES** Unger, 1842.

*Fichtelites articulatus* Unger, 1842, p. 101; wood, Leguminosae; Tertiary; Austria.

**FICOIDITES** Artis, 1825.

*Ficoidites verrucosus* Artis, 1825, p. 10, pl. 10, stigmarian appendage; Carboniferous; near Wentworth, Yorkshire, England.

**FICONIUM** Ettingshausen, 1883.

*Ficonium solandri* Ettingshausen, 1883, p. 124, pl. 3, fig. 4; leaf, Moraceae; Eocene; Dalton near Gunning, Australia.

**FICOPHYLLUM** Fontaine, 1889.

*Ficophyllum crassinerve* Fontaine, 1889, p. 291, pls. 144-148; leaf, dictyoledon; Potomac group, Lower Cretaceous; Fredericksburg, Va.

**FICOXYLON** Kaiser, 1880.

*Ficoxylon bohemicum* Kaiser, 1880a, p. 309; wood, compared with *Ficus cordata*; Tertiary; between Kostenblatt and Zettow, Bohemia. Placed in *Ficoxylon tropicum* by Edwards, 1931. See *F. tropicum* (Schleiden) Felix, 1883a, p. 81, pl. 2, fig. 6.

**FILICITES** Schlotheim, 1820.

*Filicites cyatheus* Schlotheim, 1820, p. 403; for illustrations, see Schlotheim, 1804, pl. 7, fig. 11. A genus of miscellaneous fern foliage fragments; a type species seems meaningless because of the diversity of fossils assigned to it; compare, for example, Berry, 1922e, p. 162, pl. 6, fig. 4, and Crepin, 1875, pl. 6.

**FIRMIANITES** Cockerell, 1909.

*Firmianites aterrimus* Cockerell, 1909, p. 447, fig. 2; capsule, compared with *Firmiana*; Eocene; Green River, Wyo.

**FITTONIA** Carruthers, 1870.

*Fittonia squamata* Carruthers, 1870, p. 690, pl. 56; cycadophyte trunk; Upper Cretaceous; Bournemouth, Isle of Wight, England

**FITTONITES** Kuntze, 1904.

*Fittonites* Kuntze, in Post and Kuntze, 1904, p. 236.

**FLABELLARIA** Sternberg, 1822.

*Flabellaria raphifolia* Sternberg, 1822 (1820-38), p. 32, pl. 21; palm leaf; Oligocene; Haering, Tirol, Austria. This is selected as type, for the genus has been generally used for palm leaves; first species described by Sternberg, *F. borassifolia*, however, is a cordaitan leaf. See Seward, 1917, p. 233.

**FLABELLICULA** Reid and Chandler, 1926.

*Flabellacula anglica* Reid and Chandler, 1926, p. 141, pl. 9, figs. 12, 13; angiosperm fruit; Oligocene; Isle of Wight, England.

**FLABELLITES**.

Error for *Palmacites*, in Cuvier and Brongniart, 1822, p. 35.

**FLABELLOPHYCOS** Squinabol, 1890.

*Flabelliphycos ligusticus* Squinabol, 1890, p. 199, pl. 12, fig. 1; incertae sedis; Tertiary; Italy.

**FLEMINGITES** Carruthers, 1865.

*Flemingites gracilis* Carruthers, 1865, p. 438, pl. 12, figs. A1-10; lycopod cone; Upper Carboniferous; Airdrie, Lanarkshire, Scotland.

**FLICHEIA** Pelourde, 1908.

*Flicheia esnostensis* Pelourde, 1908, p. 879, fig. 1; silicified fern petiole; Lower Carboniferous (Culm); Autun, France. See also Posthumus, 1931.

**FLORENTINITES** Spegazzini, 1924.

*Florentinites arcuata* Spegazzini, 1924a, p. 104, figs. 7-10; foliage, monocotyledon?; Eocene; Patagonia.

**FLORINITES** Schopf, Wilson, and Bantall, 1944.

*Florinites antiquus* Schopf, in Schopf, Wilson, and Bantall, 1944, p. 58, figs. 4, 5; spore; near top of Tradewater group, lower Allegheny, Pennsylvanian; Soap Creek, Davis County, Iowa.

**FLORISSANTIA** Knowlton, 1916.

*Florissantia physalis* Knowlton, 1916, p. 270. For a flower (Convolvulaceae?) described, but not named, by Kirchner, 1898, p. 188, pl. 15, fig. 2.

**FLOROPTERIS** Achepohl, 1883.

*Floropteris* sp. Achepohl, 1883, p. 91, pl. 29, fig. 3; fernlike foliage; Upper Carboniferous; Westphalia.

**FOERSTIA** David White, 1923.

*Foerstia ohioensis* David White, in White, David, and Stadnichenko, Talsia, 1923, p. 240, pl. 5; pl. 6, figs. 1-5; alga?; Devonian; near Vanceburg, Ky.

**FOLIOPTERIS** Achepohl, 1883.

*Foliopteris* sp. Achepohl, 1883, p. 91, pl. 29, fig. 7; fernlike foliage fragment; Upper Carboniferous; Westphalia.

**FOLIUM** Elise Hofmann, 1932.

*Folium sectum* Elise Hofmann, 1932, p. 61. pl. 1, figs. 1-3; cuticular remains; Tertiary; Gelseltals, Germany.

**FOLLIOLITES** Zenker, 1833.

*Folliculites kaltennordhemensis* Zenker, 1833b, p. 177, pl. 4A; fruit, Ranunculaceae?; Tertiary (Braunkohle); Weimar, Germany.

**FONTAINEA** Newberry, 1895.

*Fontainea grandifolia* Newberry, 1895, p. 96, pl. 45, figs. 1-4; leaf, Leguminosae; Raritan formation, Upper Cretaceous; Woodbridge, N. J.

**FORALITES** Rouault, 1850.

*Foralites pomell* Rouault, 1850, p. 743; incertae sedis; Silurian; Bain, Guichen, etc., in Brittany, France. *See also* Delgade, 1886, p. 90, pls. 3, 13.

**FORBESIA** Thomas Johnson, 1912.

*Forbesia cancellata* Thomas Johnson, 1912, p. 177, pls. 13, 14; fern rachis?; Lower Carboniferous; near Bandon, County Cork, Ireland.

**FORCHHAMMERA** Goeppert, 1859.

*Forchhammera silurica* Goeppert, 1859, p. 438, pl. 34, fig. 5; plant?; Lower Silurian; Bornholm, Denmark.

**FORSKOHLEANTHIUM** Conwentz, 1886.

*Forskohleanthium nudum* Conwentz, 1886, p. 45, pl. 4, figs. 20-22; flower, in amber, Urticaceae; Tertiary; West Prussia.

**FORTISIA** Vislani, 1858.

*Fortisia haidingeriana* Vislani, 1858, p. 10, pl. 1, figs. 1-4; fern? pinnules; Eocene; Monte Promona, Italy.

**FRAASIA** Unger, 1850.

*Fraasia sapindoides* Unger, 1850a, p. 457; wood, Sapindaceae; Tertiary; Hungary.

**FRACASTORIA** Massalongo, 1858.

*Fracastoria clavaeformis* Massalongo, 1858b, p. 762; Eocene; Monte Bolca, Italy. *See also* *Fracastoria megapepo* Massalongo, 1857b, p. 777; nom. nud.

**FRAENA** Rouault, 1850.

*Fraena sanctihilatae* Rouault, 1850, p. 731; plant?; Silurian; Guichen, Brittany, France. *See also* Saporta, 1884, p. 54, pl. 8, fig. 3.

**FRAXINOIDITES** Robert Potonie, 1950.

*Fraxinoidites* sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 62.

**FRAXINOPSIS** Wieland, 1929.

*Fraxinopsis minor* Wieland, 1929b, p. 448, fig. 5b; winged fruits, compared with *Fraxinus*; Rhaetic; Minas de Petroleo, southwest of Mendoza, Argentina.

**FRENELITES** Endlicher, 1847.

*Frenelites recurvatus* (Bowerbank) Endlicher, 1847, p. 273. For *Cupressinites recurvatus* Bowerbank, 1840, p. 55, pl. 10, fig. 19.

**FRENELOPSIS** Schenk, 1869.

*Frenelopsis hoheneggri* (Ettingshausen) Schenk, 1869, p. 13, pl. 4, figs. 5-7; p. 5, figs. 1, 2; pl. 6, figs. 1-6; pl. 7, fig. 1; defoliated coniferous shoot?; Cretaceous.

**FRICIA** Velenovsky, 1885.

*Fricia nobilis* Velenovsky, 1885a, p. 8, pl. 8, figs. 1-3, 6, 11.

**FRUCTUS** Engelhardt, 1877.

*Fructus polyspermus* Engelhardt, 1877, p. 389, pl. 21, fig. 8; incertae sedis; Tschernowitz, Bohemia.

**FRULLANITES** Sadebeck, 1886?

*Frullanites succini* Sadebeck, 1886, p. 121; nom. nud.; moss; Tertiary; Prussia.

**FRUTICORISTATUM** Webster, 1920.

*Fruticoristatum iowense* Webster, 1920, p. 288; marine alga; Devonian; Bloody Run, Floyd County, Iowa.

**FUCHSELIA** Endlicher, 1847.

*Fuchselia schimper* Endlicher, 1847, p. 304. For *Strobilites laticoides* Schimper and Mougeot, 1844, p. 31, pl. 1; pl. 16; cone, Coniferales; Triassic; Soultz-les-Bains, Alsace-Lorraine.

**FUCITES** (Brongniart) Unger, 1839.

*Fucites dubius* Unger, 1839, p. 101; nom. nud.

**FUCOIDES** Brongniart, 1823.

*Fucoides orbignianus* Brongniart, 1823, p. 308, pl. 19, fig. 1; Lower Cretaceous (Neocomian); Island of Aix, near La Rochelle, France. *See also* Brongniart, 1828a-38, p. 78, pl. 2, figs. 6, 7.

**FUNGITES** Haller, 1865.

*Fungites apoldensis* Haller, 1865, p. 191, pl. 9B; mycelium; Tertiary (Braunkohle); Apolda, Germany.

**FURCIFOLIUM** Kräusel, 1943.

*Furcifolium longifolium* (Seward) Kräusel, 1943a, p. 431, figs. 1-6; ginkgo-phyte, *Basia*-like foliage attached to slender stems; Jurassic; Solenhofen, Bavaria.

**FURCOPORELLA** Pia, 1918.

*Furcoporella diplopore* Pia, in Trauth, 1918, p. 209, pl. 1, figs. 1, 2; alga, Dasycladaceae; Eocene; Radstadt, Austria.

**FURCULA** Harris, 1932.

*Furcula granulifer* Harris, 1932a, p. 4, pl. 1; leaf, dicotyledon; Rhaetic; Scoresby Sound, east Greenland.

*FUSIDITES* Meschinelli, 1898.

*Fusidites* sp. (Conwentz) Meschinelli, 1898, p. 78, fungus.

## G

*GALLA* (Ludwig) Lesquereux, 1892.

*Galla quercina* Lesquereux, 1892, p. 58, pl. 7, fig. 2; oak gall?; Cretaceous; Ellsworth County, Kans. Generic name given by Ludwig, 1857, p. 90, but no species assigned.

*GALLATINIA* Walcott, 1914.

*Gallatinia pertusa* Walcott, 1914, p. 116, pl. 23, figs. 1, 2; alga; Algonkian; west of Hillsdale Post Office, Gallatin County, Mont.

*GANGAMOPTERIS* McCoy, 1875.

*Gangamopteris angustifolia* McCoy, 1875, p. 11, pl. 12, fig. 1; pl. 13, fig. 2; large net-veined leaf; Mudgee, New South Wales. For *Cyclopteris angustifolia* McCoy, 1847, p. 148, pl. 9, figs. 3, 3a.

*GANGAMOPTERIOPSIS* Zalesky, 1927.

*Gangamopteropsis netchaevi* Zalesky, 1927a, p. 41, pl. 16, figs. 1-5; pl. 17; leaf; Permian; near Voskressensky, Urals, Russia.

*GANITROCERA* Kirchheimer, 1934.

*Ganitrocera holzapfeli* Kirchheimer, 1934a, p. 770, fig. 4; seed, Cornaceae; Tertiary (Braunkohle); Herzogenrath, Germany. See also Kirchheimer, 1936a.

*GARWOODELLA* Paul, 1938.

Reference not seen; cited in Gothan, 1942b, p. 123.

*GARWOODIA* Wood, 1941.

*Garwoodia gregaria* (Nicholson) Wood, 1941, p. 222, pl. 14, figs. 1, 2; pl. 15, figs. 1-4; alga; Lower Carboniferous; Kershopefoot, Roxburghshire, Scotland.

*GASTRIDIOPSIS* Massalongo, 1851.

*Gastriodopsis elisae* Massalongo, 1851, p. 69; alga; Tertiary; Italy.

*GASTROMYCES* Ludwig, 1861.

*Gastromyces farinosa* Ludwig, 1861, p. 32, pl. 6, figs. 3, 3a-c; gasteromycete?; Upper Carboniferous Malowka, Tula, Russia.

*GAUDRYA* Grand'Eury, 1890.

*Gaudrya trivalvis* Grand'Eury, 1890, p. 308, pl. 4, fig. 12; petrified seed; Upper Carboniferous; St.-Etienne, France.

*GAUSSIA* Chachloff?, 1934.

Reference not seen; cited in Gothan, 1942b, p. 123.

*GEASTERITES* Pia, 1927.

*Geasterites florissantensis* (Cockerell) Pia, in Hirmer, 1927, p. 121, fig. 109; Geaster-like impression, Lycopodiaceae; Miocene; Florissant, Colo.

*GEIETES* Stenzel, 1872.

*Geietes moussoni* (Heer) Stenzel, 1872, p. 71.

*GEINITZIA* Endlicher, 1847.

*Geinitzia cretacea* Endlicher, 1847, p. 281. For *Sedites rabenhorstii* Geinitz, 1842 (1839-42), p. 97, pl. 24, fig. 5.

*GEINITZIELLA* Kuntze, 1904.

*Geinitziella* Kuntze, in Post and Kuntze, 1904, p. 245.

*GEINITZITES* Fontaine, 1899.

*Geinitzites jenneyi* Fontaine, in Ward, 1899, p. 681; coniferous twig impression; Lower Cretaceous; Black Hills, S. Dak. This is a "proposed" name; Fontaine describes the new species *Geinitzia jenneyi* on p. 676 and on p. 681 writes: "As *Geinitzia* is hitherto known from no strata older than the Younger Cretaceous, it may be found that our plant is an ancestral form of the true *Geinitzia*. In that case it would be fittingly named *Geinitzites jenneyi*."

*GELEENITES* Dijkstra, 1949.

*Geleenites fascinus* Dijkstra, 1949, p. 26, pl. 2, fig. 11; incertae sedis; South Limburg, Netherlands.

*GELIDINIUM* Debey and Ettingshausen, 1859.

*Gelidinium trajectomosanum* Debey and Ettingshausen, 1859a, p. 199, pl. 3, fig. 6h; alga; Cretaceous; Aachen, Rhenish Prussia.

*GELLERA* Hollick, 1931.

*Gellera paradoxa* Hollick, 1931, p. 9, pl. 2, figs. 1-3; base of stem and roots, fern?; specimen found in terminal moraine; transported from Triassic rock horizon; Arrochar, Staten Island, N. Y.

*GENOITES* Feruglio, 1942.

*Genoites patagonica* Feruglio, 1942, p. 104, pl. 1, figs. 3, 4; pls. 5, 6; Liassic; Rio Genoa Valley, Patagonia, Argentina.

*GEOCARPUS* Kinkelln, 1884.

*Geocarpus miocenicus* Kinkelln, 1884, p. 256, pl. 3, figs. 14-18; Miocene; Frankfurt-Niederrad, Prussia.

*GEONOMITES* Vislani, 1864.

*Geonomites saturnia* Vislani, 1864, p. 456, pl. 21; palm leaf; Tertiary; Italy.

*GEONOMITES* Lesquereux, 1878.

*Geonomites goldianus* Lesquereux, 1878a, p. 115, pl. 4, fig. 9; palm leaf; South Mtn., Golden, Colo.

*GERMANOPHYTON* Hoeg, 1942.

*Germanophyton psymphyloides* (Kräusel and Weyland) Hoeg, 1942, p. 98, fig. 20; stem, with cells of *Prototaxites* type, bearing large fan-shaped leaves; Lower Devonian; Kirchhunden, West-

- phallia. For *Prototaxites psugmophylloides* Kräusel and Weyland, 1930, Senckenbergiana, Band 12, p. 218.
- GERMARIA** Presl, 1838.  
*Germaria elymiformis* Presl, in Sternberg, 1838 (1820-38), p. 188, pl. 49, figs. 1-9; cones?, Incertae sedis; Rhaetic; Bayreuth, Bavaria.
- GETONITES** Ettingshausen, 1887.  
*Getonites wilkinsoni* Ettingshausen, 1887, p. 130, pl. 15, figs. 11, 11a, 12; leaf, Combretaceae; Eocene; Vegetable Creek, near Emmaville, New South Wales.
- GIGANTONOCLEA** Koldzumi, 1936.  
*Gigantonoclea lagrellii* (Halle) Koldzumi, 1936, p. 138. For *Gigantopteris lagrellii* Halle, 1927, p. 170, pl. 46; lower Shihotse series, Lower Permian; central Shansi, China.
- GIGANTOPTERIS** Schenk, 1883.  
*Gigantopteris nicotianaefolia* Schenk, 1883b, p. 256. For *Megalopteris nicotianaefolia* Schenk, 1883b, p. 238, pl. 32, figs. 6-8; pl. 33, figs. 1-3; pl. 35, fig. 6; Upper Carboniferous; Lui-pakou, Hunan province, China.
- GIGANTOSPERMUM** Jongmans and Gothan, 1935.  
*Gigantospermum posthumi* Jongmans and Gothan, 1935, p. 169, pl. 58, fig. 1; Upper Carboniferous; Djambi, Mengkarang, Sumatra.
- GIGARTINITES** Brongniart, 1849.  
*Gigartinites obtusus* Brongniart, 1849, p. 59. For *Fucoides obtusus* Brongniart, 1828a-38, p. 60, pl. 8, fig. 4; alga?; Tertiary; Monte Bolca, near Verona, Italy.
- GILBERTINA** Ulrich, 1904.  
*Gilbertina spiralis* Ulrich, 1904, p. 141, pl. 18, figs. 1, 2; plant?; Yakutat formation, Jurassic (Liasic); Pogibshi Island, Alaska.
- GILBOAPHYTON** Arnold, 1937.  
*Gilboaphyton goldringiae* Arnold, 1937, p. 76, pl. 1; Psilophytales or Lycopodiales?; Middle Devonian; Gilboa, Schoharie County, N. Y.
- GINKGANTHUS** Nathorst, 1899.  
*Ginkganthus* sp. Nathorst, 1899, p. 213, pl. 1, figs. 33, 49; microsporangiate organ, ginkgophyte; Jurassic; Franz Josef Land.
- GINKGOCLADUS** Ettingshausen, 1887.  
*Ginkgocladus novaezeelandiae* Ettingshausen, 1887b, p. 179, pl. 7, fig. 19; leaf, Incertae sedis; Upper Cretaceous; Wangapeka, Nelson, New Zealand.
- GINKGODIUM** Yokoyama, 1889.  
*Ginkgodium nathorsti* Yokoyama, 1889, p. 57, pl. 2, fig. 4e; pl. 3, fig. 7; pl. 8; pl. 9, figs. 1-10; Lower Oolite, Jurassic; Shimamura, Yanagedani, Japan.
- GINKGOITES** Seward, 1919.  
*Ginkgoites obovata* (Nathorst) Seward, 1919, p. 12, fig. 632; leaf, Ginkgoaceae; Rhaetic; Scania, Sweden.
- GINKGOPHYLLUM** Saporta, 1875.  
*Ginkgophyllum grasseti* Saporta, 1875b, p. 1018; leaf, ginkgophyte?; Permian; Lodève, France. See also Saporta, 1879, p. 186, fig. 15.
- GINKGOPHYTON** Matthew, 1910.  
*Ginkgophyton leavittii* Matthew, 1910, p. 87, pl. 4; ginkgophyte? leaves and associated seeds; Mississippian; Duck Cove, Lancaster, New Brunswick, Canada.
- GINKGOPHYTON** Zalesky, 1918.  
*Ginkgophyton* sp. Zalesky, 1918, p. 47.
- GINKGOPSIS** Zalesky, 1918.  
*Ginkgopsis czekanowskii* (Schmalhausen) Zalesky, 1918, p. 57, pl. 22, figs. 1-4; ginkgophyte leaf?; Mesozoic; Souka, Russia. This generic name mentioned in Zalesky, 1912, p. 28 (footnote), but no specific name assigned.
- GINKGOSPERMUM** Nathorst, 1878.  
*Ginkgospermum globulare* Nathorst, 1878a, p. 12; nom. nud.
- GIRVANELLA** Nicholson and Etheridge, 1878.  
*Girvanella problematica* Nicholson and Etheridge, 1878, p. 23, pl. 9, fig. 24; Silurian; Girvan District, Ayrshire, Scotland.
- GLEDITSCHIACANTHUS** Lakowitz, 1895.  
*Gleditschiacanthus alsaticus* Lakowitz, 1895, p. 288, pl. 10, fig. 8; Oligocene; Brunstatt, Alsace-Lorraine.
- GLEDITSCHITES** Fritel, 1924.  
*Gleditschites dubium* (Watelet) Fritel, 1924, p. 169, fig. 20A; fruit, Leguminosae; Belleu, France.
- GLEDITSIOPHYLLUM** E. W. Berry, 1910.  
*Gleditsiophyllum triacanthoides* E. W. Berry, 1910a, p. 197; leaf, Rosales; Cretaceous; 3½ miles below Denbars Bridge, Tar River, Edgecomb County, N. C. This species apparently never illustrated; first species illustrated: *G. eocenicum* Berry, 1916b, p. 238, pl. 46, figs. 1-7.
- GLEICHENIOPSIS** Tutin, 1932.  
*Gleicheniopsis secunda* (Heer) Tutin, 1932, p. 503, pl. 16; fertile fern frond fragment, Gleicheniaceae; Lower Cretaceous; Ritenbenk coal mine, Disko Island, Greenland.

**GLEICHENITES** Goeppert, 1836.

Goeppert, 1836, p. 181-187, described five species which in no way conform with modern usage, his plants being Carboniferous sphenopterids, neuropterids, etc. The following is suggested as a type species, being one of the first described which clearly conforms with the modern concept: *Gleichenites porstildi* Seward, 1926, p. 76, pl. 6, figs. 18, 19, 24, 27, 29-31; pl. 12, figs. 122, 124; *Gleichenia*-like frond; Cretaceous; Anglarsuit, Upernivik Island, Greenland. See also *Gleichenites coloradensis* (Knowlton) Andrews, in Andrews and Pearsall, 1941, p. 174, pl. 3, figs. 20-22, 24; pl. 4, figs. 26, 27, 29; pl. 7. See also Seward, 1910, p. 351, and 1926, p. 69.

**GLEICHENOPHYCOS** Massalongo, 1884.

*Gleichenophycos granulatus* Massalongo, in Capellini, 1884, p. 541; Upper Cretaceous; Granaglione, near Bologna, Italy.

**GLENOPTERIS** Sellards, 1900.

*Glenopteris splendens* Sellards, 1900, p. 182, pl. 37, fig. 1; pl. 38, fig. 1; pl. 40; fern frond, compared with *Protoblechnum* Lesquereux; Permian; 3½ miles south of Banner City, Dickenson County, Kans.

**GLEOCAPSOMORPHA** Zalesky, 1920.

*Gleocapsomorpha prisca* Zalesky, 1920, p. 83, figs. 1-3; alga; Silurian.

**GLOBULINEA** Ulke, 1938.

*Globulinea giganteus* Ulke, 1938, p. 58, pl. 1, fig. 1; alga; Mississippian; "Washington, D. C." Type specimen on a step of the 16th Street entrance of the Baptist Memorial Church, Washington, D. C.!

**GLOCKERIA** Goeppert, 1836.

*Glockeria marattioides* Goeppert, 1836, p. 379, pl. 39, figs. 2, 3; fernlike foliage; Upper Carboniferous; Charlottenbrunn, Silesia.

**GLOEOCAPSITES** Zalesky, 1917.

*Gloeocapsites* sp. Zalesky, 1917, p. 34.

**GLOEOCAPSOMORPHA** Zalesky, 1917.

*Gloeocapsomorpha prisca* Zalesky, 1917, p. 36, pl. 2, figs. 4-7; pl. 3, fig. 2; Lower Silurian; Petrograd, Russia.

**GLOIOCONIS** Renault, 1896.

*Gloioconis borneti* Renault, 1896a, p. 446, fig. 94, pl. 88, fig. 12; alga; Permian; Lally, France.

**GLORIOSITES** Heer, 1855.

*Gloriosites rostratus* Heer, 1855, p. 83, pl. 30, fig. 6; rhizome, Liliaceae?; Tertiary; Oeningen, Switzerland.

**GLOSSIFUNGITES** Lomnicki, 1886.

*Glossifungites saviava* Lomnicki, 1886, p. 99, pl. 3, figs. 64a, 64b; Upper Cretaceous; Rukow near Pomorzany, Galicia.

**GLOSSOCARPELLITES** Perkins, 1905.

*Glossocarpellites parvus* Perkins, 1905, p. 510, pl. 86, fig. 15; fruit; Tertiary; Brandon, Vt.

**GLOSSOCHLAMYS** Ettingshausen, 1879.

*Glossochlamys transmutans* Ettingshausen and Gardner, in Gardner and Ettingshausen, 1879, p. 31, pl. 3, fig. 3; fern? leaf; Eocene; Bournemouth, England.

**GLOSSOPHIUM** Massalongo, 1893.

*Glossophium eocenum* Massalongo, in Meschinelli and Squinabol, 1893, p. 415. See also *Glossophium proliferum* Massalongo, 1857b, p. 777; nom. nud.

**GLOSSOPHYCUS** Saprota and Marion, 1881.

*Glossophycus camillae* Saprota and Marion, 1881, p. 89, fig. 26; alga?; Triassic; Cannet, France.

**GLOSSOPHYLLUM** Kräusel, 1943.

*Glossophyllum florini* Kräusel, 1943b, p. 61, pl. 2, figs. 9-11; pl. 3, figs. 6-10; ginkgophyte leaf; Triassic; Lunz, Austria.

**GLOSSOPTERIS** (Brongniart) Sternberg, 1825.

*Glossopteris browniana* Brongniart, 1833 (1828a-38), p. 223, pl. 62. *Glossopteris* was proposed by Brongniart, 1822, p. 232, as a section of *Filicites* and given generic rank by Sternberg, 1825 (1820-38), Tentamen, p. xv; thus earliest valid binomial would appear to be *Glossopteris dubia* (Brongniart) Sternberg, 1825 (1820-38), p. xv, but Brongniart's illustration (Brongniart, 1822, p. 232, pl. 2, fig. 4) which Sternberg refers to is doubtful. See also Seward, 1910, p. 496.

**GLOSSOPTEROPSIS** Zalesky, 1918.

*Glossopteropsis angarica* Zalesky, 1918, p. 51, pl. 8, figs. 1, 2; ginkgophyte leaf?; Permian; Bassin d'Angara, near Irbinskaia, Russia.

**GLOSSOZAMITES** Schimper, 1870.

*Glossozamites oblongifolius* (Kurr) Schimper, 1870 (1869-74), p. 163, pl. 71; cycadophyte foliage; Lower Jurassic (Lias); Württemberg.

**GLOTTOPHYLLUM** Zalesky, 1912.

*Glottophyllum cuneatum* Zalesky, 1912, p. 28 (footnote), pl. 5, fig. 4; ginkgophyte leaf?; Carboniferous; Kuznets Basin, Russia. See also Zalesky, 1918, p. 59, pl. 26, fig. 1.

**GLUTOXYLON** Chowdhury, 1936.

*Glutoxylon assamicum* Chowdhury, 1936, p. 508, pl. 7; wood, compared with *Gluta* (Anacardiaceae); middle Tertiary; Nallalung, Assam, India.

**GLYPHOSTROMIUM** Reinsch, 1881.

*Glyphostromium* sp. Reinsch, 1881, p. 58, pl. 14, figs. 1-8; Upper Carboniferous; Zwickau, Saxony.



**GLYPTODENDRON** Claypole, 1878.

*Glyptodendron eatonense* Claypole, 1878a, p. 303; arborescent lycopod stem impression; Upper Silurian; Clinton near Eaton, Ohio. See also Claypole, 1878b, p. 559, fig.

**GLYPTOLEPIDIUM** (Heer) Sordelli, 1896.

*Glyptolepidium gornense* Sordelli, 1896, p. 49, pl. 10, figs. 8, 9; coniferous twigs with foliage; Triassic; Gorno, Val Seriana, Italy. Generic name given by Heer, 1876c, p. 72, but no species named.

**GLYPTOLEPIS** Schimper, 1870.

*Glyptolepis keuperiana* Schimper, 1870 (1869-74), p. 244, pl. 76, fig. 1; coniferous foliage shoots?; Upper Triassic (Keuper); near Coburg, Germany.

**GLYPTOSTROBITES** Brongniart, 1849.

*Glyptostrobitis acutifolius* Brongniart, 1849, p. 123. Apparently first illustrated species: *G. parisiensis* Brongniart, in D'Orbigny, 1852 (1851-52), p. 775, fig. 596. See also Watelet, 1866, p. 116, pl. 31, fig. 3.

**GLYPTOSTROBOXYLON** Conwentz, 1885.

*Glyptostroboxylon goepperti* Conwentz, 1885, p. 445; coniferous wood; Lower Oligocene; Katapuliche, Argentina. First illustrated species: *G. tenerum* Prill and Kräusel, in Kräusel, 1919a, p. 264, pl. 18, fig. 12; pl. 20, figs. 6-7, 10.

**GNETOPSIS** Renault and Zeller, 1884.

*Gnetopsis elliptica* Renault and Zeller, 1884a, p. 57; seeds in cupule, Pteridospermae; Upper Carboniferous; Rive-de-Gier, France. See also Renault, 1885, p. 179, pl. 20, figs. 1-10; pl. 21, figs. 1-6; pl. 22, figs. 2-4.

**GOEPPELTERELLA** Olshi and Yamasita, 1936.

*Goeppertella microloba* (Schenk) Olshi and Yamasita, 1936, p. 147. For *Woodwardites microlobus* Schenk, 1865-67, p. 68, pl. 13, figs. 11-13.

**GOEPPERTIA** Presl, 1838.

*Goeppertia polypodioides* Presl, in Sternberg, 1838 (1820-38), p. 121, pl. 50, fig. 1; fertile fern foliage fragment; Upper Carboniferous; near Plass, Bohemia.

**GOLDENBERGIA** Halle, 1933.

*Goldenbergia glomerata* Halle, 1933, p. 8, pl. 1, figs. 1a-19; pl. 3; synangium, probably pteridosperm; Upper Carboniferous; Saarbrücken, Germany.

**GOLDSONIA** Shrock and Twenhofel, 1939.

*Goldsonia burntensis* Shrock and Twenhofel, 1939, p. 247, pl. 27, figs. 2-4; alga; Pike Arm formation, Silurian; Burnt Island in Goldson Arm, New World Island, Newfoundland.

**GOMPHOSTROBUS** Marion, 1890.

*Gomphostrobus heterophylla* Marion, 1890b, p. 894; araucarianlike foliage shoots; Permian; Lodeve, France. First illustrated species: *G. bifidus* (Geinitz) Zeller and Potonie, in Potonie, Henry, 1900, p. 620, fig. 387.

**GONATOBOTRYTITES** Pia, 1927.

*Gonatobotrytites primigenius* (Caspary) Pia, in Hirmer, 1927, p. 122, fig. 111; Mucedinaceae, Fungi Imperfecti; Eocene; East Prussia.

**GONDWANIDIUM** Gothan, 1927.

Senckenberg. naturf. Gesell. Abh., 1927, Band 39, p. 342; Pteridospermae; Permian (not seen). See also Gothan, 1942b.

**GONGROSTROMIUM** Reinsch, 1881.

*Gongrostromium* sp. Reinsch, 1881, p. 58, pl. 13a, figs. 1-3; Carboniferous; Mittelbronn, Württemberg.

**GONIOLINA** d'Orbigny, 1850.

*Goniolina hexagona* d'Orbigny, 1850, p. 41; Upper Jurassic; Pointe-du-Che, near Rochelle, France. First illustrated species: *G. geometrica* Buvignier, 1852, p. 47, pl. 32, figs. 36, 37.

**GONIOPHYCUS** Saporta, 1884.

*Goniophycus implexus* Saporta, 1884, p. 53, pl. 8, fig. 4; Triassic; Draguignan, France.

**GONATOSORUS** Raciborski, 1894.

*Gonatosorus nathorstii* Raciborski, 1894, p. 173, pl. 9, figs. 5-11. See also *Gonatosorus* sp. Raciborski, 1889, p. 138.

**GORDIA** Emmons, 1844.

*Gordia marina* Emmons, 1844, p. 24, pl. 2, fig. 2; Cambrian; Jackson, Washington County, N. Y.

**GOSSLINGIA** Heard, 1927.

*Gosslingia breconensis* Heard, 1927, p. 198, pls. 13-15; petrified stem, Psilophytales; Senni beds, Lower Devonian; Brecon, South Wales.

**GOTHANIA** Hirmer, 1933.

*Gothania westfalica* Hirmer, 1933b, p. 138, pls. 17-22; petrified inflorescence, Cordaitales; middle Upper Carboniferous; Germany.

**GOTHANIELLA** Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 124.

**GOTHANOPTERIS** Koldzumi, 1936.

*Gothanopteris bosschana* Koldzumi, 1936, p. 136. For *Gigantopteris bosschana* Gothan and Jongmans, 1935, Jaar. mij. wezen Nederlandish-Indië, 1930, Verh. boekdeel 59, p. 47, figs. 2-4; Carboniferous (Stephanian); Djambi, Sumatra.

**GOULDINA** J. H. Johnson, 1940.

*Gouldina carbonaria* J. H. Johnson, 1940, p. 583, pl. 3, fig. 1; calcareous alga, Cyanophyceae?; top of Weber formation, Pennsylvanian; Park County, Colo.

**GOUPIOXYLON** Schonfeld, 1947.

*Goupioxylon stutzeri* Schonfeld, 1947, p. 19, pl. 1, figs. 2-9; pl. 2, figs. 1-4; wood, Celastraceae; Tertiary; Colombia.

**GRACILERECTUS** Webster, 1920.

*Gracilirectus hackberryensis* Webster, 1920, p. 288; marine alga; lower Hackberry group, Devonian; Mason City, Iowa. See also *Gracilirectus delicatus* Fenton and Fenton, 1924, p. 21, pl. 1, figs. 9, 10.

**GRAMINITES** H. B. Geinitz, 1865.

*Graminites feistmanteli* H. B. Geinitz, 1865, p. 392, pl. 3, fig. 3; articulate? stem fragment; Upper Carboniferous; Bras, Belgium.

**GRAMINOPHYLLUM** Conwentz, 1886.

*Graminophyllum succineum* Conwentz, 1886, p. 15, pl. 1, figs. 18-24; flower, in amber, Gramineae; Tertiary; West Prussia.

**GRAMMAEPHLOIOS** Harris, 1935.

*Grammaephloios ichtha* Harris, 1935, p. 152, pls. 23, 25, 27, 28; leafy shoot, Cycloporiales; Thaumatopteris zone, Rhaetic; Scoresby Sound, east Greenland.

**GRAMMATOPTERIS** Renault, 1891.

*Grammatopteris rigoloti* Renault, 1891, p. 500; coenopterid fern; "Permo-Carboniferous"; France. See also Renault, 1896a, p. 46, pl. 30, figs. 9-10; pl. 31, fig. 1. See also Posthumus, 1931.

**GRAMMITES** Reinsch, 1881.

*Grammites* sp. Reinsch, 1881, p. 63, pl. 14c, figs. 1-8; pl. 15, figs. 1-8; Permian; Mittelbexbach, Bavaria.

**GRAMMITITES** C. F. W. Braun, 1840.

*Grammitites humilis* C. F. W. Braun, 1840, p. 96; nom. nud.

**GRAMMOPHYLLUM** C. F. W. Braun, 1840.

*Grammophyllum lineatum* C. F. W. Braun, 1840, p. 100; nom. nud.

**GRAND'EURYA** Stur, 1883.

*Grand'Eurya autunensis* Stur, 1883, p. 679, figs. 12a, 12b; petrified pinnules bearing marattiaceous sporangia; Permian; Autun, France.

**GRAND'EURYA** Zeller, 1883.

*Grand'Eurya coralloides* (Guthrie) Zeller, 1883, p. 207; pl. 12, figs. 1-6; fertile fern frond; Upper Carboniferous; France.

**GRAND'EURYELLA** C. E. Weiss, 1885.

*Grand'Euryella renaulti* (Stur) C. E. Weiss, 1885b, p. 492. For *Grand'Eurya renaulti* Stur, 1883, p. 678, fig. 12c.

**GRANULARIA** Pomel, 1849.

*Granularia schlotheimi* Pomel, 1849, p. 333; alga; Lower Jurassic (Lias); Metz. First species illustrated: *Granularia linearis* Zigno, 1856-68, p. 37, pl. 2, fig. 5.

**GRANULATISPORITES** Ibrahim, 1933.

*Granulatisporites granulatus* Ibrahim, 1933, p. 22, pl. 6, fig. 51; spore; Carboniferous.

**GRAPHIOLITES** Fritel, 1910.

*Graphiolites sabaleos* Fritel, 1910, p. 12, pl. 20, fig. 12; fungus, Basidiomycete?; Upper Paleozoic; Cessoy, France.

**GRAYSONIA**.

Mistake for *Greysonia*, in Butts, 1926, p. 76 and Mawson and Madigan, 1930, p. 426.

**GREVILLEOPHYLLUM** Velenovsky, 1889.

*Grevilleophyllum constans* Velenovsky, 1889, p. 53. For *Grevillea constans* Velenovsky, 1883, p. 28, pl. 1, figs. 6-10; Upper Cretaceous; Jlnovic, Bohemia.

**GREWIOPSIS** Saporta, 1865.

*Grewiopsis tiliacea* Saporta, 1865, p. 50, leaf, Malvaceae; Eocene; Sézanne, France. See also Saporta, 1868, p. 406, pl. 33, fig. 12.

**GREWIOXYLON** Schuster, 1910.

*Grewioxylon swedenborgii* Schuster, 1910, p. 14, pl. 1, figs. 1-4; compared with *Dipterocarponylon tobleri* Kräusel (see Kräusel, 1922, p. 263); Tertiary; East Indies.

**GREYSONIA** Walcott, 1914.

*Greysonia basaltica* Walcott, 1914, p. 109, pl. 17, figs. 1, 2; pl. 18, figs. 1, 2; alga?; Newland limestone, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

**GRILLETIA** Renault and Bertrand, 1885.

*Grilletia sphaerospermii* Renault and Bertrand, 1885, p. 1306; fungus, Chytridiaceae; Upper Carboniferous; Grand-Croix, France.

**GRIPHOPORELLA** Pia, 1915.

*Griphoporella curvata* (Gumbel) Pia, in Spitz and Dyhrenfurth, 1915, p. 62, pl. 1, fig. 11; alga, Siphonaceae Verticillatae; Triassic.

**GRISTHORPIA** Thomas, 1925.

*Gristhorpia nathorsti* Thomas, 1925, p. 335, pls. 11, 14, 16; infructescence; Caytoniales; Jurassic; Cayton Bay, Yorkshire, England.

**GRUMILEOPHYLLUM** Geyler, 1887.

*Grumileophyllum attenuatum* Geyler, 1887a, p. 494, pl. 35, figs. 4, 5; leaf fragments, Rubiaceae?; Eocene; Labuan, Borneo.

**GUAJACITES** Massalongo, 1858.

*Guajacites heerii* Massalongo, 1858b, p.

**GUEMBELINA** (Munier-Chalmas) Morellet and Morellet, 1913.  
*Guembelina bellovacina* Munier-Chalmas in Morellet and Morellet, 1913, p. 38; Eocene; Bracheux, France. Generic name given (nom. nud.) by Munier-Chalmas, 1877, p. 817.

**GUILIELMITES** Geinitz, 1858.  
*Guilielmites permianus* Geinitz, 1858, p. 19, pl. 2, figs. 6-9; incertae sedis; Permian; Gröna near Chemnitz, Germany.

**GULLIERA** Crie, 1885.  
*Guilliera sarthacensis* Crie, 1885, p. 85; cycadophyte cone?; Jurassic (Oolite); Marners, France.

**GULPENIA** Gothan and Jongmans, 1927.  
*Gulpenia limburgensis* Gothan and Jongmans, in Jongmans, 1927a, p. 66; spheopterid foliage; Upper Carboniferous; Limburg, Gulpen mine, Netherlands.

**GUTBIERIA** Presl, 1938.  
*Gutbieria angustoloba* Presl, in Sternberg, 1938 (1820-38), p. 116, pl. 33, figs. 13a-e; fertile fern fragment; Upper Triassic (Keuper); Strahlendorf.

**GUTTIFEROXYLON** Kräusel, 1939.  
 Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, Band 47, p. 93 (not seen, cited in Gothan, 1942b, p. 124).

**GYMNOCAULUS** Emmons, 1856.  
*Gymnocaulus alternatus* Emmons, 1856, p. 239, pl. 1, fig. 4; fern? frond fragment; Permian; Madison, Stokes County, N. C.

**GYMNOCODIUM** Pla, 1927.  
*Gymnocodium bellerophontis* (Rothpletz) Pla, in Hirmer, 1927, p. 59, fig. 36b; alga; Cordiaceae; Upper Permian.

**GYMNONEUROPTERIS** Pla, 1924.  
*Gymnoneuropteris carinthiaca* Pla, 1924, p. 553, pl. [unnumbered]; coenopterid fern; Carboniferous; Bleiberg, Carinthia. See also Hirmer, 1927, p. 515.

**GYMNOSOLEN** Steinmann, 1911.  
*Gymnosolen ramsayi* Steinmann, 1911, p. 18, pl. 3; alga? (described as coelenterate). See Hirmer, 1927, p. 37; Johnson, J. H., 1943, p. 100.

**GYMNOSTROBUS** Bureau, 1914.  
*Gymnostrobis salisburyi* Bureau, 1914, p. 165, pl. 38, figs. 1, 2; lycopod cone? compression; Lower Carboniferous (upper Culm); Tardivièvre, France.

**GYNOTROCHOXYLON** Kräusel, 1939.  
 Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, Band 47, p. 97 (not seen, cited in Gothan, 1942b, p. 124).

**GYROCALAMUS** C. E. Weiss, 1884.  
*Gyrocalamus palatinus* C. E. Weiss, 1884b, p. 152, pl. 4, figs. 3, 4; Upper Carboniferous; Alben, Rhenish Bavaria.

**GYROCHORDA**.  
 See *Gyrochorte* Heer.

**GYROCHORTE** Heer, 1865.  
*Gyrochorte vermicularis* Heer, 1865, p. 142, pl. 9, figs. 9, 10. [Name altered to *Gyrochorda* by Schimper, in Schimper and Schenk, 1879 (1879-90), p. 51.]

**GYRODENDRON** Ulrich, 1904.  
*Gyrodendron emersoni* Ulrich, 1904, p. 140, pl. 18, fig. 3; pl. 19, figs. 1, 2; plant?; Yakutat formation, Lower Jurassic; Pogihsli Island, opposite village of Kadiak, Alaska.

**GYROGONITES** Lamarck, 1804.  
*Gyrogonites medicaginata* Lamarck, 1804, p. 356; Charophyte; Eocene; near Paris, France. First illustrated: Lamarck, 1807, p. 236, pl. 15, fig. 7. First? publication after 1820: Hirmer, 1927, p. 89, fig. 73. See also comment by Peck, R. E., 1934, p. 52.

**GYROPHYLLITES** Glocker, 1841.  
*Gyrophyllites kwassizensis* Glocker, 1841, p. 322, fig. p. 322; whorl of leaves, equisetalean affinities?; Cretaceous (Cenomanian); Capellenberg, near Kwassitz, Moravia.

**GYROPORELLA** Gümbel, 1871.  
*Gyroporella annulata* (Schaffhaudel) Gümbel, 1871, p. 269, pl. 2, figs. 1a-11; alga, Dasycladaceae.

**GYROPTERIS** Corda, 1845.  
*Gyropteris crassa* Corda, 1845, p. 86, pl. 54, figs. 1-6; fern petiole fragment; Upper Carboniferous; Radnitz, Bohemia. See also Posthumus, 1931.

## H

**HAASTIA** Ettingshausen, 1887.  
*Haastia speciosa* Ettingshausen, 1887b, p. 180, pl. 8, fig. 5; leaf fragment, Musaceae; Upper Cretaceous; Pakawau, Nelson, New Zealand.

**HADROPHYCUS** Fenton and Fenton, 1939.  
*Hadrophycus immanis* Fenton and Fenton, 1939, p. 92, pl. 2, figs. 1-4; pl. 3, figs. 1, 2; alga; Nash formation, pre-Cambrian; Medicine Bow Mts., Wyo.

**HAGENMULLERIA** Munier-Chalmas, 1877.  
*Hagenmulleria*, Munier-Chalmas, 1877, p. 817; nom. nud.

**HAGIOPHYTON** Corsin, 1948.  
*Hagiophyton* sp. Corsin, 1948, p. 19, pls. 3, 4; tree fern; Westphalian D, Carboniferous; mines domaniales de la Sarre et de la Lorraine, France.

**HATINGERIA** Krasser, 1916.  
*Hattingeria krasseri* (Schuster) Krasser, 1916, p. 336. For *Cycadospadia krasseri* Schuster, 1911a, p. 51, pl. 5, fig. 11; Upper Triassic (Keuper); Lunz, Austria.

**HAKEITES** Saporta, 1861.

*Hakeites deletus* Saporta, in Heer, 1861, p. 137; leaf, Proteaceae; Eocene; St. Zacharie, France. First species illustrated: *H. major* Saporta, 1867, p. 85, pl. 9, fig. 5.

**HALIMEDITES** Liburnau, 1902.

*Halimedites saportae* Liburnau, 1902, p. 712, pls. 1, 2; alga; Tertiary; near Salzburg, Austria.

**HALIMEDOPSIS** Massalongo, 1859.

*Halimedopsis tuna* Massalongo, in Massalongo and Scarabelli, 1859, p. 92. For *Corallinites tuna* Massalongo, 1856b, p. 232, pl. 3, fig. 2; Eocene; Val Grobe, Italy.

**HALISERIDES** Schimper, 1869.

*Haliserides dechenianus* (Goepfert) Schimper, 1869 (1869-74), p. 185, pl. 2, fig. 1; alga?; Lower Devonian.

**HALISERITES** Sternberg, 1833.

*Haliserites reichii* Sternberg, 1833 (1820-38), p. 34, pl. 24, fig. 7; alga; Eocene; Freiberg, Saxony.

**HALLEIA** Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 125.

**HALOCHARIS** Miquel, 1853.

*Halocharis longifolia* Miquel, 1853, p. 49, pl. 5, figs. 4-6; leaf, monocotyledon?; Upper Cretaceous; Mt. St. Peter, Limburg, Belgium.

**HALOCHLORIS** Unger, 1842.

*Halochloris cymodoceoides* Unger, 1842 (1841-47), p. 55, pl. 18, figs. 1-3; Incertae sedis; Eocene; Monte Bolca, Italy.

**HALONTIA** Lindley and Hutton, 1833.

*Halontia gracilis* Lindley and Hutton, 1833 (1831-37), p. 13, pl. 86; lycopod stem impression; Upper Carboniferous; Low Moor, Yorkshire, England.

**HALOPHYTIS** Sang, 1885.

*Halophytis magnum* Sang, 1885, p. 213; petrified alga, compared with stalk of *Laminaria digitata*; Upper Carboniferous; Kirkcaldy, Fife, Scotland.

**HALOPOA** Torell, 1869.

*Halopoa imbricata* Torell, 1869, p. 7; Cambrian; Lugnas, Sweden.

**HALOPTERIS** Stur, 1883.

*Halopteris typica* Stur, 1883, p. 660, fig. 8, fertile fern pinnae; Upper Carboniferous; Schlatzlär, Bohemia.

**HALORAGIARIA** Reid and Chandler, 1933.

*Haloragicarya quadrilocularis* Reid and Chandler, 1933, p. 413, pl. 21, fig. 25; fruit, Haloragaceae; London Clay, Eocene; Minster, Kent, England.

**HALYMENTITES** Sternberg, 1833.

*Halymentites schitzleinii* Sternberg, 1833 (1820-38), p. 30, pl. 5, fig. 1; alga?; Jurassic; Solenhofen, Bavaria.

**HALYSERITES** Sternberg, 1833.

*Halyserites reichii* Sternberg, 1833 (1820-38), p. 34, pl. 24, fig. 7; alga?; Eocene; Schoena near Freiberg, Saxony.

**HALYSIS** Hoeg, 1933.

*Halysis moniliformis* Hoeg, 1933, p. 86, pl. 7, figs. 1-3; alga?; Ordovician; Vestre Katugleas, Holand, Norway.

**HAMAMELIDANTHIUM** Conwentz, 1886.

*Hamamelidanthium succineum* Conwentz, 1886, p. 93, pl. 9, figs. 26-29; flower, in amber, Hamamelidaceae; Tertiary; West Prussia.

**HAMAMELIDOXYLON** Lignier, 1907.

*Hamamelidoxylon renaulti* Lignier, 1907, p. 301; pl. 19, fig. 44; pl. 20, figs. 45-52; wood, dicotyledon; Cretaceous (Cenomanian); near Vimoutiers, France.

**HAMAMELITES** Saporta, 1865.

*Hamamelites fothergilloides* Saporta, 1865, p. 47; leaf, Hamamelidaceae; Eocene; Sézanne, France. See also Saporta, 1868, p. 393, pl. 32, fig. 3.

**HAPALOPHLOEA** Pia, 1937.

*Hapalophloea scissa* Pia, 1937, p. 834; alga, Chaetangiales; Permian; Guguk Bulat, Sumatra.

**HAPALOPTERIS** Stur, 1883.

*Hapalopteris typica* Stur, 1883, p. 660, fig. 8; Upper Carboniferous; Schlatzlär, Bohemia.

**HAPALOXYLON** Renault, 1896.

*Hapaloxylon rochei* Renault, 1896a, p. 861, pl. 76, figs. 1-8; coniferous wood?; Carboniferous.

**HAPLOCALAMUS** Unger, 1856.

*Haplocalamus thuringiacus* Unger, 1856, p. 155, pl. 1, figs. 1-3; pl. 4, fig. 12; stem, calamitean affinities?; Devonian; Saalfeld, Thuringia. First citation: Unger, 1854; nom. nud.

**HAPLOGRAPHITES** Felix, 1894.

*Haptographites cateniger* Felix, 1894a, p. 274, pl. 19, figs. 5, 6; fungus mycelium and conidia?; Eocene; Perekeschkul near Baku, Transcaucasia. Meschinelli, 1898, p. 81, erroneously attributes this genus to Berkley and Broome.

**HAPLOPHRAGMIUM** Reinsch, 1881.

*Haplophragmium* sp. Reinsch, 1881, p. 119, pl. 52a, figs. 1-8; Upper Carboniferous; Zwickau, Saxony.

**HAPLOPLECTITES** Reinsch, 1881.

*Haploplectites* sp. Reinsch, 1881, p. 67, pl. 16b, figs. 1-7; pl. 17, figs. 1-8; Upper Carboniferous; Zwickau, Saxony.

**HAPLOPORELLA** Gumbel, 1871.

*Haploporella eruca* (Parker and Jones) Gumbel, 1871, p. 256, pl. D, figs. 1a-e.

**HAPLOSTIGMA** Seward, 1932.

*Haplostigma irregulare* (Schwarz) Seward, 1932, p. 359, pls. 23, 24; lycopod? stem; Bokkeveld series; Middle Devonian; Steytherville, Cape Province, South Africa.

**HARLANIA** Goeppert, 1851.

*Harlantia hallii* Goeppert, 1851, p. 189. See also Goeppert, 1852b, p. 98, pl. 41, fig. 4.

**HARRINGTONIA** Frenguelli, 1942.

*Harringtonia argentinica* (Arber) Frenguelli, 1942, p. 265, pl. 1, figs. 1-3; foliage, cycadophyte?; Triassic; Argentina.

**HARTZIA** Harris, 1935.

*Hartzia tenuis* Harris, 1935, p. 42, fig. 20; ginkgophyte leaf; Lepidopteris zone, Rhaetic; Scoresby Sound, east Greenland.

**HASPIA** Kräusel and Weyland, 1929.

*Haspia devonica* Kräusel and Weyland, 1929, p. 342, pl. 13, figs. 3, 4; Devonian; near Düsseldorf, Germany.

**HASTIMIMA** David White, 1908.

*Hastimima whitei* David White, 1908, p. 589, pl. 10, figs. 1-4; pl. 11, figs. 1-10; "Permo-Carboniferous"; northeast of Minas, Santa Catharina, Brazil. Name cited earlier in White, I. C., 1906, p. 379; nom. nud.

**HAUERA** Unger, 1845.

*Hauera americana* Unger, 1845, p. 228; wood; Tertiary; Antigua Island, West Indies. First? illustrated species: *H. bornensis* Engelhardt, 1870, p. 49, pl. 15, figs. 10-13.

**HAUSMANNIA** Dunker, 1846.

*Hausmannia dichotoma* Dunker, 1846, p. 12, pl. 5, fig. 1; pl. 6, fig. 12; incertae sedis; Wealden; near Buckenburg, Hannover, Germany.

**HAWLEA** Corda, 1845.

*Hawlea pulcherrima* Corda, 1845, p. 90, pl. 57, figs. 7, 8; fern foliage with partly preserved sporangia; Upper Carboniferous; Bohemia.

**HAYDENIA** Seward, 1912.

*Haydenia thryopteroides* Seward, 1912, p. 14, pl. 2, figs. 26, 29; fertile fern foliage; Cyatheaceae?; Jurassic; Ishpushta, Afghanistan.

**HEDEIA** Cookson, 1935.

*Hedeia corymbosa* Cookson, 1935, p. 135, pl. 2, figs. 25-33; Psilophytales; Silurian; Mount Pleasant, Alexandra, Victoria, Australia.

**HEDERAEPHYLLUM** Fontaine, 1889.

*Hederaephyllum crenulatum* Fontaine, 1889, p. 324, pl. 162, fig. 3; leaf, compared with *Hedera helix*; Potomac group, Lower Cretaceous; near Brooke, Va.

**HEDEROIDITES** Robert Potonie, 1950.

*Hederoidites megagertrudae* Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 61, pl. 3, fig. 54; pollen, compared with *Hedera*; upper Pliocene; Chatt-Aquitain, Germany.

**HEDEROPHYLLUM** Velenovsky, 1889.

*Hederophyllum primordiale* (Saporta) Velenovsky, 1889, p. 50. For *Hedera primordialis* Saporta, 1879, p. 200, fig. 29; Cretaceous (Cenomanian); Vyserovic, Bohemia.

**HEDSTROMIA** Rothpletz, 1913.

*Hedstromia halimedoides* Rothpletz, 1913, p. 17, pl. 3; Upper Silurian; Lumme-lunds near Storbrut, Sweden.

**HEDYCHTOPHYLLUM** Principi, 1921.

*Hedychtophyllum spectosum* (Squinabol) Principi, 1921a, p. 62; Oligocene; Santa Gulstina, Liguria, Italy.

**HEERIA** Stur, 1888.

*Heeria lunsensis* Stur, 1888a, p. 209; nom. nud.

**HELENIA** Zalesky, 1930.

*Helenia inopinata* Zalesky, 1930a, p. 740, pl. 73, fig. 1; impression of decorticated stem; Carboniferous; Podossino, Ourals, Russia.

**HELENIELLA** Zalesky, 1930.

*Heleniella bellula* Zalesky, 1930e, p. 663; Carboniferous; Donets Basin, Russia.

**HELENIODENDRON** Sze, 1936.

Geol. Soc. China Bull., 1936, v. 15, p. 113 (not seen, cited in Gothan, 1942b, p. 125).

**HELICITES** Crie, 1889.

*Helicites atrocarpa* Crie, 1889a, p. 17; nom. nud.

**HELICODAEMON.**

A name suggested as being more appropriate for the problematical *Daemonella*, in Clappole, 1895, p. 113.

**HELICTOXYLON** Felix, 1882.

*Helictoxylon speciosum* Felix, 1882a, p. 66, pl. 1, fig. 1; silicified liana; Tertiary; Antigua, West Indies.

**HELIOPHYCUS** Miller and Dyer, 1878.

*Helioptychus stelliforme* Miller and Dyer, 1878, p. 2, pl. 3, fig. 3; plant?; Cincinnati group, Silurian; Cincinnati, Ohio.

**HELIOTROPITES** Ettingshausen, 1868.

*Heliotropites reussi* Ettingshausen, 1868a, p. 221, pl. 37, figs. 7-12; seeds and leaf, *Asperifoliae*; Miocene; Priesen, Bohemia.

**HELLEBORITES** Heer, 1870.

*Helleborites marginatus* Heer, 1870, p. 63, pl. 7, figs. 17-21; fruit, Ranunculaceae?; Miocene; Cape Staratschin, Spitzbergen.

**HELLIA** Unger, 1839.

*Hellia pulchella* Unger, 1839, p. 101; Miocene; Radoboj, Croatia.

**HELMINTHOIDA** Schafbautl, 1851.

*Helminthoida irregularis* Schafbautl, 1851, p. 142, pl. 9, fig. 10; Eocene?; Bavaria.

**HELMINTHOIDICHNITES** Fitch, 1850.

*Helminthoidichnites tenuis* Fitch, 1850, p. 868, fig. [unnumbered]; Cambrian; Middle Granville, N. Y.

**HELMINTHOLITHUS** Corda, 1842.

*Helmintholithus antiquus* Corda, 1842, p. 9; nom. nud.

**HELMINTHOPSIS** Heer, 1877.

*Helminthopsis magna* Heer, 1877a, p. 116, pl. 47, figs. 1, 2; marine alga; Jurassic; Switzerland.

**HELOPHYTON** Williamson, 1881.

*Helophyton williamsoni* (Cash and Hick) Williamson, 1881, p. 124, incertae sedis; Halifax bed, Upper Carboniferous. See also Williamson, 1883, p. 459.

**HELVENSIS** Lima, 1896.

*Helvensis delgadoi* Lima, 1896, p. 94, pls. 1-4; Lower Silurian; near Elvas, Portugal.

**HEMIONITITES** Saporta, 1865.

*Hemionitites scolopendrioides* Saporta, 1865, p. 37, pl. 2, fig. 5; pl. 5, fig. 5a; fern pinnae; Miocene; Armissan, France.

**HEMIPHOENICITES** Visiani, 1864.

*Hemiphoenicites dantesiana* Visiani, 1864, p. 451, pl. 18; palm leaf; Tertiary; Italy.

**HEMITELITES** Goeppert, 1836.

*Hemitelites cibatioides* Goeppert, 1836, p. 330; pectopterid foliage; Carboniferous; Saarbruck. For *Pecopteris hemitelioides* Brongniart, 1828-38, p. 314, pl. 108, figs. 1, 2.

**HEMITRAPA** Miki, 1941.

*Hemitrapa trapelloidea* Miki, 1941, p. 289, pl. 7; fruit, Hydrocaryaceae; lower Pliocene; central Hono, Japan.

**HEPATICITES** Walton, 1925.

*Hepaticites kidstoni* Walton, 1925a, p. 565, pl. 13, figs. 1-4; leafy liverwort; Middle Coal Measures, Upper Carboniferous; Preesgweene Colliery, Preesgweene, Shropshire, England.

**HERACLEITES** Kinkelid, 1908.

*Heracleites robustus* Kinkelid, 1908, p. 248, pl. 32, fig. 14; Upper Pliocene; Klarbecken, near Niederrad, Hesse.

**HERMITELLA** Munier-Chalmas, 1877.

*Hermitella* sp. Munier-Chalmas, 1877, p. 817; nom. nud.

**HEROUVALINA** Steinmann, 1899.

*Herouvalina herouvalensis* (Munier-Chalmas) Steinmann, 1899, p. 153, figs. 20, 21; siphonaceous alga; Eocene; Herouval, France.

**HESPERIDOPHYLLUM** Massalongo, 1858.

*Hesperidophyllum senogallensis* Massalongo, 1858a, p. 87, pl. 28, fig. 13; leaf, dicotyledon; Miocene; Slinigaglia. Name first cited in Massalongo, 1857a, p. 777; nom. nud.

**HETERANGIUM** Corda, 1845.

*Heterangium paradoxum* Corda, 1845, p. 22, pl. 16; pteridosperm stem; Carboniferous; Radnitz, Bohemia.

**HETEROCALYX** Saporta, 1873.

*Heterocalyx ungeri* Saporta, 1873a, p. 111, pl. 16, figs. 19-26; calyx, Anacardiaceae; Tertiary; France.

**HETEROCLADISCOS** Ettingshausen, 1887.

*Heterocladiscos thujoides* Ettingshausen, 1887a, p. 90, pl. 8, figs. 5-7; foliage shoot, Cupressineae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

**HETEROFILICITES** E. W. Berry, 1905.

*Heterofilicites unceps* E. W. Berry, 1905, p. 154, pl. 26; fertile fern frond fragments; Cliffwood clays, Cretaceous; Kinkora, N. J.

**HETEROLEPIS** E. W. Berry, 1914.

*Heterolepis cretaceus* E. W. Berry, 1914a, p. 27, pl. 3, fig. 3; cone scale, cycad or conifer?; Black Creek formation, Upper Cretaceous; Rocky Point, Sumter County, S. C.

**HETEROPTERIS** Henry Potonie, 1893.

See Potonie, Henry, 1893b, p. 44, 45; a new name intended for *Sphenopteris essinghii* Andrä, 1866 (1865-69), p. 20, pl. 7, figs. 2, 3; Upper Carboniferous; Eschweiler, Saarbrücken, Rhenish Prussia.

**HETEROSPORITES** Renault, 1901.

*Heterosporites mischotheca* Renault, 1901a, p. 208; nom. nud.

**HETEROSPORITES** Kuntze, 1904.

*Heterosporites* Kuntze, in Post and Kuntze, 1904, p. 278.

**HETEROTHECA** Benson, 1922.

*Heterotheca grievii* Benson, 1922, p. 122, pls. 4, 5; microsporangiate organ attributed to *Heterangium*; Calciferous Sandstone series, Lower Carboniferous; Pettycur, Scotland.

**HETEROXYLON** Hartig, 1848.

*Heteroxylon seyfertii* Hartig, 1848a, p. 169; wood; Tertiary; Germany.

- HEXAGONARIA** Deecke, 1901.  
*Hexagonaria senonica* Deecke, 1901, p. 473, figs. 1, 2; alga?; Upper Cretaceous (Senonian); Rügen, Prussia.
- HEXAGONOCARPUS** Renault, 1890.  
*Hexagonocarpus crassus* Renault, in Renault and Zeiller, 1890, p. 649, pl. 72, figs. 53-55; seed; Upper Carboniferous; Commentry, France.
- HEXAPTEROCARPUS** Carpentier, 1920.  
*Hexapterocarpus* sp. Carpentier, 1920, p. 118, pl. 1, fig. 9; pl. 2, fig. 7; winged seeds; Carboniferous (Westphalien); Bassin du Pas-de-Calais, France.
- HEXAPTEROSPERMUM** Brongniart, 1874.  
*Hexapterospermum stenopterum* Brongniart, 1874, p. 254, pl. 22, figs. 12, 13; silicified seed; Carboniferous; St-Étienne, France.
- HIBISCOXYLON** Kräusel, 1939.  
 Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, Band 47, p. 73; Malvaceae; Upper Cretaceous (not seen). See Gothan, 1942b, p. 126.
- HICKLINGIA** Kidston and Lang, 1923.  
*Hicklingia edwardi* Kidston and Lang, 1923a, p. 407, pl. 53; psilophyte; middle Old Red Sandstone, Devonian; Hill of Forss, Waas, Caithness, Scotland.
- HICOROIDES** Perkins, 1904.  
*Hicoroides angulata* Perkins, 1904, p. 183, pl. 76, figs. 28, 32, 33; fruit; Tertiary; Brandon, Vt.
- HIERACITES** Saporta, 1861.  
*Hieracites salyorum* Saporta, in Heer, 1861, p. 146; leaf, Chloraceae; Eocene; Aix, Provence, France. See also Saporta, 1862, p. 262, pl. 11, fig. 1.
- HIEROGAMMA**.  
 Mistake for *Hierogramma*, in Read, 1936, p. 223.
- HIEROGRAMMA** Unger, 1856.  
*Hierogramma mysticum* Unger, 1856, p. 172, pl. 8; figs. 5-10; regarded as identical with *Cladoxylon* by Bertrand; Upper Devonian; Saalfeld, Thuringia. See also Seward, 1917, p. 200; and Posthumus, 1931.
- HIGHTEA** Bowerbank, 1840.  
*Hightea elliptica* Bowerbank, 1840, p. 32, pl. 8, figs. 7-9; fruit, Malvaceae?; London Clay, Eocene; Sheppey, Kent, England.
- HILDESHEIMIA** Florin, 1936.  
*Hildesheimia safeldi* (Lipps) Florin, 1936b, p. 37, pl. 6, fig. 5; ginkgophyte; Cretaceous; Hildesheim, Germany.
- HIMANTHALOPSIS** Zalesky, 1915.  
*Himanthaliopsis eniatkovi* Zalesky, 1915, p. 47, pl. 2, fig. 5; pl. 5, figs. 5-7, 9; pl. 12, figs. 5-8; Carboniferous; Russia.
- HIMANTHALITES** Fischer-Ooster, 1858.  
*Himanthalites taeniatus* (Kurr) Fischer-Ooster, 1858, p. 54, pl. 3, fig. 4; alga?; Lower Jurassic (Lias); Fallbrach near Blumenstein, Switzerland.
- HIMANTITES** Meschinelli, 1892.  
*Himantites alopecurus* (Debey and Ettingshausen) Meschinelli, in Saccardo, 1892, p. 801. See also Meschinelli, 1898, p. 95, pl. 26, figs. 7, 8.
- HIMANTOPHYTON** Matthew, 1913.  
*Himantophyton castorensense* Matthew, 1913, p. 87, pl. 1, psilophyte?; Silurian; New Brunswick, Canada.
- HIPPOCRATEITES** Kuntze, 1904.  
*Hippocrateites* Kuntze, in Post and Kuntze 1904, p. 282.
- HIPPOCRATEOXYLON** Hermann Hofmann, 1884.  
*Hippocrateoxylon javanicum* Hermann Hofmann, 1884b, p. 28; Tertiary; near Indramaju, Java. See also Hofmann, 1884.
- HIPPODOPHYCUS** Hall and Whitfield, 1872.  
*Hippodophycus cowlesi* Hall and Whitfield, 1872, p. 204; Devonian (Chelmung); Salamanca, Cattaraugus County, N. Y.
- HIPPURIDELLA** Edwards, 1932.  
*Hippuridella stacheana* Edwards, 1932, p. 213, pl. 10, figs. 1, 2; compared with *Hippurus* (Hippuridaceae); Lower Eocene; Gorge of the Folba, Pisino, Central Istria. For *Astrochara* Stache, 1872a, p. 316; *Astrochara uburnica* Stache, 1880, p. 201; and *Hippuridella* Stache, 1889, p. 87; all nom. nud.
- HIPPURITES** Lindley and Hutton, 1834.  
*Hippurites gigantea* Lindley and Hutton, 1834 (1831-37), p. 87, pl. 114, calamitean stem impression; Upper Carboniferous; Jarrow Colliery, near Newcastle-upon-Tyne, England.
- HIPURIDELLA** Stache, 1889.  
*Hipuridella* sp. Stache, 1889, p. 87; nom. nud. See *Hippuridella*, Edwards.
- HIRAEOCARPUM** Lakowitz, 1895.  
*Hiraeocarpum parvulum* Lakowitz, 1895, p. 276, pl. 9, fig. 16; Oligocene; Brunnstatt, Alsace-Lorraine.
- HIRMERIA** Fucini, 1936.  
 Reference not seen; cited in Gothan, 1942b, p. 126.
- HIRMERIELLA** Hörhammer, 1933.  
*Hirmeriella rhatoliasica* Hörhammer, 1933, pls. 5-7; seed cone, Coniferales; Rhaetic; France.
- HISINGERA** Miquel, 1842.  
*Hisingera mantelli* Miquel, 1842, p. 62. For *Cycadites brongniarti* Mantell, 1833, p. 338, fig.

- HOLCODENDRON** Quenstedt, 1867.  
*Holcodendron* sp. Quenstedt, 1867, p. 867, pl. 82, fig. 4; Lower Keuper.
- HOLCOSPERMUM** Nathorst, 1914.  
*Holcospermum dubium* Nathorst, 1914, p. 28, pl. 15, figs. 53, 54; seed; Carboniferous; Spitzbergen.
- HOLEOSPERMUM**.  
 Mistake for *Holcospermum*, in Davies, 1929, p. 117.
- HOLOPLEURA** Caspary, 1856.  
*Holopleura victoria* Caspary, 1856, p. 216, pl. 12, figs. 10-22; seeds, Nymphaeaceae; Miocene; Dornheim, Woelfersheim, Hesse.
- HOLOSPORELLA** Pia, 1930.  
*Holosporella siamensis* Pia, 1930, p. 177, pl. 4, figs. 1-6; alga, Dasycladaceae; Kamawkala limestone, Upper Triassic; Thaungyin River, frontier of Burma and Siam, north of Myawadi.
- HOLSTIA** Hagstrom, 1906.  
*Holstia splendens* Hagstrom, 1906, p. 90, pl. 3; Pleistocene; Toppeladugard, Sweden.
- HOMOXYLON** Hartig, 1848.  
*Homoxylon blasti* Hartig, 1848c, p. 188; wood; Upper Cretaceous; Wetterau, Hesse.
- HOMOXYLON** Sahni, 1932.  
*Homoxylon rajmahalense* Sahni, 1932a, p. 1, pls. 1, 2; wood, compared with modern homoxylous Magnoliaceae; Jurassic; Rajmahal Hills, Behar, India.
- HOOLEYA** Reid and Chandler, 1926.  
*Hooleyia hermsi* (Unger) Reid and Chandler, 1926, p. 93, pl. 6, figs. 7-9; fruit, Betulaceae; Oligocene; Isle of Wight, England.
- HORMOSPORITES** Gruss, 1927.  
*Hormosporites devonicus* Gruss, 1927, p. 367, fig. 810; alga, Cyanophyceae?; Devonian; Spitzbergen. See also Gruss, 1928b, p. 504, pl. 41, figs. 21, 22.
- HORNEA** Kidston and Lang, 1920.  
*Hornea lignieri* Kidston and Lang, 1920a, p. 611, pls. 4-10; petrified plant, Psilophytales; Old Red Sandstone, Devonian; Muir of Rhynie, Aberdeenshire, Scotland. See *Horneophyton*.
- HORNEOPHYTON** Barghoorn and Darrah, 1938.  
*Horneophyton lignieri* (Kidston and Lang) Barghoorn and Darrah, 1938, p. 142.  
 For *Hornea lignieri* Kidston and Lang, 1920a, p. 611, pls. 4-10.
- HOSTIMELLA**.  
 See *Hostinella*.
- HOSTINELLA** Barrande, 1882.  
*Hostinella hostinensis* Barrande, in Stur, 1882, p. 352, pl. 3, figs. 1, 2; pl. 4; branched dichotomizing naked axis, psilophyte; "Etage H-h," Silurian; Hostin, Srbsko, Bohemia.
- HOVENIPHYLLUM** Nathorst, 1888.  
*Hoveniphyllum thunbergi* Nathorst, 1888, p. 232, pl. 30, fig. 6; leaf, compared with *Hovenia dulcis*; Pliocene; Yokohama, Kuragigori, Musashi province, Japan.
- HSIANGCHIPHYLLUM** Sze, 1949.  
*Hsiangchiphyllyum trinerue* Sze, 1949, p. 28, pl. 7, fig. 6; pl. 8, fig. 1; Mesozoic; Hsiangchi, China.
- HUMILIS** Roualt, 1850.  
*Humilis legalli* Roualt, 1850, p. 739; Silurian; Guichen, Brittany.
- HUTTONIA** Sternberg, 1837.  
*Huttonia specata* Sternberg, 1837 (1820-38), p. 69, pl. 1; Upper Carboniferous; Radnitz, Bohemia.
- HYDATICA** Artis, 1825.  
*Hydatica prostrata* Artis, 1825, p. 1, pl. 1; Carboniferous; near Wentworth, Yorkshire, England.
- HYDNITES** Meschinelli, 1892.  
*Hydnites argillae* (Ludwig) Meschinelli, in Saccardo, 1892, p. 748. See also Meschinelli, 1898, p. 8, pl. 5, figs. 5-10; fungus, Hymenomycete.
- HYDRANGEIPHYLLUM** Dusen, 1899.  
*Hydrangeiphyllum affine* Dusen, 1899, p. 102; leaf, compared with *Hydrangea scandens* Poeppig; Oligocene; Barancas de Carmen Sylva, Chile.
- HYDROCHARITES** Weber, 1855.  
*Hydrocharites obcordatus* Weber, 1855, p. 129, pl. 30, fig. 2; leaf, Hydrocharitaceae; Miocene; Rott, Rhenish Prussia.
- HYDROCOTYLOPHYLLUM** Teixeira, 1947.  
*Hydrocotylophyllum lusitanicum* Teixeira, 1947, p. 11, pl. 1, fig. 5; leaf, compared with *Hydrocotyle asiatica*; Wealden; Portugal.
- HYDROCYTTIUM** Matthew, 1889.  
*Hydrocyttium silicula* Matthew, 1889, p. 146, pl. 6, fig. 2; incertae sedis; Cambrian; Nova Scotia.
- HYDRODICTYOLITES** Elovski, 1930.  
*Hydrodictyolites carbonis* Elovski, 1930, p. 35, pl. 1, fig. 4; Moshchny coal seam, Chernogorski mines, Minusinsk Basin, Siberia.
- HYDRODICTYOPSIS** Massalongo, 1858.  
*Hydrodictyopsis prisca* Massalongo, 1858a, p. 5. See also Massalongo, 1859, p. 93, pl. 2.
- HYDROPTERANGIUM** Halle, 1910.  
*Hydropterangium marsilioides* Halle, 1910, p. 11, pl. 2, figs. 1-14; pl. 3, figs. 12-15; sporocarps? of a water fern; lower Rhetic; Bjuf and Hyllinge, Sweden.
- HYENIA** Nathorst, 1915.  
*Hyenia sphenophyllioides* Nathorst, 1915, p. 22, pl. 1, figs. 1-5; pl. 2, fig. 1; pl. 4, figs. 1-3; articulate; Devonian; Norway.



**HYGROHYPNIDIUM** Kirchheimer, 1936.

*Hygrohypnidium ludwigi* Kirchheimer, 1936d, p. 340, figs. 1-4; Tertiary; Salzhäusen, Germany.

**HYLOMITES.**

Error for *Xylomites*, in Geinitz, 1925, p. 337.

**HYMENAEOPHYLLUM** Velenovsky, 1889.

*Hymenaeophyllum primigenium* (Saporta) Velenovsky, 1889, p. 51.

**HYMENOPHYLLEA** C. E. Weiss, 1869.

*Hymenophyllea subulata* (Geinitz) C. E. Weiss, 1869, p. 57. For *Hymenophyllites alatus* Geinitz, part, see Geinitz, H. B., 1855, p. 18, pl. 24, fig. 15; pl. 25, fig. 1.

**HYMENOPHYLLITES** Goeppert, 1836.

*Hymenophyllites quercifolius* Goeppert, 1836, p. 252, pl. 14, figs. 1, 2; fernlike foliage; Carboniferous; Silesia.

**HYMENOPTERIS** Stokes and Webb, 1824.

*Hymenopteris psilotoides* Stokes and Webb, 1824, p. 424, pl. 46, fig. 7; pl. 47, fig. 2; Wealden; Tilgate Forest, Sussex, England.

**HYMENOPTERITES** Stokes and Webb, 1824.

*Hymenopterites* Stokes and Webb, 1824, p. 426; nom. nud.

**HYMENOTHECA** Henry Potonie, 1890.

*Hymenotheca beyschlagi* Henry Potonie, 1890, p. 23, pl. 3; pteridosperm? microsporangiate organ; Upper Carboniferous; Saarbrücken.

**HYMENOZONOTRILETES** Naumova, 1937.

*Hymenozonotriletes triangularis* Mehta, 1944, p. 129, pl. 1, fig. 1; Paleozoic; Rewa, India.

**HYOSERITES** Ettingshausen, 1868.

*Hyoserites schultzei* Ettingshausen, 1868a, p. 206, pl. 35, fig. 27; achene, Compositae; Miocene; Priesen, Bohemia.

**HYPHANTAENIA** Ferdinand Roemer, 1880.

*Hyphantaenia chemungensis* (Vanuxem), Ferdinand Roemer, 1880, p. 126. For *Uphantenia chemungensis* Vanuxem, 1842, p. 183, fig. 50.

**HYPHITES** Reinsch, 1881.

*Hyphites* sp. Reinsch, 1881, p. 36, pl. 7b, figs. 5, 8; Lower Silurian; Illinois.

**HYPHOPLASMIUM** Reinsch, 1881.

*Hyphoplasmium* sp. Reinsch, 1881, p. 40; pl. 7b, fig. 8; pl. 8a, figs. 1-8; Upper Carboniferous; Mittelbexbach, Bavaria.

**HYPHOPTERIS** Schimper, 1869.

*Hyphopteris radiata* Schimper, 1869, p. 365.

**HYPNITES** Ettingshausen, 1853.

*Hypnites haeringianus* Ettingshausen, 1853, p. 27, pl. 4, fig. 12; moss; Eocene; Haering, Tirol, Austria.

**HYPOCHNITES** Meschinelli, 1898.

*Hypochnites* sp. (Conwentz) Meschinelli, 1898, p. 8, pl. 6, figs. 2-5; fungus, Hymenomycetaceae.

**HYPOGLOSSIDIUM** Heer, 1874.

*Hypoglossidium antiquum* Heer, 1874a, p. 129, pl. 38, fig. 14; leaf, monocotyledon; Cretaceous, Greenland.

**HYPSILOCARPUS** Grand'Eury, 1890.

*Hypsilocarpus amygdalaeformis* (Goeppert and Berger) Grand'Eury, 1890, p. 328, pl. 6, fig. 7; seed, Cordaitales?; Upper Carboniferous; Gard, France.

**HYRCANOPTERIS** Kristofowitsch and Prynada, 1933.

United Geol. Prosp. Service USSR Trans., 1933, no. 336, p. 10; Filices; Upper Triassic (not seen). See Gothan, 1942b, p. 126.

**HYSTERITES** Goeppert, 1846.

*Hysterites opegraphoides* Goeppert, 1846 (1841-46), p. 145, pl. 14, figs. 1, 2. See Goeppert, 1836, p. xxiii; nom. nud. Meschinelli, 1892, p. 772, erroneously attributes this to Tode.

**HYTHIA** Stopes, 1915.

*Hythia elgari* Stopes, 1915, p. 278, pls. 29, 30; wood, incertae sedis; Lower Cretaceous (Aptian); Kent, England.

# I

**ICACINICARYA** Reid and Chandler, 1933.

*Icacinicarya platycarpa* Reid and Chandler, 1933, p. 345, pl. 16, figs. 11-18; endocarp, Icacinaceae; London Clay, Eocene; Sheppey, Kent, England.

**IDELOPTERIS** Zalesky, 1929.

*Idelopteris elegans* Zalesky, 1929d, p. 721, fig. 1; compared with *Psymmophyllum*; upper Permian; Siberia.

**IDIOPHYLLUM** Lesquereux, 1880.

*Idiophyllum rotundifolium* Lesquereux, 1880, p. 160, pl. 23, fig. 11; Carbondale formation, Pennsylvanian; Mazon Creek, Ill.

**IEGOSIGOPTERIS** Zalesky, 1935.

*Iegosigopteris yavorskii* Zalesky, 1935a, p. 752, pls. 1-3; petrified stem, Osmundaceae; Russia.

**ILLICIPHYLLUM** Velenovsky, 1889.

*Illiciphyllum deletum* Velenovsky, 1889, p. 54. For *Illicium deletum* Velenovsky, 1884, p. 51, pl. 3, fig. 5; Upper Cretaceous; Lipenec, Bohemia.

**ILLICITES** Mueller, 1877.

*Illicites astrocarpa* Mueller, 1877 (1877-79), p. 179; Pliocene; Gulgong, Australia. See also Mueller, 1879 (1877-79), p. 171, pl. 4, figs. 3, 4.

**ILLINIOCARPON** Schopf, 1938.

*Illiniocarpum cadyi* Schopf, 1938b, p. 144, pl. 1, figs. 1-3; pl. 2, figs. 11-13, 15; lycopod seedlike organ; coal No. 6, Pennsylvanian; Nashville, Washington County, Ill.

**ILLINITES** Kosanke, 1950.

*Illinites unicus* Kosanke, 1950, p. 51, pl. 1, figs. 3, 4; spore; Pennsylvanian; 10-inch coal bed exposed in Coffee Creek, Wabash County, Ill.

**ILSAEPHYTUM** C. E. Weiss, 1885.

*Ilsaephytum kayseri* C. E. Weiss, 1885a, p. 178, pl. 6, figs. 1, 2. See also Posthumus, 1931.

**IMPARITERIS** Gothan, 1941.

Palaont. Zeitschr., 1941, Band 22, p. 427 (not seen, cited in Gothan, 1942b, p. 127).

**INCOLARIA** Herzer, 1893.

*Incolaria securiformis* Herzer, 1893a, p. 365, pl. 9; fungus?; Carboniferous; Tuscarawas County, Ohio.

**INDOPOLIA** Pia, 1936.

*Indopolia satyavanti* Pia, in Rao and Pia, 1936, p. 20; pl. 1, figs. 1, 5-13; pl. 2, fig. 4; alga, Dasycladaceae; Miniyur group, uppermost Cretaceous; Trichinopoly district, southern India.

**INDOSTROBUS** Sahni, 1931.

*Indostrobis bifidolepis* Sahni, 1931, p. 80, pl. 13, figs. 54-66; petrified cones, allied to *Pityostrobus*; probably uppermost Cretaceous; probably from Deccan area, India.

**INDOTHECA** Sitholey, 1943.

*Indothea sakesarenensis* Sitholey, in Sahni, Birbal, and Sitholey, R. V., 1943, p. 174, pl. 8, figs. 27, 28; Triassic; three-quarters of a mile east of Sari Village, Salt Ridge, India.

**INGOPHYLLUM** Velenovsky, 1889.

*Ingophyllum latifolium* Velenovsky, 1889, p. 54. For *Inga latifolia* Velenovsky, 1884, p. 55, pl. 20, figs. 6, 7; Upper Cretaceous; Vyserovic, Bohemia.

**INIOPTERIS** Zalesky, 1934.

*Iniopteris sibirica* Zalesky, 1934c, p. 760, fig. 20; fern foliage; Permian; Kuznets, Russia.

**INOLEPIS** Heer, 1874.

*Inolepis imbricata* Heer, 1874a, p. 72, pl. 16, figs. 12-16; pl. 23, figs. 6-8; coniferous twigs; Cretaceous; Kome, Avkrusak, Greenland.

**IRIARTITES** E. W. Berry, 1919.

*Iriartites tumbezensis* E. W. Berry, 1919b, p. 285, pl. 14; leaf, Arecaceae; Miocene; Tumbes, Peru.

**IRIDINIUM** Wessel, 1855.

*Iridinium priscum* Wessel, in Wessel and Weber, 1855, p. 129-130; pl. 20, fig. 7; irislike leaf; Miocene; Rott, Rhenish Prussia.

**IRIDIUM** Heer, 1866.

*Iridium groenlandicum* Heer, 1866, p. 275; leaf fragment referred to Iridaceae; Miocene; Atanekerdluk, Greenland. See also Heer, 1868, p. 97, pl. 3, figs. 10, 11.

**IRIDOPTERIS** Arnold, 1940.

*Iridopteris eriensis* Arnold, 1940, p. 57, figs. 1, 5; Iridopteridinae, intermediate between Psilophytales and ferns; Tully limestone, Middle Devonian; Erie County, N. Y.

**IRITES** Lesquereux, 1887.

*Irites alaskana* Lesquereux, 1887, p. 36; leaves, Iridaceae?; Lower Cretaceous; Cape Lisbourne, Alaska. First? illustrated species: *Irites grandifolium* Principi, 1921a, p. 60, pl. 3, fig. 1.

**IRRAWADIOXYLON** Gupta, 1936.

*Irrawadioxylon burmense* (Holden) Gupta, 1936, p. 305. For *Dipterocarpozylon burmense* Holden, 1916, p. 271, pl. 29; Miocene (Irrawadian); Burma.

**ISATIDES** Saporta, 1889.

*Isatides microcarpa* Saporta, 1889, p. 87, pl. 9, fig. 3; fruit, Cruciferae; Eocene; Aix, Provence, France.

**ISIOLOPTERIS** Zalesky, 1930.

*Isiopteris serrata* Zalesky, 1930f, p. 915, fig. 2; fernlike foliage; Permian; Pechora River basin, 4 km below Ost-Voy, Russia. See Zalesky, 1934b.

**ISOETITES** Muenster, 1842.

*Isotites crociformis* Muenster, 1842 (1839-43), p. 107, pl. 4, fig. 4; Jurassic; Daiting near Manheim, Bavaria.

**ISOETOIDES** Wethered, 1884.

*Isotoides* Wethered, 1884, p. 300; a generic name proposed for spores, compared with *Isotetes*, found in the "Carmock Chase" coal; the name is "suggested \* \* \* pending further investigations."

**ISOETOPSIS** Saporta, 1888.

*Isotopsis subaphylla* Saporta, 1888, p. 28, pl. 2, figs. 16-20; *Isotetes*-like sporophyll with spores; Eocene; Aix, Provence, France.

**ISONANDROPHYLLUM** Geyler, 1887.

*Isonandrophyllum* sp. Geyler, 1887a, p. 498, pl. 33, fig. 9; leaf fragment, Sapotaceae; Eocene; Labuan, Borneo.

**ISSELLIA** Squinabol, 1891.

*Isselia primaeva* Squinabol, 1891a, p. 779, pl. 16, fig. 5; leaf fragment, monotylen; lower Miocene; Ste.-Justine, Sasello, France.

**ITIERIA** Saporta, 1872.

*Itieria brongniartii* Saporta, 1872a-73, p. 122, pl. 4; alga? Jurassic; Orbagnoux, France.

**JUGLANDOXYLON**.

*Juglandoxylon wichmanni* Hofmann, 1884b, p. 36; probably mistake for *Juglandoxylon*.

**IVANOVIA** Khvorova, 1946.

*Ivanovia tenuissima* Khvorova, 1946, p. 737, 2 figs; alga; middle Carboniferous; Moscow Basin, USSR.

**IXOROPHYLLUM** Geyler, 1887.

*Ixorophyllum anceps* Geyler, 1887a p. 495., pl. 35, figs. 1, 2; leaf fragment, Rubiaceae; Eocene; Labuan, Borneo.

**IXOSTROBUS** Raciborski 1891.

*Ixostrobus siemiradzki* Raciborski, 1891a, p. 378. For *Taxites siemiradzki* Raciborski, 1891b, p. 315, pl. 5, fig. 7; cycadophyte microsporangiate cone?; Rhætic, Poland. See discussion by Harris, 1935, p. 146-147.

## J

**JANENSCHIA** Gothan, 1927.

*Janenschia obscura* Gothan, 1927b, p. 146, pl. 18, figs. 1-5; pl. 19, figs. 11, 12; "Permo-Carboniferous"; Mkumbi, East Africa.

**JEANPAULIA** Unger, 1845.

*Jeanpaulia dichotoma* (C. F. W. Braun) Unger, 1845 (1841-47), p. 11. For *Baiera dichotoma* C. F. W. Braun in Münster 1843 (1839-43); Lower Jurassic (Lias); Hinterholz, Austria. Apparently first illustrated species is *Jeanpaulia munsteriana* (Presl) Schenk, 1865-67, pl. 11, figs. 1-13.

**JEJOSIGOPTERIS** Zalesky, 1937.

Acad. sci. U. S. S. R. Bull. 1937, sér. 7<sup>e</sup>, p. 747 (not seen; cited in Gothan, 1942b, p. 127).

**JENKINSELLA** Reid and Chandler, 1933.

*Jenkinsella apocynoides* Reid and Chandler, 1933, p. 481, pl. 28, figs. 1-5; fruit, Apocynaceae or Asclepiadaceae; London Clay, Eocene; Herne Bay, Kent, England.

**JIDOPTERIS** Koldzum, 1936.

*Jidopteris manchurica* (Kawasaki) Koldzum, 1936, p. 142. For *Pecopteridium manchuricum* Kawasaki, 1931 (1927-31); pl. 34, fig. 73; intermediate between *Pecopteris* and *Callipteridium*; Jido series, Lower Permian; Tayaokou coal mine, Manchuria.

**JIRUSIA** Bayer, 1914.

*Jirusia bohémica* Bayer, 1914, p. 23, figs. 12, 13; cycadophyte leaves.

**JODOTELLA** Morellet and Morellet, 1913.

*Jodotella veslensis* Morellet and Morellet, 1913, p. 29, pl. 3, fig. 12; alga, Bornetellées, Eocene (Thanetien), Chalon-sur-Vesles, France.

**JOHANNOPHYTON** Matthew, 1910.

*Johannophyton discrepans* (Dawson) Matthew, 1910, p. 84, pl. 2, figs. 7-9; pl. 3.

**JOHNSTONIA** Walkom, 1925.

*Johnstonia coriacea* (Johnston) Walkom, 1925, p. 79, figs. 6-8; fernlike foliage; Mesozoic; Tasmania.

**JONGMANSIA** Reid and Reid, 1915.

*Jongmansia cypreaeformis* Reid and Reid, 1915, p. 95, pl. 8, figs. 14-21; seeds, Anonaceae; Pliocene; Reuver, Swalmen, Netherlands.

**JORDANIA** Goeppert and Fiedler, 1857.

*Jordania bignonioides* Goeppert and Fiedler in Fiedler, 1857, p. 289, pl. 28, figs. 36, 37, 43, 44; seed compression; Upper Carboniferous; near Saarbruck, Rhenish Prussia.

**JORDANIA** Schenk, 1880.

*Jordania ebenoides* Schenk, 1880, p. 659; wood, dicotyledon; Upper Cretaceous; Libyan Desert. See also Schenk, 1883a, p. 10, pl. 4, figs. 13, 14.

**JUGLANDICARYA** Reid and Chandler, 1933.

*Juglandicarya lubbocki* Reid and Chandler, 1933, p. 140, pl. 3, figs. 1-4; seed, Juglandaceae; London Clay, Eocene; Sheppey, Kent, England.

**JUGLANDINIUM** Unger, 1845.

*Juglandinium mediterraneum* Unger, 1845, p. 241; Tertiary; Hungary.

**JUGLANDIPHYLLUM** Nathorst, 1888.

*Juglandiphyllum* sp. Nathorst, 1888, p. 208, pl. 4, fig. 6; leaf, dicotyledon; Tertiary; Japan.

**JUGLANDIPHYLLUM** Fontaine, 1889.

*Juglandiphyllum integrifolium* Fontaine, 1889, p. 315, pl. 157, figs. 3, 5, 6; leaf compared with *Persea* and *Quercus*; Potomac group, Lower Cretaceous; White House Bluff, Va.

**JUGLANDITES** Sternberg, 1825.

*Juglandites nuxtauriniensis* (Brongniart) Sternberg, 1825 (1820-38), Tentamen, p. xl. For *Juglans nuxtauriniensis* Brongniart, 1822, p. 323, pl. 6, fig. 6; *Juglans*-like endocarp; Miocene; Turin, Italy.

**JUGLANDOXYLON** Kraus, 1882.

*Juglandoxyylon mediterraneum* Kraus, 1882, p. 91; wood; Miocene; Girgenti, Sicily.

**JUGLANSOXYLON** Falqui, 1906.

*Juglansoxyylon zurienensis* Falqui, 1906, p. 26, pl. 1, fig. 2; lower Miocene. See Edwards, 1931.

**JUGLOXYLON** Stopes and Fujii, 1910.

*Jugloxyylon hamaoanum* Stopes and Fujii, 1910, p. 62, pl. 7, fig. 48; wood, possible affinities with *Juglans*; Upper Cretaceous; Hokkaido, Japan.

**JUNGERMANNIOPSIS** Howe and Hollick, 1922.

*Jungermanniopsis cockerellii* Howe and Hollick, 1922, p. 208, fig. 1; leafy liverwort; Miocene; Florissant, Colo.

**JUNGERMANNITES** Goeppert, 1845.  
*Jungermannites neesianus* Goeppert, in Berendt, 1845, p. 113, pl. 6, figs. 34-37; liverwort?; Miocene; Prussia.

**JUNGHUHNITES** Goeppert, 1854.  
*Junghuhnites javanicus* Goeppert, 1854, p. 54, pl. 2, figs. 11-16; wood, incertae sedis; Tertiary; Java.

**JUNIPERITES** Brongniart, 1828.  
*Juniperites alienus* (Sternberg) Brongniart, 1828b, p. 108. For *Thuites alienus* Sternberg, 1825 (1820-38), Tentamen, pl. 45, fig. 1.

**JUNIPEROXYLON** Houlbert, 1910.  
*Juniperoxylon turonense* Houlbert, 1910, p. 73, pl. 4; coniferous wood; middle Eocene; Touraine, France.

**JURANYIA** Tuzson, 1908.  
*Juranyia hemiflabellata* Tuzson, 1908, p. 1, pl. 1, figs. 1, 2; pl. 2, fig. 3; leaves, seeds, Palmaeaceae; Upper Cretaceous; Ruszkabanya, Krasso-Szoreny, Hungary. See also Tuzson, 1914, p. 248.

## K

**KAIDACARPUM** Carruthers, 1868.  
*Kaidacarpum ooliticum* Carruthers, 1868, p. 156, pl. 9, figs. 1-6; described as cast of a fruit (Pandanaeaceae), later transferred to *Araucarites* (Seward, 1919, p. 256); Jurassic (Oolite); Moulton Park Quarries, Kingsthorpe, near Northampton, England.

**KAIKOMAKO** Hector, 1880.  
*Kaikomako penantioides* Hector, 1880, p. 49; nom. nud.

**KAIKORAIA** W. R. B. Oliver, 1936.  
*Kaikoraia gracilis* W. R. B. Oliver, 1936, p. 301, fig. 21; leaf, Sapotaceae; Pliocene; Kaikorai Valley, Otago, New Zealand.

**KALINAIA** Bayer, 1914.  
*Kalinaia dekapetala* Bayer, 1914, p. 51; Cretaceous; Vyserovic, Bohemia.

**KALOXYLON** Williamson, 1875.  
*Kaloxylon hookeri* Williamson, 1875, p. 453; roots of *Lyginopteris*; Upper Carboniferous; Oldham, England. See also Williamson, 1876a, p. 23, pl. 5, figs. 23-27; pl. 4, fig. 29; pl. 6, figs. 28, 30-33; pl. 7, figs. 34-38; and Seward, 1917, p. 67.

**KALYMMA** Unger, 1856.  
*Kalymma grandis* Unger, 1856, p. 157, pl. 1, figs. 4-6; petiole of *Calamopitys*; Upper Devonian; Saalfeld, Thuringia. Name first cited in Unger, 1854; nom. nud. See also Posthumus, 1931.

**KAMARASPERMUM** Kern, 1946.  
*Kamaraspermum lecanum* Kern, in Kern and Andrews, 1946, p. 296, pl. 19; petrified seed with air chamber, Cardiocarpales?; Des Moines group, Pennsylvanian; Urbandale coal mine, Des Moines, Iowa.

**KANTIA** Pia, 1912.  
*Kantia philosophi* Pia, 1912, p. 45, pl. 4, figs. 17-21; alga, Siphonaeae Verticillatae; Triassic; Austria?

**KARRERIA** (Munier-Chalmas) Morellet and Morellet, 1913.  
*Karrerria zitteli* Munier-Chalmas, in Morellet and Morellet, 1913, p. 11, figs. 13-24.

**KARSTENIA** Goeppert, 1836.  
*Karstenia omphalostigma* Goeppert, 1836, p. 452, pl. 33, fig. 1; fern rhizome, compared with *Polypodium aureum*; Upper Carboniferous; Charlottenbrunn, Silesia.

**KATADROMOPTERIS** Hartung, 1940.  
*Katadromopteris boncevi* Hartung, 1940, p. 101, pl. 2, figs. 1, 2; pl. 3, figs. 1-4; fernlike foliage; Upper Cretaceous.

**KATANGASIA** Maslov, 1937.  
*Katangasia samoilovi* Maslov, 1937a, p. 321, pl. 3, figs. 2, 4; rock-building alga; Silurian; Russia.

**KAYEOXYLON** Chowdhury and Tandan, 1949.  
*Kayeoxyylon assamicum* Chowdhury and Tandan, 1949, p. 59, pls. 5, 6; petrified wood, affinities with *Kayea*, Guttiferae; Upper Miocene; Thallangthu Nadi, Assam, India.

**KECKIA** Glocker, 1841.  
*Keckia annulata* Glocker, 1841, p. 319, pl. 4, figs. 1, 2; plant?; Cretaceous; Capellenberge, near Kwassitz, Moravia.

**KENTITES** Bureau, 1896.  
*Kentites pratecinensis* Bureau, 1896, p. 285, Tertiary; Pratecni, Italy.

**KERAIAPHYLLUM** Frentzen, 1932.  
*Kerataphyllum suevicum* Frentzen, 1932, p. 83, figs. 2, 3; Rhatic; Swabia, Nürtingen, Germany.

**KIDSTONIA** Zeller, 1897.  
*Kidstonia heracleensis* Zeller, 1897, p. 209, pl. 6, figs. 3, 4; fertile fernlike foliage, Osmundaceae or Schizaeaceae?; Upper Carboniferous; Zongouldak, Asia Minor.

**KILTORKENSIA** Thomas Johnson, 1917.  
*Kiltorkensia devonica* Thomas Johnson, 1917, p. 250, pl. 12, figs. 3-5; pl. 13, figs. 1-5; incertae sedis; Upper Devonian; Kiltorecan, County Kilkenny, Ireland.

**KINGTHIOPHYLLUM** Crie, 1889.  
*Kingthiophyllum primaevum* Crie, 1889a, p. 89; nom. nud.

**KINNEYIA** Walcott, 1914.

*Kinneyia simulans* Walcott, 1914, p. 107, pl. 11, fig. 3; alga; Beltian series, Newland limestone, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

**KIRCHNERIA** Alexander Braun, 1854.

*Kirchneria decurrens* Alexander Braun, 1854, p. 6, pl. 1, figs. 1-3; Triassic (Keuper); Eckersdorf, Bavaria. Earlier citation: Braun, C. F. W., 1840, p. 97; nom. nud.

**KIRKORIA** Zalessky, 1937.

*Kirkoria multifida* Zalessky, 1937b, p. 83, figs. 51, 52; ginkgophyte? foliage; Permian; above village of Matveyevo, Oural, Russia.

**KIRSTEA** Kirchheimer, 1936.

*Kirstea zinkelseni* (Gelnitz) Kirchheimer, 1936a, p. 86, pl. 12, figs. 38a-f; seed, Magnoliaceae; Tertiary (Braunkohle); Altenburg, Germany.

**KITAKAMIANIA** Ishijima, 1943.

*Kitakamiania eguchii* Ishijima, 1943, p. 639, figs. 1, 2; alga; Cretaceous; Japan.

**KLIPPSTEINIA** Unger, 1845.

*Klippsteinia medullaris* Unger, 1845 (1841-47), p. lxxxiii. Illustrated in Unger, 1858a, p. 12, pl. 3, figs. 8-10; Miocene; Thal, Germany.

**KLOEDENIA** Goepfert, 1839.

*Kloedenia quercoides* Goepfert, 1839, p. 521, pl. 8b, figs. 1, 3, 4; wood (placed in *Quercinium* by Edwards, 1931); Cretaceous; Silesia.

**KLUKIA** Raciborski, 1890.

*Klukia exilis* (Phillips) Raciborski, 1890, p. 6, pl. 1, figs. 17-19; fertile foliage, Schizaeaceae; Jurassic; Yorkshire, England.

**KNIGHTIOPHYLLUM** Ettlingshausen, 1887.

*Knightiophyllum primaevum* Ettlingshausen, 1887b, p. 185, pl. 9, fig. 12; leaf fragment, Proteaceae; Upper Cretaceous; New Zealand.

**KNIGHTIOPHYLLUM** E. W. Berry, 1916.

*Knightiophyllum wilcozianum* E. W. Berry, 1916b, p. 208, pl. 35, figs. 1-3; leaf, Proteaceae; Lagrange formation, lower Eocene; Puryear, Henry County, Tenn.

**KNIGHTITES** Saporta, 1861.

*Knightites salyorum* Saporta, in Heer, 1861, p. 145; leaf, Proteaceae; Eocene; Aix, Provence, France. See also Saporta, 1862, p. 254, pl. 9, fig. 1.

**KNORRIA** Sternberg, 1825.

*Knorrria imbricata* Sternberg, 1825 (1820-38) Tentamen, p. xxxvii, pl. 27; partly decorticated arborescent lycopod stem; Carboniferous. Seward, 1910, p. 124 notes: "Although it is now a well-established fact that fossils bearing the name *Knorrria* are imperfect leptodend-

roid stems, the use of the term may be conveniently retained for descriptive purposes." In such a case a "type species" can have little significance, for the size, anatomical details, and degree of decortication will result in correspondingly different fossils.

**KNORRPTERIS** Henry Potonie, 1899.

*Knorrpteris mariana* Henry Potonie, 1899, p. 68, fig. 35; petrified fern stem, Knorrpteridaceae; Triassic; Krappitz, Upper Silesia. See also Hörck, in Potonie, Henry, 1910, no. 134, p. 1-19.

**KNOWLTONELLA** E. W. Berry, 1911.

*Knowltonella mazoni* E. W. Berry, 1911a, p. 235, pls. 25-27; frond fragments, Matoniaceae?; Patapsco formation, Lower Cretaceous; Stump Neck, near Glymont, Md.; near Widewater, Va.

**KOHEKOHE** Hector, 1880.

*Kohekohe dysowylodes* Hector, 1880, p. 49; nom. nud.

**KOHLMANNOPTERIS** Richter, 1899.

*Kohlmannopteris insignis* Richter, 1899, p. 40; nom. nud.

**KONINCKOPORA** (Lee) Alan Wood, 1943.

*Koninckopora inflata* (de Koninck) Alan Wood, 1943, p. 208, pls. 8-10; alga, Dasycladaceae; Lower Carboniferous; Visé, Belgium. Previously described by de Koninck, 1842, as a coral, and by Lee, 1912, as a bryozoan.

**KORAIA** Oishi, 1931.

*Koraia koraiensis* Oishi, 1931a, figs. 1-3; cupule; Jido series, "Permo-Triassic"; near Heijo, Korea.

**KOSMOGYRA** Stache, 1889.

*Kosmogyrta superba* Stache, 1889, p. 134, pl. 4, figs. 2a, 2b; oogonium, Characeae; Cretaceous; Divacca, near Trieste, Italy.

**KOSMOGYRELLA** Stache, 1889.

*Kosmogyrrella carinata* Stache, 1889, p. 121, pl. 2, fig. 19; oogonium, Characeae; Cretaceous?

**KRANNERA** Corda, 1866.

*Krannera mirabilis* Corda, in Renger, 1866, p. 137, pl. 1, fig. 1; Cretaceous; Kaunic, Bohemia.

**KRAUSELIA** Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 128.

**KRYSHTOFOVICHIA** Nikitin, 1934.

Acad. sci. U. R. S. S. Bull., tome 7, p. 1079 (not seen, cited in Gothan, 1942b, p. 128).

**KÜNSBERGIA** Corda, 1847.

*Künsbergia primaeva* Corda, 1947, p. 16; Carboniferous.

**KURRIA** Schenk, 1866.

*Kurria digitata* Schenk, 1866, p. 53.

**KURTZIANA** Frenguelli, 1942.

*Kurtziana cacheutensis* Frenguelli, 1942, p. 331, pl. 1; fern frond fragment; Triassic; Argentina.

## L

- LACCOPTERIS** Presl, 1838.  
*Lacopteris elegans* Presl, 1838 in Sternberg (1820-38), p. 115, pl. 32, figs. 8a, 8b; fertile fern pinnales, Matoniaceae; Upper Triassic (Keuper); Steindorf near Bamberg, Bavaria.
- LACOEIA** Read, 1946.  
*Lacoeia seriata* Read, 1946, p. 18, pl. 1, figs. 1-14; probably pteridosperm microsporangiate organ, compared with *Doleriotheca* and *Potonica*; Forkston coal, Pennsylvanian; Dutch Mtn., Pa.
- LACONIELLA** Krasser, 1920.  
*Laconiella sardinitica* Krasser, 1920, p. 16; cyadophyte; Jurassic (Dogger); Laconi, Sardinia.
- LAESTADITES** Meschinelli, 1892.  
*Laestadites nathorstii* Meschinelli, in Saccardo, 1892, p. 750. See also Meschinelli, 1898, p. 16, pl. 9, fig. 16; fungus, Pyrenomycete.
- LAEVIGATISPORITES** Ibrahim, 1933.  
*Laevigatisporites laevigatus* Ibrahim, 1933, p. 17, pl. 6, fig. 46; spore; Carboniferous. See also Bennie and Kidston, 1886, p. 107 (Triletes I), pl. 3, figs. 1a, 1b.
- LAEVIGATOSPORITES** Ibrahim, 1933.  
*Laevigatosporites vulgaris* Ibrahim, 1933, p. 39, pl. 2, fig. 16; spore; Carboniferous. For *Sporonites vulgaris* Ibrahim, 1932, p. 448, pl. 15, fig. 16.
- LAFFONIA** Heer, 1877.  
*Laffonia helvetica* Heer, 1877a, p. 178, pl. 56, figs. 28, 29; Eocene; Beggingen, Switzerland.
- LAGENELLA** Reid and Chandler, 1933.  
*Lagenella alata* Reid and Chandler, 1933, p. 497, pl. 29, figs. 28-34; fruit, incertae sedis; London Clay, Eocene; Minster, Kent, England.
- LAGENIASTRUM** Renault, 1894.  
*Lageniastrum macrospora* Renault, 1894, p. 170. See also Renault, 1896a, p. 429, figs. 81-84; alga, Coelastraceae; Lower Carboniferous; Combres near Rigny, France.
- LAGENICULA** (Kidston) Zerdth, 1931.  
*Lagenicula glabrata* Zerdth, 1931, p. 175. For *Triletes glabratus* Zerdth, 1930, pl. 8, figs. 38-41; spore; Carboniferous; Labiaz, Poland. Generic name (*Lagenicula*) originally given by Kidston, in Bennie and Kidston, 1886, p. 114.
- LAGENIOPTERIS** Renault, 1883.  
*Lageniopteris obtusiloba* Renault, 1883, p. 131, pl. 23, figs. 1-8; petrified pecopterid foliage; Upper Carboniferous.
- LAGENOIDEA** Reid and Chandler, 1933.  
*Lagenoidea trilocularis* Reid and Chandler, 1933, p. 493, pl. 29, figs. 1-18; fruit, incertae sedis; London Clay, Eocene; Sheppey, Kent, England.
- LAGENOPTERIS** Jongmans, 1935.  
Reference not seen; cited in Gothan, 1942b, p. 129.
- LAGENOSPERMUM** Nathorst, 1914.  
*Lagenospermum nitidulum* (Heer) Nathorst, 1914, p. 30, pl. 15, fig. 59; seed; Carboniferous; Spitzbergen.
- LAGENOSTOMA** Williamson, 1876.  
*Lagenostoma ovoides* Williamson, 1876a, p. 70; pteridosperm seed; Upper Carboniferous; Oldham, England. See also Williamson, 1877, p. 266, pl. 9, figs. 53-59; pl. 10, figs. 60-69, 71, 74-76; pl. 11, figs. 70, 72, 73, 77, 78.
- LAGERSTROEMIOXYLON** Madler, 1939.  
*Lagerstroemioxylon durum* Madler, 1939, p. 130, pl. 12, figs. 8-10; wood, Lythraceae; Pliocene; Schluesenkammer, near Höchst am Main, Germany.
- LAGYNOPHORA** Stache, 1880.  
*Lagynophora liburnica* Stache, 1880, p. 198; Paleocene; Divacca near Corgnale, Austria-Hungary.
- LAHARPIA** Heer, 1859.  
*Laharpia umbellata* Heer, 1859, p. 171, p. 147, figs. 28, 29; infructescence, Juncaginaceae; Miocene; Oeningen, Switzerland.
- LAMBERTIPHYLLUM** Velenovsky, 1889.  
*Lambertiphyllum durum* Velenovsky, 1889, p. 53. For *Lambertia dura* Velenovsky, 1883, p. 5, pl. 2, fig. 16; Upper Cretaceous; Lidic, Bohemia.
- LAMINARIOPSIS** Meunier, 1904.  
*Laminariopsis africana* Meunier, 1904, p. 157, 4 figs. [unnumbered]; Devonian?; Tienfala, Africa.
- LAMINARITES** (Brongniart) Sternberg, 1833.  
*Laminarites tuberculosus* (Brongniart) Sternberg, 1833 (1820-38), p. 35. For *Fucoides tuberculosus* Brongniart, 1828a-38, p. 54, pl. 7, fig. 5; alga; Cretaceous; Isle of Aix, near La Rochelle, France.
- LAMINOPSIS** Fucini, 1938.  
Reference not seen; cited in Gothan, 1942b, p. 129.
- LAMPETIA** Koenig, 1825.  
*Lampetia lucrymabunda* Koenig, 1825, p. 2, pl. 2, fig. 23; fruit, referred to Terebinthaceae; Oligocene; Prussia.
- LAMPROCARPITES** Heer, 1882.  
*Lamprocarpites nitidus* Heer, 1882, p. 58, pl. 8, figs. 10, 12-14; fruit, Juncaginaceae; Upper Cretaceous; Uperivik, Greenland.

**LANFRANCIA** Reid and Chandler, 1933.

*Lanfrancia subglobosa* Reid and Chandler, 1933, p. 457, pl. 25, figs. 37-40; fruit, Cornaceae; London Clay, Eocene; Sheppey, Kent, England.

**LANGTONIA** Reid and Chandler, 1933.

*Langtonia bisulcata* Reid and Chandler, 1933, p. 453, pl. 25, figs. 18-27; endocarp, Cornaceae; London Clay, Eocene; Sheppey, Kent, England.

**LARICITES** Goeppert, 1850.

*Laricites woodwardii* Goeppert, 1850, p. 210; for illustrations, see Lindley and Hutton, 1837 (1831-37), pl. 226, figs. B1, B2; Quarternary; Pastor Hill, Norfolk Cliffs, England.

**LARICOIDITES** Robert Potonie, 1950.

*Laricoidites magnus* Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 48, pl. C, figs. 9, 10; pollen, compared with *Larix*; lower Miocene; Niederlausitz, Germany.

**LARICOPSIS** Fontaine, 1889.

*Laricopsis longifolia* Fontaine, 1889, p. 233, pls. 102, 103, 165, 168; coniferous twigs compared with *Larix*; Potomac group, Lower Cretaceous; Dutch Gap Canal, Va.

**LARVARIA** Defrance, 1822.

*Larvaria reticulata* Defrance, 1822, p. 287; plant? middle Eocene; near Paris, France. See also Morellet and Morellet, 1913, p. 14, pl. 14.

**LASKOVSKIA** Zalessky, 1939.

*Laskovskia flabellata* Zalessky, 1939b, p. 357, fig. 35; compared with *Callipteris*; Permian; Matveyevo, Krutaia Katouchka, USSR.

**LATANITES** Massalongo, 1858.

*Latanites parisiensis* (Brongniart) Massalongo, 1858, p. 11. For *Palmacites parisiensis* Brongniart, 1822, p. 312, pl. 16, fig. 1. See also Massalongo, 1859, p. 124, pl. 2, fig. 19.

**LAURINASTRUM** Unger, 1862.

*Laurinastrium dubium* Unger, 1862, p. 163, fig. 17; leaf, Lauraceae; Eocene; Kumi, Greece.

**LAURINIUM** Unger, 1845.

*Laurinium xyloides* Unger, 1845, p. 228; wood; Pliocene; Vicentino, Italy. See also Edwards, 1931.

**LAURINOXYLON** Felix, 1883.

*Laurinoxylon diluviale* (Unger) Felix, 1883a, p. 59, pl. 2, figs. 1, 3; pl. 3, fig. 1; wood, dicotyledon; Miocene; Medgyaz, Hungary.

**LAURIPHYLLUM** Nathorst, 1888.

*Lauriphyllum gaudini* Nathorst, 1888, p. 203, pl. 2, fig. 6; leaf, dicotyledon; Tertiary?; Shimohinokinaimura, Ugo province, Japan.

**LAUROCALYX** Reid and Chandler, 1933.

*Laurocalyx globularis* Reid and Chandler, 1933, p. 219, pl. 7, figs. 12-15; fruit, Lauraceae; London Clay, Eocene; Sheppey, Kent, England.

**LAUROCARPUM** Reid and Chandler, 1933.

*Laurocarpum sheppeyense* Reid and Chandler, 1933, p. 225, pl. 7, figs. 27, 28; endocarp, Lauraceae; London Clay, Eocene; Minster, Kent, England.

**LAUROGENE** Ettingshausen, 1854.

*Laurogene cretacea* Ettingshausen, in Reuss, 1854, p. 740.

**LAUROPHYLLUM** Goeppert, 1857.

*Laurophyllum beilschmiedtioides* Goeppert, 1857, p. 45, pl. 10, fig. 65a; pl. 11, figs. 66, 68; leaf, Lauraceae; Eocene; Java.

**LAUROXYLON** Meschinelli and Squinabol, 1893.

*Lauroxylon xyloides* (Unger) Meschinelli and Squinabol, 1893, p. 303. For *Laurinium xyloides* Unger, 1845 (1841-47), p. 81.

**LEBACHIA** Florin, 1938.

*Lebachia piniformis* (Schlotheim) Florin, 1938, p. 25, pls. 1, 2, 25, 26, 27, 28, 39, 40; coniferous foliage and cones; Permian.

**LEBEPHYLLUM** W. J. Wilson, 1913.

*Lebephyllum reineckei* W. J. Wilson, 1913, p. 88, pl. 9, figs. 1, 2; dicotyledonous leaf compared with *Pilea* and *Urtica*; Miocene?; British Columbia.

**LECKENBYA** Seward, 1894.

*Leckenbya valdensis* Seward, 1894b, p. 384. For *Nathorstia valdensis* Seward, 1894, p. 145, pl. 7, fig. 5; pl. 9, fig. 2; fern foliage; Wealden; England.

**LECROSIA** Florin, 1940.

*Lecrosia grand'euryi* Florin, 1940b, p. 315, pls. 161-162; seed-bearing cone, Coniferales; Upper Stephanien, Carboniferous; Le Cros near St.-Étienne, France. Generic name cited earlier in Florin, 1927, p. 2; and Florin, 1929b, p. 403.

**LECYTHIDOANTHUS** E. W. Berry, 1924.

*Lecythidoanthus kugleri* E. W. Berry, 1924c, p. 103, figs. 1, 2; flower, Lecythidaceae; Miocene; Trinidad, British West Indies.

**LECYTHIDOPHYLLUM** E. W. Berry, 1923.

*Lecythidophyllum courataroides* E. W. Berry, 1923, p. 21, pl. 6, figs. 3, 4; leaf, Lecythidaceae; Miocene; Palomares, Oaxaca, Mexico.

**LECYTHIOXYLON** Milanez, 1935.

*Lecythioxylon brasiliense* Milanez, 1935, p. 88, pls. 1-3; wood, dicotyledon; Upper Cretaceous, Brazil.

**LEGUMINOCARPON** Goeppert, 1855.

*Leguminocarpum arachnoides* Goeppert, 1855, p. 40, pl. 26, fig. 11; fruit, Leguminosae; Miocene; Schossnitz, Silesia. Goeppert also uses the spelling *Leguminucarpus*.

**LEGUMINOCARPUM** Dotzler, 1938.

*Leguminocarpum anceps* (Berry) Dotzler, 1938, p. 41, pl. 5, figs. 4, 5; fruit, Leguminosae; Eocene. This spelling of generic name also used by Massalongo, 1859b, p. 121, for *Leguminocarpum* of Goeppert.

**LEGUMINOSITES** Bowerbank, 1840.

*Leguminosites subovatus* Bowerbank, 1840, p. 125, pl. 17, figs. 1, 2; seed, Leguminosae; Eocene; Sheppey, Kent, England.

**LEGUMINOXYLON** Gupta, 1936.

*Leguminoxylon burmense* Gupta, 1936, p. 305; wood, Leguminosae; Burma.

**LEIODERMARIA** (Goldenberg) Renault, 1896.

*Leioderma lepidodendrifolia* (Brongniart) Renault, 1896a, p. 208, pl. 36, fig. 1; lycopod bark impression; Carboniferous; France.

**LEJEUNITES** Sadebeck, 1886?

*Lejeunites dentifolius* Sadebeck, 1886, p. 121; moss; Tertiary; Prussia; nom. nud.

**LEMANIDIUM** Massalongo, 1859.

*Lemanidium galaxacera* Massalongo, in Massalongo and Scarabelli, 1859, p. 92. For *Corallinites galaxacera* Massalongo, 1856, p. 42, pl. 6, figs. 1, 2.

**LEMOINELLA** Morellet and Morellet, 1913.

*Lemoineella geometrica* Morellet and Morellet, 1913, p. 24, pl. 1, figs. 54, 55; alga, Dasycladaceae; Eocene; Grignon, France.

**LENNEA** Kräusel and Weyland, 1932.

*Lennea schmidtii* Kräusel and Weyland, 1932, p. 189; Devonian; Rönkhausen, Westphalia, Germany.

**LENZITITES** Meschinelli, 1892.

*Lenzitites gastaldii* (Heer) Meschinelli, 1892, p. 745. For *Lenzites gastaldii* Heer, in Sismonda, 1859, p. 533, pl. 1; figs. 1, 2; middle-Miocene; Turin, Italy.

**LEPACYCLOTES** Emmons, 1856.

*Lepacyclotes circularis* Emmons, 1856, p. 332, pl. 3, fig. 4; incertae sedis; Triassic; Ellingtons, N. C.

**LEPEOCAULUS** Zalesky, 1933.

*Lepeocaulus aphyllus* Zalesky, 1933c, p. 1389, fig. 3; lycopod stem impression; Devonian; Novala Zemlia, Russia.

**LEPIDANTHIUM** Schimper, 1870.

*Lepidanthium micrirhombeum* Schimper, 1870 (1869-74), p. 200, pl. 72, fig. 24; cycadophyte microsporangiate cone?; Rhaetic; Veitlahm, near Culmbach, Franconia.

**LEPIDIOPSIS** Bleicher and Fliche, 1889.

*Lepidiopsis tufacca* Bleicher and Fliche, 1889, p. 579, fig. 1; silique? compared with *Lepidium salivum*; Quarternary; France.

**LEPIDOCALAMUS** Matthew, 1906.

*Lepidocalamus scutiger* (Dawson) Matthew, 1906b, p. 117, pl. 4, figs. 1-9; articulate stem; Little River group, Devonian; New Brunswick, Canada.

**LEPIDOCARPON** Scott, 1900.

*Lepidocarpum lomaxi* Scott, 1900, p. 309; lycopod seed cone; Ganister beds, Lower Coal Measures, Upper Carboniferous; Hough Hill, Stalybridge, Oldham, England. See also Scott, 1901, p. 294, pls. 33-41; and Schopf, 1941b.

**LEPIDOCARPUS** Rothpletz, 1880.

*Lepidocarpus ellipsoideus* (Goeppert) Rothpletz, 1880, p. 29, pl. 2, fig. 9. For *Trigonocarpum ellipsoideum* Goeppert, 1852; seeds? of doubtful affinity; Carboniferous (Culm); Hainichen, Ottendorf and Lerchenberg, Germany.

**LEPIDOCARYOPSIS** Stur, 1873.

*Lepidocaryopsis westphalensis* Stur, 1873, p. 3; Cretaceous; Kaunitz, Bohemia. Only? other species: *Lepidocaryopsis rolloti* Berry, 1929d, p. 3, pl. 1, fig. 7; Guaduas formation, Tertiary; Colombia.

**LEPIDOCARYTES** Kuntze, 1904.

*Lepidocarytes*, Kuntze, in Post and Kuntze, 1904, p. 323.

**LEPIDOCLADUS** Vaffier, 1901.

*Lepidocladus fuisseensis* Vaffier, 1901, p. 134, pl. 10, figs. 1a-c; lycopod stem with leaves; Lower Carboniferous; Maconnais, France.

**LEPIDOCYSTIS** Lesquereux, 1880.

*Lepidocystis pectinatus* Lesquereux, 1880, p. 454, pl. 59, fig. 3; Lepidocarpaceae?; Pennsylvanian; near Pittston, Pa.

**LEPIDODENDRITES** Fliche, 1905.

*Lepidodendrites tessellata* (Schimper and Mougeot) Fliche, 1905a, p. 144. For *Caulopteris tessellata* Schimper and Mougeot, 1844, p. 64, pl. 29; incertae sedis; Triassic; Ruau, Vosges, France.

**LEPIDODENDRON** Sternberg, 1820.

*Lepidodendron dichotomum* Sternberg, 1820 (1820-38), p. 23, pls. 1-3; Upper Carboniferous; Swina, Bohemia. It seems likely that the figures shown on plates 1-3 represent several species; although the second species is the first one described, it would seem that it will serve as a more useful type: *Lepidodendron obovatum* Sternberg, 1820 (1820-38), p. 23, pl. 6, fig. 2; pl. 8, fig. 1.

**LEPIDODENDROPSIS** Lutz, 1933.

*Lepidodendropsis hirmerti* Lutz, 1933, p. 118, pl. 15, figs. 1-12; pl. 16, figs. 1-10; lycopod stem impression; Carboniferous (Culm); Germany.



**LEPIDOFLOYOS** Sternberg, 1825.

*Lepidofloyos laticnum* Sternberg, 1825 (1820-38), Tentamen, p. xlii, pl. 23, figs. 2-4; arborescent lycopod stem impression with horizontally elongate leaf cushions; Carboniferous; Radnitz and Swina, Bohemia. This is original spelling although most modern workers have adopted *Lepidophloios*.

**LEPIDOLEPIS** Sternberg, 1823.

*Lepidolepis imbricata* Sternberg, 1823 (1820-38), p. 39, pl. 27; partly decorticated arborescent lycopod stem.

**LEPIDOPHLOIOS.**

See note under *Lepidofloyos*. See also Sterzel, 1907, p. 728; he divides the genus into *Eulepidophloios* and *Sublepidophloios*.

**LEPIDOPHYLLUM** Brongniart, 1828.

Of the species listed by Brongniart, 1828b, the following seems to be the only acceptable one: *Lepidophyllum lineare* Brongniart, 1828b, p. 87. For *Poacites carinata* Brongniart, 1822, p. 238, pl. 3, fig. 2; a long linear leaf; Carboniferous. Notes on Brongniart's other species may be of interest because of the need of a revision of this genus: *L. majus* Brongniart, a lycopod cone scale which would fall in *Lepidostrobophyllum*, Hirmer, 1927, p. 231. *L. lanceolatum* Brongniart, apparently never described by Brongniart; see Riehl, 1869, p. 141, pl. 28, fig. 10; also a *Lepidostrobophyllum*. *L. bodlayi* Brongniart, nom. nud. *L. trinerve* Brongniart, nom. nud.? Lindley and Hutton describe a species under this name which may be Brongniart's; also a *Lepidostrobophyllum*. Note also that *Lepidophyllum* is pre-empted by Cassini for a living Compositae. See Cassini in Sci. soc. Philomatique Bull. 1816, p. 198-200, Paris.

**LEPIDOPTERIS** Schimper, 1869.

*Lepidopteris stuttgartiensis* (Jaeger) Schimper, 1869 (1869-74), p. 572, pl. 34; fernlike foliage; Upper Triassic (Keuper); near Stuttgart. For description of seed-bearing organs, see Thomas, 1933, p. 250; Harris, 1932a, p. 58.

**LEPIDOSIGILLARIA** Kräusel and Weyland, 1949.

*Lepidosigillaria whitei* Kräusel and Weyland, 1949, p. 148; for several fossils previously assigned to *Archaeosigillaria* and *Protolapidodendron*; Upper Devonian.

**LEPIDOSTROBOPHYLLUM** Hirmer, 1927.

*Lepidostrobophyllum maius* (Brongniart) Hirmer, 1927, p. 193, 231, fig. 213; isolated lycopod sporophyll; Upper Carboniferous; England.

**LEPIDOSTROBUS** Brongniart, 1828.

*Lepidostrobos ornatus* Brongniart, 1828b, p. 87. See also Lindley and Hutton, 1832 (1831-37), p. 81, pl. 26; lycopod cone (possibly *Lepidocarpon*); Carboniferous; England.

**LEPIDOTRUNCUS** Fritsch, 1908.

*Lepidotruncus fortis* Fritsch, 1908, p. 23, pl. 7, figs. 1, 2; Silurian; Chodoun, Bohemia.

**LEPIDOXYLON** Lesquereux, 1878.

*Lepidoxylon anomalum* (Brongniart) Lesquereux, 1878b, p. 334. See also Lesquereux, 1879, pl. 83, fig. 5; pl. 84, fig. 1; cordaitan stem impression with leaves attached; Pennsylvanian; Missouri.

**LEPROPHRAGMIUM** Reinsch, 1881.

*Leprophragmium* sp. Reinsch, 1881, p. 118, pl. 52, figs. 1-8; pl. 52a, figs. 8-10; Upper Carboniferous; Zwickau, Saxony.

**LEPROSPERMUM** Heer, 1877.

*Leprospermum thurmanni* Heer, 1877a, p. 133, pl. 56, figs. 14, 15; seed, Cycadaceae?; Jurassic; Delsberg, Switzerland.

**LEPTOCARYUM** Brongniart, 1874.

*Leptocaryum avellanium* Brongniart, 1874, p. 248, pl. 21, fig. 17; silicified seed; Carboniferous; St.-Etienne, France.

**LEPTOLITHOPHYLLUM** Airoidi, 1930.

*Leptolithophyllum roveretoi* Airoidi, 1930, p. 684; alga, Corallinaceae; Oligocene; Sassello, Liguria, Italy.

**LEPTONEMA** John Smith, 1896.

*Leptonema tenuis* John Smith, 1896, p. 321, pl. 7, fig. 9; incertae sedis; Upper Carboniferous; Annandale, near Kilmarnock, Scotland.

**LEPTOPHLOEUM** Dawson, 1862.

*Leptophloeum rhombicum* Dawson, 1862, p. 316, pl. 12, fig. 8; pl. 17, fig. 53; lycopod stem; Devonian.

**LEPTOPHYCUS** Fritsch, 1908.

*Leptophycus venosus* (Barrande) Fritsch, 1908, p. 20, pl. 3, figs. 7-9; Silurian; Drabov, Bohemia.

**LEPTOPHYCUS** J. H. Johnson, 1940.

*Leptophycus gracilis* J. H. Johnson, 1940, p. 586, pl. 6, figs. 1-3; pl. 7, fig. 3; blue-green or green calcareous alga; South Fork Salt Creek, Park County, Colo.

**LEPTOPLASMIUM** Reinsch, 1881.

*Leptoplasmium* sp. Reinsch, 1881, p. 38, pl. 8b, figs. 1-5; pl. 7c, figs. 7-12; Carboniferous; Mittelbroun, Württemberg.

**LEPTOPTEROPHYLLUM** Thomas, 1930.

*Leptopterophyllum nathorsti* (Seward) Thomas, 1930, p. 393, pl. 20, fig. 1; pl. 21; cycadophyte leaf; Jurassic; Yorkshire, England.

**LEPTOSPERMITES** Schmalhausen, 1883.

*Leptospermities spicatus* Schmalhausen, 1883, p. 319, pl. 37, figs. 7b, 7c; pl. 38, figs. 8-15; fruit, compared with *Leptospermum*, Myrtaceae; Oligocene; Wolh-yien, Russia.

**LEPTOSPERMOCARPUM** Menzel, 1913.

*Leptospermocarpum herzogenothense* Menzel, 1913, p. 51, pl. 5, figs. 9-16; capsule, Myrtaceae; Tertiary (Braun-kohle); near Herzogenrath, Prussia.

**LEPTOSPHAERITES** Richon, 1885.

*Leptosphaerites lemoinii* Richon, 1885, p. viii, pl. 32; fungus compared with *Leptosphaeria*; Tertiary; Reims, France. Meschinelli, 1892, p. 751, erroneously attributes this genus to Cesati and De Notarius.

**LEPTOSTROBUS** Heer, 1876.

*Leptostrobus laxiflorus* Heer, 1876c, p. 72, pl. 13, figs. 10-13; pl. 15, fig. 9b; seed-bearing cones, Taxodiaceae; Jurassic, Siberia.

**LEPTOSTROMIUM** Reinsch, 1881.

*Leptostromium* sp. Reinsch, 1881, p. 90, pl. 21, figs. 1-6; pl. 22, figs. 1-6; pl. 22a, figs. 1-7; Permian; Stockheim, Württemberg.

**LEPTOTESTA** Loubiere, 1929.

*Leptotesta grand'euryi* Loubiere, 1929, p. 594, pl. 12; silicified seed; Carboniferous; Grand-Croix, France.

**LEPTOTHRICHITES** Meschinelli, 1898.

*Leptothrichites buccalis* (Robin and Lebour) Meschinelli, 1898, p. 70; Schizomycete.

**LEPTOTHYRIOMYCES** Kräusel, 1929.

*Leptothyriomyces zonatus* Kräusel, 1929, p. 4, pl. 1, figs. 1-3; fungus, Leptostromataceae; Tertiary (Upper Miocene?); Anak Sinsing, South Sumatra.

**LEPTOXYLUM** Corda, 1845.

*Leptoxylum geminum* Corda, 1845, p. 21, pl. 15; Upper Carboniferous; Swina, Bohemia.

**LESANGIANA** (Mougeot) Fliche, 1906?

*Lesangiana voltzii* (Schimper) Fliche, 1906, p. 164, pl. 13, fig. 3. Earliest citation: *Lesangiana hasselotii* Mougeot, 1851, p. 346; nom. nud. See also *L. remota* Blanckenhorn, 1885, p. 147; and Posthumus, 1931.

**LESCURIA** Perkins, 1906.

*Lescuria attenuata* Perkins, 1906, p. 220, pl. 57, figs. 7, 10; Tertiary; Brandon, Vt.

**LESCUROPTERIS** Schimper, 1869.

*Lescuropteris moorii* (Lesquereux) Schimper, 1869 (1869-74), p. 465; fern-like foliage; Pennsylvanian; Greensburg, Pa. For *Neuropteris moorii* Lesquereux, in Rogers, 1858, p. 860, pl. 19, fig. 1.

**LESLEYA** Lesquereux, 1880.

*Lesleya grandis* Lesquereux, 1880, p. 143, pl. 25, figs. 1-3; *Glossopteris*-like foliage; base of Chester limestone, Pennsylvanian; Pennsylvania.

**LEUCADENDRITES** Saporta, 1862.

*Leucadendrites sextinctus* Saporta, 1862, p. 249, pl. 7, fig. 8; leaf, compared with *Leucadendron*; Tertiary; France.

**LEUCOSPERMITES** Saporta, 1861.

*Leucospermities denticulatus* Saporta, in Heer, 1861, p. 140; leaf, Proteaceae; Eocene; St. Zacharie, France; nom. nud.

**LEVEILLEITES** Foerste, 1923.

*Leveilleites hartnageli* Foerste, 1923, p. 62 pls. 4-11; alga?; Medina formation, Upper Silurian; southern Ontario.

**LEYRIDA** Reid and Chandler, 1933.

*Leyrida bilocularis* Reid and Chandler, 1933, p. 488, pl. 28, figs. 22-32; endocarp, incertae sedis; London Clay, Eocene; Sheppey, Kent, England.

**LIANOPHYCUS** Herzer, 1902.

*Lianophycus polyfrons* Herzer, 1902, p. 41, pl. 1; organic remains? Carboniferous; Marietta, Ohio.

**LIASOPHYCUS** Fliche, 1909.

*Liasophycus scythothalioides* Fliche, 1909, p. 211, alga; Lower Jurassic (Lias); Rimogne, France.

**LIASPERMUM** Grandori, 1916.

*Liaspermum dissectum* (Zigno) Grandori, 1916, p. 108, figs. 2-4 [unnumbered plate]; seed?; Jurassic (Lower Oolite); Zullana near Rovere di Velo, Italy.

**LIBOCEDRITES** Endlicher, 1847.

*Libocedrites salicornioides* (Unger) Endlicher, 1847, p. 275. For *Thuites salicornioides* Unger, 1841 (1841-47), p. 11, pl. 2, figs. 1-4, 7; pl. 20, fig. 8; coniferous foliage shoots; Eocene; Radoboj, Croatia.

**LICROPHYCUS** Billings, 1862.

*Licrophycus ottawaensis* Billings, 1862, p. 99, fig. 87; alga?; Trenton limestone, Lower Silurian; near Ottawa, Canada.

**LILLIA** Unger, 1842.

*Lillia viticulosa* Unger, 1842, p. 178; wood; Tertiary; Raica, Hungary. See also Corda, 1845, p. 49, pl. 60, figs. 1-3.

**LIMNOCARPUS** Reid, 1898.

*Limnocarpus headonensis* (Gardner) Reid, 1898, p. 465, figs. a-d; fruit, compared with *Potamogeton*; Lower Headon beds, Oligocene; Hordle Cliff, Hampshire, England.

**LIMNOPHYCUS** Kirchheimer, 1930.

*Limnophycus paradoxus* Kirchheimer, 1930a, p. 589, pl. 35; alga, compared with *Cutleria*, *Dictyota*, etc.; Upper Pliocene; Homberg, Germany.

- LIMNOPHYLLUM** Hosius and Marck, 1880.  
*Limnophyllum primaevum* Hosius and Marck, 1880, p. 183, pl. 38, fig. 153; leaf, Pistaceaceae?; Upper Cretaceous; Westphalia.
- LINGUIFOLIUM** E. A. N. Arber, 1913.  
*Linguifolium ullicanum* E. A. N. Arber, 1913, p. 346, pl. 7, figs. 1, 4; leaf, resembling *Glossopteris*; Mt. Pots beds, Rhaeto-Jurassic; Mount Pots, Ashburton County, New Zealand.
- LINOPORELLA** Steinmann, 1899.  
*Linoporella capriotica* (Oppenheim) Steinmann, 1899, p. 149, fig. 13; alga, Dasycladaceae; Upper Jurassic; Capri.
- LINOPTERIS** Presl, 1838.  
*Linopteris gutbieriana* Presl, in Sternberg, 1838 (1820-38), p. 167. For *Dictyopteris brongniarti* Gutbier, 1835, p. 63. pl. 11, figs. 7, 9, 10; neuropterid-shaped pinnules with net venation; Carboniferous; Zwickau, Saxony.
- LINOSPOROIDEA** Keller, 1895.  
*Linosporoidea populi* Keller, 1895, p. 3, pl. 2, fig. 6; fungus; Miocene; Herisau, Switzerland.
- LIQUIDAMBAROXYLON** Felix, 1884.  
*Liquidambaroxylon speciosum* Felix, 1884, p. 24, pl. 3, figs. 2-4; pl. 4, fig. 4; wood compared with *Liquidambar styraciflua*; Tertiary; Medgyanzo, Hungary.
- LIRIODENDROPSIS** Newberry, 1895.  
*Liriodendropsis simplex* Newberry, 1895, p. 83, pl. 19, figs. 2, 3; pl. 53, figs. 1-4. 7; leaf, Magnoliaceae; Amboy clay, Cretaceous; Woodbridge, N. J.
- LIRIOPHYLLUM** Lesquereux, 1878.  
*Liriophyllum beckwithii* Lesquereux, 1878c, p. 482; leaf, affinities with *Liriodendron*; Cretaceous. See also Lesquereux, 1883, p. 76, pl. 10, fig. 1.
- LISTRODIUM** Zalesky, 1937.  
*Listrodium uninervium* Zalesky, 1937b, p. 83, fig. 50; leaf fragment, incertae sedis; Permian; left bank Sylva River near mouth of Tchekarda River, Urals, Russia.
- LISTROPHYLLUM** Zalesky, 1934?  
*Listrophylum uscatense* Zalesky, 1934c, p. 771, fig. 35; fern pinnule; Permian; Kuznets Basin, Russia.
- LITHARCHAEOCYSTIS** Deflandre, 1932.  
*Litharchaeocystis costata* Deflandre, 1932, p. 1273, figs. 1, 2; alga, Chrysophyceae; Kuznets Basin, Russia.
- LITHIOTIS** Gümbel, 1871.  
*Lithiotis problematica* Gümbel, 1871, p. 48, pl. 2, figs. 13, 14; Lower Jurassic (Liasic); near Roveredo, Italy.
- LITHOBRYON** Ruprecht, 1866.  
*Lithobryon calcareum* Ruprecht, 1866, p. 37; Jurassic; Wjatka, Russia.
- LITHOCAULON** Meneghini, 1857.  
*Lithocaulon minus* Meneghini, 1857, p. 550, pl. H, fig. 7; alga; Tertiary; Sardinia.
- LITHODICTUON** Conrad, 1837.  
*Lithodictyon beckii* Conrad, 1837, p. 167; Silurian (Medina sandstone); Medina, N. Y.
- LITHOMYXA** Howe, 1932.  
*Lithomyxa calcigena* Howe, 1932a, p. 63, pls. 19-23; lime-secreting alga; Recent; Furnace Creek near Harpers Ferry, W. Va.
- LITHOPHYLLODENDRON** Musper, 1919.  
*Lithophyllo dendron rubrum* Musper, 1919, p. 17, figs. 1-12; "Upper White Jura"; Schwaben, Württemberg.
- LITHOSPERMITES** E. W. Berry, 1929.  
*Lithospermities glabrum* E. W. Berry, 1929b, p. 165, pl. 3, figs. 9-13; fruit, Boraginaceae; Tertiary; Belen, Peru.
- LITHOSTACHYS** Fischer-Ooster, 1858.  
*Lithostachys alpina* Fischer-Ooster, 1858, p. 59, pl. 3, fig. 1; alga?; Jurassic (Lower Oolite); near Blumenstein, Switzerland.
- LITHOTHAMNISUM** (Rothpletz) Heydrich, 1900.  
*Lithothamniscum nahaense* Heydrich, 1900b, fig. 1, pl. 7, figs. 1, 2. Generic name cited in Rothpletz, 1891, p. 311.
- LITHOTHAMNITES** Saporta, 1882?  
*Lithothamnites croizieri* Saporta, 1882, p. 21, pl. 1, fig. 6; alga; Jurassic (Oolite); La Rochefoucauld, France.
- LITHOXYLON** Jaeger, 1827.  
*Lithoxylon arenaceum* Jaeger, 1827, p. 38, pl. 5, fig. 4; stem impression, incertae sedis; Upper Triassic (Keuper); Stuttgart.
- LITSAEOPHYLLUM** Deane, 1902.  
*Litsaeophyllum wingellense* Deane, 1902a, p. 64, pl. 17, fig. 4; leaf, compared with *Litsea dealbata* Nees (Lauraceae); Tertiary; Wingello, New South Wales.
- LITSEOPSIS** Weyland, 1938.  
*Litseopsis rottensis* Weyland, 1938b, p. 141, pl. 19, fig. 1; staminate flower, Lauraceae; Tertiary; Rott, Siebengebirge, Germany.
- LIVERSIDGEA** Mueller, 1877.  
*Liversidgea oxyspora* Mueller, 1877a, p. 239, figs. 1-5; Pliocene; Richmond River, New South Wales.
- LOBATANNULARIA** Kawasaki, 1927.  
*Lobatannularia inequifolia* (Tokunaga) Kawasaki, 1927 (1927-34), p. 12, pl. 3A, figs. D, E; pl. 4, figs. 13-15; pl. 5, figs. 16-22; pl. 9, fig. 38; pl. 14, figs. 74, 75; foliage, intermediate between *Annularia* and *Schizoneura*; Jido series, "Permian-Carboniferous"; Chôngsôn, Korea.

- LOBATICARPUM** Reid and Chandler, 1933.  
*Lobaticarpum variabile* Reid and Chandler, 1933, p. 314, pl. 14, figs. 16-20; fruit, Anacardiaceae?; London Clay, Eocene; Sheppey, Kent, England.
- LOCHMOPHYCUS** Debey and Ettingshausen, 1859.  
*Lochmophycus caulerpoides* Debey and Ettingshausen, 1859a, p. 198, pl. 2, figs. 1-5; alga?; Cretaceous; Aachen, Rhinish Prussia.
- LOCKEIA** U. P. James, 1879.  
*Locketia siliquaria* U. P. James, 1879, p. 17. See James, J. F., 1885, p. 161, pl. 9, fig. 7; Lower Silurian; Kentucky.
- LOGANIA** Stolley, 1925.  
*Logania canadensis* Stolley, 1925, p. 63; Devonian; Campbellton, New Brunswick, Canada.
- LOMARITES** Hector, 1886.  
*Lomarites pectinata* Hector, 1886, p. 66, fig. 30A; Jurassic; Mataura Falls, New Zealand. Cited originally in Hector, 1878, p. 8; nom. nud.
- LOMATITES** Saporta, 1862.  
*Lomatites acerossus* Saporta, 1862, p. 253; leaf, compared with *Hakea repanda* and *Lomatia longifolia* (Proteaceae); Oligocene; Aix, Provence, France. See also Saporta, 1873a, p. 52, pl. 9, fig. 20.
- LOMATOFLOYOS** Corda, 1838.  
*Lomatofloyos crassicaule* Corda, 1838, in Sternberg (1820-38), p. 206, pl. 66, figs. 10-14; pl. 68, fig. 20; arborescent lycopod stem; Carboniferous; Radnitz, Bohemia. Various spelled in later works as *Lomatophloios* and *Lomatophloyos*.
- LOMATOPHLOIOS**.  
 See *Lomatofloyos*.
- LOMATOPHLOYOS**.  
 See *Lomatofloyos*.
- LOMATOPTERIS** Schimper, 1869.  
*Lomatopteris jurensis* (Kurr) Schimper, 1869 (1869-74), p. 472, pl. 45, figs. 2-5; fernlike foliage; Upper Carboniferous; Nussplingen, Württemberg.
- LOMENTARITES** Fliche, 1905.  
*Lomentarites bornetti* Fliche, 1905, p. 57, pl. 4, fig. 4; pl. 5, fig. 2b; alga, Rhodophyceae?; Triassic; Mourthe-et-Moselle, France. Generic name given in Fliche, 1903, p. 828.
- LONCHOPTERIS** Brongniart, 1836.  
*Lonchopteris breicii* Brongniart, 1836 (1828a-38), p. 368, pl. 131, figs. 2, 3. First citation: Brongniart, 1828b, p. 60; nom. nud.
- LOPERIA** Newberry, 1888.  
*Loperia simplex* Newberry, 1888, p. 93, pl. 25, figs. 1-3; incertae sedis; Triassic; Durham, Conn. This binominal cited by Newberry, 1887, p. 126; nom. nud.
- LOPHIODENDRON** Zalesky, 1936.  
*Lophiodendron tyrganense* Zalesky, 1936a, p. 228, fig. 11; lycopod leaf bases; Carboniferous; Russia.
- LOPHODERMA** Zalesky, 1937.  
*Lophoderma sibirica* Zalesky, 1937c, p. 126, fig. 2; lycopod leaf base impression; Permian; Kuznets Basin, Russia.
- LORANTHACITES** Conwentz, 1886.  
*Loranthacites succineus* Conwentz, 1886, p. 135, pl. 13, figs. 6, 7; stem fragment, in amber, Lorantheaceae; early Tertiary; West Prussia.
- LORANTHOPHYLLUM** Unger, 1864.  
*Loranthophyllum griselinia* Unger, 1864, p. 8, fig. 13; leaf, Lorantheaceae?; Tertiary; Manganui, New Zealand.
- LOXOPTERIS** Pomel, 1846.  
*Loxopteri adiontoides* Pomel, 1846, p. 652; fern foliage; Lower Jurassic (Lias); Moselle, France.
- LUDOVIOPSIS** Saporta, 1868.  
*Ludovioopsis discerpta* Saporta, 1868, p. 338, pl. 4, fig. 3; leaf fragment, Pandanaceae; Eocene; Sézanne, France.
- LUHEOPSIS** Langeron, 1900.  
*Luheopsis dissymetra* Langeron, 1900, p. 343, pl. 1, fig. 5; pl. 2, fig. 5; leaf, compared with *Luhea*; Eocene; Sézanne, France.
- LUNZIA** Krasser, 1918.  
*Lunzia austriaca* Krasser, 1918, p. 492, pl. 1, figs. 1-3; pl. 2, figs. 1-4; pl. 3; pl. 4, figs. 2-4; cycadophyte microsporophyll; Triassic; Pramelsreith near Lunz, Austria.
- LYCHNOPHORITES** Martius, 1822.  
*Lychnophorites dichotomus* (Sternberg) Martius, 1822, p. 144. For *Lepidodendron dichotomum* Sternberg, 1820 (1820-38), p. 23, pls. 1-3; pl. 63, fig. 1; Upper Carboniferous; Swina, Bohemia.
- LYCOPODIOLITES**.  
 See *Lycopodiolithes*.
- LYCOPODIOLITHES** Schlotheim, 1820.  
*Lycopodiolithes arboreus* Schlotheim, 1820, p. 413, pl. 22, fig. 2; lycopod branchlets with foliage; Upper Carboniferous; Waldenburg, Silesia. Sternberg, 1825 (1820-38), Tentamen, p. ix, adopts spelling *Lycopodiolithes*.
- LYCOPODIOPSIS** Renault, 1890.  
*Lycopodiopsis derbyi* Renault, 1890, p. 809; lycopod stem; Permian; San Paulo, Piracicaba, Brazil. See also White, David, 1908, p. 437, pl. 5, fig. 11.
- LYCOPODITES** Brongniart, 1822.  
*Lycopodites taioformis* Brongniart, 1822, p. 231, pl. 13, fig. 1. This is the first species described by Brongniart, but, according to Seward, it is a conifer. See discussion by Seward, 1910, p. 76.

**LYCOPOGENIA** Read, 1936.

*Lycopogentia callicyrtia* Read, 1936b, p. 227, figs. 1, 2; petrified stem, Lepidodendrales; Devonian; near Junction City, Boyle County, Ky.

**LYCOSPORA** Schopf, Wilson, and Bentall, 1944.

*Lycospora micropapillata* (Wilson and Coe) Schopf, Wilson, and Bentall, 1944, p. 54. For *Cirratriradites micropapillatus* L. R. Wilson and Coe, 1940, p. 184, fig. 6; spore; Des Moines group, Pennsylvanian; Iowa.

**LYCOSTROBUS** Nathorst, 1908.

*Lycostrobus scotti* Nathorst, 1908b, p. 8, pl. 1; lycopod cone.

**LYCOXYLON** Srivastava, 1946.

*Lycoxylon indicum* Srivastava, 1946, p. 192, pl. 1; petrified *Lycopodium*-like stele; Jurassic; Santal Pargana District, Behar, India. Brief description given earlier in Srivastava, 1937, p. 273.

**LYGINODENDRON** Gourlie, 1843.

*Lyginodendron landsburgii* Gourlie, 1843, p. 108, pl. 2; stem cast of arborescent lycopod?; Carboniferous; Stevenston, Ayrshire, Scotland.

**LYGINOPTERIS** Henry Potonie, 1899.

*Lyginopteris oldhamiana* (Binney) Henry Potonie, 1899, p. 170; pteridosperm stem; Upper Carboniferous; England. For *Dadoxylon oldhamium* Binney, 1866, p. 115. According to Seward, 1917, p. 39, Binney's specimen was first figured by Arber, E. A. N., 1902. See also Williamson, 1873, p. 377; Seward, 1917, p. 38; Walton, 1940; and Jongmans, 1930.

**LYGINORACHIS** Kidston, 1923.

*Lyginorachis papilio* Kidston, in Scott, 1923, p. 57; pteridosperm petiole; Cementstone group, Calciferous Sandstone series, Lower Carboniferous; Northam Bridge, Tweed, Scotland. See Crookall, 1931, p. 27, pl. 1, fig. 2; pl. 2, figs. 4, 5; pl. 3, figs. 6-8.

**LYGODITES** Schulze, 1887.

*Lygodites* cf. *aneimifolius* (Debey and Ettlingshausen) Schulze, 1887, p. 463. For *Pteridolemma aneimifolius* Debey and Ettlingshausen, 1859, p. 230, pl. 7, fig. 1; fern pinnae; Cretaceous (Senonian); Aachen, Rhenish Prussia.

**LYONSIAEPHYLLUM** Deane, 1907.

*Lyonsiaephyllum dunt* Deane, 1907, p. 191, pl. 36, fig. 1; leaf, compared with *Lyonsia* and *Alstonia* (Apocynaceae); Tertiary; Warrumburg Mts., New South Wales.

**LYSSOXYLON** Daugherty, 1941.

*Lyssoxylon grigsbyi* Daugherty, 1941, p. 71, pls. 26-30; petrified trunk fragment, Williamsoniaceae; upper Triassic; island in Rio Puerco, three-quarters of a mile southeast of Adamana, Ariz.

**M**

**MACCOLINTOCKIA** Heer, 1866.

*Maccolintockia dentata* Heer, 1866, p. 277. See also Heer, 1868, p. 115, pl. 15, figs. 3, 4; leaf fragment, Proteaceae; Miocene; Atanekerdluk, Greenland.

**MACRALETHOPTERIS** Jongmans and Gothan, 1935.

Jaarb. mijnwezen Nederlandlisch-Indië, 1930, Verh., boekdeel 59, p. 130, pl. 40, figs. 2-5; pl. 41, fig. 1, 1935 (not seen). See also Gothan, 1942a, p. 131.

**MACROGLOSSOPTERIS** Sze, 1931.

*Macroglossopteris leclana* Sze, 1931, p. 5, pl. 3, fig. 1; pl. 4, fig. 1; Jurassic; Pinghsiang, Kiangsi province, China.

**MACROPORELLA** Pia, 1912.

*Macroporella dinarica* Pia, 1912, p. 33, pl. 2, figs. 1-6; alga, Siphonaceae Verticillatae; Triassic; Dalmatia, Austria-Hungary.

**MACROPTERYGIUM** Schimper, 1870.

*Macropterygium bronni* (Schenk) Schimper, 1870 (1869-74), p. 132. For *Pterophyllum bronni* Schenk, 1865-76, p. 168, pl. 40, figs. 2, 3; cycadophyte foliage; Carinthia.

**MACROSPHENOPTERIS** Kidston, 1887.

*Macrosphenopteris lindaeoides* Kidston, 1887b, p. 353, pl. 27, fig. 1; sphenopteridlike frond fragment; Upper Carboniferous; Radstock, England.

**MACROSPORITES** Renault, 1899.

*Macrosporites insignis* Renault, 1899, p. 1072; spores; Carboniferous; Germany.

**MACROCYSTITES** Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 131.

**MACROSTACHYA** Schimper, 1869.

*Macrostachya infundibuliformis* (Bronn) Schimper, 1869 (1869-74), p. 333, pl. 23, figs. 15-17; articulate cone; Carboniferous; Zwickau, Saxony.

**MACROTAENIA** Frenguelli, 1943.

*Macrotaenia fertilis* Frenguelli, 1943b, p. 401, pls. 1-3; fertile fern frond, Marattiaceae; Triassic; Cacheuta, Mendoza, Argentina.

**MACROTAENIOPTERIS** Schimper, 1869.

*Macrotaeniopteris major* (Lindley and Hutton) Schimper, 1869 (1869-74), p. 610. For *Taeniopteris major* Lindley and Hutton, 1831-37, p. 31, pl. 92; cycadophyte foliage; Jurassic; Gristhorpe, Yorkshire, England.

**MACROTORELLIA** Kryštofovich, 1927.

*Macrorella hoshayahiana* Kryštofovich, 1927, p. 604, pl. 13, figs. 2-9; Cycadophyte leaflets?; Jurassic; North Caucasus.

**MAFFEIA** Massalongo, 1857.

*Maffeia ceratophylloides* Massalongo, 1857b, p. 777; nom. nud.

- MAGNOLIAEPHYLLUM** (Krasser) Seward, 1926.  
*Magnoliaephyllum alternans* (Heer) Seward, 1926, p. 120, fig. 25; leaf, Magnoliaceae; Cretaceous; Atanikerdluk, Greenland. Generic name cited in Krasser, 1896, p. 131, pl. 17, fig. 12.
- MAGNOLIAESPERMUM** Kirchheimer, 1934.  
*Magnoliaespermum flegeli* Kirchheimer, 1934a, p. 770, fig. 2; seed, Magnoliaceae; Tertiary; Germany. See also Kirchheimer, 1936a, p. 45, pl. 2, figs. 5a-l.
- MAGNOLIAESTROBUS** Seward and Conway, 1935.  
*Magnoliaestrobis gilmouri* Seward and Conway, 1935, p. 22; pl. 4, fig. 20; *Magnolia*-like infructescence; Cretaceous; west Greenland.
- MAGNOLILEPIS** Conwentz, 1886.  
*Magnolilepis orussica* Conwentz, 1886, p. 56, pl. 6, figs. 6-8; bud scale?, in amber, Magnoliaceae; Tertiary; West Prussia.
- MAGNOLIOIDES** Ettingshausen, 1885.  
*Magnolioides carniolica* Ettingshausen, 1885, p. 19, pl. 30, fig. 22; leaf, Magnoliaceae; Miocene; Steinbruch.
- MAGNOLIOPHYLLUM**.  
 Error for *Magnoliophyllum*, in Dorf, 1938, p. 64.
- MAGNOLIPHYLLUM** Conwentz, 1886.  
*Magnoliophyllum balticum* Conwentz, 1886, p. 57, pl. 6, fig. 9; leaf, in amber, Magnoliaceae; Tertiary; West Prussia.
- MAGNOLITES** Tuzson, 1909.  
*Magnolites subatica* Tuzson, 1909, p. 376; wood; Schotter beds, Tertiary; Lake Balaton, Hungary. See also Tuzson, 1911, p. 44, figs. 17-21. Placed in *Dryoxylon* by Edwards, 1931.
- MAJANTHEMOPHYLLUM** Weber, 1851.  
*Majanthemophyllum petiolatum* Weber, 1851, p. 156, pl. 18, fig. 5; leaf, Smilacaceae; Oligocene; Quegstein, Rhenish Prussia.
- MALACOTESTA** Williamson, 1876.  
*Malacotesta oblonga* Williamson, 1876a, p. 71; seed; Upper Carboniferous; Oldham, England. See also Williamson, 1877, p. 268, pl. 12, fig. 89; pl. 13, figs. 88, 90-93.
- MALPIGHIASTRUM** Unger, 1850.  
*Malpighiastrum procrustae* Unger, 1850a, p. 453; Malpighiaceae; Eocene; Radoboj, Croatia. See also Unger, 1860 (1860-65), p. 30, pl. 13, figs. 4-7.
- MALVACARPUS** E. W. Berry, 1925.  
*Malvacarpus tertiarus* E. W. Berry, 1925b, p. 217, pl. 3, fig. 6; fruit, Malvaceae; Miocene; Mirador Mesa, north of Rio Shubut, Chubut province, Argentina.
- MALVOCARPON** Hollick, 1928.  
*Malvocarpum clarum* Hollick, 1928, p. 214, pl. 75, fig. 6; fruit, compared with *Abutilon*, Malvaceae; Tertiary; Collazo River, Puerto Rico.
- MAMILLARIA** Brongniart, 1825.  
*Mamillaria desnoyersii* Brongniart, 1825, p. 423, pl. 19, figs. 9, 10; incertae sedis; Jurassic; Mamers, France.
- MAMMAEITES** Fliche, 1896.  
*Mammacites francheti* Fliche, 1896, p. 283, pl. 13, fig. 7; seed referred to Clusiaceae; Cretaceous; Chaudefontaine near St. Menehould, France.
- MANCHURIOPHYCUS** Endo, 1933.  
*Manchuriophycus yamamotoi* Endo, 1933, p. 47, pl. 6, fig. 3; pl. 7, fig. 2; alga?; Nanshan formation, pre-Cambrian; near Chiao-tou Station, South Manchuria.
- MANICARITES** Bureau, 1896.  
*Manicarites dantescaanus* (Visiani) Bureau, 1896, p. 282. For *Hemiphoenices dantesiana* Visiani, 1864, p. 451, pl. 18, figs. A, B; Oligocene; Verona, Italy.
- MANIHOTITES** E. W. Berry, 1910.  
*Manihotites georgiana* E. W. Berry, 1910b, p. 507, fig. 1; leaf, Euphorbiaceae; Cretaceous; Georgia.
- MANTELLIA** (Brongniart) Bronn, 1837.  
*Mantellia megalophylla* (Buckland) Bronn, 1837, p. 227, pl. 15, fig. 2. First citation of genus: *Mantellia nidiformis* Brongniart, 1828b, p. 96; nom. nud.
- MARANTOIDEA** Jaeger, 1827.  
*Marantoidea arenacea* Jaeger, 1827, p. 28, pl. 5, fig. 5; *Taeniopteris* leaf fragment; Triassic (Keuper); Stuttgart. See also Sternberg, 1838 (1820-38), p. 139.
- MARATTIOPSIS** Schimper, 1874.  
 Schimper, 1874 (1869-74), suggests that the species which he formerly assigned to *Angiopteridium* (Schimper, 1869, p. 602) should all be transferred to *Marattiopsis*. Presumably type would be for *Angiopteridium münsteri* (Goepfert) Schimper, 1869, p. 603, pl. 38, figs. 1-6; frond, Marattiaceae; Rhaetic; Bayreuth, Bavaria.
- MARATTIOTHECA** Schimper, 1879.  
*Marattiotheca grand'euryi* Schimper, in Schimper and Schenk, 1879 (1879-90), p. 91, fig. 66; fertile fern pinnule, Marattiaceae; Upper Carboniferous.
- MARATTITES** Marion and Laurent, 1898.  
*Marattites desideratus* Marion and Laurent, 1898, p. 189, pl. 1, fig. 1; fragment of fern pinnule; Cretaceous; Babadeg, Rumania.

**MARCHANTITES** Brongniart, 1849.

*Marchantites sesannensis* Brongniart, 1849, p. 61. First illustration for this species appears to be in Watelet, 1866, p. 40, pl. 11, fig. 6. Apparently first illustrated species is *Marchantites sinuatus* Saporta, 1865, p. 68, pl. 1, fig. 2.

**MARGARETIA** Walcott, 1931.

*Margaretia dorus* Walcott, 1931, p. 2, pl. 1, figs. 1-6; compared with living alga *Kallymenia*; Burgess shale, Middle Cambrian; British Columbia.

**MARGARITOPTERIS** Gothan, 1913.

*Margaritopteris pseudocoemansi* Gothan, 1913a, p. 169, pl. 34, figs. 6, 6a; fernlike foliage; Upper Carboniferous; Upper Silesia.

**MARIMINNA** Unger, 1843.

*Mariminna meneghinii* Unger, 1843 (1841-47), p. 58, pl. 18, fig. 5; incertae sedis; Eocene; Monte Bolca, Italy.

**MARIOPTERIS** Zeller, 1879.

*Mariopteris nervosa* (Brongniart) Zeller, 1879, p. 69, pl. 167, figs. 1-4; fernlike foliage; Upper Carboniferous; Bassin du Bas-Boulonnais, France.

**MAROESIA** Jongmans and Gothan, 1935.

*Maroesia rhomboidea* Jongmans and Gothan, 1935, p. 91, pl. 18, figs. 1-3; lycopod stem impression; Upper Carboniferous; Residentie Djambi, Maroes, Sumatra.

**MARPOLIA** Walcott, 1919.

*Marpolia spissa* Walcott, 1919, p. 234, pl. 52, figs. 1a, 1b; alga, Cyanophyceae; Burgess shale, Middle Cambrian; northeast of Burgess Pass, British Columbia.

**MARSILIDIUM** Schenk, 1871.

*Marsilidium speciosum* Schenk, 1871, p. 225, pl. 26, fig. 3; leaves, incertae sedis; Wealden; Osterwald, Hannover, Germany.

**MARTINIA** Crle, 1889.

*Martinia elegans* Crle, 1889b, p. 20; nom. nud. See note under *Bottgeria*.

**MARTYIA** Reid, 1924.

*Martyia naviculaeformis* Reid, 1924, p. 327, figs. 5a-c; seed, Leguminosae; Lower Pliocene; Pont-de-Gail, France.

**MARZARIA** Zigno, 1865.

*Marzaria paroliniana* Zigno, 1865, p. 32; fertile fern frond fragment; Jurassic (Oolite); near Rovere di Velo, Italy. See also Zigno, 1867 (1856-68), p. 170, pl. 19, figs. 3-7.

**MASCULOSTROBUS** Seward, 1911.

*Masculostrobos zeilleri* Seward 1911b, p. 686, fig. 11; male inflorescence, Coniferales; Jurassic; coast of Sutherland between Brora and Helmsdale, Scotland.

**MASSULITES** Sahni and H. S. Rao, 1943.

*Massulites coelatus* Sahni and H. S. Rao, 1943, p. 56, pl. 7, figs. 56-63; massulae of water fern; Intertrappean cherts, early Tertiary; Sausar Tensli, Chhindwara district, Central Provinces, India.

**MASTIXICARPUM** Chandler, 1926.

*Mastixicarpum crassum* Chandler, 1926, p. 36, pl. 6, figs. 5a-d; endocarp, Cornaceae; Upper Eocene; Hordle, Hampshire, England.

**MASTIXIOPSIS** Kirchheimer, 1935.

*Mastixiopsis nyssoides* Kirchheimer, 1935, p. 293, fig. 17; seed, Cornaceae; Tertiary (Braunkohle); Riestedt, Germany. See also Kirchheimer, 1936c, p. 291, pl. 7, figs. 5a-g.

**MASTOCARPITES** Trevisan, 1856.

*Mastocarpites cruceaformis* (Sternberg) Trevisan, in Zigno, 1856 (1856-68), p. 22. For *Algacites cruceaformis* Sternberg, 1820-38, p. 36, pl. 2, figs. 5, 6.

**MASTOPORA** Eichwald, 1840.

*Mastopora concava* Eichwald, 1840, p. 204; alga?; Silurian; Russia.

**MATONIDIUM** Schenk, 1871.

*Matonidium goepperti* (Ettingshausen) Schenk, 1871, p. 220; pl. 27, fig. 5; pl. 28, figs. 1a-d, 2; pl. 30, fig. 8; leaves, Matoniaceae; Wealden, Germany.

**MATONIELLA** Hirmer and Hoerhammer, 1936.

*Matoniella wiesneri* (Krasser) Hirmer and Hoerhammer, 1936, p. 47, fig. 7; leaf, Matoniaceae; Cretaceous; Kunststadt, Mähren, Germany.

**MAUCHERIA** Broili, 1928.

*Maucheria gemundenensis* Broili, 1928, p. 191, pls. 1, 2; Lower Devonian; Gemunden, Germany.

**MAUERITES** Zalesky, 1933.

Reference not seen; cited in Gothan, 1942b, p. 132.

**MAUPASIA** (Munier-Chalmas) Morellet and Morellet, 1917.

*Maupasia dumasi* Morellet and Morellet, 1917, p. 369, pl. 14, figs. 11, 12; alga, Dasycladaceae; Tertiary; Bretagne, France. [On p. 368 these authors note "*Maupasia* Mun.-Ch. = *Maupasina* Mun.-Ch."]

**MAUPASINA** Munier-Chalmas, 1877.

In Munier-Chalmas, 1877, p. 817; nom. nud. See *Maupasia*.

**MAWSONELLA** Chapman, 1927.

*Mawsonella woollanensis* Chapman, 1927a, p. 124, pl. 6; calcareous alga; Lower Cambrian?; 9 miles west of Woollana Head Station, South Australia.

**MAYOGYNOPHYLLUM** Kräusel, 1929.

*Mayogynophyllum paucinerium* Kräusel, 1929, p. 21, pl. 5, fig. 12; leaf, Anonaceae; Tertiary (Upper Miocene?); Anak Silingsing, South Sumatra.

**MAZOCARPON** (Scott) Benson, 1918.

*Mazocarpum shoreense* Benson, 1918, p. 579, pl. 17, figs. 1-14; petrified sigillarlike cone; Upper Carboniferous; Yorkshire, England. Generic name first cited by Scott, 1907, p. 169. For recent consideration, see Schopf, 1941.

**MEDULLOPITYS** Kräusel, 1928.

*Medullopitys sclerotica* (Gothan) Kräusel, 1928, p. 22, pl. 1, fig. 11; pl. 2, figs. 2-6; pl. 3, figs. 1-5; petrified cordaitan stem; Karroo beds, Permian; German Southwest Africa.

**MEDULLOSA** Cotta, 1832.

*Medullosa stellata* Cotta, 1832, p. 65, pl. 13; petrified stem with polycyclic stelar system; Permian; Chemnitz, Germany. Of the species described by Cotta this one is proposed as the type, for it is the first in order of description which clearly displays the characteristic stelar pattern. For later accounts, see Scott, 1899; Baxter, 1948; Andrews, 1945.

**MEDULLOSITES** Bureau, 1914.

*Medullosites mammiger* Bureau, 1914, p. 288, pl. 27, fig. 6; fern stem?; Carboniferous; Loire, France.

**MEDULLOXYLON** Hartig, 1848.

Hartig, 1848b, proposes this genus to include certain species placed in *Dadoxylon* Endlicher. Presumably he intended *Medulloxylon withamii* (Lindley) Hartig.

**MEGADENDRON** Reichenbach, 1836.

*Megadendron saonianum* Reichenbach, 1836, p. 6; Permian; Hilbersdorf, near Chemnitz, Germany.

**MEGALOMEYLON** Cribbs, 1940.

*Megalomeylon myriodesmon* Cribbs, 1940, p. 596, figs. 1-3, 7, 10, 12-15, 18; stem of pityean affinity; Reed Spring formation, Mississippian; Missouri.

**MEGALOPTERIS** (Dawson) E. B. Andrews, 1875.

*Megalopteris dawsoni* (Hartt) E. B. Andrews, 1875, p. 415; fern or pteridosperm foliage; Devonian?; St. John, New Brunswick, Canada. For *Neuropteris dawsoni* Hartt, in Dawson, 1868, p. 551, fig. 193.

**MEGALOPTERIS** Schenk, 1883.

*Megalopteris nicotianaeifolia* Schenk, 1883c, p. 238, pl. 32, figs. 6-8; pl. 33, figs. 1-3; pl. 35, fig. 0; fern? leaf fragments; Upper Carboniferous; Lui-pa-Kou, Hunan province, China.

**MEGALORHACHIS** Unger, 1845.

*Megalorhachis elliptica* Unger, 1856, p. 169, pl. 7, figs. 19-21; petiole of *Cladophylon*?; Upper Devonian; Saalfeld, Thuringia. See also Seward, 1917, p. 204; and Posthumus, 1931; This binomial first cited in Unger, 1854; nom. nud.

**MEGALOSPERMUM** E. A. N. Arber, 1914.

*Megalospermum widdii* (Kidston) E. A. N. Arber, 1914, p. 91, pl. 7, fig. 28; seed; Carboniferous.

**MEGALOXYLON** Seward, 1899.

*Megaloxylon scottii*, Seward, 1899, p. 172, pls. 5-7; pteridosperm stem; Upper Carboniferous; Lancashire, England.

**MEGALOZAMIA** Hosijs and Marck, 1880.

*Megalozeria falciformis* Hosijs and Marck, 1880, p. 203, pl. 43, figs. 181-183; cycadophyte petiole fragment; Lower Cretaceous; Westphalia.

**MEGAPHYTON** Artis, 1825.

*Megaphyton frondosum* Artis, 1825, p. 20, fig. 20; tree fern trunk showing vertical row of large leaf scars; Carboniferous; near Rowmarsh, Yorkshire, England.

**MEGATHECA** H. N. Andrews, 1940.

*Megatheca thomasi* H. N. Andrews, 1940, p. 597, figs. 1-3; large pteridosperm cupule, probably identical with *Calathospermum* Walton; Oil Shale group, Carboniferous Sandstone series, Lower Carboniferous; Broxburn, West Lothian, Scotland.

**MEIBOMITES** Knowlton, 1926.

*Meibomites lucens* Knowlton, 1926, p. 44, pl. 28, fig. 10; leaf, Papilionaceae; Latah formation, Miocene; Spokane, Wash.

**MELANCONITES** Goeppert, 1852.

*Melanconites serialis* Goeppert, 1852c, p. 487, nom. nud.

**MELANOSPHAERITES** Gruss, 1928.

*Melanosphaerites devonicus* Gruss, 1928a, p. 353, figs. 16, 19, 24; fungus; Devonian; Bear Island, Norway.

**MELANOSPORITES** Pampaloni, 1902.

*Melanosporites stefanti* Pampaloni, 1902, p. 127, pl. 10, fig. 12; fungus perithecium; Miocene; Melilli, Sicily.

**MELASTOMACEOPHYLLUM** (Geyler) Kräusel, 1929.

First? species described: *Melastomaceophyllum geyleri* Kräusel, 1929, p. 36, pl. 7, fig. 1; leaf, Melastomaceae; Tertiary (Upper Miocene?); Suban Pulut, South Sumatra. Genus first cited: *Melastomaceophyllum* sp. Geyler, 1887a, p. 503, pl. 35, fig. 6.

**MELASTOMITES** Unger, 1850.

*Melastomites druidum* Unger, 1850a, p. 480, leaf, Melastomaceae; Eocene; Sotzka, Styria. See also Unger, 1851, p. 181, pl. 55, figs. 1-9.

**MELIACEAE CARPUM** Menzel, 1913.

*Meliaceae carpum ligniticum* Menzel, 1913, p. 39, pl. 4, fig. 22; fruit, Meliaceae; Tertiary (Braunkohle); near Herzogenrath, Prussia.



**MELICARYA** Reid and Chandler, 1933.

*Melicarya variabilis* Reid and Chandler, 1933, p. 280, pl. 11, figs. 20-24; fruit, Meliaceae; London Clay, Eocene; Sheppey, Kent, England.

**MELICYTAPHYLLITES** Hector, 1880.

*Melicytaxyloylon ungeri* Hartig, 1848a, p. 171; 49, nom. nud.

**MELITOXYLON** Hartig, 1848.

*Melitoxyloylon ungeri* Hartig, 1848a, p. 171; wood; Tertiary; Germany.

**MELOBESITES** Massalongo, 1857.

*Melobesites membranacea* Massalongo, 1857b, p. 777; Eocene; Monte Bolca, Italy.

**MELOPHYTUM** Debey and Ettingshausen, 1859.

*Melophytum cyclostigma* Debey and Ettingshausen, 1859b, p. 241, pl. 7, figs. 28-30; incertae sedis; Upper Carboniferous; Aachen, Rhenish Prussia.

**MEMBRANITES** Fucini, 1938.

Reference not seen; cited in Gothan, 1942b, p. 132.

**MEMINELLA** Morellet and Morellet, 1913.

*Meminella larvarioides* Morellet and Morellet, 1913, p. 13, pl. 1, figs. 41, 42; alga, Dasycladaceae; Eocene; Chaussy, Croix-Blanche near Gisors, France.

**MENGEA** Conwentz, 1886.

*Mengea palacogena* Conwentz, 1886, p. 102, pl. 10, figs. 13-16; flower, in amber, Rosaceae; Tertiary; West Prussia.

**MENIPHYLLOIDES** E. W. Berry, 1916.

*Meniphylloides ettingshauseni* E. W. Berry, 1916b, p. 166, pl. 11, figs. 4-7; leaf, Polypodiaceae; Grenada formation, lower Eocene; Grenada, Grenada County, Miss.

**MENIPHYLLUM** Ettingshausen, 1879.

*Meniphyllum elegans* Ettingshausen in Gardner and Ettingshausen, 1879, p. 36, pl. 3, figs. 10-14; fern leaf fragments, Aspladeae; Eocene; Bournemouth, England.

**MENISPERMACITES** Ettingshausen, 1879.

*Menispermaoites abutooides* Ettingshausen, 1879, p. 394; Eocene; Sheppey, England; nom. nud.

**MENISPERMITES** Lesquereux, 1874.

*Menispermites obtusiloba* Lesquereux, 1874, p. 94, pl. 25, figs. 1, 2; pl. 28, fig. 3; leaf, dicotyledon; Cretaceous; Nebraska?

**MENISPERMOPHYLLUM** Velenovsky, 1901.

*Menispermorphyllum celakovskii* Velenovsky, in Fric and Bayer, 1901, p. 128, fig. 90; leaf, dicotyledon; Cretaceous (Cenomanian); Bohemia. First citation: Velenovsky, 1889, p. 54; nom. nud.

**MENOPTERIS** Stenzel, 1889.

*Menopteris dubia* (Cotta) Stenzel, 1889, p. 12, pl. 3, figs. 19-26; fern stem; Permian; Chemnitz, Germany.

**MENYPHYLLUM** Ettingshausen, 1878.

*Menyphyllum elegans* Ettingshausen and Gardner, 1878, p. 227; fern, Aspladiaceae; Eocene; Bournemouth, England; nom. nud.

**MERISTOPHYLLUM** Zalesky, 1937.

*Meristophyllum sojanaceanum* Zalesky, 1937b, p. 99, fig. 76; leaf, incertae sedis; Permian; Russia.

**MERISTOPTERIS** Zalesky, 1937.

*Meristopteris laciniata* Zalesky, 1937e, p. 590, fig. 8; incertae sedis; Upper Devonian; near village of Styła, Donets Basin, Russia.

**MERTENSIDES** Fontaine, 1883.

*Mertensides bullatus* (Bunbury) Fontaine, 1883, p. 35; pl. 15, figs. 2-5; pl. 16, figs. 1-3; pl. 17, figs. 1, 2; pl. 18, figs. 1, 2; fertile fern foliage; Triassic; Carbon Hill, Va. Apparently no connection with *Mertensites* of Wanklyn.

**MERTENSITES** Wanklyn, 1869.

*Mertensites hantoniensis* Wanklyn, 1869, p. 11, pl. 1, figs. 1, 2; fertile fern foliage, Gleicheniaceae; "Bournemouth leaf bed," Miocene; Bournemouth, England. Intended as subgenus of *Gleichenia* but is actually used as a generic designation.

**MESEMBRIOXYLON** Seward, 1919.

*Mesembrioxylon woburnense* (Stopes) Seward, 1919, p. 207; coniferous wood; Lower Greensand, Cretaceous; Woburn, Bedfordshire, England. For *Podocarpoxylon woburnense* Stopes, 1915, p. 211, pl. 20, figs. 1, 2.

**MESOCALAMITES** Hirmer, 1927.

*Mesocalamites roemeri* (Goeppert) Hirmer, 1927, p. 382; Calamitaceae; Lower Carboniferous; various localities. For *Calamites roemeri* Goeppert, 1850, p. 45, pl. 7, fig. 6.

**MESOLONCHOPTERIS** Koldzumi, 1936.

*Mesolonchopteris reticulata* (Fontaine) Koldzumi, 1936, p. 143. For *Cladophlebis reticulata* Fontaine, in Ward, 1900a, p. 235, pl. 21.

**MESONEURASTER** Sandberg, 1866.

*Mesoneuraster cordatus* (Goeppert) Sandberger, 1866, p. 76, pl. 5, figs. 1-3; neuropterid foliage thought to bear sporangia; Permian.

**MESONEVRON** Unger, 1856.

*Mesonevron lygioides* Unger, 1856, p. 172, pl. 8, fig. 18; incertae sedis; Upper Devonian; Saalfeld, Thuringia. See also *Mesoneuron* in Posthumus, 1931.

**MESOPHYLLUM** Lemoine, 1930.

*Mesophyllum austriacum* Lemoine, 1930, p. 538, pl. 2, fig. 17a; Upper Cretaceous (Danian); Bruderndorf near Vienna, Austria.

**MESOPITYS** Zalesky, 1911.

*Mesopitys tchihatcheffianus* (Goepfert) Zalesky, 1911a, p. 28, pl. 1; pl. 2, figs. 1-5. For *Araucarites tchihatcheffianus* Goepfert, 1950, p. 235.

**MESOSIGILLARIA** (Grand'Eury) Weiss and Sterzel, 1893.

*Mesosigillaria lepidodendrifolia* (Brongniart) Weiss and Sterzel, 1893, p. 249. For *Sigillaria lepidodendrifolia* Brongniart, 1828a-38, p. 426, pl. 161.

**MESOSTROBUS** Watson, 1909.

*Mesostrobus scottii* Watson, 1909, p. 390, pl. 27; lycopodiaceous cone; Mountain 4-foot mine, Lower Coal Measures, Upper Carboniferous; Cloughfoot, Dulesgate, England.

**MESOXILOIDES** Maslen, 1930.

*Mesoxylodes platypodium* Maslen, 1930, p. 515, pl. 25, figs. 4-6; pl. 26; pl. 28, fig. 19; cordaitan stem; Lower Coal Measures, Upper Carboniferous; Shore, Littleborough, Lancashire, England.

**MESOXYLON** Scott and Maslen, 1910.

*Mesoxylon sutcliffei* (Scott) Scott and Maslen, 1910, p. 237; cordaitan stem; Lower Coal Measures, Upper Carboniferous; Lancashire, England. See Scott, 1909, p. 511, fig. 184.

**MESOXILOPSIS** Scott, 1919.

*Mesoxylopsis arberae* Scott, 1919, p. 17, pl. 1, figs. 7-9; pl. 2, figs. 11-14; cordaitan stem; Lower Coal Measures, Upper Carboniferous; Shore, Littleborough, Lancashire, England.

**METACAENOXYLON** Zalesky, 1935.

*Metacaenoxylon carpentieri* Zalesky, 1935a, p. 740, pl. 1, figs. 3-5; pl. 2, figs. 4-6; Permian; village of Dratchonina, Kuznets Basin, Russia.

**METACALAMOSTACHYS** Hirmer, 1927.

*Metacalamostachys palaeacea* (Stur) Hirmer, 1927, p. 454, fig. 544; Upper Carboniferous; Loire, France.

**METACEDROXYLON** Holden, 1913.

*Metacedroxylon araucarioides* Holden, 1913, p. 538, pl. 40, figs. 17-21; coniferous wood; Jurassic (Oolite); Whitby and Scarborough, England.

**METACLEPSYDROPSIS** Paul Bertrand, 1907.

*Metaclepsydropsis duplex* (Williamson) Paul Bertrand, 1907, p. 776, coenopterid fern; Carboniferous. See also Bertrand, Paul, 1909, p. 121, pl. 2, fig. 7; and Posthumus, 1931.

**METACORDAITES** Renault, 1896.

*Metacordaites rigolotti* Renault, 1896b, p. 31, figs. 1-10; cordaitan stem; Carboniferous; Autun, France.

**METACUPRESSINOXYLON** Torrey, 1923.

*Metacupressinoxylon cedroides* (Holden) Torrey, 1923, p. 84. For *Paracupressinoxylon cedroides* Holden, 1913, p. 537, pl. 39, figs. 11-14; Jurassic; Yorkshire, England.

**METASEQUOIA** Miki, 1941.

*Metasequoia disticha* (Heer) Miki, 1941, p. 262, pl. 5; cones and foliage, Taxodiaceae; lower Pliocene; central Hondo, Japan.

**METASOLENOPORA** Yabe, 1912.

*Metasolenopora rothpletzi* Yabe, 1912, p. 2, pl. 1, figs. 2, 3; alga; Upper Jurassic to Lower Cretaceous; Shikoku, Japan.

**METROSIDEROPHYLLITES** Hector, 1880.

*Metrosiderophyllites ovata* Hector, 1880, p. 49; nom. nud.

**METZGERITES** Steere, 1946.

*Metzgerites glebosus* (Harris) Steere, 1946, p. 306; liverwort, Jungermanniales; *Thaumatopteris* zone, Lower Jurassic (Liassic); Nell's Cliff, Scoresby Sound, east Greenland. For *Hepaticites glebosus* Harris, 1931b, p. 4, pl. 1, figs. 3, 4.

**MEYENITES** Unger, 1842.

*Meyenites acquimontanus* Unger, 1842, p. 102; wood; Miocene; Gleichenberg, Styria. See also Unger, 1854c, p. 183, pl. 7, figs. 4-6.

**MIADESMIA** C. E. Bertrand, 1895.

*Miadesmia membranacea* C. E. Bertrand, 1895, p. 588; lycopod cone; Carboniferous; Hough Hill, Staleybridge, England. See also Benson, 1908, pls. 30-37.

**MICHEEVIA** Zalesky, 1930.

*Michoevia uralica* Zalesky, 1930a, p. 738, pl. 72, figs. 1-4; pl. 73, fig. 2; lycopod stem impression; Carboniferous; Podosinino, Oural, Russia.

**MICONIOPHYLLUM** Dusen, 1908.

*Miconiophyllum australe* Dusen, 1908, p. 2, pl. 1, fig. 14; leaf, dicotyledon; Tertiary; Seymour Island, Antarctic Ocean.

**MICROCHEIRIS** Harris, 1935.

*Microcheiris enigma* Harris, 1935, p. 118, pl. 8; seed-bearing organ, Caytoniales?; *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**MICROCHORTON** Reis, 1923?

*Microchorton claviger* Reis, 1923, p. 109, pl. 3, figs. 10-13; pl. 5, fig. 1; Tertiary; Rhenish Prussia.

**MICROCOCOCITES** Meschinelli, 1898.

*Microcococites lepidophagus* (Renault) Meschinelli, 1898, p. 62, pl. 18, fig. 13; pl. 19, figs. 5, 6; Schizomycete, in coprolite; Permian.

**MICROCOCCLUS** Renault, 1895.

*Micrococcus quignardi* Renault, 1895a, p. 218; bacteria; Upper Carboniferous (Stephanien); Grand Croix, France. See also Renault, 1895b, p. 450, fig. 10.

**MICROCODIUM** Gluck, 1912.

*Microcodium elegans* Gluck, 1912, p. 4, pls. 1-4; Tertiary (Braunkohle); Baden, Germany.

**MICRODICTYON** Saporta, 1872.

*Microdictyon rutenicum* Saporta, 1872-73, p. 309, pl. 33, figs. 2-4; pl. 35, fig. 3; pl. 44, fig. 5; fern foliage; Jurassic; Liqueuse, France.

**MICROLEPIDIUM** Velenovsky, 1889.

*Microlepidium striatulum* Velenovsky, 1889, p. 11, pl. 1, figs. 25-27; cone, Coniferales; Upper Cretaceous; Lipenec, Bohemia.

**MICROPHYCUS** Matthew, 1890.

*Microphycus catenatus* Matthew, 1890a, p. 146, pl. 5, fig. 6; alga?; Cambrian; Canada.

**MICROPHYLLOPTERIS** E. A. N. Arber, 1917.

*Microphylopteris pectinata* (Hector) E. A. N. Arber, 1917, p. 40, pl. 7, figs. 3-6, 8-11; Lower Jurassic; Mataura Falls, New Zealand; and Cretaceous (Neocomian); Waikato Heads, New Zealand.

**MICROPODIUM** Saporta, 1861.

*Micropodium oligospermum* Saporta in Heer, 1861, p. 149; seed, Leguminosae?; Eocene; Aix, Provence, France. See also Saporta, 1873a, p. 123, pl. 18, fig. 1.

**MICRORRHAGION** Ettingshausen, 1883.

*Microrrhagion liversidgei* Ettingshausen, 1883, p. 112, pl. 1, figs. 7-11; monocotyledonous infructescence?; Tertiary; Wallerawang, New South Wales.

**MICROSPERMOPTERIS** Baxter, 1949.

*Microspormopteris aphyllum* Baxter, 1949, p. 289, pls. 2-5; petrified stem, Pteridospermae?; Des Moines group, Pennsylvanian; What Cheer, Iowa.

**MICROSPERMUM** E. A. N. Arber, 1914.

*Microspermum samaroides* (Carpenter) E. A. N. Arber, 1914, p. 106, and 90, pl. 7; seed; Carboniferous (Westphalian); northern France.

**MICROSTROMIUM** Reinsch, 1881.

*Microstromium* sp. Reinsch, 1881, p. 91, pl. 31a, figs. 1-7; Upper Carboniferous; Zwickau, Saxony.

**MICROTAENIA** Knowlton, 1918.

*Microtaenia variabilis* Knowlton, 1918, p. 81, pl. 29, figs. 1-4; fertile fern foliage, Polypodiaceae; Frontier formation, Upper Cretaceous; Cumberland (15 miles south of Kemmerer), Wyo.

**MICROTESTA** Chapman, 1927.

*Microtesta triassica* Chapman, 1927b, p. 144, pl. 12, fig. 38; seed, incertae sedis; Triassic; Bald Hill, Bacchus Marsh, Victoria.

**MICROTHYRIACITES** Cookson, 1947.

*Microthyriacites ambriatus* Cookson, 1947b, p. 211, pl. 13, fig. 17; ascomata, Microthyriaceae; Oligocene-Miocene; Traralgon, Victoria.

**MICROTHYRITES** Pampaloni, 1902.

*Microthyrites disodilis* Pampaloni, 1902, p. 127, pl. 11, fig. 1; fungus peritheciium?; Miocene; Melilli, Sicily.

**MICROTINOMISCIUM** Reid and Chandler, 1933.

*Microtinomiscium foveolatum* Reid and Chandler, 1933, p. 164, pl. 4, figs. 5, 6; fruit, Menispermaceae; London Clay, Eocene; Minster, Kent, England.

**MICROZYGIA** Read, 1936.

*Microzygia lacunosa* Read, 1936b, p. 223, fig. 9; petrified petiole, Palaeopteridales; New Albany shale, Upper Devonian; Junction City, Boyle County, Ky.

**MILDRAEDIODENDRON** Harms, 1920.

*Mildraediodendron excelsum* Harms, in Menzel, 1920, p. 26; Pleistocene; Jonje, Dibundja, Africa.

**MILLERIA** Lang, 1926.

*Milleria thomsoni* Lang, 1926, p. 790, pl. 1, figs. 6-8; fertile "frond," compared with *Aneurophyton germanicum*; Old Red Sandstone, Devonian; Yesknary, Orkney, Scotland.

**MIMOSITES** Bowerbank, 1840.

*Mimosites browniana* Bowerbank, 1840, p. 140, pl. 17, fig. 42; fruit, Leguminosae; Eocene; Isle of Sheppey, Kent, England.

**MINSTEROCARPUM** Reid and Chandler, 1933.

*Minsterocarpum alatum* Reid and Chandler, 1933, p. 416, pl. 21, figs. 26-31; fruit, Lythraceae; London Clay, Eocene; Sheppey, Kent, England.

**MIQUELITES** Goeppert, 1854.

*Miquelites elegans* Goeppert, 1854, p. 56, pl. 1, figs. 6, 7; wood, incertae sedis; Tertiary; Java.

**MIRBELLITES** Unger, 1845.

*Mirbellites lesbii* Unger, 1845, p. 242; wood; Tertiary?; Island of Lesbos, Greece.

**MITCHELDEANIA** Wethered, 1886.

*Mitcheldeania nicholsoni* Wethered, 1886, p. 535, pl. 14, fig. 6; plant?; Lower Carboniferous; Mitcheldean, England.

**MITROPICEA** Debey, 1848.

*Mitropicea decheni* Debey, 1848, p. 120; nom. nud.

**MITROSPERMUM** Arber, 1910.

*Mitrospermum compressum* (Williamson) Arber, 1910, p. 503, pls. 37-39; petrified seed, Cordaitales?; Lower Coal Measures, Upper Carboniferous; Oldham, Lancashire, England.

**MITSCHERLICHIA** Lorenz, 1904.

*Mitscherlichia chinensis* Lorenz, 1904, p. 194; alga; Cambrian; Shantung, China.

**MITTAGIA** Lignier, 1913.

*Mittagia seminiformis* Lignier, 1913, p. 65, pl. 8; sporangia; Carboniferous (Westphalien); Ostrau, Silesia.

**MIXONEURA** C. E. Weiss, 1870.

*Mixoneura obtusa* (Brongniart) C. E. Weiss, 1870a, p. 865. For *Odontopteris obtusa* Brongniart, 1828-38, pl. 78, figs. 3, 4; fernlike foliage; Carboniferous.

**MIZZIA** Schubert, 1908.

*Mizzia velebitana* Schubert, 1908, p. 382, fig. 5; pl. 16, figs. 8-12; Upper Carboniferous; Dalmatia, Austria-Hungary.

**MOELLERINA** Ulrich, 1886.

*Moellerina greenii* Ulrich, 1886, p. 34, pl. 3, fig. 8; Devonian; Ohio.

**MOHLITES** Unger, 1839.

*Mohlites parenchymatosus* Unger, 1839, p. 13. See Unger, 1854, p. 182, pl. 6, figs. 14-16.

**MOKRAWIA** Knopp, 1933.

Preuss. geol. Landesanst. Inst. Paläobotanik u. Petrographische Brennsteine Arb., Band 3, p. 158 (not seen, cited in Gothan, 1942b, p. 133).

**MOLASPORA** Schemel, 1950.

*Molaspora rugosa* Schemel, 1950, p. 753, fig. 12; spore?; Cretaceous; Plymouth County, Iowa.

**MOLTENIA** Du Toit, 1927.

*Moltenia dentata* Du Toit, 1927, p. 380, fig. 20; bennettitalean? leaf; Molteno beds, Upper Triassic; Waterfall, Upper Umkomas Valley, Natal.

**MOMIPITES** Wodehouse, 1933.

*Momipites coryloides* Wodehouse, 1933, p. 511, fig. 43; pollen, Ulmaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

**MONEMITES** Massalongo, 1850.

*Monemites cadiotides* Massalongo, 1850, p. 25; alga; Eocene; Monte Bolca, Italy.

**MONHELMIA** Debey and Ettingshausen, 1859.

*Monheimia polypodioides* Debey and Ettingshausen, 1859b, p. 211, pl. 3, figs. 34-36; pl. 4, figs. 1, 2, 21; fern frond fragment; Upper Cretaceous; Aachen, Rhenish Frisia.

**MONILITES** Pampaloni, 1902.

*Monilites albida* Pampaloni, 1902, p. 128, pl. 11, fig. 2; fungus mycelium with conidia; Miocene; Mellilli, Sicily.

**MONIMIOPSIS** Saporta, 1868.

*Monimiopsis amboraefolia* Saporta, 1868, p. 361, pl. 8, fig. 13; leaf, Monimiacae; Eocene; Sézanne, France.

**MONOCARPELLITES** Perkins, 1904.

*Monocarpellites whitfieldii* Perkins, 1904, p. 180, pl. 76, fig. 21; fruit; Tertiary; Brandon, Vt.

**MONOCARPIA** Jongmans and Gothan, 1935.

Jaarb. mijnwezen Nederlandish-Indië, 1930, Verh., boekdeel 59, p. 97 (not seen, cited in Gothan, 1942b, p. 133).

**MONOCERAS**.

Apparently error for *Monocercocarpus*, in Gothan, 1909, p. 399.

**MONOCEROCARPUS** Raciborski, 1909.

*Monocercocarpus miocaenicus* Raciborski, 1909, p. 283, fig. 4; Miocene; Tjilatjap, Pupu Merak, Java.

**MONOCOTYLOPHYLLUM** Reid and Chandler, 1926.

*Monocotylphyllum* sp. Reid and Chandler, 1926, p. 87, pl. 5, fig. 12; monocotyledonous leaf, family uncertain; Bembridge marl, Oligocene; Isle of Wight, England.

**MONODOROSPERMUM** Warburg, 1897.

*Monodorospermum bangkanum* Warburg, 1897, p. 232, pl. 4, figs. 1-5; Pliocene; Bangka Island, Indonesia.

**MONOLETES** (Ibrahim, 1933) emended by Schopf, Wilson, and Bantall, 1944.

*Monoletes ovatus* Schopf, 1936, p. 108, fig. 7. See also Ibrahim, 1933, p. 39; Schopf, Wilson, and Bantall, 1944, p. 38.

**MONOPHYLLITES** Kuntze, 1904.

No species name assigned, in Post and Kuntze, 1904, p. 373.

**MONOSPHENOPHYLLUM** Lotsy, 1909.

No new combination actually made but intended as *Monosphenophyllum dawsoni* (Williamson) Lotsy, 1909, p. 525, fig. 349, III.

**MONOSULCITES** Erdtman, 1948.

*Monosulcites magnolioides* Erdtman, 1948, p. 269, fig. 11; pollen, affinities with *Magnolia*?; Lower Jurassic (Liassic); Palsjo, Scania, Sweden.

**MONTELLA** (Munier-Chalmas) Morellet and Morellet, 1922.

*Montiella munieri* Morellet and Morellet, 1922, p. 12, pl. 9, figs. 31, 32; alga, Dasycladaceae; Eocene (Montien); Mons, Belgium.

**MORANIA** Walcott, 1919.

*Morania confuens* Walcott, 1919, p. 226, pl. 43, figs. 1-3; pl. 44, figs. 1-11; pl. 45, fig. 1; pl. 58, fig. 3; alga, Nostocaceae; Middle Cambrian; 1 mile northeast of Burgess Pass, above Field, British Columbia.

**MORANIA** Seward and Sahni, 1920.

*Morania oldhami* (Zeiller) Seward and Sahni, 1920; coniferous shoot; Lower Gondwana, "Permian-Carboniferous"; Moran Valley, India. See *Morano-cladus*. For *Araucarites oldhami* Zeiller, 1902, p. 36, pl. 7, fig. 6.

**MORANOCLADUS** Seward and Sahni, 1926.

*Moranocladus oldhami* (Zeiller) Seward and Sahni, 1926, p. 288. Change of name for *Morania* Seward and Sahni; see above.

**MOREAUIA** Pomel, 1849.

*Moreauia araucarina* Pomel, 1849, p. 350.

**MORELLETOPORA** Varma, 1950.

*Morelletopora nammalensis* Varma, 1950, p. 207, 2 figs.; alga, Dasycladaceae; Paleocene; Nammal Gorge of the Punjab Salt Range, India.

**MOREOPHYLLUM** Geyler, 1887.

*Moreophyllum* sp. Geyler, 1887a, p. 492, pl. 34, figs. 4, 5; leaf fragments, Moraceae; Eocene; Labuan, Borneo.

**MORESNETIA** Stockmans, 1946.

*Moresnetia zaleskyi* Stockmans, 1946a, p. 1, fig. 1; Upper Devonian; Belgium. For full account, see Stockmans, 1948, p. 55, pl. 9, figs. 1-7a.

**MORICONIA** Debey and Ettingshausen, 1859.

*Moriconia cycloaxon* Debey and Ettingshausen, 1859b, p. 239, pl. 7, figs. 23-27; fern foliage; Upper Cretaceous; Aachen, Rhenish Prussia.

**MORINDIDIUM** Stiehler, 1861.

*Morindidium brongniarti* Stiehler, 1861, p. 124.

**MORINIUM** Ettingshausen, 1854.

*Morinium populifolium* Ettingshausen, in Reuss, 1854, p. 740; Cretaceous (Cenomanian); Moleteln, Moravia; nom. nud.

**MOROSPORIUM** Renault and Roche, 1898.

*Morosporium lignitum* Renault and Roche, 1898, p. 227, pl. 13, figs. 1-3; fungus mycelium with conidia; Eocene; Herault, France.

**MUCEDITES** Bertrand and Renault, 1896.

*Mucedites stercoraria* Bertrand and Renault, in Renault, 1896a, p. 443, figs. 91, 92; fungus, in coprolites; Upper Carboniferous; Igornay, France.

**MUCORITES** Meschinelli, 1898.

*Mucorites combrensis* (Renault) Meschinelli, 1898, p. 9, pl. 5, fig. 13; fungus, Phycomycete, in lycopod macrospore; Carboniferous; Loire, France.

**MUCORODIUM** Zalesky, 1915.

*Mucorodium paleomycoides* Zalesky, 1915, p. 57; pl. 4, figs. 1-4; pl. 5; pl. 6, figs. 1-3; pl. 7, figs. 1-6; mycelium, Mucoraceae; Carboniferous; Russia.

**MUCUNITES** Heer, 1859.

*Mucunites grepint* Heer, 1859, p. 103, pl. 134, figs. 9-12; Tertiary; Switzerland.

**MUNDAPTERIS** Teixeira, 1948.

*Mundapteris delicata* Teixeira, 1948, pl. 44, figs. 1-9; fernlike foliage; Cretaceous; Vila Verde de Tentugal, Portugal.

**MUNIERIA** Hantken, 1883.

*Munieria baconica* Hantken, in Deecke, 1883, p. 9, pl. 1, figs. 4-10; siphonaceous alga; Cretaceous; Bakony, Hungary.

**MUNIERINA** Viguiet, 1907.

*Munierina oecenia*, Viguiet, 1907a, p. 605; flower, Ranunculaceae?; Eocene; Sézanne, France.

**MÜNSTERIA** Sternberg, 1833.

*Münsteria vermicularis* Sternberg, 1833 (1820-38), p. 32, pl. 1, fig. 3; alga?; Jurassic; Solenhofen, Bavaria.

**MURCHISONITES** Goeppert, 1859.

*Murchisonites forbesii* Goeppert, 1859, p. 441, pl. 35, fig. 1.

**MUSAEITES** Presl, 1838.

*Musacites primaevus* Presl, in Sternberg, 1838 (1820-38), p. 191, pl. 39, fig. 6; stem, incertae sedis; Carboniferous; Kruschowitz, Bohemia.

**MUSCITES** Brongniart, 1828.

*Muscites tournallii* Brongniart, 1828 (1828a-38), p. 93, pl. 10, figs. 1, 2; moss; Tertiary; Armissan near Narbonne, France.

**MUSITES**.

Mistake? for *Muscites*, in Pimenova, 1929, p. 192.

**MUSCOCARPUM** (Brongniart) Grand'Eury, 1877.

*Muscocarpum prismaticum* Brongniart, in Grand'Eury, 1877, p. 184, pl. 15, fig. 3 (plate is labelled *Trigonocarpus*?); seed; Carboniferous; Roche-la-Mollère, France. See *Muscocarpum prismaticum* Brongniart, 1828b, p. 137; nom. nud.; also Seward, 1917, p. 361.

**MUSOPHYLLUM** Goeppert, 1854.

*Musophyllum truncatum* Goeppert, 1854, p. 39, pl. 7, fig. 47; leaf fragment, referred to Musaceae; Eocene; Java. Earlier citation by Goeppert, 1853a, p. 434; nom. nud.

**MUSOXYLON** Meschinelli and Squinabol, 1893.

*Musoxylon antracotherii* (Massalongo) Meschinelli and Squinabol, 1893, p. 194; Scitaminaceae; Tertiary; Italy.

**MYCOGEMMA** Zalesky, 1915.

*Mycogemma saccharomycoides* Zalesky, 1915, p. 64; pl. 10, figs. 5-7; pl. 11; mycelium, Ascomycete?; Carboniferous; Russia.

**MYCORRHIZONIUM** F. E. Weiss, 1904.

*Mycorrhizonium* sp. F. E. Weiss, 1904a, p. 264, pls. 18, 19; mycorrhizal fungus; Halifax Hard bed; Upper Carboniferous; England.

**MYELOCALAMITES** Grand'Eury, 1877.

*Myelocalamites approximatus* (Schlotheim) Grand'Eury, 1877, p. 510. For *Calamites approximatus* Schlotheim, 1820, p. 399; see also Artis, 1825, p. 4, pl. 4.

**MYELOPHYCUS** Ulrich, 1904.

*Myelophycus curvatum* Ulrich, 1904, p. 145, pl. 13, fig. 2; alga?; Yakutat formation, Lower Jurassic (Liassic); Woody Island, Kodiak, Alaska.

**MYELOPITHYS** Corda, 1845.

*Myelopithys medullosa* Corda, 1845, p. 30, pl. 11, figs. 4-8; fragment of *Medullosa* stem?; Carboniferous; Mühlhausen, Bohemia.

**MYELOPTERIS** Renault, 1874.

*Mylopteris radiata* Renault, 1874, p. 259, medullous petiole; Permian?; Antun, France.

**MYELOXYLON** Brongniart, 1849.

*Myeloxylon elegans* (Cotta) Brongniart, 1849, p. 109. For *Medullosa elegans* Cotta, 1832, p. 61, pl. 12, figs. 1-5. These illustrations actually convey little information. The following is suggested as a more suitable type species: *Myeloxylon radiatum* (Renault) Schenk, see Zeiller, 1890, p. 290, pl. 27, fig. 1.

**MYOPORIPHYLLUM** Ettingshausen, 1891.

*Myoporiphyllum angustum* Ettingshausen, 1891, p. 291; pl. 5, figs. 24, 25; leaf, *Asperifoliaceae*; Miocene; Johann-Stollen, Schoenegg, Styria.

**MYRCIPHYLLUM** Engelhardt, 1891.

*Myrciphyllum ambiguaeoides* Engelhardt, 1891, p. 681, pl. 3, fig. 5; leaf fragment, *Myrtaceae*; Tertiary; Chile.

**MYRIASPERMUM** C. F. W. Braun, 1840.

*Myriaspermum granum* C. F. W. Braun, 1840, p. 105; nom. nud.

**MYRICAEPHYLLUM** Fontaine, 1889.

*Myricaephyllum dentatum* Fontaine, 1889, p. 316, pl. 156, fig. 6; leaf, compared with *Myrica*; Potomac group, Lower Cretaceous; near Brooke, Va.

**MYRICANTHIUM** Velenovsky, 1889.

*Myricanthium amentaceum* Velenovsky, 1889, p. 16, pl. 2, figs. 24-26; inflorescence, *Myricaceae*?; Cretaceous (Cenomanian); Vyserovic, Bohemia.

**MYRICIPHYLLUM** Conwentz, 1886.

*Myriciphyllum oligocenicum* Conwentz, 1886, p. 42, pl. 4, figs. 14-16; leaf, in amber, *Myricaceae*; Tertiary; West Prussia.

**MYRICIPITES** Wodehouse, 1933.

*Myricipites dubius* Wodehouse, 1933, p. 506, fig. 33; pollen, *Myricaceae*; Parachute Creek member, Green River formation; Eocene; Colorado and Utah.

**MYRICOPHYLLUM** Saporta, 1862.

*Myricophyllum gracile* Saporta, 1862, p. 255; pl. 10, fig. 1; leaf, *Proteaceae*; Tertiary; Aix, Provence, France.

**MYRIOPHYLLITES** Artis, 1825.

*Myriophyllites gracilis* Artis, 1825, p. 12, pl. 12; roots, incertae sedis; Carboniferous; near Wentworth, Yorkshire, England.

**MYRIOPHYLLOIDES** Hick and Cash, 1881.

*Myriophylloides williamsoni* Hick and 1881, p. 404, pl. 21; calamitean roots; Upper Carboniferous; Halifax, England. See also Seward, 1898, p. 342.

**MYRIOTHECA** Zeiller, 1883.

*Myriotheca desaillyi* Zeiller, 1883, p. 187, pl. 9, figs. 18-20; fertile fern frond; Upper Carboniferous; Pas-de-Calais, France.

**MYRISTICOPHYLLUM** Geyler, 1887.

*Myristicophyllum minus* Geyler, 1887a, p. 498, pl. 33, figs. 5, 6; leaf fragments, *Myristicaceae*; Eocene; Labuan, Borneo.

**MYRISTICOXYLON** Boureau, 1950.

*Myristicoxylon princeps* Boureau, 1950a, p. 523, pl. 1, figs. 1, 2; Oligo-Miocene; Sahara Soudanese, Asselar.

**MYRMEKIOPORELLA** Pia, 1925.

*Myrmekioporella mosana* Pia, 1925, p. 85, pl. 1, fig. 8; alga, *Siphoneae Verticillatae*; Jurassic (Malm); St. Mihiel, France.

**MYRSINITES** Ettingshausen, 1868.

*Myrsinites antiquus* Ettingshausen, 1868a, p. 227, pl. 37, fig. 26; leaf, *Myrsinaceae*; Miocene; Priesen, Bohemia.

**MYRSINOPHYLLUM** Velenovsky, 1889.

*Myrsinophyllum varians* Velenovsky, 1889, p. 25, pl. 4, figs. 8, 9; pl. 5, fig. 12; pl. 6, figs. 10, 11; leaf, compared with *Myrsine feruginea* (*Myrsinaceae*); Upper Cretaceous (Cenomanian); Lidice, Bohemia.

**MYRSINOPSIS** Conwentz, 1886.

*Myrsinopsis succinea* Conwentz, 1886, p. 118, pl. 11, figs. 21-23; flower, in amber, *Myrsinaceae*; Tertiary. West Prussia.

**MYRTHOMYOPHYTON** Massalonge, 1857.

*Myrthomyophyton stephanophorus* Massalonge, 1857b, p. 777; Eocene; Monte Bolca, Italy; nom. nud.

**MYRTIFOLIUM** Unger, 1864.

*Myrtifolium lingua* Unger, 1864, p. 10, pl. 4, figs. 1, 2; leaf, *Myrtaceae*; Tertiary; Drury, near Auckland, New Zealand.

**MYRTIPHYLLUM** Dusen, 1899.

*Myrtiphyllum bagualense* Dusen, 1899, p. 103, pl. 11, figs. 7-9; leaves, compared with *Eugenia* (*Myrtaceae*); Oligocene; Baguales, Chile.

**MYRTOMIOPHYTON** Massalongo, 1858.

*Myrtomiophyton stephanophorus* Massalongo, 1858b, p. 769; fruit, Myrtaceae; Tertiary. See also Massalongo, 1859a, p. 77, pl. 32, fig. 1.

**MYRTONIUM** Ettingshausen, 1887.

*Myrtonium obtusifolium* Ettingshausen, 1887a, p. 133, pl. 14, fig. 20; pl. 15, figs. 14, 15; leaf, Myrtaceae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

**MYRTOPHYLLUM** Heer, 1869.

*Myrtophyllum geinitzi* Heer, 1869a, p. 22, pl. 11, figs. 3, 4; Upper Cretaceous (Cenomanian); Moleteln, Moravia.

**MYXOMYCETES** Renault, 1895.

*Myxomycetes mangini* Renault, 1895d, p. 77, fig. 2; Upper Carboniferous; Combres, France. Meschinelli, 1898, p. 71, changes the spelling to *Myxomycites*.

**MYXOMYCITES.**

See *Myxomycetes*, Renault.

N

**NAGEIOPSIS** Fontaine, 1889.

*Nageiopsis longifolia* Fontaine, 1889, p. 195, pl. 75, fig. 1; pl. 76, figs. 2-6; pl. 77, figs. 1, 2; pl. 78, figs. 1-5; cycadophyte? foliage; Potomac group, Lower Cretaceous; Fredericksburg, Va.

**NAIADEA.**

See *Naiadita*.

**NAIADITA** Buckman, 1850.

*Naiadita lanceolata* Buckman, 1850, p. 415, fig. 2; emended by Harris, 1938. Original citation appears in Murchison, 1845, p. 52. Variouslly spelled as *Naiades*, *Najadita*, *Najadites*, *Naiadea*. For comprehensive review and complete synonymy, see Harris, 1938, p. 17-18.

**NAIADITES.**

See *Naiadita*.

**NAJADITA.**

See *Naiadita*.

**NAJADITES.**

See *Naiadita*.

**NAJADONIUM** Ettingshausen, 1872.

*Najadonium longifolium* Ettingshausen, 1872, p. 173, pl. 3, figs. 3-5; leaf, Najadaceae?. Original citation: Ettingshausen, 1871, p. 410; nom. nud.

**NAJADOPSIS** Heer, 1855.

*Najadopsis dichotoma* Heer, 1855, p. 104, pl. 48, figs. 1-6; stem fragments?; Najadaceae; Tertiary; Oeningen, Switzerland.

**NAKTONGIA** Oishi, 1939.

*Naktongia yabei* Oishi, 1939, p. 310, pl. 35, fig. 3; fertile fern foliage; Naktong series, Upper Jurassic; Korea.

**NATHORSTIA** Heer, 1880.

*Nathorstia angustifolia* Heer, 1880b, p. 7, pl. 1, figs. 1-6; fertile fern pinnales; Cretaceous; Pattorfk, Greenland.

**NATHORSTIA** Seward, 1894.

*Nathorstia valdensis* Seward, 1894a, p. 145, pl. 7, fig. 5; fernlike foliage; Wealden.

**NATHORSTIANA** Richter, 1909.

*Nathorstiana arborea* Richter, 1909 (1906-09), p. 3, pl. 8, figs. 1-3, 5, 8, 13; pl. 10, figs. 11, 15; Lower Cretaceous; Quedlenburg, Prussian Saxony.

**NAUCLEOXYLON** Crie, 1888.

*Naucleoxylon spectabile* Crie, 1888, p. 19, pl. 8, figs. 1, 2; Pliocene; Bultenzorg, Java.

**NAVAJOIA** Wieland, 1928.

*Navajoia magnifica* Wieland, 1928, p. 391; petrified cycadean trunks; Chuska Mts., N. Mex.; nom. nud.

**NECHALEA** Debey, 1848.

*Nechalea serrata* Debey, 1848, p. 115; nom. nud.

**NECTANDROPHYLLUM** Engelhardt, 1891.

*Nectandrophyllum* sp. Engelhardt, 1891, p. 654, pl. 4, fig. 6; pl. 9, fig. 12; leaf, Lauraceae; Tertiary; Chile.

**NEGUNDOIDES** Lesquereux, 1868.

*Negundoides acutifolia* Lesquereux, 1868, p. 101; leaves, compared with *Acer*; Cretaceous; north of Fort Ellsworth, Nebr. See also Lesquereux, 1874, p. 97, pl. 21, fig. 5.

**NELUMBITES** E. W. Berry, 1911.

*Nelumbites virginienis* (Fontaine) E. W. Berry, 1911a, p. 463, pl. 82, figs. 3-5; leaf, Nymphaeaceae; Patapsco formation, Lower Cretaceous; Maryland and Virginia.

**NEMAELADA** John Smith, 1896.

*Nemaclada alternata* John Smith, 1896, p. 320, pl. 7, fig. 10; fragment of mycelium, in amber; Upper Carboniferous; Annandale near Kilmarnock, Scotland.

**NEMALIONITES** Massalongo, 1851.

*Nemalionites timacoides* Massalongo, 1851, p. 41; nom. nud.

**NEMAPLANA** John Smith, 1896.

*Nemaplana filiforme* John Smith, 1896, p. 320, pl. 7, fig. 9; fragment of mycelium, in amber; Upper Carboniferous; Annandale near Kilmarnock, Scotland.

**NEMATOLITES** Keeping, 1882.

*Nematolites edwardsii* Keeping, 1882, p. 489, pl. 11, figs. 8-11; alga; various localities, central Wales.

**NEMATOPHORA** Gruss, 1924.

*Nematophora fascigera* Gruss, 1924, p. 8, pl. 5, fig. 44; pl. 6, figs. 10, 10, 13; Devonian; Magdalena Bay, Spitzbergen.

**NEMATOPHYCUS** Carruthers, 1872.

*Nematophycus logani* (Dawson) Carruthers, 1872, p. 160, pls. 21, 22; a problematical alga?; Devonian; Gaspé, Canada. See Arnold, 1947, p. 52.

**NEMATOPHYLLITES** S. A. Miller, 1892.

*Nematophyllites angustus* (Fontaine and White) S. A. Miller, 1892, p. 665. For *Nematophyllum angustum* Fontaine and White, 1880, p. 35, pl. 2, figs. 1-5; Permian?; West Union, W. Va.

**NEMATOPHYLLUM** Fontaine and White, 1880.

*Nematophyllum angustum* Fontaine and White, 1880, p. 35, pl. 2, figs. 1-5; apparently close to *Asterophyllites*; Waynesburg Coal, Pennsylvanian or Permian(?); West Union, W. Va. See *Nematophyllites*.

**NEMATOPHYTON** Dawson, 1888.

*Nematophyton logani* Dawson, 1888, p. 21; marine alga?; Devonian; Gaspé, Canada. For *Prototaxites logani* Dawson, 1859, p. 484, figs. 4a-c. See Arnold, 1947, p. 52.

**NEMATORITES** Gruss, 1928.

*Nematorites oscillatoriiformis* Gruss, 1928b, p. 506, pl. 41, figs. 19, 20.

**NEMATOTHALLUS** Lang, 1937.

*Nematothallus pseudovasculosa* Lang, 1937, p. 269, pl. 11, figs. 56, 60, 61, 64; pl. 12, figs. 70-82; incertae sedis; Downtonian, Devonian; Perton Quarry, Saltwells, South Pembrokeshire, England.

**NEMATOXYLON** Dawson, 1863.

*Nematoxylon crassum* Dawson, 1863a, p. 466, pl. 19, fig. 24; compared with *Prototaxites* but with larger cells and no "medullary rays"; Devonian; Gaspé, Canada.

**NEOCALAMITES** Halle, 1908.

*Neocalamites hoerensis* (Schimper), Halle, 1908, p. 6, pls. 1, 2; calamitean stem; Lower Jurassic; Helsingborg, Bjuf, Skromberga, etc., Sweden.

**NEOCALLIERGON** Williams, 1930.

*Neocalliergon integrifolium* Williams, 1930, p. 36, pl. 5, figs. 8-11; moss, compared with *Calliergon* and *Calliergonella*; Pleistocene; Minneapolis; Minn.

**NEOCHONDRITES** Saporta, 1893.

*Neochondrites* sp. Saporta, 1893b, p. 121; nom. nud.

**NEOGYROPORELLA** Yabe and Toyama, 1949.

*Neogyroporella elegans* Yabe and Toyama, 1949, p. 163, figs. 5-10; alga, Dasycladaceae; Torinosu limestone, Upper Jurassic; Hanabata Togano-mura, Japan.

**NEOZAMIA** Pomel, 1846.

*Neozamia joubertiana* Pomel, 1846, p. 655. For *Flabellaria borassifolia* Sternberg, 1820-38, p. 32, pl. 18.

**NEPHELITES** Deane, 1902.

*Nephelites equidantata* Deane, 1902a, p. 61, pl. 15, fig. 3; leaf, compared with *Quercus dampieri* Ettingshausen; Tertiary; Wingello, New South Wales.

**NEPHROPSIS** Zalessky, 1912.

*Nephropsis integerrima* (Schmalhausen) Zalessky, 1912, p. 28. A name suggested by Zalessky for *Ginkgo integerrima* Schmalhausen, 1879, p. 85, pl. 16, figs. 12-15; *Ginkgo*-like leaves; Permian; Lower Tougouska, Russia. See also Seward, 1919, p. 77.

**NEPHROPTERIS** Brongniart, 1849.

*Nephropteris obliqua* Brongniart, 1849, p. 65. For *Cyclopteris obliqua* Brongniart, 1828a-38, p. 221, pl. 61, fig. 3; cyclopterid "stipule"; Carboniferous; Greenough, Yorkshire, England.

**NEREOGRAPSUS** Geinitz, 1864.

*Nereograpsus jacksoni* (Emmons) Geinitz, 1864, p. 6, pl. 2, fig. 4; plant?.

**NERIOPTERIS** Newberry, 1873.

*Neriopteris lanceolata* Newberry, 1873, p. 381, pl. 45; fernlike foliage; Pennsylvanian; near Cuyahoga Falls, Summit County, Ohio.

**NERITINUM** Unger, 1850.

*Neritinium dubium* Unger, 1850b, p. 125, pl. 14, fig. 13; leaves, Apocynaceae; Miocene; Radoboj, Croatia. Cited by Unger, 1845 (1841-47), p. 81; nom. nud.

**NEURALETHOPTERIS** Cremer, 1893.

*Neuralethopteris schlehani* (Stur) Cremer, 1893, p. 33. For *Neuropteris schlehani* Stur, 1877, p. 183, pl. 11, figs. 7, 8; Lower Carboniferous; Witkowitz, Moravia.

**NEUROCALLIPTERIS** Sterzel, 1895.

*Neurocallipteris gleichenioides* (Stur) Sterzel, 1895, p. 285, pl. 8, fig. 6; pl. 9, fig. 1.

**NEUROCARDIOPTERIS** Lutz, 1933.

*Neurocardiopteris broilli* Lutz, 1933, p. 138, pl. 18, figs. 1-10; *Neuropteris*-like foliage; Carboniferous (Culm); Germany.

**NEURODONTOPTERIS** Henry Potonie, 1893.

*Neurodontopteris auriculata* (Brongniart) Henry Potonie, 1893a, p. 12. For *Neuropteris auriculata* Brongniart, 1830 (1828a-38), p. 236, pl. 66; Upper Carboniferous; St.-Etienne, France.

**NEUROGANGAMOPTERIS** Zalessky, 1918.

*Neurogangamopteris cardiopteroides* (Schmalhausen) Zalessky, 1918, p. 48, pl. 2, fig. 1; pl. 2, figs. 7, 8, 10, 11, 13, 14; pl. 4, figs. 1, 2; pinnule, said to combine characters of *Neuropteris* and *Gangamopteris*; Permian; Tarbagatai, Russia.



**NEUROPHYLLUM** Kon'no, 1941.

*Neurophyllum koreanicum* Kon'no, 1941, p. 24, pls. 1, 2; foliage and cones, compared with *Phyllothea* and *Asterocalamites*; Jido series, Lower Permian; Taedong, South Helando, Korea.

**NEUROPTERIDIUM** Schimper, 1879.

*Neuropteridium grandifolium* Schimper, in Schimper and Schenk, 1879 (1879-90), p. 117, fig. 90; neuropterid pinnule; Lower Triassic.

**NEUROPTERIS** (Brongniart) Sternberg, 1825.

*Neuropteris heterophylla* (Brongniart) Sternberg, 1825 (1820-38), Tentamen, p. xvii. For *Filicites* (*Neuropteris*) *heterophyllus* Brongniart, 1822, p. 233, pl. 2, fig. 6. [When first used (as a subgenus of *Filicites*), Brongniart spelled this name with a "v"; it was changed to a "u" (*Neuropteris*) by Sternberg who gave it generic rank for the first time.]

**NEUROPTEROCARPUS** (Grand'Eury) Seward, 1917.

*Neuropterocarpus kidstoni* (Arber) Seward, 1917, p. 114, fig. 422; a name for seeds attached to *Neuropteris* foliage. See *Neuropterocarpus* sp. Grand'Eury, 1904, p. 785 (footnote).

**NEUROPTEROMEDULLOSA** Lotsy, 1909.

*Neuropteromedullosa stellata* (Cotta) Lotsy, 1909, p. 724, fig. 509. For *Medullosa stellata* Cotta, 1832, p. 65. See note under *Pecopteromedullosa*.

**NEURORAPHE** Reid and Chandler, 1933.

*Neuroraphe obovatum* Reid and Chandler, 1933, p. 491, pl. 28, figs. 37-42; seed, incertae sedis; London Clay, Eocene; Minster, Kent, England.

**NEUROSPERMUM** E. A. N. Arber, 1914.

*Neurospermum kidstoni* E. A. N. Arber, 1914, p. 93, pl. 8, fig. 47; seed (named for seeds previously shown by Kidston to be borne on foliage of *Neuropteris heterophylla*); Middle Coal Measures, Upper Carboniferous; Clays Croft, Cosely, South Staffordshire, England.

**NEUROSPHENOPTERIS** Zalesky, 1907.

*Neurospenopteris bohdanowiczii* Zalesky, 1907, p. 69. For *Sphenopteris bohdanowiczii* Zalesky, 1907, p. 65, pl. 2, fig. 2; fernlike foliage; Carboniferous; Dombrowa, Russia.

**NEUROSPORANGIUM** Debey and Ettingshausen, 1859.

*Neurosporangium foliaceum* Debey Ettingshausen 1859a, p. 190, pl. 1, fig. 5; alga; Cretaceous; Aachen, Rhenish Prussia.

**NEVROPTERIS.**

See *Neuropteris*.

**NEVROSPERMUM** Paul Bertrand, 1913.

*Nevospermum heterophyllae* Paul Bertrand, 1913, p. 124, fig. 2; Bertrand creates this genus for seeds borne on *Neuropteris* foliage; three species are recorded, the one cited here being the only one illustrated.

**NEWBERRYANA** E. W. Berry, 1910.

*Newberryana rigida* (Newberry) E. W. Berry, 1910c, p. 254, Raritan formation, Upper Cretaceous; New Jersey. For *Hausmannia rigida* Newberry, 1895, p. 35, pl. 2, figs. 2, 3, 5.

**NEWLANDIA** Walcott, 1914.

*Newlandia frondosa* Walcott, 1914, p. 105, pl. 5, fig. 4; pl. 6, figs. 1-3; pl. 7, figs. 1, 2; alga; Beltian series, Algonkian; 8 miles west of White Sulphur Springs, Meagher County, Mont.

**NIAYSSI** Zalesky, 1937.

*Palaeophytographica*, Moskau-Leningrad, 1937b, p. 18 (not seen, cited in Gothan, 1942b, p. 135).

**NIAZONARIA** Radsechenko, 1933.

Acad. sci. U. R. S. S., Inst. géologique, 1933, Travaux, tome 3, p. 252 (not seen, cited in Gothan, 1942b, p. 135).

**NICOLIA** Unger, 1842.

*Nicolia aegyptiaca* Unger, 1842b, p. 177; wood; Tertiary; Egypt. See Unger, 1858, p. 214, pl. 1, figs. 1, 2.

**NIDULITES** Salter, 1851.

*Nidulites javus* Salter, in Murchison, 1851, p. 174, pl. 9, figs. 16, 17; plant?; Silurian; Pembrokeshire, Wales.

**NILSSONIA** Brongniart, 1825.

*Nilssonia brevis* Brongniart, 1825, p. 218, pl. 12, figs. 4, 5; cycadophyte foliage; Rhaetic; Hoer, Sweden. For history of genus, see Nathorst, 1909a; see also Harris, 1941.

**NILSSONIOPTERIS** Nathorst, 1909.

*Nilssoniopteris tenuinervis* Nathorst, 1909a, p. 29, pl. 6, figs. 23-25; pl. 7, fig. 21; cycadophyte leaf; Jurassic; Cloughton Wyke, Yorkshire, England.

**NIPADITES** Bowerbank, 1840.

*Nipadites umbonatus* Bowerbank, 1840, pl. 1; palm fruit; Eocene; Sheppey, Kent, England. See Reid and Chandler, 1933, p. 118.

**NIPANIOPHYLLUM** Sahni, 1948.

*Nipaniophyllum rooti* Sahni, 1948, p. 52, fig. 1; *Taeniopteris*-like leaves borne on *Pentoxylon*; Rajmahal series, Jurassic; Nipania, Rajmahal Hills, India.

**NIPANIORUHA** Rao, 1947.

*Nipanioruha granthia* Rao, 1947, p. 389, pls. 1-6; petrified coniferous shoots, affinities with Podocarpaceae or Cupressinae; Rajmahal series, Jurassic; Nipania, Rajmahal Hills, India.

**NIPANIOSTROBUS** Rao, 1943.

*Nipaniostrobus sahnii* Rao, 1943a, p. 115, pls. 1-3, 5; petrified seed-bearing cone, Podocarpaceae?; Rajmahal series, Jurassic; Nipania, Rajmahal Hills, India.

**NIPANTOXYLON** Srivastava, 1944.

*Nipantoxylon guptai* Srivastava, 1944, p. 75, pl. 2, fig. 14; petrified stem closely related or actually referable to *Pentoxylon*; Rajmahal series, Jurassic; Nipania, Rajmahal Hills, India. See also Srivastava, 1937; 1946, p. 207; Sahnii, 1948.

**NIPONOPHYLLUM** Stopes and Fujii, 1910.

*Niponophyllum cordatiforme* Stopes and Fujii, 1910, p. 16, pl. 3, figs. 14-16; petrified gymnospermous leaves; Upper Cretaceous; Hokkaido, Japan.

**NIPPONOPHYCUS** Yabe and Toyama, 1928.

*Nipponophycus ramosus* Yabe and Toyama, 1928, p. 142, pl. 18, figs. 1-6; pl. 19, figs. 1-4; pl. 23, figs. 2, 3; alga, Rhodophyceae; Torinosu limestone, Mesozoic; Tosa, Japan.

**NODOPHYCUS** Herzer, 1901.

*Nodophycus thallyformis* Herzer, 1901, p. 26, pl. 1, fig. 2; marine alga; Carboniferous; Marietta, Ohio.

**NOEGGERATHIA** Sternberg, 1822.

*Noeggerathia foliosa* Sternberg, 1822 (1820-38), p. 33, pl. 20; fern or cycad frond (see Seward, 1910, p. 428); Upper Carboniferous; Bohemia.

**NOEGGERATHIASTROBUS** Ottokar Feistmantel, 1871.

*Noeggerathiastrobus bohemicus* Ottokar Feistmantel, 1871, p. 59; Upper Carboniferous; Radnitz, Bohemia. See also Feistmantel, 1876a, p. 270, pl. 61, fig. 5.

**NOEGGERATHIOPSIS** Ottokar Feistmantel, 1879.

*Noeggerathiopsis hislopi* (Bunbury) Ottokar Feistmantel, 1879, p. 23, pl. 19, figs. 1-6; pl. 20, fig. 1; Karharbari beds, Lower Gondwana; Domahni, India.

**NOEGGERATHIOSTROBUS** Němejč, 1928.

*Naeggerathiostrobus bohemicus* Němejč, 1928, p. 53, pl. 1, figs. 2-7; pl. 2, figs. 5-8; Carboniferous; central Bohemia.

**NOEOPTERIS** Janssen, 1940.

*Nocopteris asymmetrica* Janssen, 1940, p. 97, pl. 25, fig. 3; fern stem impression; Pennsylvanian; Mazon Creek, Ill.

**NORDENSKIÖLDIA** Heer, 1870.

*Nordenkiöldia borealis* Heer, 1870, p. 65, pl. 7, figs. 1-13; fruit, Tillaceae?; Miocene; Kings Bay, Spitzbergen.

**NORIMBERGIA** Gothan, 1914.

*Norimbergia braunii* (Goeppert) Gothan, 1914, p. 19, pl. 18, figs. 6-8; fertile fern frond, Schizaeaceae; Rhaetic; Nürnberg, Germany.

**NORINIA** Halle, 1927.

*Norinia cucullata* Halle, 1927, p. 218, pl. 56, figs. 8-12; cupule?; Upper Shihhotse series, Paleozoic; Ch'en-chia-yu, central Shansi, China.

**NOSTOCITES** Maslov, 1929.

*Nostocites problematica* Maslov, 1929, p. 122, pl. 70, fig. 8; Carboniferous; Donets Basin, Russia.

**NOTHOFAGOXYLON** Gothan, 1908.

*Nothofagoxylon scalariforme* Gothan, 1908, p. 20, pl. 2, figs. 14-18; wood, compared with *Nothofagus* (Fagaceae); Tertiary; Seymour Island, Antarctic Ocean.

**NOTHOPTERIS** C. F. W. Braun, 1847.

*Nothopteris mysteriosa* C. F. W. Braun, 1847, p. 87; nom. nud.

**NOTOSCHIZAEA** Graham, 1934.

*Notoschizaea robusta* Graham, 1934, p. 453, figs. 1-5; pl. 8, fig. 26; petrified sporangia, Zygopteridaceae; upper McLeansboro group, Pennsylvanian; Calhoun coal mine, Richland County, Ill.

**NOTOTHYRITES** Cookson, 1947.

*Notothyrites setiferus* Cookson, 1947b, p. 209, pl. 11, figs. 1-6; ascomata, Microthyriaceae; late Oligocene; Kerguelen Island near Port Jeanne d'Arc, South Indian Ocean.

**NUBECULARITES** Maslov, 1937.

*Nubecularites polymorphus* Maslov, 1937b, p. 345, pl. 4, fig. 1; calcareous alga; Middle Cambrian; Vvedenskoye, Russia.

**NUCELLANGIUM** H. N. Andrews, 1949.

*Nucellangium grabrum* (Darrach) H. N. Andrews, 1949, p. 491, pls. 35-39; sporangia of uncertain affinities, some showing gemma-type reproductive tissue?; Des Moines group, Pennsylvanian; Urbandale coal mine, Des Moines, Iowa.

**NULLIPORITES** Heer, 1865?

*Nulliporites hechtlingensis* (Quenstedt) Heer, 1865, p. 140, pl. 9, figs. 18, 19.

**NUMMULOSPERMUM** Walkom, 1921.

*Nummulospermum bovense* Walkom, 1921, p. 290, pl. 21; seed, associated with *Glossopteris*, "Permo-Carboniferous"; Three-Mile Creek, Bowen, Queensland.

**NYCTAGINITES** E. W. Berry, 1938.

*Nyctaginites ellipticus* E. W. Berry, 1938, p. 72, pl. 17, figs. 1, 2; leaf, Nyctaginaceae; Tertiary; Rio Pichileufu, Argentina.

**NYCTOMYCES** Unger, 1841.

*Nyctomyces antediluvianus* Unger, 1841 (1841-47), p. 3, pl. 1, fig. 3; fungus mycelium; Miocene; Gleichenberg, Styria.

**NYGMITES** Mägdefrau, 1937.

*Nygmites solitarius* (Hagenow) Mägdefrau, 1937, p. 56.

**NYMPHAEITES** Sternberg, 1825.

*Nymphaeites arethusae* (Brongniart) Sternberg, 1825 (1820-38), Tentamen, p. xxxix. For *Nymphaea arethusae* Brongniart, 1822, p. 332, pl. 6, fig. 9; Tertiary; fruit, Nymphaeaceae; Tertiary; Lonjumeau near Paris, France.

**NYMPHAEOPSIS** Kriusel, 1939.

Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, Band 47, p. 39 (not seen, cited in Gothan, 1942b, p. 136).

**NYSSIDIUM** Heer, 1870.

*Nyssidium ekmani* Heer, 1870, p. 62, pl. 15, figs. 1-5, 7; fruit, Araleaceae; Miocene; Cape Staratschin, Spitzbergen.

**NYSSITES** Geyler, 1887.

*Nyssites obovatus* (Weber) Geyler, 1887b, p. 162. For *Nyssa obovata* Weber, 1851, p. 184, pl. 20, fig. 11; Oligocene; Friesdorf, Rhenish Prussia. See also Geyler and Kinkel, 1887, p. 28, pl. 3, figs. 1-6.

**NYSSOIDITES** Thiergart?, 1950.

*Nyssoidites rodderensis* Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 59, pl. B, fig. 49; pollen, Nyssaceae?; Miocene; Chatt-Aquitain, Germany.

**NYSTROEMIA** Halle, 1927.

*Nystroemia pectiniformis* Halle, 1927, p. 221, pl. 59; seed-bearing organ and microsporangia, Pteridospermae?; Upper Shihhotse series, Paleozoic; Ch'en-chiauy Valley, central Shansi, China.

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**OCHROSELLA** Reid and Chandler, 1933.

*Ochrosella ovalis* Reid and Chandler, 1933, p. 480, pl. 27, figs. 30, 31; fruit, Apocynaceae; London Clay, Eocene; Minster, Kent, England.

**OCHROSOIDEA** Reid and Chandler, 1933.

*Ochrosoidea sheppeyensis* Reid and Chandler, 1933, p. 477, pl. 27, figs. 15-29; fruit, Apocynaceae; London Clay, Eocene; Sheppey, Kent, England.

**OCHTHODOCARYON** Mueller, 1877.

*Ochthodocaryon wilkinsonii* Mueller, 1877a (1877-79), p. 178, fruit; Tertiary; New South Wales. See also Mueller, 1879 (1877-79), p. 171, pl. 4, figs. 1, 2.

**OCOTEOXYLON** Schuster, 1908.

*Ocoteoxydon ligurinum* Schuster, 1908, p. 149, pl. 2, figs. 1-5; wood, Lauraceae; Eocene; Tegern Lake, Bavaria.

**ODONTOCARYON** Mueller, 1873.

*Odontocaryon macgregorii* Mueller, 1873 (1871-82), p. 41, pl. 6, figs. 5-8; Pliocene; Nintlingbool, Victoria.

**ODONTOPTERIS** Brongniart, 1825.

*Odontopteris brardii* Brongniart, in Sternberg, 1825 (1820-38), Tentamen, p. xxi. For *Filicites brardii* Brongniart, 1822, p. 234, pl. 2, fig. 5. See also Brongniart, 1828a-38, p. 252, pls. 75, 76. In the Sternberg reference the specific name is spelled *berardi* which is apparently a mistake, for Brongniart originally (1822) employed *brardii* and retains this in 1828-38.

**ODONTOPTEROCARPUS** Lubière, 1930.

*Odontopterocarpus oblongus* Lubière, 1930, p. 323; seeds; Carboniferous; St.-Etienne, France.

**ODONTOSORITES** Kobayashi and Yosida, 1944.

*Odontosorites heerianus* (Yokoyama) Kobayashi and Yosida, 1944, p. 267, 269, pl. 28, figs. 6, 7; fern foliage, compared with *Odontosoria*; Jurassic; Ryokusuin, Manchuria.

**OIDITES** Meschinelli, 1892.

*Oidites moniliformis* (Menge and Goepfert) Meschinelli, in Saccardo, 1892, p. 789; fungus, Hyphomycetaceae. See also Meschinelli, 1898, p. 77.

**OIDOSPORA** Williamson, 1878.

*Oidospora anomala* Williamson, 1878, p. 364, pl. 25, fig. 102 (figured but not described); Carboniferous.

**OLDHAMIA** Forbes, 1854.

*Oldhamia antiqua* Forbes, in Murchison, 1854, p. 32, fig. 1; plant?; Cambrian; Bray Head in Wicklow, Ireland.

**OLEAECARPUM** Menzel, 1913.

*Oleaecarpum germanicum* Menzel, 1913, p. 60, pl. 5, figs. 25, 26; fruit, Oleaceae; Tertiary (Braunkohle); Germany.

**OLEANDRIDUM** Schimper, 1869.

*Oleandridum vittatum* (Brongniart) Schimper, 1869 (1869-74), p. 607. For *Taeniopteris vittata* Brongniart, 1828a-38, p. 263, pl. 82, figs. 1-4; now believed to be foliage of *Williamsoniella*. See Thomas, H. H., 1915.

**OLEARIAPHYLLITES** Hector, 1880.

*Oleariaphyllites whaurangi* Hector, 1880, p. 49; nom. nud.

**OLEINITES** Cookson, 1947.

*Oleinites willistii* Cookson, 1947a, p. 188, pl. 8, figs. 1-5; mummified leaves, probably Oleaceae; Oligocene-Miocene; Yalourn, Victoria.

**OLEIPHYLLUM** Conwentz, 1886.

*Oleiphyllum boreale* Conwentz, 1886, p. 122, pl. 12, figs. 12-14; leaf, in amber, Oleaceae; early Tertiary; West Prussia.

**OLERACITES** Saporta, 1862.

*Oleracites convolvuloides* Saporta, 1862, p. 241, pl. 7, fig. 8; leaf, Oleaceae; Tertiary; France.

**OLFERSITES** Guembel, 1859.

*Olfersites dichotomus* Guembel, 1859b, p. 161. For *Schizeites dichotomus* Guembel, 1859, p. 101, pl. 8, fig. 7; compared with *Olfersia peltata*; Permian (Rothliegendes); Erbdorf, Bavaria.

**OLIGOCARPIA** Goepfert, 1841.

*Oligocarpia gutbieri* Goepfert, 1841b, p. 57, pl. 4, figs. 1, 2; fertile fern frond, probably Gleicheniaceae; Carboniferous; Saxony.

**OLIGOPORELLA** Pia, 1912.

*Oligoporella pilosa* Pia, 1912, p. 42, pl. 4, figs. 1-8; alga, Siphonaceae Verticillatae; Triassic; Dalmatia, Austria-Hungary.

**OMMATOXYLON** Hartig, 1848.

*Ommatoxylon germari* Hartig, 1848a, p. 172; wood; Tertiary; Germany.

**OMPHALOMELA** Germar, 1846.

*Omphalomela scabra* Germar, 1846, p. 29, pl. 3, fig. a; incertae sedis; Triassic (Keuper); Badeleben, Thuringia.

**OMPHALOPHLOIOS** David White, 1898.

*Omphalophloios cyclostigma* David White, 1898, p. 336, pls. 20-23; arborescent lycopod stem impression; Pennsylvania; Clinton, Henry County, Mo.

**ONCOBYRSELLA** J. H. Johnson, 1937.

*Oncobyrsella coloradensis* J. H. Johnson, 1937, p. 1235, pl. 2, figs. 3, 4; compared with *Oncobyrsa*, Cyanophyceae; Anteroformation, Oligocene; Park County, Colo.

**ONCODENDRON** Eichwald, 1860.

*Oncodendron mirabile* Eichwald, 1860, p. 213, pl. 16, figs. 7, 8; pl. 21, fig. 8; lycopod? stem; Upper Carboniferous; Bjelebi, Orenbourg, Russia. Earlier citation: Eichwald, in Mercklin, 1856, p. 80; nom. nud.

**ONCOPTERIS** Dormitzer, 1853.

*Oncopteris nettwalli* Dormitzer, in Krejčí, 1853, p. 28, pl. 2; Cretaceous (Cenomanian); Kaunitz, Bohemia. See also Posthumus, 1931.

**ONCYLOGONATUM** König, 1827.

*Oncylogonatum carbonarium* König, in Murchison, 1827, p. 300, pl. 32 (1829); compared with *Equisetum*; Jurassic; Brora, Sutherlandshire, Scotland.

**ONYCHIOPSIS**.

Apparently misprint for *Onychiopsis*, in Sze, 1945, p. 46.

**ONOCLEITES** Jaeger, 1827.

*Onocleites lanceolatus* Jaeger, 1827, p. 84, pl. 6, fig. 8; fern? leaf fragment; Triassic (Keuper); Esslingen, Württemberg.

**ONTHEANTHUS** Ganju, 1944.

*Ontheanthus polyandra* Ganju, 1944, p. 77, pl. 2, figs. 17-20; male fructification, Bennettitales; Jurassic; Onthea, Rajmahal Hills, India.

**ONTHEODENDRON** Sahni and A. R. Rao, 1931.

*Ontheodendron florini* Sahni and Rao, 1931, p. 200, pls. 15, 16; cone, Coniferales; Jurassic; Rajmahal Hills, India.

**ONTHEOSTROBUS** Ganju, 1944.

*Ontheostrobus sessilis* Ganju, 1944, p. 77, pl. 3, figs. 21-24; gymnospermous seed-bearing fructification, possibly related to Bennettitales; Jurassic; Onthea, Rajmahal Hills, India.

**ONYCHIOPSIS** Yokoyama, 1889.

*Onychiopsis elongata* (Geyler) Yokoyama, 1889, p. 27, pl. 2, figs. 1-3; pl. 3, fig. 6d; pl. 12, figs. 9, 10; fern, Polypodiaceae?; Jurassic; Tetorigawa, Japan. See also Seward, 1894, p. 40.

**OOCHYTRIUM** Renault, 1895.

*Oochytrium lepidodendri* Renault, 1895c, p. 160, pl. 154, figs. 15, 16; fungus spores; Carboniferous (Culm); Esnost, France.

**OOTHECA** Nathorst, 1914.

*Ootheca nordenskiöldii* Nathorst, 1914, p. 19, pl. 15, fig. 83; pteridosperm sporangia?; Palaeozoic; Spitzbergen.

**OPEGRAPHITES** Debey, 1859.

*Opegraphites striatopunctatus* Debey, in Debey and Ettingshausen, 1859a, p. 211, pl. 3, fig. 7; lichen?; Lower Cretaceous; Aachen, Rhenish Prussia.

**OPHIOGLOSSITES** Massalongo, 1850.

*Ophioglossites eocena* Massalongo, 1850, p. 50; fern; Eocene; Monte Bolca; Italy.

**OREODOXITES** Goepfert, 1864.

*Oreodoxites martianus* Goepfert, 1864, p. 147, pl. 26, fig. 5; seed; Permian; Braunau, Bohemia.

**ORESTOVIA** Zalesky, 1931.

Acad. sci. U. R. S. S. Bull., 1931, p. 402 (not seen, cited in Gothan, 1942b, p. 136).

**ORIOPORELLA** (Munier-Chalmas) Morellet and Morellet, 1922.

*Orioporella briardi* Munier-Chalmas, in Morellet and Morellet, 1922, p. 28, pl. 10, figs. 47, 48; alga, Dasycladaceae; Eocene (Montien); Mons, Belgium. Generic name cited in Munier-Chalmas, 1877, p. 817; nom. nud.

**ORMOXYLON** Dawson, 1871.

*Ormoxyton erianum* Dawson, 1871, p. 14, pl. 1, figs. 10-15; woody stem of cordaitacean affinities; Devonian; Schohar County, N. Y.

**ORNOXYLON** Felix, 1882.

*Ornoxyton fraxinoides* Felix, 1882a, p. 35; wood, dicotyledon.

**ORPHANIDESITES** Caspary, 1881.

*Orphanidesites primaevus* Caspary, 1881, p. 29; fruit; Ericaceae; Tertiary.

**ORTHOGONIOPTERIS** E. B. Andrews, 1875.  
*Orthogoniopteris clara* E. B. Andrews, 1875, p. 419, pl. 50, fig. 1; foliage resembling *Taeniopteris*; Pennsylvanian; near Rushville, Perry County, Ohio.

**ORTHOPORITES** Schleiden, 1855.  
*Orthoporites apeltianus* Schleiden, in Schmid and Schleiden, 1855, p. 27. Tertiary (Braunkohle); Haering, Tirol, Austria.

**ORTONELLA** Garwood, 1914.  
*Ortonella furcata* Garwood, 1914, p. 266, pl. 20, figs. 1-4; alga?; Lower Carboniferous; Eskrigg Wood near Summerlands, Westmoreland, England.

**ORVILLEA** Lang, 1945.  
*Orvillea brasiliensis* (Dawson) Lang, 1945, p. 546, pls. 22-25; Upper Devonian; Brazil. For *Protosalvinia brasiliensis* Dawson, in Chicago Acad. Sci. Bull., 1886, v. 1, p. 115, figs. 1, 8, 9.

**OSAGIA** Twenhofel, 1919.  
*Osagia incrustata* Twenhofel, 1919, p. 352, fig. 5; alga; Foraker limestone member; Pennsylvanian; Ekler Canyon, Cowley County, Kans.

**OSCILLATORITES** Zalesky, 1927.  
*Oscillatorites bertrandi* Zalesky, 1927a, p. 98, pl. 4, fig. 8; alga, compared with *Oscillatoria*; Carboniferous; Simbirsk, Russia.

**OSMUNDIA** R. M. Johnston, 1894.  
*Osmundia tasmanica* R. M. Johnston, 1894, p. 176, pl. 1, fig. 2; fern leaflets; lower Tertiary; Glenora, Tasmania.

**OSMUNDITES** Jaeger, 1827.  
*Osmundites pectinatus* Jaeger, 1827, p. 29, pl. 7, figs. 1-5; cycadophyte foliage, name changed to *Pterophyllum jacgeri* by Brongniart, 1828b, p. 100.

**OSMUNDITES** Unger, 1854.  
*Osmundites schemnicensis* Unger, 1854a, p. 143, pl. 1; petrified rhizome, Osmundaceae; Tertiary; Illa, near Schemnitz, Hungary. See also Kidston and Gwynne-Vaughan, 1907-10; Posthumus, 1931.

**OSMUNDOPHYLLUM** Velenovsky, 1889.  
*Osmundophyllum crataceum* Velenovsky, 1889, p. 6, pl. 2, fig. 21; fern frond fragment; Upper Cretaceous; Lipenec, Bohemia.

**OSMUNDOPSIS** Harris, 1931.  
*Osmundopsis sturii* (Raciborski) Harris, 1931a, p. 136; fertile pinnae compared with *Osmunda*; Jurassic; Cracow, Poland. For *Osmunda sturii* Raciborski, 1890, p. 2, pl. 1, figs. 1-5. See also Harris, 1931b, p. 48.

**OSTERITES**.  
Error for *Zosterites*, in Brongniart, Alexander, 1829, p. 409.

**OTIDOPHYTON** David White, 1905.  
*Otidophyton hymenophylloides* David White, in Smith and White, 1905, p. 47, pl. 2, fig. 3; fern leaf fragment; Upper Devonian; Perry, Maine.

**OTOPTERIS** Lindley and Hutton, 1834.  
*Otopteris obtusa* Lindley and Hutton, 1834 (1831-37), p. 128, pl. 128; cycadophyte leaf; Lower Jurassic (Lias); Membury, near Axminster, England.

**OTOPTERIS** Sauvcur, 1848.  
*Otopteris cycloidea* Sauvcur, 1848, p. 1, pl. 26, figs. 1, 2, no description given; cyclopterid leaflet; Upper Carboniferous; Belgium.

**OTOZAMITES** Braun, 1842.  
The following is suggested as a type species: *Otozamites obtusus* (Lindley and Hutton) Brongniart, 1849, p. 104. For *Otopteris obtusa* Lindley and Hutton, 1834 (1831-37), p. 129, pl. 128; cycadophyte foliage; Jurassic; England. See also Seward, 1904, pl. 1, figs. 1, 3, 5.

**OTTOKARIA** Zelller, 1902.  
*Ottokaria bengalensis* Zelller, 1902, addenda facing p. 1; pl. 4, figs. 9, 10. For *Feistmantelia bengalensis* Zelller, 1902, p. 34. See also Seward, 1917, p. 139; Seward and Sahni, 1920, p. 12; and Thomas, 1921, p. 285.

**OTTONOSIA** Twenhofel, 1919.  
*Ottonosia luminata* Twenhofel, 1919, p. 350, figs. 3, 4; alga; Crouse limestone member, Permian; Osage County, Okla.

**OUROSTROBUS** Harris, 1935.  
*Ourostrobos nathorsti* Harris, 1935, p. 116, pls. 23, 27; seed-bearing cone, incertae sedis; *Thaumatopteris* zone; Rhaetic; Scoresby Sound, east Greenland.

**OVALITES** Lomax, 1911.  
*Ovalites resinosus* Lomax, 1911, p. 126, pl. 5, fig. 18; pl. 6, fig. 21; pl. 7, fig. 23; a name assigned to oval resinous bodies found in coal; Arley coal seam and others; Upper Carboniferous; Atherton, Lancashire, England.

**OVOPTERIDIUM** Behrend, 1909.  
*Ovopteridium schumannii* (Stur) Behrend, 1909, p. 677, pl. 17, fig. 10; sphenopterid foliage; Upper Carboniferous.

**OVOPTERIS** Henry Potonie, 1893.  
*Ovopteris cremeriana* Henry Potonie, 1893b, p. 39, pl. 3, fig. 1; sphenopterid foliage; Permian; Ilmenau, Prussian Saxony.

**OVULARITES** Whitford, 1916.  
*Ovularites barbouri* Whitford, 1916, p. 85, figs. 1-5; fungus; Cretaceous; Rose Creek, Jefferson County, Nebr.

**OVULITES** Lamarck, 1816.

*Ovulites margaritula* Lamarck, 1816, p. 194; alga?; Eocene; near Paris, France. First species described after 1820 appears to be: *Ovulites pavantina* (d'Archiac) d'Orbigny, 1850, p. 405. First species illustrated after 1820 appears to be: *O. elongata* Lamarck, in Schwager, 1883, p. 146, pl. 29, fig. 22. See discussion in Seward, 1898, p. 161; Hirmer, 1927, p. 60.

**OXALIDITES** Caspary, 1886.

*Oxalidites brachysepalus* Caspary, 1886, p. 7; fruit, Oxalidaceae; Tertiary; Samland, Baltic Prussia. First species illustrated: *O. averrhoides* Conwentz, 1886, p. 70, pl. 8, figs. 1-3.

**OXYCARPIA** Trautschold, 1874.

*Oxycarpia bifaria* Trautschold, 1874, p. 132, pl. 3; Tertiary; Kamuschin, Russia.

**P****PACHYPHLOEUS** Goeppert, 1836.

*Pachyphloeus tetragonus* Goeppert, 1836, p. 433, pl. 43; atheroscent lycopod stem impression; Lower Carboniferous; Landshut, Falkenberg, Silesia.

**PACHYPHYLLUM** Lesquereux, 1854.

*Pachyphyllum fimbriatum* Lesquereux, 1854, p. 421; fernlike foliage; Pennsylvanian; Pennsylvania. See Lesquereux, in Rogers, 1858, p. 863, pl. 8, fig. 2.

**PACHYPTERIS** Brongniart, 1829.

*Pachypteris lanceolata* Brongniart, 1829 (1828a-38), p. 167, pl. 45, fig. 1. Generic name cited in Brongniart, 1828b, p. 50. See Seward, 1910, p. 550.

**PACHYSPERUM** Reid and Chandler, 1933.

*Pachysperum quinqueloculare* Reid and Chandler, 1933, p. 419, pl. 22, figs. 1-7; fruit, Lythraceae; London Clay, Eocene; Sheppey, Kent, England.

**PACHYSPORANGIUM** Salter, 1880.

*Pachysporangium pilula* Salter, 1880, p. 463; nom. nud.

**PACHYTESTA** Brongniart, 1874.

*Pachytesta incrassata* Brongniart, 1874, p. 262, pl. 22, fig. 4; silicified seed; Upper Carboniferous; St.-Etienne, France.

**PACHYTHECA** Hooker, 1861.

*Pachythea sphaerica* Hooker, in Salter, 1861, p. 162. Devonian; Malvern, Scotland. Previously described by Hooker, 1852, p. 12, but not named. See also Harris, W. H., 1884, p. 28-32, figs. 21-23; and Kidston and Lang, 1925.

**PAGIOPHYLLITES** Tuzson, 1911.

*Pagiophyllites keuperianus* (Unger) Tuzson, 1911, p. 30, fig. 5.

**PAGIOPHYLLUM** Heer, 1881.

*Pagiophyllum circinatum* (Saporta) Heer, 1881, p. 11, pl. 10, fig. 6; coniferous twigs and foliage; Jurassic (Malm); Sierra de San Luiz, Portugal.

**PAIKHOIA** Zalessky, 1936.

*Paikhoia tchernovi* Zalessky, 1936b, p. 237, figs. 1-5; lycopod leaf bases; Permian; Russia.

**PALACKYA** Crie, 1889.

*Palackya philippinensis* Crie, 1889a, p. 87, pl. 17, figs. 1, 2; wood, dicotyledon; Pliocene; San Juan del Monte, Manila, Philippine Islands.

**PALAEACHLYA** Duncan, 1876.

*Palaeachlya perforans* Duncan, 1876, p. 210, pl. 16; alga or fungus?, in coral; Silurian.

**PALAEAELECTRYON** Reid and Chandler, 1933.

*Palaeaelectryon spirale* Reid and Chandler, 1933, p. 363, pl. 17, figs. 13-19; seed, Sapindaceae; London Clay, Eocene; Sheppey, Kent, England.

**PALAEALLOPHYLLUS** Reid and Chandler, 1933

*Palaeallophyllus ovoideus* Reid and Chandler, 1933, p. 360, pl. 17, figs. 1-7; seed, Sapindaceae; London Clay, Eocene; Sheppey, Kent, England.

**PALAEANTHUS** Newberry, 1895.

*Palaeanthus problematicus* Newberry, 1895, p. 125, pl. 35; fructification, Bennettiales?; Amboy clay, Upper Cretaceous; New Jersey.

**PALAEUECHARIDIUM** Reid and Chandler, 1933.

*Palaeuecharidium cellulare* Reid and Chandler, 1933, p. 426, pl. 23, figs. 1-4; fruit, Onagraceae; London Clay, Eocene; Minster, Kent, England.

**PALAEOALGITES** Weyland and Budde, 1932.

*Palaeoalgites kräuselii* Weyland and Budde, 1932, p. 272, figs. 20, 21; Devonian; near Douglstown, Gaspé, Canada.

**PALAEOASTER** Knowlton, 1917.

*Palaeoaster inquirenda* Knowlton, 1917, p. 278, pl. 49, figs. 5, 6; incertae sedis; Vermejo formation, Cretaceous; Alkali Gap, Canon City, Colo.

**PALAEOAVENA** Ettingshausen, 1890.

*Palaeoavena stipaeformis* Ettingshausen, 1890, p. 77, pl. 2, figs. 1-12; inflorescence fragments, Gramineae; Miocene; Schoenegg, Styria.

**PALAEOBROMELIA** Ettingshausen, 1852.

*Palaeobromelia jugleri* Ettingshausen, 1852b, p. 3, pl. 1, fig. 1; pl. 2, figs. 1-3; not a plant, see R. W. Brown, 1950.

**PALAEOCARYA** Saporta, 1873.

*Palaeocarya atavia* Saporta, 1873a, p. 101, pl. 15, figs. 36-39; involucre, Juglandaceae; Eocene; Aix, Provence, France.

**PALAEOCASSIA** Ettingshausen, 1867.

*Palaeocassia angustifolia* Ettingshausen, 1867, p. 261, pl. 3, figs. 6, 7; leaf, Papilionaceae; Cretaceous (Cenomanian); Niederschoena, Saxony.

**PALAEOCEDRUS** Unger, 1842.

*Palaeocedrus exstinctus* Unger, in Endlicher, 1842, p. 26; abietinean cone; Tertiary. Brief generic description only. See also Goeppert, 1850, p. 210.

**PALAEOCHARA** Massalongo, 1851.

*Palaeochara rigida* Massalongo, 1851, p. 44; Characeae; Eocene; Monte Bolca, Italy. Apparently given as a new name for *Chondrites rigidus* Massalongo, 1850, p. 36.

**PALAEOCHARA** Bell, 1922.

*Palaeochara acadica* Bell, 1922, p. 160, pl. 1, figs. 3-9; oogonium, Charophyte; Pennsylvanian; St. Rose mine, Inverness County, Nova Scotia.

**PALAEACHLYA** Duncan, 1876.

*Palaeachlya perforans* Duncan, 1876, p. 210, pl. 16; alga?, compared with *Achlya* and found in Silurian corals; Silurian; Canada.

**PALAEOCHONDRITES** (Schimper) Saporta, 1882.

*Palaeochondrites fruiticulosus* (Goeppert) Saporta, 1882, p. 35, pl. 5, figs. 2-3; alga; Silurian?; Glanz near Vailhan, France.

**PALAEOCHORDA** M'Coy, 1848.

*Palaeochorda minor* M'Coy, in Sedgewick, 1848, p. 225; alga; upper Silurian; Cumberland and Westmoreland, England.

**PALAEOCLADUS** Ettingshausen, 1887.

*Palaeocladus cuneiformis* Ettingshausen, 1887a, p. 93, pl. 8, fig. 33; foliage shoot, Taxineae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

**PALAEOCLADUS** Pia, 1920.

*Palaeocladus mediterraneus* Pia, 1920, p. 118, pl. 6, figs. 1-5; alga, Siphoneae Verticillatae; Jurassic; Monte Potina, Italy.

**PALAEOCODIUM** Chiarugi, 1947.

*Palaeocodium saharitanum* Chiarugi, 1947, p. 129, pl. 9; alga, Codiaceae; Lower Carboniferous; Uadi near Gebel Auénat, Lybian Desert, Egypt.

**PALAEOCYCAS** Florin, 1933.

*Palaeocycas integer* (Nathorst) Florin, 1933, p. 32, pl. 1, figs. 1, 2; pl. 2, figs. 1-3; pl. 3, figs. 1-3; cycad megasporophyll; Rhaetic.

**PALAEOCYPARIS** Saporta, 1872.

*Palaeocyparis expansus* (Sternberg) Saporta, 1872, p. 1056. For *Thuites expansus* Sternberg, 1823 (1820-38), p. 39, pl. 38; Jurassic; Stonesfield, England.

**PALAEODASYCLADUS** Pia, 1927.

*Palaeodasycladus mediterraneus* Pia, in Hirmer, 1927, p. 79, fig. 62; alga, Dasycladaceae; Lower Jurassic (middle Lias).

**PALAEODENDRON** Saporta, 1862.

*Palaeodendron gypsophilum* Saporta, 1862, p. 250, pl. 7, fig. 9; leaf, Proteaceae; Tertiary; St.-Zacharie, France.

**PALEODICTYON** Heer, 1865.

*Palaeodictyon singulare* Heer, 1865 (1864-65), p. 245, pl. 10, fig. 10; alga?; Eocene; Switzerland.

**PALAEODICTYOTA** Whitfield, 1902.

*Palaeodictyota ramulosa* (Spencer) Whitfield, 1902, p. 399, pl. 53; marine alga; Niagara Group, Silurian; Lockport, N. Y.

**PALAEOGLEICHENIA** Leuthardt, 1901.

*Palaeogleichenia gracilis* (Heer) Leuthardt, 1901, p. 128. For *Pecopteris gracilis* Heer, 1865 (1864-65), p. 54, pl. 2, fig. 1.

**PALAEOGONIOPTERIS** Koldzumi, 1936.

*Palaeogoniopteris mengkarangensis* (Gothan and Jongmans) Koldzumi, 1936, p. 134. For *Gigantopteris mengkarangensis* Gothan and Jongmans, 1935, Jaarb. mijnwezen Nederlandish-Indië, 1930, Verh., boekdeel 59, p. 143, p. 47, figs. 2-4; Stephanian, Carboniferous; Djambi, Sumatra.

**PALAEOGREWIA** Massalongo, 1851.

*Palaeogrewia dejepeae* Massalongo, 1851, p. 182; Tillaceae; Tertiary; Italy.

**PALAEOHALIDRYS** Gardner, 1924.

*Palaeohalidrys californica* Gardner, 1924, p. 362, pl. 25; alga, compared with *Halidrys* (Fucaceae); Miocene (in diatomaceous earth); Los Angeles (Bairdstown), Calif.

**PALAEOHYPNUM** Steere, 1946.

*Palaeohypnum arnoldianum* Steere, 1946, p. 315, pls. 1, 2; moss, Bryales Pleurocarpi; Miocene; Carter Creek, near Finley McKenzie ranch, Malheur County, Oreg.

**PALAEOKEURA** Massalongo, 1853.

*Palaeokeura pellegriniana* Massalongo, 1853d, p. 206, pls. 1-4; Pandanaceae; Tertiary; Italy.

**PALAEOLEPIS** Saporta, 1894.

*Palaeolepis bicornuta* Saporta, 1894, p. 179, pl. 33, fig. 4c; cone scales, Coniferales; Cretaceous (Albian); Buarcos, Portugal.

**PALAELOBIUM** Unger, 1850.

*Palaeolobium haeringianum* Unger, 1850a, p. 490; fruit, Leguminosae; Eocene; Haering, Tirol, Austria. *See also* Unger, 1851, p. 186, pl. 62, figs. 8-10.

**PALAEOMYCES** Renault, 1896.

*Palaeomyces gracilis* Renault, 1896a, p. 439, figs. 88, 89; fungus; Upper Carboniferous; Esnost, France. [Meschinelli, 1898, p. 9, cites the genus "*Palaeomyces*, Renault." This is Meschinelli's change in spelling and should not be attributed to Renault as such; the only species cited is "*Palaeomyces gracilis* (Renault) Meschinelli."]

**PALAEOMYCITES**.

*See Palaeomyces* Renault.

**PALAEONITELLA** Pia, 1927.

*Palaeonitella cranii* (Kidston and Lang) Pia, in Hirmer, 1927, p. 91. For *Algites cranii* Kidston and Lang, 1921, p. 876, pl. 9, figs. 98-104; alga, probably Characeae; Old Red Sandstone, Middle Devonian; Muir of Rhynie, Aberdeenshire, Scotland.

**PALAEONYSSA** Reid and Chandler, 1933.

*Palaeonyssa multilocularis* Reid and Chandler, 1933, p. 431, pl. 23, figs. 11-15; endocarp, Nyssaceae; London Clay, Eocene; Sheppey, Kent, England.

**PALAEOPEDA** Etheridge, 1899.

*Palaeopede whiteleggei* Etheridge, 1899a, p. 127, pl. 23, figs. 1-4; *Nostoc*-like endophytic alga; "Permo-Carboniferous"; New South Wales.

**PALAEOPERONE** Etheridge, 1891.

*Palaeoperone endophytica* Etheridge, 1891, p. 97, pl. 7, fig. 2; spores?, found in coal; "Permo-Carboniferous"; New South Wales.

**PALAEOPHOENIX** Saporta, 1878.

*Palaeophoenix aymardi* Saporta, 1878a, p. 25, pls. 1, 2; pl. 3, figs. 2-4; Eocene; Brives near Puy-en-Velay, France.

**PALAEOPHYCUS** Hall, 1847.

*Palaeophycus tubularis* Hall, 1847, p. 7, pl. 2, figs. 1, 2, 4, 5; alga?; Silurian; New York.

**PALAEOPHYTOCERNE** Reid and Chandler, 1933.

*Palaeophytocerne foveolata* Reid and Chandler, 1933, p. 333; pl. 15, figs. 24-32; endocarp, Icacinaceae; London Clay, Eocene; Sheppey, Kent, England.

**PALAEOPICEOXYLON** Kräusel, 1949.

*Palaeopiceoxylon transiens* (Shimakura) Kräusel, 1949, p. 127, 182; coniferous wood; Cretaceous; Japan. For *Piceoxylon transiens* Shimakura, 1937, p. 24, pl. 6, figs. 1-9.

**PALAEOPITYS** M'Nab, 1870.

*Palaeopitys milleri* M'Nab, 1870, p. 314; Devonian. *See also* Kidston and Lang, 1923b.

**PALAEOPORELLA** Stolley, 1893.

*Palaeoporella variabilis* Stolley, 1893, p. 138, pl. 7, figs. 1-5; siphonaceous alga?; Silurian; Holstein, Kiel, Prussia.

**PALAEOPOTAMOGETON** Knowlton, 1916.

*Palaeopotamogeton florissanti* Knowlton, 1916, p. 251, pl. 16, fig. 1; pl. 17, fig. 3; stems with leaves and fruits, Potamogetonaceae?; Oligocene; Florissant, Colo.

**PALAEOPTERIDIUM** Kidston, 1923.

*Palaeopteridium reussi* (Ettingshausen) Kidston, 1923a, p. 201, pl. 55, figs. 1-3; foliage similar to *Archaeopteris*; Westphalian, Upper Carboniferous.

**PALAEOPTERIS** Geinitz, 1855.

*Palaeopteris schnorriana* Geinitz, 1855, p. 32, pl. 35, fig. 8; fern? stem impression; Upper Carboniferous; Niedersachsdorf, Saxony. *See also* Posthumus, 1931.

**PALAEOPTERIS** Schimper, 1869.

*Palaeopteris hibernica* (Forbes) Schimper, 1869 (1869-74), p. 475, pl. 36; this genus changed to *Archaeopteris* (Dawson, 1871) because of the earlier use of *Palaeopteris* by Geinitz.

**PALAEOPYRUM** Schmalhausen, 1883.

*Palaeopyrum incertum* Schmalhausen, 1883, p. 293, pl. 31, figs. 3, 4; fruits, Gramineae; Eocene; Russia.

**PALAEORACHIS** Saporta, 1889.

*Palaeorachis subgracilis* Saporta, 1889, p. 46, pl. 8, fig. 1; inflorescence (axis only) of *Sabal*?; Eocene; Aix, Provence, France.

**PALAEORCHIS** Massalongo, 1858.

*Palaeorchis rhyzoma* Massalongo, 1858b, p. 750, Tertiary; Italy.

**PALAEORHODOMYRTUS** Reid and Chandler, 1933.

*Palaeorhodomyrtus subangulata* (Bowerbank) Reid and Chandler, 1933, p. 436, pl. 23; figs. 21-31; fruit, Myrtaceae; London Clay, Eocene; Sheppey, Kent, England.

**PALAEOSORDARIA** Sahni and H. S. Rao, 1943.

*Palaeosordaria lagena* Sahni and Rao, 1943, p. 46, pl. 3, figs. 22, 23; perithecia, Sordariaceae; Intertrappean cherts, early Tertiary; Chhindwara district, Central Provinces, India.

**PALAEOSPADIX** Saporta, 1886-91.

*Palaeospadix girardoti* Saporta, 1886-91, p. 260, pl. 270, fig. 3; pl. 271, fig. 9; palm spadix?; Jurassic; Châtelneuf, France.

**PALAEOSPATHE** Unger, 1845.

*Palaeospathe sternbergii* Unger, 1845 (1841-47), p. lxxi; wood, Auranitiaceae; Carboniferous; Swina, Bohemia. For *Spatha* (*Flabellaria*) *borassifoliae* Sternberg, 1820-38, pl. 41.



**PALAEOSTACHYA** C. E. Weiss, 1876.

The following is suggested as the type in view of the clear-cut diagnostic characters displayed: *Palaeostachya elongata* (Presl) C. E. Weiss, 1876, p. 108, pl. 15; articulate cone; Upper Carboniferous; Swina near Radnitz, Bohemia.

**PALAEOSTROBUS** Renger, 1866.

*Palaeostrobus mirabilis* (Corda) Renger, 1866, p. 137, pl. 1, fig. 1.

**PALAEOTAXODIOXYLON** Frentzen, 1916.

*Palaeotaxodioxyylon gruenwetttersbachense* Frentzen, 1916, p. 103, pl. 22; Triassic (Upper Bunter Sandstone); Gruenwetttersbach, Baden.

**PALAEOTAXUS** Nathorst, 1908.

*Palaeotaxus rediviya* Nathorst, 1908a, p. 16, pl. 3, figs. 13-17; foliage and cone, Coniferales; Rhaetic; Skromberga, Sweden.

**PALAEOTHALIA** Squinabol, 1892.

*Palaeothalia sanctaejustinae* Squinabol, 1892, p. 57, pl. 21, fig. 2; pl. 29, fig. 7; leaf, Scitamninae; Tertiary; Santa Giustina, Italy.

**PALAEOTHECIUM** Saporta, 1888.

*Palaeothecium ambiguum* Saporta, 1888, p. 16, pl. 1, fig. 15; sporophyte of moss?; Eocene; Aix, Provence, France.

**PALAEOTHRINAX** Reid and Chandler, 1926.

*Palaeothrinax mantelli* Reid and Chandler, 1926, p. 80, pl. 5, figs. 1-5; palm leaf; Bembridge Marl, Oligocene; Isle of Wight, England.

**PALAEOVITIS** Reid and Chandler, 1933.

*Palaeovitis paradosa* Reid and Chandler, 1933, p. 388, pl. 19, figs. 20-27; seed, Vitaceae; London Clay, Eocene; Warden Point, Kent, England.

**PALAEOVITTARIA** Ottokar Feistmantel, 1876.

*Palaeovittaria kurzi* Ottokar Feistmantel, 1876a, p. 368, pl. 19, figs. 3, 4; fern leaf, compared with *Vittaria* (Polypodiaceae); Damuda series, Gondwana System; Raniganj, India.

**PALAEOWEICHSELIA** Henry Potonie and Gothan, 1909.

*Palaeoweichselia defrancei* (Brongniart) Henry Potonie and Gothan, 1909, p. 4. For *Pecopteris defrancei* Brongniart, 1828a-38, p. 325, pl. 111; pl. 112, fig. 1.

**PALAEOXYLON** Hartig, 1848.

*Palaeoxylon endlicheri* Hartig, 1848a, p. 172; wood; Tertiary; Riestadt, Germany.

**PALAEOXYLON** Brongniart, 1849.

*Palaeoxylon withami* (Lindley and Hutton) Brongniart, 1849, p. 126. For *Pinites withami* Lindley and Hutton, 1831 (1831-37), p. 9, pl. 2; cordaitan wood; Carboniferous; Craigleith, Scotland.

**PALAEOXYRIS** Brongniart, 1828.

Not a plant; see Brown, R. W., 1950.

**PALAEOZAMIA** Endlicher, 1836.

*Palaeozamia tazina* (Lindley and Hutton) Endlicher, 1836 (1836-40), p. 72? First specific reference in Endlicher is to *Zamia tazina* Lindley and Hutton, 1835 (1831-37), p. 67, pl. 175.

**PALAMOPHYLLUM** Zalesky, 1912.

*Palamophyllum cuneifolium* (Kutorga) Zalesky, 1912, p. 38. For *Psygmyphyllum cuneifolium* (Kutorga) Schimper, 1870 (1869-74), p. 194. For *Sphenopteris cuneifolia* Kutorga, 1838, p. 32, pl. 7, fig. 3.

**PALEODICTYON** Savi and Meneghini, 1851.

*Paleodictyon strozzi* Savi and Meneghini, 1851, p. 208; alga, affinities with *Hydrodictyon*?; Eocene; Tuscany, Italy. See also Silvestri, 1911; and Peruzzi, 1881, p. 7, pl. 1, fig. 8.

**PALEOERIOCOMA** Elias, 1942.

*Paleoeriocoma hitchcocki* Elias, 1942, p. 100, pl. 15, figs. 7, 8; grass hull; Ash Hollow formation, middle Pliocene; Beecher Island Post Office, Yuma County, Colo.

**PALEOHEPATICA** Raciborski, 1889.

*Paleohepatica rostafinskii* Raciborski, 1889, p. 136; Jurassic; Cracow, Poland. See Hirmer, 1927, p. 141, figs. 135, 136.

**PALEOHILLIA** Knowlton, 1895.

*Paleohillia arkansana* Knowlton, 1895, p. 387, figs. 1-3; stem with epidermis preserved, incertae sedis; Trinity division, Lower Cretaceous; 6 miles northeast of Center Point, Howard County, Ark.

**PALEOMEANDRON** Peruzzi, 1881.

*Paleomeandron rude* Peruzzi, 1881, p. 8, pl. 1, fig. 4; incertae sedis; Eocene; Monte Fiesole, Mugnone, Italy.

**PALEONELUMBO** Knowlton, 1930.

*Paleonelumbo macrotoba* Knowlton, 1930, p. 93, pl. 39, fig. 3; pl. 42, figs. 3, 4; leaf, Nymphaeaceae; Dawson arkose, Upper Cretaceous and Eocene(?); Colorado.

**PALEONUPHAR** Hollick, 1930.

*Paleonuphar inopina* Hollick, in Hollick and Martin, 1930, p. 75, pl. 40, fig. 5; leaf, Nymphaeaceae; Upper Cretaceous; Yukon River, 6 miles above Nahochatilton, Alaska.

**PALEOTAXITES** David White, 1929.

*Paleotaxites praecursor* David White, 1929, p. 107, pl. 49, figs. 1, 3; pl. 50, figs. 1, 2, 6; pl. 48, fig. 3; coniferous twigs, Hermit shale, Permian; Hermit basin, near Yaki Trail, Ariz.

**PALIBINIA** Korovin, 1932.

*Palibinia lasifolia* Korovin, 1932, p. 517, pl. 1, Proteaceae; Tertiary; Turkistan.

- PALISSYA** Endlicher, 1847.  
*Palissya braunii* Endlicher, 1847, p. 306.  
 For *Cunninghamites sphenolepis* Braun, in Münster, 1843 (1839-43), p. 24, pl. 13, figs. 19, 20.
- PALIURITES** Langeron, 1902.  
*Paliurites martyi* Langeron, 1902, p. 94, pl. 6; fruit, compared with *Paliurus* (Rhamnaceae); Pliocene; Cantal, France.
- PALLIOPORIA** Kirchheimer, 1934.  
*Pallioporia symplocoides* Kirchheimer, 1934a, p. 771, fig. 8; fruit, Symplocaceae; Tertiary (Braunkohle); Germany. See also Kirchheimer, 1936a, p. 68, pl. 9, figs. 25a-v.
- PALMACITES** (Schlothelm) Brongniart, 1822.  
*Palmacites parisiensis* Brongniart, 1822, p. 312, pl. 16, fig. 1. [This genus created by Schlothelm, 1820, p. 393, and applied to arborescent lycopod trunk impressions; for example, his *P. oculatus*, p. 394, pl. 17, fig. 1 is clearly a *Sigillaria* and his *P. quadrangulatus* is a *Lepidodendron*. *Palmacites* as used by Brongniart clearly applies to palm leaves; later authors have applied it to supposed palm trunk and petiole impressions.]
- PALMANTHIUM** Schimper, 1870.  
*Palmanthium martii* (Heer) Schimper, 1870 (1869-74), p. 506; palm flower: Tertiary; Berlingen, Canton Thurgovie, Switzerland. For *Palmacites martii* Heer, 1855, p. 97, pl. 41, figs. 2-4.
- PALMATOPHYCUS** Boucek, 1941.  
*Palmatophycus contractus* Boucek, 1941, p. 1; alga; Silurian; Beroun, Czechoslovakia.
- PALMATOPTERIS** Henry Potonie, 1893.  
*Palmatopteris furcata* (Brongniart) Henry Potonie, 1893a, p. 1, pl. 1; figs. 1, 5; sphenopterid foliage; Carboniferous.
- PALMITES** Hector, 1880.  
*Palmites pectinata* Hector, 1880, p. 48; nom. nud.
- PALMOCARPON** Miquel, 1853.  
*Palmocarpum cretaceum* Miquel, 1853, p. 51, pl. 7; palm fruit; Upper Cretaceous (Senonian); Mt. St. Peter, Limburg, Belgium.
- PALMOCARPON** Lesquereux, 1878.  
*Palmocarpum compositum* Lesquereux, 1878a, p. 119, pl. 11, fig. 4; palm fruit?; Tertiary; Placiere Mtn., N. Mex.
- PALMOGLOEITES** Goeppert, 1869.  
*Palmogloeites adamantinus* Goeppert, 1869, p. 64, pl. 1, fig. 7.
- PALMOPHYLLUM** Conwentz, 1886.  
*Palmophyllum succineum* Conwentz, 1886, p. 11, pl. 1, figs. 12, 13; leaf fragment in amber, Palmae; Tertiary; West Prussia.
- PALMOSPERMUM** Reid and Chandler, 1933.  
*Palmospermum jenkinsi* Reid and Chandler, 1933, p. 110, pl. 1, figs. 23, 24; seed; Palmae; London Clay, Eocene; Herne Bay, Kent, England.
- PALMOXYLON** Schenk, 1882.  
*Palmoxylon blanfordi* Schenk, 1882, p. 355; palm stem; Pliocene; Nerbada River near Dschansi, Bandelkand, India. See also Schenk, in Zittel, 1890 (1879-90), p. 886, fig. 427.
- PALOREODOXITES** Knowlton, 1930.  
*Paloreodoxites plicatus* (Lesquereux) Knowlton, 1930, p. 41, pl. 11, figs. 1-4; leaves, Arceaceae; Denver formation, Upper Cretaceous and Eocene?; Golden, Colo.
- PANACITES** Deane, 1902.  
*Panacites howitti* Deane, 1902b, p. 18, pl. 1, fig. 8; Tertiary; Pittfield, Australia.
- PANDANITES** Tuzson, 1914.  
*Pandanites acutidens* Tuzson, 1914, p. 245, pl. 15, fig. 6; leaf fragment, monocotyledon; Cretaceous; Ruszkabanya, Krasso-Szorenz, Hungary.
- PANDANITES** Dorf, 1938.  
*Pandanites corcont* Dorf, 1938, p. 46, pl. 3, fig. 4; leaf fragment, Pandanaceae; Upper Cretaceous; Corson Ranch, Wyo.
- PANDANOCARPUM** (Brongniart) Zigno, 1873.  
*Pandanocarpum oolithicum* (Carruthers) Zigno, 1873 (1873-85), p. 3. For *Kaidacarpum oolithicum* Carruthers, 1868, p. 153, pl. 9, figs. 1-6. *Pandanocarpum oblongum* cited in Brongniart, 1828b, p. 138; nom. nud.; the genus mentioned briefly in Brongniart, 1848, p. 137.
- PANDANOPHYLLUM** Kryštofovich, 1929.  
*Pandanophyllum ahneritii* Kryštofovich, 1929, p. 524, fig. 4; angiosperm leaf; Cretaceous; near town of Nikolsk-Ussuriysk, Ussuriland, Siberia.
- PANESCOREA** Saporta, 1882.  
*Panescorea glomerata* Saporta, 1882, p. 25, pl. 5, fig. 1; alga?; Permian; France.
- PAPANINIA** Fedin, 1943.  
*Papaninia involucrata* Fedin, 1943, p. 365; cone, Coniferales; age unknown; Franz Josef Land.
- PAPAVERITES** Friedrich, 1833.  
*Papaverites* sp. Friedrich, 1833, p. 297, pl. 19, fig. 17; Oligocene; Bornstedt, Saxony.

**PAPILIONITES** E. W. Berry, 1924.

*Papilionites erythrinaformis* E. W. Berry, 1924a, p. 171, pl. 33, fig. 9; leaf, Papilionaceae; Fayette sandstone, Eocene; Mossy Creek, 3 miles southwest of Wellborn, Brazos County, Tex.

**PARACALAMITES** Zalessky, 1927.

*Paracalamites striatus* (Schmalhausen) Zalessky, 1927a, p. 51, pl. 40, fig. 5; calamite stem impression; Jurassic; Russia.

**PARACALAMITINA.**

Apparently a mistake for *Paracalamites*, in Zalessky, 1934b, p. 242.

**PARACALAMOSTACHYS** C. E. Weiss, 1884.

*Paracalamostachys polystachya* (Sternberg) C. E. Weiss, 1884b, p. 190, pl. 19, figs. 1, 2; articulate cone, attached to stem; Carboniferous.

**PARACALLIPTERIS** Richter, 1904.

*Paracallipteris potoniiei* Richter, 1904, p. 17, pl. 1, fig. 13; leaf, incertae sedis; Upper Cretaceous; Hohlweg near Sternbrunnen, Saxony.

**PARACEDROXYLON** Sinnott, 1909.

*Paracedroxylon scituate* Sinnott, 1909, p. 171, pls. 80, 81; araucarian wood; Cretaceous; Second Cliff, Scituate, Mass.

**PARACHAETETES** Deninger, 1906.

*Parachaetetes ternquisti* Deninger, 1906, p. 65, pl. 6 fig. 6; alga; Mesozoic; Monte Zirra, Sardinia.

**PARACREDNERIA** Richter, 1905.

*Paracredneria fritschii* Richter, 1905, p. 15, pl. 2, fig. 14; pl. 3, fig. 9; Upper Cretaceous; Warnstedt, Saxony.

**PARACUPRESSINOXYLON** Holden, 1913.

*Paracupressinoxylon cedroides* Holden, 1913, p. 537, pl. 39, figs. 11-14; coniferous wood; Jurassic; Yorkshire, England.

**PARADOXOCARPUS** Nehring 1892.

*Paradoxocarpus carinatus* Nehring, 1892, p. 454, figs. 18-26; Pleistocene; Klinge near Cottbus, Prussia.

**PARADOXOPTERIS** Hirmer, 1927.

*Paradoxopteris stromeri* Hirmer, 1927, p. 609, figs. 733-736; Cretaceous (Cenomanian); Baharije Oasis, Egypt.

**PARAENGELHARDTIA** Berry, 1916.

*Paraengelhardtia eocenica* Berry, 1916b, p. 186, pl. 17, figs. 2-5; fruit, Juglandaceae; Lagrange formation, Eocene; Puryear, Henry County, Tenn.

**PARAFAGUS** W. R. B. Oliver, 1936.

*Parafagus otakouia* W. R. B. Oliver, 1936, p. 292, figs. 8, 9; leaf, Fagaceae; Pliocene; Kalkorai Valley, Otago, New Zealand.

**PARAGONORRACHIS** Grand'Eury, 1877.

*Paragonorrachis gutbieriana* (Presl) Grand'Eury, 1877, p. 381. For *Rhodea gutbieriana* Presl, in Sternberg, 1820-38, p. 111.

**PARANOCLADUS** Florin, 1940.

*Paranocladus dusenii* Florin, 1940b, p. 320, pls. 165-166; leafy coniferous shoot; "Permo-Carboniferous"; Iraty, Parana, Brazil.

**PARANYMPHAEA** E. W. Berry, 1935.

*Paranymphea crassefolia* (Newberry) E. W. Berry, 1935, p. 39, pl. 7, figs. 4, 5; pl. 9; leaf, Nymphaeaceae; Ravenscrag formation, uppermost Cretaceous?; Ravenscrag Butte, Saskatchewan, Canada.

**PARAPECOPTERIS** Grand'Eury, 1890.

*Parapecopteris neuropteridis* Grand'Eury, 1890, p. 288, pl. 5, figs. 2-5.

**PARAPHYLLANTHOXYLON** Bailey, 1924.

*Paraphyllanthoxylon arizonense* Bailey, 1924, p. 446, pl. 15; wood, dicotyledon; Colorado group, Upper Cretaceous; Arizona.

**PARAPHYLLOCLADOXYLON** Holden, 1913.

*Paraphyllocladoxylon eboracense* Holden, 1913, p. 536, pl. 39, figs. 7-9; coniferous wood; Oolite, Jurassic; Scarborough, England.

**PARAPITYS** Zalessky, 1911.

*Parapitys spenceri* (Scott) Zalessky, 1911a, p. 28. For *Dadoxylon spenceri* Scott, 1902, p. 357, pl. 2, figs. 12, 13; pl. 6, figs. 24, 25.

**PARARAUCARIA** Wieland, 1935.

*Pararaucaria patagonica* Wieland, 1935, p. 21, pls. 2-5; petrified araucarian cone; Triassic?; Cerro Cuadrado, Santa Cruz, Argentina. See also Wieland, 1929, p. 62.

**PARASPORITES** Schopf, 1938.

*Parasporites maccabei* Schopf, 1938a, p. 48, pl. 1, fig. 6; pl. 7, figs. 1-3; spore; No. 5 and No. 6 coal, Pennsylvanian; Belleville, Ill.

**PARATHINNFELDIA** Richter, 1904.

*Parathinnfeldia dubia* Richter, 1904, p. 14, pl. 1, fig. 3; leaf fragment, incertae sedis; Upper Cretaceous; Saxony.

**PARENCHYMOPHYCUS** Duden, 1897.

*Parenchymophycus asphalticum* Duden, 1897, p. 118, pl. 2; "fucoidal plants"; Genesee shale, Devonian; Indiana.

**PARILINOPTERIS** Hirmer, 1940.

Palaeontographica, 1940, Band 84, Abt. B, p. 188 (not seen, cited in Gothan, 1942b, p. 138).

**PARINARIOXYLON** Hearn, 1928.

K. Akad. Wetensch. Amsterdam Vers. 1928 Verh., Band 37, p. 470 (not seen, cited in Gothan, 1942b, p. 138).

**PARINEUROPTERIS** Hirmer, 1940.

*Palaeontographica*, 1940, Band 84 Abt. B, p. 188 (not seen, cited in Gothan, 1942b, p. 138).

**PARIPTERIS** Gothan, 1941.

*Palaeont. Zeitschr.*, Band 22, p. 427 (not seen, cited in Gothan, 1942b, p. 139).

**PARKA** Fleming, 1857.

*Parka decipiens* Fleming, 1857, p. 448, fig. 121; Old Red Sandstone, Devonian; Scotland. *See also* Lang, 1937.

**PARKERELLA** (Munier-Chalmas) Morellet and Morellet, 1922.

*Parkerella montensis* Munier-Chalmas, in Morellet and Morellet, 1922, p. 15, pl. 1, figs. 56-60; alga, Dasycladaceae; Eocene; Mons, France.

**PARKERIOIDEA** Renault, 1901.

*Parkerioidea stephanensis* Renault, 1901b, p. 350, fern fructification. *See* Renault, 1902, p. 104, pl. 6, fig. 4; pl. 7 bis.

**PARNESINA** Steinmann 1899.

*Parnesina annulus* (Parker and Jones) Steinmann, 1899, p. 152; alga, Dasycladaceae; Miocene; Grignon, France. For *Dactylopora annulus* Parker and Jones, 1860, p. 474. *See also* Carpenter, 1862, p. 129, pl. 10, figs. 9-14.

**PARTHENITES** Saporta, 1861.

*Parthenites priscus* Saporta, in Heer, 1861, p. 146. *See* Saporta, 1862, p. 261, pl. 10, fig. 4.

**PARTSCHIA** Presl, 1838.

*Partschia brongniartii* Presl, in Sternberg, 1838 (1820-38), p. 116. For *Pecopteris hemitelioides* Brongniart, 1828a-38, p. 314, pl. 108, figs. 1, 2; pecopterid foliage; Upper Carboniferous; Saarbrück.

**PASIANOPSIS** Saporta and Marion, 1878.

*Pasianopsis retinervis* Saporta and Marion, 1878, p. 48, pl. 7, fig. 2; leaf, Fagaceae; lower Eocene; Gelinden, Belgium.

**PASINIA** Massalongo, 1851.

*Pasinia pyriformis* Massalongo, 1851, p. 41. For *Delessertites pyriformis* Massalongo, 1850, p. 48.

**PASSALOSTROBUS** Endlicher, 1847.

*Passalostrobis tessellatus* (Bowerbank) Endlicher, 1847, p. 278; cone, Coniferales; Eocene; Sheppey, England. For *Cupressinites tessellatus* Bowerbank, 1840, p. 63, pl. 10, figs. 26, 27, 30, 31.

**PASTILLUS** Zalesky, 1928.

*Pastillus cellulosus* Zalesky, 1928, p. 3, pl. 2, fig. 3; Minoussinsk Basin, Siberia.

**PATALOXYLON** Sahn, 1920.

*Pataloxylon scalariforme* Sahn, 1920, p. 29, pl. 1, fig. 6; pl. 2, figs. 8-11; wood, dicotyledon; Tertiary; Mt. Meerscham, near Nerang, Queensland.

**PATETE** Hector, 1886.

*Patete scheffleri* Hector, 1886, p. 61, fig. 24; Tertiary-Cretaceous; Pakawau, New England.

**PATHEROTHECA** Jongmans, 1929.

Reference not seen; cited in Gothan, 1942b, p. 139.

**PATZEA** Caspary, 1872.

*Patzea gnetoides* Caspary, 1872, p. 20; Tertiary; Prussia. First? species illustrated: *P. johniiana* Conwentz, 1886, p. 136, pl. 13, figs. 8-14.

**PECOPTERIDIUM** Fontaine and White, 1880.

A suggested generic name, with no species assigned, to include fossils which Fontaine and White assign to *Callipteridium unitum* Fontaine and White, 1880, p. 61. Lacoe, 1884, p. 10, lists the binomial *Pecopteridium unitum* F. and W.

**PECOPTERIDIUM** Picquenard, 1922.

*Pecopteridium pluckenettii* (Schlotheim) Picquenard, 1922, p. 347. For *Pecopteris pluckenettii* (Schlotheim) Sternberg, 1825 (1820-38), Tentamen, p. xix. [Note the following from Picquenard, 1922, p. 347: "Je crois devoir réunir sous ce nom, dans un genre d'attente, les frondes filicoides faisant partie du groupe des *Pecopteris Pluckenettii* Sternb., Essai Pl., monde prim., I, fasc. 4, p. xix, et *Stersehl*, Zeiller que sont nom pas des fougères comme les *Pecopteris sensu stricto*, mais des pteridospermees."]

**PECOPTERIDIUM** Kawasaki, 1934.

*Pecopteridium manchuricum* Kawasaki, 1934 (1927-34), p. 155, pl. 34, figs. 73-75; pl. 40, fig. 97; fernlike foliage; Jido series, Carboniferous; Tae-dong, district, North Korea.

**PECOPTERIS** (Brongniart) Sternberg, 1825.

*Pecopteris pennaeformis* (Brongniart) Sternberg, 1825 (1820-38), Tentamen, p. xvii. For *Filicites pennaeformis* Brongniart, 1822, p. 233, pl. 2, fig. 3: Carboniferous.

**PECOPTEROMEDULLOSA** Lotsy, 1909.

*Pecopteromedullosa anglica* (Scott) Lotsy, 1909, p. 727, fig. 512. For *Medullosa anglica* Scott, 1899.

**PECTINOPHYTON** Hoeg, 1935.

*Pectinophyton norvegicum* Hoeg, 1935, p. 12, pl. 4; fig. 3; fertile frond, compared with *Bartiniophyton*; Middle Devonian; Devonskardet, western Norway.

**PEDIASTRITES** Zalesky, 1927.

*Pediastrites kidstoni* Zalesky, 1927b, p. 97, pl. 5, figs. 1, 2; alga?; Chlorophyceae; Carboniferous; Russia.

**PELLETIERIA** Seward, 1913.

*Pelletieria valdensis* Seward, 1913, p. 91, pl. 12, fig. 12; pl. 14, fig. 5; fertile fern frond, Schizaeaceae; Wealden; near Hastings, England.

**PELOURDEA** Seward, 1917.

*Pelourdea vogesiaca* (Schimper and Mougeot) Seward, 1917, p. 278, fig. 484; cordate leaves; Lower Triassic (Bunter sandstone); Vosges, France.

**PELTANDRIPITES** Wodehouse, 1933.

*Peltandripites davisii* Wodehouse, 1933, p. 498, fig. 24; pollen, Araceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

**PELTASPERMUM** Harris, 1937.

*Peltaspermum rotula* Harris, 1937, p. 34; peltate seed-bearing organ, Pteridospermae; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland. See Harris, 1932a, pl. 6, figs. 3-6.

**PELTASTROBUS** Baxter, 1950.

*Peltastrobis reedae* Baxter, 1950, p. 175, figs. 1-6; petrified articulate cone; No. 5 coal, Pennsylvanian; Warrick County, Ind.

**PELTOPHYLLUM** Massalongo, 1854.

*Peltophyllum nelumboides* Massalongo, 1854, p. 22; leaf; Eocene; Monte Bolca, Italy. See Massalongo, 1859a, p. lxxv, pl. 28, figs. 1, 2.

**PEMPHIGALETES** Zalesky, 1939.

*Pemphigaletes*, Zalesky, 1939a, p. 326; nom. nud.

**PENHALLOWIA** Kuntze, 1904.

*Penhallowia* Kuntze, in Post and Kuntze, 1904, p. 421.

**PENICILLITES** Meschinelli, 1892.

*Penicillites curtipes* (Berkeley) Meschinelli, in Saccardo, 1892, p. 789. See Meschinelli, 1898, p. 78, pl. 22, fig. 1.

**PENICILLOIDES** Paul, 1938.

Reference not seen; cited in Gothan, 1942b, p. 139.

**PENTACOILA** Mueller, 1877.

*Pentacoila gulgongensis* Mueller, 1877a (1877-79), p. 179; Pliocene; Gulgong, Australia. See Mueller, 1883, p. 12, pl. 15, figs. 19, 20.

**PENTEUNE** Mueller, 1873.

*Penteune clarkei* Mueller, 1873 (1871-82), p. 41, pl. 7; Pliocene; Smythes Creek, Victoria.

**PENTOXYLON** Srivastava, 1944.

*Pentoxylon sahni* Srivastava, 1944, p. 74, pl. 1, fig. 11; polystelic stem, Pentoxyleae; Jurassic; Santal Parganas district, Behar, India. Brief description in Srivastava, 1937, p. 273. Full description in Srivastava, 1946, p. 196, pl. 2, figs. 6-17; pls. 3-5. For full consideration of Pentoxyleae, see Sahni, 1948.

**PEREBORITES** Zalesky, 1934.

*Pereborites rarineris* Zalesky, 1934b, p. 268, fig. 43; leaf fragment, incertae sedis; Permian; Pechora basin, Russia.

**PEREMOPTERIS** Zalesky, 1937.

*Peremopteris sylvacana* Zalesky, 1937b, p. 46, fig. 10; fernlike foliage; Permian; Tchekarda, Russia.

**PERFOSSUS** Cotta, 1832.

*Perfossus angularis* Cotta, 1832, p. 52, pl. 10, fig. 1-3; petrified palm; Tertiary; Carlsbad, Bohemia.

**PERIASTRON** Unger, 1856.

*Periastron reticulatum* Unger, 1856, p. 171, pl. 8, figs. 13-15; petiole, Pteridospermae?; Upper Devonian; Saalfeld, Thuringia. See also Scott and Jeffrey, 1914.

**PERICHODERMA** McLean, 1912.

*Perichoderma asteroides* (Williamson) McLean, 1912, p. 508, fig. 4; spore or Radiolarian?; Carboniferous.

**PERICORDAITES** Zalesky, 1927.

*Pericordaites eugeniae* Zalesky, 1927a, p. 45, pl. 27, figs. 1-7; cordate leaves; Permian; Urals, Russia.

**PERIMNESTE** Harris, 1939.

*Perimneste horrida* Harris, 1939, p. 54, pl. 14, figs. 2, 7, 9; Charophyta; Middle Purbeck, Jurassic, Dorset, England.

**PERISPORIACITES** Felix, 1894.

*Perisporiactites larundae* Felix, 1894b, p. 271, pl. 19, fig. 3; fungus peritheclum?; Eocene; Perekeschkul near Baku. Meschinelli, 1898, p. 15, erroneously attributes this genus to Fries.

**PERISPORITES** Pampaloni, 1902.

*Palaeontographia Italica*, 1902, v. 8, p. 126 (not seen, cited in Gothan, 1942b, p. 139).

**PERMOPHYLLUM** Zalesky, 1937.

*Permophyllum incisum* Zalesky, 1937b, p. 70, fig. 34; foliage fragment, Ginkgoales?; Permian; Matveyevo, USSR.

**PERMOPORA** Elias, 1947.

*Permopora keenae* Elias, 1947, p. 53, pl. 18, figs. 1-11; alga, Dasycladaceae; Childress dolomite, Permian; Childress and Cottle Counties, Tex.

**PERMOPTERIDIUM** Zalesky, 1939.

*Permopteridium densinervum* Zalesky, 1939b, p. 353, fig. 31; fern? frond fragment; Permian, Matveyevo, USSR.

**PERMOSAMAROPSIS** Kuntze, 1904.

*Permosamaropsis* Kuntze, in Post and Kuntze, 1904, p. 425.

**PERMOSPERMA** Zalesky, 1939.

*Permosperma ornatum* Zalesky, 1939b, p. 372, fig. 56; seed; Permian; Matveyevo, USSR.

- PEKMOTHECA** Zalesky, 1929.  
*Permotheca sardykensis* Zalesky, 1929a, p. 688, fig. 15; microsporangia; Permian; village of Koullarovo, Arsk, Tatar, USSR.
- PERONOSPORITES** W. G. Smith, 1877.  
*Peronosporites antiquarius* W. G. Smith, 1877, p. 499, figs. 97, 98; fungus; Carboniferous; England.
- PERONOSPOROIDES** John Smith, 1896.  
*Peronosporoides carbonifera* John Smith, 1896, p. 321, pl. 7, figs. 17, 18; fungus spores and mycelium, in amber; Upper Carboniferous; Annandale near Kilmarnock, Scotland.
- PERONOSPOROIDES** E. W. Berry, 1916  
*Peronosporoides palmi* E. W. Berry, 1916c, p. 74, pl. 180; spores and mycelium, Peronosporaceae, in silicified palm stem; Oligocene; Bayou Pierre, Miss.
- PERRANDOA** Squinabol, 1891.  
*Perrandoa protogaea* Squinabol, 1891, p. 778, pl. 17, fig. 2; fragment of palm leaf; lower Miocene; Ste.-Justine, Sassello, Italy.
- PERSEOPHYLLUM** Kurtz, 1902.  
*Perseophyllum hauthalianum* Kurtz, 1902, p. 52; Lower Cretaceous; Cerro Guido, Patagonia.
- PERSEOXYLON** Felix, 1887.  
*Perseoxylon antiquum* Felix, 1887b, p. 153, pl. 27a, figs. 1-4; dicotyledonous wood.
- PERUVIOPHYLLUM** Steinmann, 1929.  
*Peruviophyllum minutifolium* Steinmann, 1929, p. 105, fig. 113; fern rachis?; Cretaceous; Huayanco, Peru.
- PESTALLOZZITES** E. W. Berry, 1917.  
*Pestalozzites sabulana* E. W. Berry, 1917, p. 46, pl. 8, fig. 3; pl. 9, fig. 9; leaf spot fungus, Melanconiaceae; Alum Bluff formation, Miocene; Alum Bluff, Liberty County, Fla.
- PETCHERIA** Zalesky, 1934.  
*Petcheria elongata* Zalesky, 1934b, p. 288, figs. 74, 75; leaf fragment, incertae sedis; Permian; Pechora basin, Russia.
- PETCHEROPTERIS** Zalesky, 1931.  
*Petcheropteris splendida* Zalesky, 1931b, p. 705, pls. 1, 2; petrified stem, Osmundaceae; Permian; Pechora, Russia.
- PETROPHILOIDES** Bowerbank, 1840.  
*Petrophiloides richardsonii* Bowerbank, 1840, p. 44, pl. 9, figs. 9-15; pl. 10, figs. 5-8; cone, Coniferales; London Clay, Eocene; Herne Bay, Sheppey, England.
- PETROPHYTON** Yabe, 1912.  
*Petrophyton miyakoense* Yabe, 1912, p. 6, pl. 2, figs. 1-8; alga; Cretaceous; Rikuchū province, Japan.
- PETROSPHAERIA** Stopes and Fujii, 1910.  
*Petrosphaeria japonica* Stopes and Fujii, 1910, p. 4, pl. 1, figs. 1-6; fungus hyphae; Upper Cretaceous; Hokkaido, Japan. Cited in Stopes and Fujii, 1909, p. 558; nom. nud.
- PETZOLDTIA** Unger, 1842.  
*Petzholdtia tropica* Unger, 1842b, p. 176, wood, incertae sedis; Tertiary; Antigua, West Indies.
- PETZIA** Zalesky, 1931.  
Acad. sci. U. R. S. S. Bull., 1931, p. 402 (not seen, cited in Gothan, 1942b, p. 140).
- PEUCE** Lindley and Hutton, 1832.  
*Peuce withami* Lindley and Hutton, 1832 (1831-37), p. 73, pl. 24; coniferous wood; 4 miles northwest of Durham, England.
- PEUCEDANITES** Heer, 1859.  
*Peucedanites spectabilis* Heer, 1859, p. 25, pl. 104, fig. 20; fruit, Umbelliferae; Miocene; Oeningen, Switzerland.
- PEZIZITES** Meschinelli, 1892.  
*Pezizites sylvaticus* (Ludwig) Meschinelli, in Saccardo, 1892, p. 775. See also Meschinelli, 1898, p. 49, pl. 5, fig. 14; Discomycete; Salzhausen, Germany.
- PHACIDIOPSIS** Geyler, 1887.  
*Phacidopsis* sp. Geyler, 1887a, p. 487, pl. 32, fig. 2; fungus, compared with *Phacidium coronatum*; Labaun, Borneo.
- PHACIDITES** Meschinelli, 1892.  
*Phacidites sinuosus* (Ludwig) Meschinelli, in Saccardo, 1892, p. 776. See also Meschinelli, 1898, p. 50, pl. 15, figs. 33-35; fungus, Discomycete; Germany.
- PHACITES** Colla, 1829.  
*Phacites alpinus* (Jacquin) Colla, in Borson, 1829, p. 182.
- PHACOLEPIS** Frenguelli, 1942.  
*Phacolepis mendozana* Frenguelli, 1942, p. 323, pls. 1, 2; cone scale, Coniferales; Triassic; Argentina.
- PHACOPLASMIUM** Reinsch, 1881.  
*Phacoplasmium* sp. Reinsch, 1881, p. 39, pl. 8b, figs. 6-8; Upper Carboniferous; Zwickau, Saxony.
- PHAETHUSA** Koenig, 1825.  
*Phaethusa lachrymabunda* Koenig, 1825, p. 2, pl. 1, fig. 23.
- PHANEROPHLEBITES** Knowlton, 1922.  
*Phanerophlebites pealei* Knowlton, 1922a, p. 110, pl. 3, fig. 5; leaf fragment, Podiaceae; Laramie formation, Upper Cretaceous; Lafayette, Colo.
- PHASOLITES** Unger, 1850.  
*Phaseolites cassiaefolius* Unger, 1850a, p. 488; leaf, Leguminosae; Miocene; Radibj, Croatia. Cited in Unger, 1845 (1841-47), p. lxxxv; nom. nud. First species illustrated: *P. orbicularis* Unger, 1851, p. 184, pl. 40, figs. 3, 4.

- PHASEOLITES** L. R. Wilson and Coe, 1940.  
*Phaseolites desmoinesensis* L. R. Wilson and Coe, 1940, p. 182, pl. 1, fig. 4; spore; Des Moines group, Pennsylvanian; What Cheer, Keokuk County, Iowa
- PHEGONIUM** Unger, 1839.  
*Phegonium vasculosum* Unger, 1839b, p. 14. See discussion under *Fegonium* Unger.
- PHELLODENDRONOIDITES** Thomson, 1950.  
*Phellodendronoidites* sp. Thomson, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 58, pl. B, fig. 43; pollen compared with *Phellogenodendron*.
- PHELLOMYCETES** Renault, 1896.  
*Phellomyces dubius* Renault, 1896a, p. 421, fig. 74; fungus; Upper Carboniferous; Autun, France. Meschinelli, 1898, p. 97 cites this genus with the spelling changed to *Phellomyces*.
- PHELLOMYCITES**.  
 See *Phellomyces* Renault.
- PHOLONITES** Fresenius, 1861.  
*Phelonites lignitum* Fresenius, 1861, p. 155, pl. 62, figs. 1-15; Miocene; Salzhausen, Hesse.
- PHENACOCCLADUS** Cockerell, 1926.  
*Phenacocladus hendersoni* Cockerell, 1926b, p. 111, fig. p. 112; alga, Rhodometaceae; Green River formation, Eocene; Kimball Creek, Roan Mtn., Colo.
- PHENANTHERA** Hollick, 1907.  
*Phenanthera petalifera* Hollick, 1907, p. 182, figs. 1, 2; flower allied to Caryophyllaceae, Rosales or Myrtales; Miocene; Florissant, Colo.
- PHIALOPHLOIOS** Horich, 1915.  
*Phialophloios quadratus* Horich, 1915, p. 426, figs. 1-3; arborescent lycopod stem impression; Upper Carboniferous.
- PHIALOPTERIS** Presl, 1838.  
*Phialopteris tenera* Presl, in Sternberg, 1838 (1820-38), p. 114, pl. 32, fig. 1; fertile fernlike foliage; Upper Triassic (Keuper); Steindorf near Bamberg, Bavaria.
- PHILLIPSIA** Presl, 1838.  
*Phillipsia harcourtii* Presl, in Sternberg, 1838 (1820-38), p. 206. For *Lepidodendron harcourtii* Witham, 1833, p. 75, pls. 12, 13.
- PHLEBOMERIS** Saporta, 1894.  
*Phlebomeris spectanda* Saporta, 1894, p. 168, pl. 29, fig. 14; pl. 30, fig. 1; fern frond, Matoniaceae?; Cretaceous; Portugal.
- PHLEBOPTERIS** Brongniart, 1836.  
*Phlebopteris polypodioides* Brongniart, 1836 (1828a-38), p. 372, pl. 83, fig. 1; fern leaf, Matoniaceae; Jurassic; Scarborough, England.

- PHLEBOXYLON** Hartig, 1848.  
*Phleboxylon pannonica* (Unger) Hartig, 1848a, p. 138; coniferous wood; Tertiary (Braunkohle); Germany.
- PHLOISBOLITHES** Steger, 1883.  
*Phloisbolithes striatus* Steger, 1883, p. 28; Miocene; Kokoschutz, Silesia.
- PHOENICITES** Brongniart, 1828.  
*Phoenicites pumila* Brongniart, 1828b, p. 121; nom. nud. First valid description?; *Phoenicites spectabilis* Unger, in Heer, 1855, p. 94, pl. 39; palm leaf; Tertiary; Lausanne, Switzerland.
- PHOENICOCARPUS** Massalongo, 1859.  
*Phoenicocarpus chiavonicus* Massalongo, 1859a, p. 125; nom. nud.; Oligocene; Chiavon, Italy.
- PHOENICOPSIS** Heer, 1876.  
*Phoenicopsis angustifolia* Heer, 1876c, p. 51, pl. 1, fig. 1d; pl. 2, fig. 3b; cycadophyte? foliage; Jurassic; Kalamundung, Siberia.
- PHOENICOPTERIS**.  
*Phoenicopterus croizeti* Lapparent, 1883, p. 1045; error for *Phoenicopsis*?
- PHOLIDOPHLOIOS** Zalesky, 1934.  
*Pholidophloios calmiusicus* Zalesky, 1934d, p. 1115, fig. 11; lycopod leaf base impression; Carboniferous; Donets, Russia.
- PHOLIDOPHORUS** Zigno, 1856.  
*Pholidophorus beggiatianus* Zigno, 1856b, p. 331, Jurassic (Oolite); Rotzo, Italy.
- PHOLIDOPHYLLUM** Zalesky, 1937.  
*Pholidophyllum ornatum* Zalesky, 1937, p. 81, fig. 47; incertae sedis; Permian; Matveyevo, U. S. S. R.
- PHOMITES** Fritel, 1910.  
*Phomites myricae* Fritel, 1910, p. 14, pl. 20, fig. 13; fungus, compared with *Phoma* (Sphaerioidaceae, Fungi Imperfecti); upper Paleocene; Cessoy (Seine-et-Marne), France.
- PHORMIDIODEA** Wieland, 1930.  
*Phormidiodea superba* Wieland, 1930, p. 28, fig. 1b; reef-forming alga; Cloverly formation, Lower Cretaceous; 16 miles east of Medicine Bow, Wyo.
- PHRAGMOTHYRITES** Edwards, 1922.  
*Phragmothyrites eocaenica* Edwards, 1922, p. 69, pl. 8; fungus, Microthyriaceae; Eocene; Isle of Mull, Scotland.
- PHTHINOPHYLLUM** Stur, 1877.  
*Phtthinophyllum debile* (Sternberg) Stur, 1877, p. 187. For *Pecopteris debile* Sternberg, 1825 (1820-38), Tentamen, p. xviii, pl. 26, fig. 3; Upper Carboniferous; Radnitz, Bohemia.
- PHYCODES** Debey and Ettlinghausen, 1859.  
*Phycodes sericeus* Debey and Ettlinghausen, 1859a, p. 200; alga, incertae sedis; Cretaceous; Aachen, Rhenish Prussia.

- PHYCROIDELLA** Matthew, 1890.  
*Phycoidella stichidifera* Matthew, 1890a, p. 144, pl. 5, figs. 5a-d; alga; Cambrian; Hanford Brook, Nova Scotia, Canada.
- PHYCOMYCITES** Ellis, 1915.  
*Phycomycites frodinghamii* Ellis, 1915, p. 111, pl. 1; mycelium and sporangia, Phycomycete; Jurassic; Lincolnshire, England.
- PHYCOPSIS** Rothpletz, 1896.  
*Phycopsis affinis* (Sternberg) Rothpletz, 1896, p. 885, pl. 22, figs. 1, 2; alga.
- PHYCOSIPHON** Fischer-Ooster, 1858.  
*Phycosiphon incertum* Fischer-Ooster, 1858, p. 59, pl. 15, fig. 4; alga?; Cretaceous?; Gurnigel, Switzerland.
- PHYCOSIPHON** Massalongo, 1859.  
*In* Massalongo and Scarabelli, 1859, p. 92; a suggested name change for *Brachycladium thomasinum* Berkeley, 1848, p. 382, pl. 11, figs. 2a, 2b; Miocene; Prussia.
- PHYLLADODERMA** Zalesky, 1913.  
*Phylladoderma arberi* Zalesky, 1913, p. 24, pl. 1, fig. 4; pl. 2, figs. 7, 9; pl. 3, 5-8, 10, 11; cordaitan? leaf, cuticle preserved; Permian; Chome-chor, Mont Talbel, Russia.
- PHYLLADODESME** Zalesky, 1929.  
*Phylladodesme zeileri* Zalesky, 1929a, p. 196, pl. 18, figs. 1-4; ginkgophyte? leaf; lower Westphalian, Carboniferous; near Rovenki, Donetsk Basin, Russia.
- PHYLLANTHINIUM** Ogura, 1932.  
*Phyllanthinium pseudohobashiraishi* Ogura, 1932a, p. 189, pl. 4; petrified wood, Euphorbiaceae; Tertiary ("Palaeogene"); near Fukuoka City, Kiushu, Japan.
- PHYLLERITES** Meschinelli, 1892.  
*Phyllerites palaeocassiae* (Ettingshausen) Meschinelli, *in* Saccardo, 1892, p. 805. See also Meschinelli, 1898, p. 104, pl. 29, fig. 1.
- PHYLLITES** Brongniart, 1822.  
*Phyllites populina* Brongniart, 1822, p. 237, pl. 14, fig. 4; leaf, dicotyledon; Miocene; Oeningen, Switzerland. Brongniart's genus is based on this species. However, including as it does a miscellaneous assemblage of leaves of doubtful affinity, a type species has little or no real significance.
- PHYLLOCANNITES** Kuntze, 1904.  
*Phyllocannites* Kuntze, *in* Post and Kuntze, 1904, p. 435.
- PHYLLOCHORDA** Schimper, 1879.  
*Phyllochorda sinuosa* (Ludwig) Schimper, *in* Schimper and Schenk, 1879 (1879-90), p. 50, fig. 38, alga, Chordophyceae; Upper Devonian; Thuringia.
- PHYLLOCLADOPITYS** Kräusel, 1928.  
*Phyllocladopitys capensis* Kräusel, *in* Kräusel and Range, 1928, p. 35, pl. 6, figs. 5, 6; pl. 7, figs. 1-6; coniferous stem; Karroo beds, Permian; German Southwest Africa.
- PHYLLOCLADOPSIS** Fonatine, 1889.  
*Phyllocladopsis heterophylla* Fontaine, 1889, p. 204, pl. 84, fig. 5; pl. 167, fig. 4; foliage, compared with *Phyllocladus* (Podocarpaceae); Potomac group, Lower Cretaceous; Virginia.
- PHYLLOCLADOXYLON** Gothan, 1905.  
*Phyllocladoxylon mülleri* (Schenk) Gothan, 1905, p. 55. For *Phyllocladus mülleri* Schenk, *in* Zittel, 1879-90, p. 373, fig. 424.
- PHYLLOCLADITES** Visiani, 1858.  
*Phyllocladites foliosa* (Sternberg) Visiani, *in* Massalongo, 1858c, p. 816. For *Noeggerathia foliosa* Sternberg, 1820-38, p. 33, pl. 20.
- PHYLLODERMIMUM** Miner, 1935.  
*Phyllodermium remschii* Miner, 1935, p. 594, pl. 21, figs. 72, 73; angiosperm cuticle; Upper Cretaceous; Amlut, east coast Disco Island, Greenland.
- PHYLLOPTYIS** Zalesky, 1918.  
*Phylloptysis heeri* (Schmalhausen) Zalesky, 1918, p. 23, pl. 15, fig. 7.
- PHYLLOPTERIS** Brongniart, 1849.  
A name created by Brongniart for *Glossopteris phillipsii* Brongniart, 1830 (1828a-38), p. 225, pl. 61 bis, fig. 5; pl. 63, fig. 2; a *Sagenopteris* leaflet; Jurassic; Gristhorpe Cliff, near Scarborough, Yorkshire, England.
- PHYLLOSTROBUS** Saporta, 1873.  
*Phyllostrobos lorteti* Saporta, 1873b, p. 134; see also Saporta, 1884 (1876-84), p. 636, pl. 221, figs. 1, 2; coniferous foliage and cones; Jurassic; Orbagnoux, France. Generic name cited in Saporta, 1872b, p. 1056.
- PHYLLOTAENIA** Saporta, 1894.  
*Phyllotaenia demersa* Saporta, 1894, p. 216, pl. 38, fig. 6; leaf fragment, monocotyledon; Upper Cretaceous; Padrao, Portugal.
- PHYLLOTENIA** Salfeld, 1909.  
*Phyllotenia longifolia* Salfeld, 1909, p. 27, pl. 4, figs. 3-5; foliage and seeds, Ginkgoales?; Jurassic; Salzheimendorf, Germany.
- PHYLLOTHALLUS** Rothpletz, 1896.  
*Phyllothallus lumbricarius* (Münster) Rothpletz, 1896, p. 902. For *Chondrites lumbricarius* Münster, 1843 (1939-43), p. 79, pl. 2, fig. 1.



**PHYLLOTHECA** Brongniart, 1828.

*Phyllothea australis* Brongniart, 1828b, p. 150, articulate stem and foliage; Hawkesbury River, near Port Jackson, Australia. One of first illustrations in a reasonably accessible source appears to be Feistmantel, 1878, p. 83, pl. 6, fig. 3; pl. 7, figs. 1, 2; pl. 15, figs. 1, 2.

**PHYMATOCARYON** Mueller, 1871.

*Phymatocaryon mackayi* Mueller, 1871 (1871-82), p. 47, pl. 2; Pliocene; Smythe's Creek, Victoria.

**PHYMATODERMA** Brongniart, 1849.

*Phymatoderma granulatulum* (Schlotheim) Brongniart, 1849, p. 59. For *Algcrites granulatulus* Schlotheim, 1822, p. 46, pl. 5, fig. 1; alga?; Jurassic; Württemberg.

**PHYMATOLITHES** Romanowski, 1890.

*Phymatolithes algeformis* Romanowski, 1890, p. 142, pl. 21, fig. 5; Lower Jurassic; Thian-Schan, Turkistan, Asia.

**PHYSAGENIA** Heer, 1855.

*Physagenia parlatorii* Heer, 1855, p. 109, pl. 42, figs. 2-17; incertae sedis; Tertiary.

**PHYSEMATOPITYS** Goeppert, 1850.

*Physematopitys salisburioides* Goeppert, 1850, p. 242, pl. 49, figs. 1-3; coniferous wood; Tertiary (Braunkohle); Schwerta, Lusatia, Germany.

**PHYSOPHYCUS** Schimper, 1869.

*Physophycus marginatus* (Lesquereux) Schimper, 1869 (1869-74), p. 207. For *Caulerpites marginatus* Lesquereux, 1869, p. 314, pl. 7; alga?; Carboniferous; Württemberg, also Lawrence County, Pa.

**PHYSOPHYLLUM** Massalongo, 1858.

*Physophyllum tococaeifolium* Massalongo, 1858a, p. 122; leaf, Melastomaceae; Tertiary; Italy. See Massalongo, 1859, p. 410, pl. 8, fig. 15; pl. 38, fig. 23.

**PHYSOPORELLA** Steinmann, 1903.

*Physoporella pauciforata* (Gumbel) Steinmann, 1903, p. 17, fig. 7; alga, Dasycladaceae; Triassic (Keuper); South Tyrol.

**PHYSOSTOMA** Williamson, 1876.

*Physostoma elegans* Williamson, 1876b, p. 160; petrified seed, Pteridospermae; Upper Carboniferous. For illustrations, see Williamson, 1877, p. 262, pl. 11, figs. 77, 78. [Name changed to *Lagenostoma physoides* in Williamson, 1876a, p. 70, and again to *Physostoma elegans*, in Oliver, 1909, p. 74.]

**PHYTOCALYX** Bornemann, 1886.

*Phitocalyx antiquus* Bornemann, 1886, p. 13, pl. 1, figs. 1-8; alga?; Cambrian; Sardinia. Earlier citation: Bornemann, 1883, p. 272; nom. nud.

**PHYTOLITHUS**.

This name applied to a diverse assemblage of fossil plants by Martin, 1809. First citation after 1820 appears to be *Phytolithus sulcatus* Sternberg, 1825 (1820-38), p. 28, pl. 5, figs. 2-6.

**PHYTOPSIS** Hall, 1847.

*Phytopsis tubulosum* Hall, 1847, p. 38, pl. 8, figs. 1a-e; plant?; Lowville limestone (Birdseye limestone), Ordovician; near Amsterdam, N. Y.

**PHYTORADICULARIA** Hollick, 1930.

*Phytoradicularia dubia* Hollick, in Hollick and Martin, 1930, p. 116, pl. 2, fig. 10; incertae sedis; Upper Cretaceous; Herendeen Bay, Alaska Peninsula.

**PIAEA** Florin, 1929.

*Piaca punctata* Florin, 1929a, p. 244, pl. 1, figs. 1-5; pl. 2, figs. 1-4; pl. 3, figs. 1-6; alga, Dasycladaceae?; Permian; Oberhessen, Bidingen, Germany.

**PIAELLA** Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 141.

**PICCOLOMINITES** Unger, 1845.

*Piccolominites sardus* Unger, 1845 (1841-47), p. xc; wood; Miocene; Sardinia.

**PICEITES** Goeppert, 1850.

*Piceites reucheanus* (Goeppert and Berndt) Goeppert, 1850, p. 209, pl. 30, figs. 1, 2; cone, Coniferales; Tertiary.

**PICEOPHYLLUM** Ogura, 1932.

*Piceophyllum simplex* Ogura, 1932b, p. 463, pl. 22, fig. 5; petrified leaf, Abietineae, Coniferales; Cretaceous; Hokkaido, Japan.

**PICEOXYLON** Gothan, 1906.

*Piceoxylon pseudotsugae* Gothan, in Henry Potonie, 1906, no. 80, p. 1, fig. 1; coniferous wood; Tertiary; California.

**PIETZSCHIA** Gothan, 1927.

*Pietzschia schulleri* Gothan, 1927a, p. 5, pls. 1, 2; petrified stem, related to *Cladoxylon*; Wildenfels shale, Upper Devonian; Saxony.

**PILA** C. E. Bertrand and Renault, 1892.

*Pila vibractensis* C. E. Bertrand and Renault, 1892, p. 159, pl. 6; alga?; Permian; Autun, France.

**PILODEA** Pia, 1937.

*Pilodea* sp. Pia, 1937, p. 834; alga, Chaetangaceae; Permian; Sumatra.

**PILOPHOROSPERMA** Thomas, 1933.

*Pilophorosperma granulatulum* Thomas, 1933, p. 207, pl. 23, fig. 58; pteridosperm inflorescence with seeds enclosed in cupules; Molteno beds, Karroo system, Triassic; Upper Umkomas Valley, Natal.

**PILULARITES** Goeppert, 1837.

*Pilularites braunii* Goeppert, 1837, p. 439; Triassic (Keuper); Bayreuth, Bavaria.

**PIMPINELLITES** Unger, 1839.

*Pimpinellites ziaoides* Unger, 1839a, p. 104; fruit, Umbelliferae; Miocene; Radoboj, Croatia.

**PINAKODENDRON** C. E. Weiss, 1893.

*Pinakodendron mustivum* C. E. Weiss, in Weiss and Sterzel, 1893, p. 61, pl. 3, fig. 16; Upper Carboniferous; near Wattensteinscheid, Westphalia.

**PINIPHYLLUM** Nathorst, 1886.

*Piniphyllum* Nathorst, 1886a, p. 53; nom. nud.

**PINITES** Lindley and Hutton, 1831.

*Pinites brandlingi* Lindley and Hutton, 1831 (1831-37), p. 1, pl. 1; cordaitan petrified tree; Carboniferous; Wideopen, near Gosforth, 5 miles north of Newcastle-upon-Tyne. Described and figured but not named by Witham, 1831, p. 31, pl. 4, figs. 1-5; later placed in *Dadoxylon*. See Seward, 1917, p. 254.

**PINNULARIA** Lindley and Hutton, 1832.

*Pinnularia capillacea* Lindley and Hutton, 1832 (1831-37), p. 81, pl. 111; probably calamitean roots; Carboniferous; England.

**PINOSTROBUS** (Feistmantel) Stopes, 1915?

*Pinostrobus sussexiensis* (Mantel) Stopes, 1915, p. 123, pl. 10, figs. 2-4; pl. 11, fig. 3; abietinean cone; Lower Greensand, Cretaceous; Selmeaton, Sussex, England. Original citation: *Pinostrobus validus* Ottokar Feistmantel, 1875, p. 272; nom. nud. See also Stopes, 1915, p. 122.

**PINOXYLON** Knowlton, 1900.

*Pinoxylon dacotense* Knowlton, in Ward, 1900a, p. 420, pl. 179; wood, compared with *Pinus* but lacking large rays; Jurassic; 3 miles west of Sturgis, S. Dak.

**PINUXYLON** Gothan, 1906?

*Pinuxylon succiniferum* (Goeppert and Berendt) Gothan, in Heinholt, 1906, p. 118. Cited originally as *Pinuxylon* sp. Gothan, 1905, p. 102. For *Pinites succinifer* Goeppert and Berendt, in Berendt, 1845, p. 89, pl. 2, figs. 1-8.

**PIPERITES** Goeppert, 1853.

*Piperites miquelianus* Goeppert, 1853, p. 41, pl. 7, figs. 48, 49; leaf, Piperaceae; Tertiary; Dorje Tandjung, Java.

**PIROCONITES** Gothan, 1914.

*Piroconites kusperti* Gothan, 1914, p. 42, pl. 28, fig. 4; portion of cone, Bennettiales; Rhaetic; Nürnberg, Germany.

**PISONIAEPHYLLITES** Hector, 1880.

*Pisoniaephyllites novaezealandiae* Hector, 1880, p. 49; nom. nud.

**PISTITES** Hosius and Marck, 1880.

*Pistites loriformis* Hosius and Marck, 1880, p. 182, pl. 38, figs. 151, 152; leaves, Pistiaceae; Upper Cretaceous Westphalia.

**PITOXYLON** Hartig, 1848.

Hartig, 1848b, p. 138, proposes this genus to include certain species formerly placed in *Peuce*.

**PITUS** Witham, 1833.

*Pitus antiqua* Witham, 1833, p. 37, pl. 8, figs. 1-3; wood, Cordaitales. Lower Carboniferous; Lennel Braes, Tweed Mill, Berwick, Scotland. Witham's name was corrected by later authors to *Pitys*; see Unger, 1842 (1841-47), p. 78; Seward, 1917, p. 285; Scott, 1923, p. 255.

**PITYANTHUS** (Nathorst) Seward, 1919.

*Pityanthus granulatus* (Heer) Seward, 1919, p. 395. For *Ophioglossum granulatum* Heer, 1883, pl. 57, figs. 8, 9; abietinean microsporangiate cone; Cretaceous (Patoot); Greenland. Original citation of genus: *Pityanthus* sp. Nathorst, 1899, p. 16, pl. 2, fig. 7.

**PITYITES** Seward, 1919.

*Pityites solmsi* Seward, 1919, p. 373, figs. 772, 773; coniferous shoots and cones, appear similar to *Prepinus*; Wealden; Sussex, England.

**PITYOCLADUS** (Nathorst) Seward, 1919.

*Pityocladus longifolius* (Nathorst) Seward, 1919, p. 378, figs. 775, 776; foliage shoots, Coniferales; Rhaetic; Scania, Sweden. Originally applied as a subgenus of *Pinites* by Nathorst.

**PITYOIDOLEPIS** Hollick and Jeffrey, 1909.

*Pityoidolepis statenensis* Hollick and Jeffrey, 1909, p. 53, pl. 9, figs. 13, 14; pl. 27, figs. 1-3; cone scale, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.

**PITYOPHYLLUM** Nathorst, 1899.

*Pityophyllum staratschini* Nathorst, 1899, p. 19, pl. 2, figs. 24, 25; coniferous leaves; Jurassic; Franz Josef Land.

**PITYORADIX** Chachloff, 1924.

*Pityoradix irkutensis* Chachloff, 1924, p. 29; pl. 10, figs. 62, 67; Upper Jurassic; Irkutsk, Siberia.

**PITYOSPERMUM** Nathorst, 1899.

*Pityospermum maakianum* (Heer) Nathorst, 1899, p. 17, pl. 2, fig. 15; seed. affinities with *Tauga*?; uppermost Jurassic; Franz Josef Land.

**PITYOSPORITES** Seward, 1914.

*Pityosporites antarcticus* Seward, 1914, p. 23, pl. 8, fig. 45; winged spores, Abietinae; supposedly derived from Beacon sandstone, not older than Rhaetic; Priestley Glacier, Antarctica.

**PITYOSTROBUS** (Nathorst) Dutt, 1916.

*Pityostrobus macrocephalus* (Lindley and Hutton) Dutt, 1916, p. 529, pl. 15; cone, compared with *Pinus excelsa* Linnaeus; lower Eocene; Dover, England. Original generic citation: *Pityostrobus* sp. Nathorst, 1899, p. 17, pl. 2, figs. 9, 10.

**PITYOXYLON** Kraus, 1870.

*Pityoxylon sandbergeri* Kraus, in Schimper, 1870 (1869-74), p. 378, pl. 79, fig. 8; Triassic (Keuper); Kitzingen, Bavaria.

**PITYS.**

See *Pitus* Witham.

**PLAGIOPODOPSIS** Britton and Hollick, 1915.

*Plagiopodopsis scudderi* Britton and Hollick, 1915, p. 10, figs. 1, 2; moss, compared with *Plagiopsis* (Bartramia) Miocene; Florissant, Colo. See later discussion by Steere, 1946, p. 313.

**PLAGIOZAMITES** Zeiller, 1894.

*Plagiozamites planchardi* (Renault) Zeiller, 1894, p. 174, pl. 8, fig. 1; pl. 9, fig. 1; cycadophyte? leaf; Permian; Trienbach, Alsace.

**PLAGIOZAMIOPSIS** Sze, 1943.

*Plagiozamiopsis podozamioides* Sze, 1943, p. 511, figs. 1-10; cycadophyte foliage; Permian.

**PLANOXYLON** Stopes, 1916.

*Planoxylon hectori* Stopes, 1916, p. 120, pl. 4, figs. 1-5; coniferous wood; Cretaceous; Amuri Bluff, New Zealand.

**PLANTAGINOPSIS** Fontaine, 1905.

*Plantaginopsis marylandica* Fontaine in Ward, 1905, p. 561, pl. 117, fig. 7; pl. 118, figs. 1, 2; leaf, dicotyledon; Potomac group, Lower Cretaceous; Federal Hill, Baltimore, Md.

**PLATAEANTHUS.**

Error for *Palaeanthus*, in Knowlton, 1898, p. 168.

**PLATANINIUM** Unger, 1842.

*Plataninium acerinum* Unger, 1842b, p. 174. See Unger, 1847 (1841-47), p. 138, pl. 47, figs. 8-10.

**PLATANITES** Forbes, 1851.

*Platanites herbridicus* Forbes, 1851, p. 103, pl. 4, fig. 1; leaf, compared with *Platanus* (Platanaceae); Tertiary; Isle of Mull, Scotland.

**PLATANOIDITES** Robert Potonie, 1950.

*Platanoidites gertrudae* Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 57, pl. B, fig. 40; pollen, Platanaceae?; Pliocene; Chatt-Aquitain, Germany.

**PLATANOPHYLLUM** Fontaine, 1889.

*Platanophyllum crossinerve* Fontaine, 1889, p. 316, pl. 158, fig. 5; leaf fragment, compared with *Araliacphyllum* and *Hedera platanoides* Lesquereux; Potomac group; Lower Cretaceous; Virginia.

**PLATYGERIPHYLLUM** Velenovsky, 1889.

*Platygeriphyllum cretaceum* Velenovsky, 1889, p. 29, pl. 5, fig. 16. For *Platyccrium cretaceum* Velenovsky, 1889, p. 5; leaf fragment; Cretaceous (Cenomanian); Vyserovic, Bohemia.

**PLATYGERITES** Goepfert, 1854.

*Platygerites wirthingianus* Goepfert, 1854, p. 98; nom. nud.; Miocene; Niederrhein, Germany.

**PLATYCOILA** Mueller, 1874.

*Platycoila sullivani* Mueller, 1874, p. 23, pl. 9, figs. 5-9; angiospermous fruit; lower Pliocene; near Nintingbool, Victoria.

**PLATYLEPIS** Saporta, 1874.

*Platylepis micromyela* Saporta, 1874 (1873c-75), p. 278, pl. 120, figs. 1-3; cycadophyte trunk; Jurassic (Lias); Tournay-sur-Odon, France.

**PLATYMASTIXIA** Kirchheimer, 1934.

*Platymastixia cacaoides* (Zenker) Kirchheimer, 1934b, p. 790, figs. 21; fruit, Cornaceae; Tertiary (Braunkohle); Altenburg, Germany.

**PLATYPUCE** Menge, 1850.

*Platypuce dichotoma* Menge, 1850, p. 26, pl. 3, figs. 8-14; Tertiary (Braunkohle); Redlau near Danzig, Prussia.

**PLATYPHYLLUM** (Dawson) David White, 1905.

*Platyphyllum brownianum* Dawson, in Smith and White, 1905, p. 37, pl. 2, figs. 1, 2. [Dawson, 1881a, p. 11, proposed *Platyphyllum* for *Cyclopteris brownii* if the latter is found at a later date with a fructification. Dawson, 1888, p. 265, uses the binomial *Platyphyllum brownii* but only in a list and without description. The above reference to White appears to be the first valid one.]

**PLATYPTERYGIUM** (Schimper) Ottokar Feistmantel, 1886.

*Platypterygium balli* Ottokar Feistmantel, 1886, p. 37, pl. 2A, figs. 4-8; pl. 3A, fig. 2; cycadophyte leaf; Barakar group; west of Gurtur, western Bengal, India.

**PLATYSOLENTES** Quenstedt, 1867.

*Platysolenites* sp. Quenstedt, 1867, p. 842, pl. 80, fig. 20; Tertiary; Russia.

**PLATYSPERMUM** E. A. N. Arber, 1914.

*Platyspermum sulcatum* (Presl) E. A. N. Arber, 1914, p. 95, pl. 6, fig. 11; seed; Transition Coal Measures of South Staffordshire and Middle Coal Measures of Warwickshire and Yorkshire, England.

**PLECTITES** Reinsch, 1881.

*Plectites* sp. Reinsch, 1881, p. 72, pl. 16a, figs. 1-5; pl. 17a, figs. 1-8; Permian; Stockheim, Württemberg.

**PLEIACRON** Mueller, 1877.

*Pleiacron elachocarpum* Mueller, 1877a (1877-79), p. 179; fruit; Tertiary; New South Wales. *See also* Mueller, 1883, p. 2, pl. 15, figs. 15-18.

**PLEIOCLINIS** Mueller, 1882.

*Pleioclinis couchmanti* Mueller, 1882 (1871-82), p. 43, pl. 19, figs. 1-11; Pliocene; Nintingbool and Haddon, Victoria.

**PLEIOMERITES** Ettingshausen, 1868.

*Pleiomerites reticulatus* Ettingshausen, 1868a, p. 226, pl. 38, fig. 6; leaf, Myrsineae; Tertiary.

**PLEIOMEROPSIS** Weyland, 1938.

*Pleiomeropsis rothenensis* Weyland, 1938b, p. 161, pl. 23, figs. 1-7; inflorescence, Myrsinaceae; Tertiary; Rott, Siebengebirge, Germany.

**PLEOSPORITES** Suzuki, 1910.

*Pleosporites shiraius* Suzuki, 1910, p. 191, pl. 7, fig. 6; fungus; Upper Cretaceous; Hokkaido, Japan.

**PLESIOCAPPARIS** Mueller, 1871.

*Plesiocapparis prisca* Mueller, 1871 (1871-82), p. 40, pl. 4, figs. 9-11; Pliocene; Haddon, Victoria.

**PLEURODICTYTES** Reinsch, 1881.

*Pleurodictytes* sp. Reinsch, 1881, p. 89, pl. 29, figs. 1-7; pl. 29a, figs. 1-7; Permian; Stockholm, Württemberg.

**PLEUROMEIA** Corda, 1852.

*Pleuromeia sternbergi* (Münster) Corda, in Germar, 1852, p. 184 (original spelling given by Corda is *Pleuromeya*). For *Sigillaria sternbergi* Münster, 1839 (1839-43), p. 47, pl. 3, fig. 10; Triassic (Bunter Sandstein); Magdeburg, Prussian Saxony.

**PLEUROMEYA**.

*See Pleuromeia* Corda, 1852.

**PLEUROPLASMIUM** Reinsch, 1881.

*Pleuroplasmium* sp. Reinsch, 1881, p. 24, pl. 1, figs. 1-7; pl. 2, figs. 1-6; Upper Carboniferous; Zwickau, Saxony.

**PLEUOSTROMIUM** Reinsch, 1881.

*Pleurostromium* sp. Reinsch, 1881, p. 59, pl. 14a, figs. 1-4; Upper Carboniferous; Zwickau, Saxony.

**PLEXIPLICA** Kirchheimer, 1935.

*Plexiplica reidi* Kirchheimer, 1935, p. 293, fig. 18; endocarp, Cornaceae; Oligocene (Braunkohle); Helene near Born, Germany. *See also* Kirchheimer, 1936c, p. 292, pl. 8, figs. 1a-e.

**PLINTHIOTHECA** Zeiller, 1899.

*Plinthiotheca anatolica* Zeiller, 1899, p. 54, pl. 4, figs. 18, 18a; incertae sedis; Carboniferous; Bassin d'Heraclee, Asia Minor.

**PLOCARITES** Massalongo, 1851.

*Plocarites polymorphus* Massalongo, 1851, p. 63, alga; Tertiary; Italy.

**PLOCHMOPELTINITES** Cookson, 1947.

*Plochmopeltinites masoni* Cookson, 1947b, p. 212, pl. 13, figs. 14, 15; ascumata, Micropeltaceae; late Oligocene; Kerguelen Island, South Indian Ocean.

**PLUMALINA** Hall, 1858.

*Plumalina gracilis* Hall, 1858, p. 175; probably not a plant; Chemung group, Devonian; Missouri. *See also* Miller, S. A., 1889, p. 134.

**PLUMATOPTERIS** Kidston, 1894.

*Plumatopteris elegans* Kidston, 1894, p. 259, pl. 5, figs. 1, 1a; sterile fern foliage; Calderwood group, Carboniferous Limestone series, Lower Carboniferous; East Kilbride, Lanarkshire, Scotland.

**PLUTONIA** Velenovsky, 1889.

*Plutonia cretaceae* Velenovsky, 1889, p. 11, pl. 2, figs. 11-20; pl. 3, figs. 1, 2; foliage and cones, Coniferales; Upper Cretaceous; Lipenec, Bohemia.

**POACITES** Schlotheim, 1820.

It seems evident that Schlotheim proposed this genus to include supposed grass leaves. The species he described are Carboniferous in age and clearly not grasses. A variety of fossils have been assigned to the genus, for example: *Poacites carinata* Brongniart, 1822, p. 238, pl. 14, fig. 2; this species is apparently an arborescent lycopod leaf. *Poacites cocoina* Lindley and Hutton (see Seward, 1898, p. 366); is probably a calamite. *Poacites firmus* Heer, 1855, p. 70, pl. 25, fig. 11; the first well-illustrated description of a fossil that bears good evidence of being a grass and is suggested as the type (Miocene; Lausanne, Switzerland).

**POACORDAITES** Grand'Eury, 1877.

*Poacordaites latifolius* (Goeppert) Grand'Eury, 1877, p. 224. For *Noeggerathia palmaeformis* Goeppert, 1852b, p. 216, pl. 15; pl. 16, figs. 1-3; given earlier as *Poacites latifolius* Goeppert, 1844, p. 216.

**POACORDAIXYLON** Renault, 1885.

*Poacordaitylon stephanense* Renault, 1885, p. 81, pl. 6, figs. 20-23; cordaitan wood; Upper Carboniferous; Montmartre, St.-Etienne, France.

**PODALYRIOPHYLLUM** Ettingshausen, 1895.

*Podalyriophyllum brochidodromum* Ettingshausen, 1895, p. 51, pl. 4, fig. 17; leaf, Leguminosae; Upper Cretaceous; between Warnagh and Oxley Station, Australia.

**PODOCARPITES** Andrae, 1855.

*Podocarpites acicularis* Andrae, 1855, p. 45, pl. 10, fig. 5; coniferous leaves?; Jurassic; Hungary.

- PODOCARPOIDITES** Robert Potonie, 1950.  
*Podocarpoidites libellus* Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 49, pl. C, fig. 6; pollen, Podocarpaceae?; lower Miocene; Niederlausitz, Germany.
- PODOCARPOXYLON** Gothan, 1904.  
*Podocarpoxyylon juniperoides* Gothan, in Gagel, 1904, p. 272; coniferous wood; Pleistocene; Elmshorn, Prussia. First? illustrated species: *Podocarpoxyylon aparenchymatosum* Gothan, 1908, p. 8, pl. 1, figs. 9-11. See also Gothan, 1905; Seward, 1919, p. 173; Kräusel, 1949.
- PODOCARYA** (Buckland) Goeppert, 1848.  
*Podocarya bucklandi* Goeppert, in Bronn, 1848, p. 1023; Lower Oolite, Jurassic; Charmouth, England. Originally cited as *Podocarya* sp. Buckland, 1836, p. 505, pl. 43, figs. 2-10; petrified fruit referred to Pandanaceae.
- PODOGONIUM** Heer, 1859.  
*Podogonium knorrii* Heer, 1859, p. 114, pl. 134, figs. 22-26; pl. 135; pl. 136, figs. 1-9; leaves, Caesalpinae; Miocene, Switzerland.
- PODOLOMA** Ettingshausen, 1879.  
*Podoloma polypodioides* Gardner and Ettingshausen, 1879, p. 29, pl. 3, figs. 4-6, 9; leaf fragment, Polypodiaceae; Eocene; Bournemouth, England.
- PODOSPORITES** Rao, 1943.  
*Podosporites tripakshi* Rao, 1943b, p. 182, figs. 1-13; spores with three bladders, probably Podocarpaceae; Jurassic; Nipania, Rajmahal Hills, Behar, India.
- PODOSTEMON** Unger, 1853.  
*Podostemon ceratophylloides* Unger, in Massalongo, 1853b, p. 7; Eocene; Monte Bolca, Italy.
- PODOSTEMONOPSIS** Weyland, 1938.  
*Podostemonopsis tertiaria* Weyland, 1938a, p. 90, pl. 11, figs. 6-10; infructescence, Podostemonaceae; Tertiary; Rott, Siebengebirge, Germany.
- PODOZAMITES** (Brongniart) C. F. W. Braun, 1843.  
*Podozamites distans* (Presl) C. F. W. Braun, in Münster, 1843 (1839-43), p. 28. For *Zamites distans* Presl, in Sternberg, 1820-38, p. 196, pl. 41, fig. 1; Jurassic (Lower Lias); Bayreuth, Bavaria.
- POECILITOCAULON** Fliche, 1910.  
*Poecilitocaulon dubium* Fliche, 1910, p. 261, pl. 26, fig. 3; stem impression, incertae sedis; Triassic; Meurthe-et-Moselle, France.
- POECILITOSTACHYS** Fliche, 1910.  
*Poecilitostachys haugi* Fliche, 1910, p. 264, pl. 26, fig. 4; pl. 27, fig. 1; incertae sedis; Triassic; Meurthe-et-Moselle, France.
- POECILOXYLON** Grand'Eury, 1877.  
*Poeciloxylon proprium* Grand'Eury, 1877, p. 307, wood, some comparison with *Dadoxylon*; Carboniferous; Loire, France.
- POLIOEXOLOBUS** E. W. Berry, 1938.  
*Polioexolobus prenuntius* E. W. Berry, 1938, p. 128, pl. 51; leaf, Asclepiadaceae; Rio Pichileufu, Argentina.
- POLLENITES** Robert Potonie, 1931.  
*Pollenites iliacus* Robert Potonie, 1931a, p. 556, fig. 5; pollen; Miocene.
- POLYCARPELLA** Reid and Chandler, 1933.  
*Polycarpella caespitosa* Reid and Chandler, 1933, p. 486, pl. 28, figs. 13-21; incertae sedis; London Clay, Eocene; Sheppey, Kent, England.
- POLYGONITES** Saporta, 1865.  
*Polygonites ulmaceus* Saporta, 1865, p. 92, pl. 3, fig. 14; winged fruit, Polygonaceae; Tertiary; St.-Jean-de-Garguer, France.
- POLYGONOCARPUM** Weyland, 1938.  
*Polygonocarpum ambratum* Weyland, 1938a, p. 87, pl. 11, figs. 1, 1a; winged fruit, Polygonaceae; Tertiary; Rott, Siebengebirge, Germany.
- POLYGONOCARPUS** (Zeiller) Zalesky, 1907.  
*Polygonocarpus czarnockii* Zalesky, 1907, p. 68, pl. 2, fig. 15; Upper Carboniferous; Dombrowa, Russia.
- POLYGONOSPHAERITES** Ferdinand Roemer, 1880.  
*Polygonosphaerites tessellatus* (Phillips) Ferdinand Roemer, 1880, p. 297. For *Sphaerontes tessellatus* Phillips, 1841, p. 135, pl. 59, fig. 49; Devonian; Plymouth, England.
- POLYLOPHOSPERMUM** Brongniart, 1874.  
*Polylophospermum stephanense* Brongniart, 1874, p. 264, pl. 23, figs. 6-8; silicified seed; Carboniferous; St.-Étienne, France.
- POLYMORPHOCODIUM** Derville, 1931.  
*Polymorphocodium lapparenti* Derville, 1931, p. 54, pl. 4, figs. 12-14, 16; alga, Codliaceae; Carboniferous; Henirette, Bas-Boulonnais, France.
- POLYPODIISPORITES** Robert Potonie, 1934.  
*Polypodiisporites favus* Robert Potonie, 1934, p. 38, pl. 1, figs. 19, 20; spore, Polypodiaceae; Miocene.
- POLYPODIOLITES** Sternberg, 1823.  
*Polypodiolites pectiniformis* Sternberg, 1823 (1820-38), pl. 33, fig. 1; cycadophyte frond; Jurassic; Stonesfield, England.

**POLYPODITES** Goeppert, 1836.

*Polypodites mantellii* (Brongniart) Goeppert, 1836, p. 341. For illustration, see *Lonchopteris mantelli* Brongniart, in Lindley and Hutton, 1837 (1831-37), p. 59, pl. 171; fern? foliage; Lower Cretaceous; near Wansford, Northamptonshire, England.

**POLYPORITES** Lindley and Hutton, 1833.

*Polyporites bowmanni* Lindley and Hutton, 1833 (1831-37), p. 181, pl. 65; fungus, Polyporaceae; Upper Carboniferous; near Wrexham, Denbigh, Wales. Meschinelli, 1892, p. 746, erroneously attributes this genus to Fries.

**POLYPTEROCARPUS** Grand'Eury, 1877.

*Polypterocarpus caudatus* Grand'Eury, 1877, p. 506, pl. 15, figs. 7-11; winged seed; Carboniferous; France.

**POLYPTEROSPERMUM** Brongniart, 1874.

*Polypterospermum renaultii* Brongniart, 1874, p. 256, pl. 23, figs. 1-3; silicified seed; Carboniferous; St.-Étienne, France.

**POLYSIPHONIDES** Schimper, 1869.

*Polysiphonides koechlini* (Heer) Schimper, 1869 (1869-74), p. 178, pl. 3, fig. 5; alga?; Miocene; Bouxwiller, near Ferrette, France.

**POLYSORITES** Raciborski, 1889.

*Polysorites* sp. Raciborski, 1889, p. 138.

**POLYSPORIA** Newberry, 1853.

*Polysporia mirabilis* Newberry, 1853a, p. 108; nom. nud.

**POLYSTICHITES** Presl, 1838.

*Polystichites murrayana* (Brongniart) Presl, 1838, in Sternberg, 1820-38, p. 117. For *Pecopteris murrayana* Brongniart, 1828a-38, pl. 126, figs. 1-5; fern-like foliage; Jurassic; Scarborough, England.

**POLYSTIGMITES** Meschinelli, 1892.

*Polystigmmites priscus* (Massalongo) Meschinelli, in Saccardo, 1892, p. 770. See also Meschinelli, 1898, p. 43, pl. 14, fig. 14; fungus; Miocene; Italy.

**POLYTHECA** Henry Potonie, 1900.

*Polytheca desaillyi* (Zeiller) Henry Potonie, 1900, p. 447, fig. 251; fern sporangia; Upper Carboniferous.

**POLYTRICHITES** Britton, 1926.

*Polytrichites spokanensis* Britton, in Knowlton, 1926, p. 24, pl. 8, figs. 3, 4; moss, Polytrichaceae; Latah formation, Miocene; Deep Creek, northwest of Spokane, Wash.

**POLYTRICHITES** Yasui, 1928.

*Polytrichites aichiense* Yasui, 1928, p. 439, pl. 22, figs. 95-103; moss, compared with *Polytrichum*; upper Tertiary; Aichi coalfield, Japan.

**POLYTRIPA** Defrance, 1825.

*Polytripa elongata* Defrance, in Bronn, 1825, p. 44, pl. 7, fig. 15; Palaeocene; Paris, France.

**POMADERITES** Ettingshausen, 1883.

*Pomaderrites banksii* Ettingshausen, 1883, p. 141, pl. 6, fig. 4; leaf, Rhamnaceae; Eocene; Dalton near Gunning, Australia.

**PONDICHERRIA** Sahni, 1933.

*Pondicheria ebenaleoidica* Sahni, 1933, p. 436, pl. 25; syncarpous multilocular fruit, compared with *Achras* (Sapotaceae) and *Diospyros* (Ebenaceae); probably Upper Cretaceous; Pondicherry, south India.

**PONDICHERRIOIDEA.**

Error for *Pondicheria*, in Sahni, 1933, p. 436.

**PONTEDERITES** Knowlton, 1922.

*Pontederites hesperia* Knowlton, 1922b, p. 154, pl. 36, fig. 6; leaf fragment, Pontederiaceae; Green River formation, Eocene; Greasewood Creek, Rio Blanco County, Colo.

**POPULITES** Viviani, 1833.

*Populites phaetonis* Viviani, 1833, p. 133, pl. 10, fig. 2?; leaf, dicotyledon; Tertiary; near Pavia, Italy.

**POPULITES** Goeppert, 1852.

*Populites platyphyllus* Goeppert, 1852a, p. 276, pl. 35, fig. 5, leaf, Salicaceae; Tertiary; Stroppen, Silesia.

**POPULOCAULIS** Stopes and Fujii, 1910.

*Populocaulis yezoensis* Stopes and Fujii, 1910, p. 64, pl. 8, fig. 49; petrified stem, compared with *Populus*; Upper Cretaceous; Hokkaido, Japan.

**POPULOPHYLLUM** Fontaine, 1889.

*Populophyllum reniforme* Fontaine, 1889, p. 311, pl. 155, fig. 9; pl. 156, fig. 3; leaves, compared with *Populus*; Potomac group, Lower Cretaceous; Brooke, Va.

**PORODENDRON** (Nathorst) Zalesky, 1909.

*Forodendron tenerimum* (Auerbach and Trauttschold) Zalesky, 1909, p. 5, pl. 1, figs. 1-4; Carboniferous; Mugodzary, Russia.

**POROSTROBOSPORITES** Wicher, 1934.

*Porostrobosporites bennholdi* Wicher, 1934, p. 92, pl. 6, figs. 10-12; Carboniferous; Ruhr, Germany.

**POROSTROBUS** Nathorst, 1914.

*Porostrobos zeilleri* Nathorst, 1914, p. 70, pl. 5, figs. 12-16; lycopod cone compression; Paleozoic; Pyramidenberg, Spitzbergen.

**POROSUS** Cotta, 1832.

*Porosus communis* Cotta, 1832, p. 39, pl. 8, figs. 1-3; medullous? stem fragment; Permian; Rudgisdorf near Chemnitz, Germany.

**POROXYLON** Renault, 1879.

*Poroxyton boysseti* Renault, 1879, p. 278, pl. 13, figs. 5-13; pl. 14, figs. 1-8; silicified stem, Cordaitales; Permian; Autun, France.

**PORTELIA**, Boursault, 1889.

*Portelia meunieri* Boursault, 1889, p. 728, fig. 2; plant? remains; Upper Jurassic; Fortel, Pas-de-Calais, France.

**POTAMOCARPITES** Ettingshausen, 1852.

*Potamocarpites thalictroides* (Brongniart) Ettingshausen, 1852a, p. 7. For *Carpolithes thalictroides* Brongniart, 1822, p. 319, pl. 14, fig. 5; Eocene; Isle of Wight, England.

**POTAMOGENITES** Geoppert, 1848.

*Potamogenites vivianii* Geoppert, in Bronn, 1848, p. 1035; Eocene; Stradella, Italy.

**POTAMOGETOPHYLLUM** Fontaine, 1905.

*Potamogetophyllum vernonense* Fontaine, in Ward, 1905, p. 500, pl. 109, fig. 7; leaf fragment, compared with *Potamogeton* (Potamogetonaceae); Potomac group, Lower Cretaceous; Mt. Vernon, Va.

**POTAMOPHYLLITES** Brongniart, 1828.

*Potamophyllites multinervis* Brongniart, 1828b, p. 114; brief generic description only.

**POTHOCITES** Paterson, 1844.

*Pothocites grantonii* Paterson, 1844, p. 45, pl. 3; spadix compared with *Typha* (Typhaceae) and *Pothos?* (Araceae); Carboniferous?; Granton, Scotland.

**POTHOCTOPSIS** Nathorst, 1914.

*Pothocitopsis vertillii* Nathorst, 1914, p. 78, pl. 3, figs. 5, 6; incertae sedis; Paleozoic; Pyramidenberg, Spitzbergen.

**POTONIEA** Zeller, 1899.

*Potoniea adiantiformis* Zeller, 1899, p. 52, pl. 4, fig. 19; pteridosperm microsporangiate organ; Carboniferous; Bassin d'Heraclée, Asia Minor.

**POUTERLABATIA** E. W. Berry, 1938.

*Pouterlabatia lanceolata* E. W. Berry, 1938, p. 123, pl. 46, figs. 1, 2; leaf, Sapotaceae; Tertiary; Río Pichileufu, Argentina.

**PRAEDEPARIA** Stur, 1921.

*Praedeparia danatica* Stur, in Krasser, 1921a, p. 347; Polypodiaceae; Jurassic (Lower Lias); Stederdorf, Austria.

**PRAEENGELHARDTIA**.

Error for *Paraengelhardtia*, in Knowlton, 1919, p. 501.

**PRAMELREUTHIA** Krasser, 1918.

*Pramelreuthia habersfelneri* Krasser, 1918, p. 533, pl. 1, figs. 5, 6; cycadophyte microsporangiate organ; Upper Triassic; Pramelreith, Lunz, Austria.

**PRATTIA** d'Archiac, 1850.

*Prattia glandulosa* d'Archiac, 1850, p. 407, pl. 8, figs. 20, 20a, 20b; Eocene; Biarritz, France. Earlier citation: d'Archiac, 1847, p. 1010; nom. nud.

**PREISSITES** Knowlton, 1894.

*Preissites wardi* Knowlton, 1894, p. 458, pl. 219; liverwort, compared with *Preissia*; Fort Union formation, Eocene; Burn's Ranch, 30 miles south of Glendive, Mont.

**PREISSLERIA** Presl, 1838.

*Preissleria antiqua* Presl, in Sternberg, 1838 (1820-38), p. 192, pl. 33, figs. 5, 10; incertae sedis; Triassic (Keuper); Steindorf near Bamberg, Bavaria.

**PREMNOPHYLLUM** Velenovsky, 1884.

*Premnophyllum trigonum* Velenovsky, 1884, p. 51, pl. 3, fig. 2; leaf, Verbenaceae; Upper Cretaceous; Vyserovic, Bohemia.

**PREPECOPTERIS** Grand'Eury, 1877.

*Prepecopteris dentata* (Brongniart) Grand'Eury, 1877, p. 63, pectopterid foliage-bearing schizaeaceous sporangia; Carboniferous; Poille, France. For *Pectopteris dentata* Brongniart, 1828a-38, p. 346, pls. 123, 124. See also Radforth, 1938, 1939.

**PREPINUS** Jeffrey, 1908.

*Prepinus statnensis* Jeffrey, 1908, p. 209, pl. 13; short shoots bearing many leaves, Coniferales; Raritan formation, Upper Cretaceous; Kreischerville, Staten Island, N. Y.

**PRIMICORALLINA** Whitfield, 1894.

*Primicorallina trentonensis* Whitfield, 1894, p. 357, pl. 11, figs. 14-17; marine alga; Trenton limestone, Middle Ordovician; Middleville, N. Y.

**PRIONOTES** Reinsch, 1881.

*Prionotes* sp. Reinsch, 1881, p. 52, pl. 9a, figs. 1-4; Upper Carboniferous; Zwickau, Saxony.

**PRITCHARDIA** Unger, 1842.

*Pritchardia insignis* Unger, 1842b, p. 177, wood, incertae sedis; Tertiary; St. Bartholomew Island, West Indies.

**PRITCHARDITES** Bureau, 1896.

*Pritchardites wettinioides* Bureau, 1896, p. 284; palm, compared with *Pritchardia pacifica*; Tertiary; Italy.

**PRITOPHYLLOCLADUS?**

*Pritophyllocladus subinterrefolius* (Lesquereux) Berry; this name cited in a list of fossils in Reagen, 1932, p. 232.

**PROARAUCARIA** Wieland, 1935.

*Proaraucaria mirabilis* Wieland, 1935, p. 26; pl. 8, fig. 1; pl. 9, fig. 1; pl. 10; pl. 12, figs. 1, 2; petrified araucarian cone; Triassic; Cerro Cuadrado, Santa Cruz, Argentina. See earlier preliminary account, without illustrations, by Wieland, 1929a.

**PROBLEMATOSPERMUM** Turutanova-Ketova, 1930.

*Problematospermum ovale* Turutanova-Ketova, 1930, p. 160, pl. 4, figs. 30, 30a; Jurassic; southwest Turkistan.

**PROCHONDRITES** Fritsch, 1908.

*Prochondrites bifidus* Fritsch, 1908, p. 22, pl. 4, fig. 6; alga?; Silurian; Bohemia.

**PROLEPIDODENDRON** Arnold, 1939.

*Prolepidodendron breviinternodium* Arnold, 1939, p. 278, pl. 1, figs. 2, 4; lycopod branch bearing two-veined leaves; Upper Devonian; near Port Allegany, McKean County, Pa.

**PROPALMOPHYLLUM** Lignier, 1895.

*Propalmophyllum liasinum* Lignier, 1895, p. 146, pl. 7, figs. 20, 21; petiole fragments, incertae sedis; Lower Jurassic (Liassic); Ste. Honorine, France.

**PROSPIRAXIS** Williams, 1887.

This name proposed in footnote, Williams, 1887, p. 86, for *Spiraxis randalli* Newberry, 1885, p. 217. The latter probably not a plant.

**PROTALTINGIA** Reid and Chandler, 1933.

*Protaltingia europaea* Reid and Chandler, 1933, p. 247, pl. 9, figs. 1-5; fruit, Hamamelidaceae; London Clay, Eocene; Sheppey, Kent, England.

**PROTAMYRIS** Unger, 1850.

*Protamyris eocenica* Unger, 1850a, p. 476; leaves, Burseraceae; Eocene; Sotzka, Styria. See also Unger, 1851, p. 180, pl. 52, fig. 15.

**PROTANNULARIA** Dawson, 1880?

*Protannularia harknessii* (Nicholson) Dawson, 1880b, fig. 83, p. 91; no description; Annularia-like foliage; Skidaw series, Lower Silurian. Only other species is: *Protannularia laxa* (Dawson) Arber, 1921, p. 75, fig. 41.

**PROTASOLANUS** H6rlich, 1920.

*Protasolanus wieprechti* H6rlich, 1920, p. 434, pl. 16; partly decorticated lycopod stem; Lower Carboniferous (Culm); Germany.

**PROTEACIDITES** Cookson, 1950.

*Proteacidites tuberculatus* Cookson, 1950, p. 170, pl. 1, figs. 12-14; pollen, incertae sedis; Tertiary; Yallourn, Victoria.

**PROTEACITES** Caspary, 1882.

*Proteacites pinnatipartitus* Caspary, 1882, p. 25.

**PROTEAEPPHYLLUM** Fontaine, 1889.

*Proteaepphyllum reniforme* Fontaine, 1889, p. 282, pl. 139, fig. 3; pl. 156, fig. 4; pl. 160, figs. 1, 2; leaf, Protaceae?; Potomac group, Lower Cretaceous; Fredericksburg, Va.

**PROTEOIDES** Heer, 1866.

*Proteoides grevilleaeformis* Heer, in Capellini and Heer, 1866, p. 17, pl. 4, fig. 11; Cretaceous; Sioux City, Iowa.

**PROTEOPHYLLUM** Friedrich, 1883.

*Proteophyllum bipinnatum* Friedrich, 1883, p. 335, pl. 28, figs. 1, 2; Oligocene; Elselben, Saxony.

**PROTEOPHYLLUM** Velenovsky, 1889.

*Proteophyllum paucipinnatum* Velenovsky, 1889, p. 18, pl. 4, figs. 7, 10-13; pl. 5, figs. 13-15; pl. 6, figs. 12-15; leaf, dicotyledon; Upper Cretaceous; Bohemia.

**PROTEOPSIS** Velenovsky, 1889.

*Proteopsis proserpinaceae* Velenovsky, 1889, p. 19, pl. 1, figs. 6-9; fruit, dicotyledon; Upper Cretaceous (Cenomanian); Vyserovic, Bohemia.

**PROTEOTITES** Kuntze, 1904.

*Proteotites Kuntze*, in Post and Kuntze, 1904, p. 461.

**PROTEOXYLON** Kräusel, 1939.

Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, 47, p. 36 (not seen, cited in Gothan, 1942b, p. 143).

**PROTOBARCLAYA** Reid and Chandler, 1933.

*Protobarclaya eocenica* Reid and Chandler, 1933, p. 152, pl. 3, figs. 23-28; fruit, Nymphaeaceae; London Clay, Eocene; Sheppey, Kent, England.

**PROTOBLECHNUM** Lesquereux, 1880.

*Protoblechnum holdeni* (Andrews) Lesquereux, 1880, p. 188; fernlike foliage; Carboniferous; Rushville, Ohio. For *Alethopteris holdeni* E. B. Andrews, 1875, p. 420, pl. 51, figs. 1, 2.

**PROTOBRACHYOXYLON** Holden, 1913.

*Protobrachyoxylon eboracense* Holden, 1913, p. 541, pl. 40, figs. 29, 30; coniferous wood; Jurassic (Oolite); Scarborough, England.

**PROTOCOLAMITES** Goebel, 1906.

*Protocolamites scrobiculatus* (Schlotheim) Goebel, 1906, p. 242. For *Calamites scrobiculatus* Schlotheim, 1820, p. 402, pl. 22, fig. 4; Upper Carboniferous; Zurich, Switzerland. [The origin of modern usage, as applied to petrified stems, originates in Lotzy, 1909, p. 528. See also Scott, 1908, p. 37.]

**PROTOCOLAMOSTACHYS** Walton, 1949.

*Protocolamostachys arranensis* Walton, 1949a, p. 729, pl. 1; petrified Equisetalean cone; Calcareous Sandstone series, Lower Carboniferous; Isle of Arran, Scotland.

**PROTODROXYLON** Gothan, 1910.

*Protodroxylon araucarioides* Gothan, 1910, p. 27, pl. 6, figs. 3-5, 7; pl. 6, fig. 1; coniferous wood; Upper Jurassic; Green Harbour, Spitzbergen.

**PROTOCLADUS** Ettingshausen, 1887.

*Protocladus lingua* Ettingshausen, 1887b, p. 147; nom. nud.



**PROTOCLEPSYDROPSIS** Hirmer, 1927.

*Protoclepsydropsis kidstoni* (Bertrand) Hirmer, 1927, p. 519; petrified stem, Clepsydraceae; Califerous Sandstone series, Lower Carboniferous; Langton Burn, Berwickshire, Scotland. For *Zygopteris kidstoni* Bertrand, 1911, p. 55, fig. 9.

**PROTOCOMMIPHORA** Reid and Chandler, 1933.

*Protocommiphora europaea* Reid and Chandler, 1933, p. 273, pl. 11, figs. 1-7; endocarp, Burseraceae; London Clay, Eocene; Sheppey, Kent, England.

**PROTOPRESSINOXYLON** Eckhold, 1922.

*Protopressinoxylon cupressoides* (Holden) Eckhold, 1922, p. 491. For *Paracupressinoxylon cupressoides* Holden, 1913, p. 538, pl. 39, figs. 15, 16; coniferous wood; Jurassic; Yorkshire, England.

**PROTOCYATHEA** Ottokar Feistmantel, 1877.

*Protopcyathea trichinopolensis* Ottokar Feistmantel, 1877, p. 136, pl. 10, figs. 1, 2; Upper Cretaceous (Cenomanian); near Trichinopoly, India. See also Posthumus, 1931.

**PROTODAMMARA** Hollick and Jeffrey, 1906.

*Protodammara speciosa* Hollick and Jeffrey, 1906, p. 199, pl. 1 figs. 5-13; pl. 2, figs. 1-5; cone scales, Araucariaceae; Raritan formation, Upper Cretaceous; Kreischerville, Staten Island, N. Y.

**PROTODAPHNE** Saporta, 1865.

*Protodaphne delessii* Saporta, 1865, p. 47; leaf; Tertiary; Sézanne, France.

**PROTOFICUS** Saporta, 1868.

*Protoficus crenulata* Saporta, 1868, p. 355, pl. 6, fig. 5; leaf, compared with *Ficus alba*; Eocene; Sézanne, France.

**PROTOJUNIPEROXYLON** Eckhold, 1922.

*Protojuniperoxylon maidstonense* (Stopes) Eckhold, 1922, p. 491. For *Cedroxylon maidstonense* Stopes, 1915, p. 149, pl. 12, figs. 1, 2; coniferous wood; Lower Greensand, Cretaceous; Iguanodon Quarry, Maidstone, England. Generic name cited by Eckhold, 1921, p. 2.

**PROTOLARIX** Saporta, 1876-84.

*Protolarix lundgreni* (Nathorst) Saporta, 1876-84, p. 469. For *Pinus lundgreni* Nathorst, 1878c, p. 31, pl. 14, figs. 9a, 13-17; pl. 15, figs. 1, 2.

**PROTOLEPIDODENDRON** Křejčí, 1880.

*Protolepidodendron scharianum* Křejčí, 1880, p. 203; lycopod stems, foliage Upper Silurian?; Hostin, Bohemia. First? illustrated in Potonie, Henry, and Bernard, 1903, p. 40, figs. 94-102.

**PROTOLEPIDODENDROPSIS** Gothan, 1937.

Preuss. geol. Landesanst. Jahrb., 1937, Band 57, p. 497 (not seen, cited in Gothan, 1942b, p. 143).

**PROTOLOTUS** Saporta, 1865.

*Protolotus raincourtii* Saporta, 1865, p. 52; leaf, Rhamnaceae; Tertiary; Sézanne, France.

**PROTOMYCITES** Meschinelli, 1892.

*Protomyces protogenes* (Smith) Meschinelli, in Saccardo, 1892, p. 748. Phycomycete; Carboniferous; England. For *Protomyces protogenes* Smith, 1884, p. 333, fig. 140.

**PROTONYSSA** Reid and Chandler, 1933.

*Protonyssa bilocularis* Reid and Chandler, 1933, p. 429, pl. 23, figs. 5-10; endocarp, Nyssaceae; London Clay; Eocene; Sheppey, Kent, England.

**PROTOSMUNDITES** H. N. Andrews and Baxter, 1948.

*Protoosmundites wilsonii* H. N. Andrews and Baxter, 1948, p. 194, pls. 9, 10; probably a lycopod branch tip; Des Moines group, Pennsylvanian; coal mine of What Cheer Clay Products Co., What Cheer, Iowa.

**PROTOPHYLLOCLADOXYLON** Kräusel, 1939.

Bayer, Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge 47, p. 16, (not seen, cited in Gothan, 1942b, p. 143).

**PROTOPHYLLOCLADUS** E. W. Berry, 1903.

*Protophyllocladus subintegrifolius* (Lesquereux) E. W. Berry, 1903, p. 440; compared with *Phyllocladus asplenifolia* Hooker; Cretaceous to Tertiary. For *Phyllocladus subintegrifolius* Lesquereux, 1868, p. 92, and 1874, p. 54, pl. 1, fig. 12.

**PROTOPHYLLUM** Lesquereux, 1874.

*Protophyllum sternbergii* Lesquereux, 1874, p. 101, pl. 16; pl. 17, fig. 2; leaf, dicotyledon; Cretaceous; south of Fort Harker, Nebr.?

**PROTOPICEOXYLON** Gothan, 1907.

*Protopiceoxylon extinctum* Gothan, 1907, p. 32, figs. 16, 17; coniferous wood; Tertiary; King Karl's Land.

**PROTOPINUXYLON** Eckhold, 1922.

*Protopinuxylon ruffordii* (Seward) Eckhold, 1922, p. 491. For *Pinites ruffordii* Seward, 1895, p. 199, and 1896c, p. 417, pls. 2, 3; coniferous wood; Wealden; near Hastings, England.

**PROTOPITYS** Goeppert, 1850.

*Protopitys buchiana* Goeppert, 1850, p. 229, pl. 37, figs. 4-7; pl. 38, figs. 1, 2; gymnospermous wood; Carboniferous; Falkenberg, Silesia. See also Posthumus, 1931.

**PROTOPODOCARPOXYLON** Eckhold, 1922.

*Protopodocarpoxylon blevillense* (Lignier) Eckhold, 1922, p. 491. For *Cedroxylon blevillense* Lignier, 1907, p. 267, pl. 18, figs. 15-17; pl. 21, fig. 66; pl. 22, fig. 72; coniferous wood; Lower Cretaceous (Gault); France.

**PROTOPTERIDIUM** Krejčí, 1880.

*Protopteridium hostinense* Krejčí, 1880, p. 208; Upper Silurian?; Hostin, Bohemia.

**PROTOPTERIS** Sternberg, 1938.

*Protopteris punctata* Sternberg, 1938 (1820-38), p. 170, pl. 65, figs. 1-3; leaf base impression of tree fern; Lower Cretaceous; Bohemia. *See also* Corda, 1845, p. 77, pl. 48, fig. 1. Seward, 1910, p. 372, notes: "The generic name *Caulopteris* is used by some authors in preference to Presl's genus; but *Protopteris* is more conveniently restricted to Mesozoic Cyatheaceous stems and *Caulopteris* to Palaeozoic stems, with the internal structure of *Psaronius*." *See also* Posthumus, 1931.

**PROTORAVENSARA** Reid and Chandler, 1933.

*Protoravensara sheppeyensis* Reid and Chandler, 1933, p. 214, pl. 7, figs. 3-5; fruit Lauraceae; London Clay, Eocene; Herne Bay, Kent, England.

**PROTORCHIS** Massalongo, 1859.

*Protorchis monorchis* Massalongo, 1859a, p. 64, pl. 23, fig. 3; orchidaceous plant?; Eocene; Italy.

**PROTORHIPIS** Andrae, 1855.

*Protorhipis buchii* Andrae, 1855, p. 36, pl. 8, fig. 1; leaf fragment, Incertae sedis; Lower Jurassic (Lias); Steierdorf, Austria.

**PROTORNITHOPTERIS** Reed, 1947.

*Protornithopteris fremonti* (Knowlton) Reed, 1947, p. 149; frond, Schizaeaceae; Frontier formation, Upper Cretaceous; Cumberland, Wyo.

**PROTOSALVINIA** (Dawson) Clarke, 1885.

*Protosalvinia bilobata* Clarke, 1885, p. 285, fig. 6; water fern sporocarp?; Devonian; Hopewell, Ontario County, N. Y.

**PROTOSPIROXYLON** Lingelshelm, 1929.

*Protospiroxylon lusaticum* Lingelshelm, 1929, p. 111, figs. 1-8; wood, Coniferales; lower Miocene; Niederlausitz.

**PROTOSTIGMA** Lesquereux, 1877.

*Protostigma sigillarioides* Lesquereux, 1877, p. 169, pl. 1, figs. 7, 8; lycopod? stem; Cincinnati group, Silurian; near Cincinnati, Ohio.

**PROTOTAMUS** Langeron, 1899.

*Prototamus paucinervis* Langeron, 1899, p. 439, pl. 3, fig. 3; leaf, compared with *Tamus*; Eocene; Sézanne, France.

**PROTOTAXITES** Dawson, 1859.

*Prototaxites logani* Dawson, 1859, p. 484, figs. 4a-c; alga; Devonian; Gaspé, Canada. For usage of name, *see* Arnold, 1947, p. 52.

**PROTOTHAMNOPTERIS** Richard Beck, 1920.

*Protothamnopteris baldaufl* Richard Beck, 1920, p. 511, figs. 1-6; coenopterid fern; Permian (Middle Rothliegendes); Chemnitz, Germany. *See* Hirmer, 1927, p. 538.

**PRUNINIUM** Platen, 1908.

*Pruninium gummosum* Platen, 1908, p. 122, pl. 3, figs. 2-6; Miocene; Amethyst Mtn., Yellowstone Park, Wyo.

**PRUNIPHYLLUM** Weyland, 1948.

*Pruniphyllum prinoides* (Weber) Weyland, 1948, p. 129, leaf, Rosaceae; Tertiary.

**PRUNOIDES** Perkins, 1904.

*Prunoides bursaeformis* Perkins, 1904, p. 208, pl. 80, fig. 133; fruit, compared with *Prunus*; Tertiary; Brandon, Vt.

**PSAMMOPTERIS** Eichwald, 1861.

*Psammopteris knorriaeformis* Eichwald, 1861, p. 304. *See also* Eichwald, 1865 (1860-68), p. 25, pl. 1, fig. 3; pl. 5, figs. 3, 4.

**PSARONIOCAULON** Grand'Eury, 1877.

*Psaroniocalyon sulcatum* Grand'Eury, 1877, p. 91, pl. B; arborescent fern stem apparently close to *Psaronius*; Carboniferous; France. *See also* Posthumus, 1931.

**PSARONITES** Williamson, 1875.

*Psaronites renaulti* Williamson, 1875, p. 453; *Psaronius* roots; Upper Carboniferous; Oldham, England.

**PSARONIUS** Cotta, 1932.

*Psaronius helmintholithus* (Sprengel) Cotta, 1932, p. 32, pl. 5, fig. 1; petrified stem, believed to be Marattiaceae; Chemnitz, Germany. This is suggested as the type, for the first (p. 29) is illustrated only by roots. *See also* Posthumus, 1931.

**PSEUDADIANTITES** Gothan, 1929.

*Pseudadiantites sessilis* (v. Röhl) Gothan, 1929, p. 17, pl. 14, figs. 1, 1a; fernlike foliage; Carboniferous; Ruhr, Germany.

**PSEUDOALETHOPTERIS** Achepohl, 1883.

*Pseudoalethopteris* sp. Achepohl, 1883; unnumbered page following p. 160; unnumbered plate following pl. 41; foliage, more contracted pinnule attachment than in *Alethopteris*; Upper Carboniferous; Westphalia.

**PSEUDOANNULARIA** Grand'Eury, 1877.

*Pseudoannularia laza* (Dawson) Grand'Eury, 1877, p. 370. For *Annularia laza* Dawson, 1871, p. 31, pl. 6, figs. 64-73.

**PSEUDOARAUCARIA** Fliche, 1896.

*Pseudoaraucaria loppinetti* Fliche, 1896, p. 189, pl. 6, figs. 3, 4; petrified cone, Araucariaceae; Cretaceous (Albien); Clermont and Vaubecourt, France.

- PSEUDOASPIDIOPHYLLUM** Hollick, 1930.  
*Pseudospidiophyllum platanoides* Hollick, in Hollick and Martin, 1930, p. 96, pl. 62, figs. 1, 2; leaf, Platanaceae; Upper Cretaceous; Yukon River, 1½ miles below Seventymile Creek, Alaska.
- PSEUDOASTEROPHYLLITES** Velenovsky, 1887.  
*Pseudosterophyllites cretaceous* (Feistmantel) Velenovsky, 1887, p. 643, figs. 19-25; *Asterophyllites*-like foliage with cone; Cretaceous; Bohemia.
- PSEUDOBALIERA** Matthew, 1906.  
*Pseudobaliera mcintoshii* Matthew, 1906a, p. 395, pl. 8, figs. 1-6; sphenopterid? foliage; Devonian; Duck Cove, Lancaster, New Brunswick, Canada.
- PSEUDOBORNIA** Nathorst, 1894.  
*Pseudobornia ursina* Nathorst, 1894, p. 57, pl. 12, figs. 1-7; pl. 13; pl. 14, fig. 5; calamitellike stem impression; Devonian; Bear Island, Norway.
- PSEUDOCALLIPTERIS** Grand'Eury, 1877.  
*Pseudocallipteris discreta* (Weiss) Grand'Eury, 1877, p. 430; Carboniferous; France. For *Callipteris discreta* Weiss, 1870, p. 872, pl. 20, figs. 1, 2.
- PSEUDOCOAETETES** Peterhans, 1929?  
*Pseudocoaetetes champagnensis* Peterhans, 1929, p. 10, pls. 1, 2; Jurassic; Champagne, France.
- PSEUDOCHONDRITES** H. B. Geinitz, 1863.  
*Pseudochondrites* sp. H. B. Geinitz, 1863, p. 530; alga; Permian.
- PSEUDOCORDAITES** (Heer) Fritsch, 1900.  
*Pseudocordaites palmaeformis* (Goepfert) Fritsch, in Beyschlag and Fritsch, 1900, p. 68; Upper Carboniferous; Saxony. For *Noeggerathia palmaeformis* Goepfert, 1852b, p. 216, pl. 15; pl. 16, figs. 1-3.
- PSEUDOCOTYLEDON** Saporta, 1893.  
*Pseudocotyledon inquirendum* Saporta, 1893a, p. xxxiv, pl. 1, fig. 10; leaf, compared with *Cotyledon* (Crassulaceae); Tertiary (Aquitaine); Bois-d'Asson, Aix, France.
- PSEUDOCTENIS** Seward, 1911.  
*Pseudoctenis eathiensis* (Richards) Seward, 1911b, p. 692, pl. 4, figs. 62, 67; pl. 7, figs. 11, 12; pl. 8, fig. 32; cycadophyte frond fragment; Jurassic.
- PSEUDOCYCAS** Nathorst, 1907.  
*Pseudocycas insignis* Nathorst, 1907, p. 4, pl. 1, figs. 1-5; pl. 2, figs. 1-9; pl. 3, fig. 1; cycadophyte foliage; Lower Jurassic (Lias); Hör, Sweden.
- PSEUDOCYCLOPTERIS** Grand'Eury, 1877.  
*Pseudocyclopteris oblata* (Lindley and Hutton) Grand'Eury, 1877, p. 430; Upper Carboniferous; France. For *Cyclopteris oblata* Lindley and Hutton, 1837 (1831-37), p. 173, pl. 217.
- PSEUDODANAEOPSIS** Fontaine, 1883.  
*Pseudodanaeopsis seticulata* Fontaine, 1883, p. 59, pl. 30, figs. 1-4; fern foliage; Triassic; Clover Hill, Va.
- PSEUDOFRENELOPSIS** Nathorst, 1893.  
*Pseudofrenelopsis felixi* Nathorst, in Felix and Nathorst, 1893, p. 52, figs. 6-9; Lower Cretaceous (Neocomian); Tlaxiaco, Mexico.
- PSEUDOGEINITZIA** Hollick and Jeffrey, 1909.  
*Pseudogeinitzia sequoiiformis* Hollick and Jeffrey, 1909, p. 45, pls. 10, 25; cone scales, Coniferales; Cretaceous; Kretscherville, Staten Island, N. Y.
- PSEUDOGINKGO** Velenovsky and Viniklar, 1926.  
*Pseudoginkgo bohemica* Velenovsky and Viniklar, 1926, p. 35, pl. 5, figs. 1-15; Upper Cretaceous (Cenomanian); Bohemia.
- PSEUDOMANGROVIA** Fucini, 1938.  
Reference not seen; cited in Gothan, 1942b, p. 144.
- PSEUDONYSSA** Kinkel, 1900.  
*Pseudonyssa palmiformis* Kinkel, 1900, p. 130; fruit, compared with *Nyssa*; Upper Pliocene; Klarbecken near Niderrad, Hesse. See also Engelhardt and Kinkel, 1908, p. 225, pl. 27, fig. 15.
- PSEUDOODONTOPTERIS** Grand'Eury, 1877.  
*Pseudoodontopteris neuropteroides* (Roemer) Grand'Eury, 1877, p. 430. For *Odontopteris neuropteroides* Roemer, 1860, p. 31, pl. 7, fig. 2.
- PSEUDOPECOPTERIS** Grand'Eury, 1877.  
*Pseudopecopteris defranci* (Brongniart) Grand'Eury, 1877, p. 379; Carboniferous; France. For *Pecopteris defranci* Brongniart, 1828a-38, p. 325, pl. 111.
- PSEUDOPECOPTERIS** Lesquereux, 1880.  
*Pseudopecopteris mazoniana* Lesquereux, 1880, p. 190, pl. 32, figs. 1-7; fernlike foliage; Pennsylvanian; Mazon Creek, Ill.
- PSEUDOPEZIZITES** Fiore, 1932.  
Soc. naturalisti Napoli Boll., 1932, v. 43, p. 154 (not seen, cited in Gothan, 1942b, p. 144).
- PSEUDOPHRAGMITES** Saporta, 1873.  
*Pseudophragmites arundinaceus* Saporta, 1873a, p. 33, pl. 4, fig. 1; rhizome?; Tertiary; France.
- PSEUDOPINUS** Ettingshausen, 1887.  
*Pseudopinus wilkinsonii* Ettingshausen, 1887a, p. 90, pl. 8, figs. 12-18; foliage shoot and cone, Abietinae; Eocene; Vegetable Creek, near Emmaville, New South Wales.

- PSEUDOPOLYPORUS** Hollick, 1910.  
*Pseudopolyporus carbonicus* Hollick, 1910, p. 93, figs. 1, 2; a stalked polyporaceous fungus?; Carboniferous; West Virginia.
- PSEUDOPROTOPHYLLUM** Hollick, 1930.  
*Pseudoprotophyllum marginatum* Hollick, in Hollick and Martin, 1930, p. 92, pl. 52, fig. 2a; pl. 65, fig. 3; leaf, Platanaceae; Upper Cretaceous; Yukon River, 6 miles above Nahochatilton, Alaska.
- PSEUDOPTEROPHYLLUM** Florin, 1933.  
*Pseudopterophyllum cteniforme* (Nathorst) Florin, 1933, p. 81, pl. 9, figs. 1-7; cycadophyte leaf; Rhætic; Bjuv, Sweden.
- PSEUDOPTILOPHYLLUM** Krasser, 1918.  
*Pseudoptilophyllum titzei* Krasser, 1918, p. 547, pl. 4, fig. 6; cycadophyte foliage; Upper Triassic; Pramelreith, Lunz, Austria.
- PSEUDORHIPIDOPSIS** P'an, 1937.  
*Pseudorhipidopsis brevicaulis* (Kawasaki and Kon'no) P'an, 1937, p. 265, pl. 1; pl. 2; pl. 3, figs. 4, 5; compared with *Rhipidopsis*; Tafenkou series, Lower Permian; Yuhsien, Honan, China.
- PSEUDOSAGENOPTERIS** Henry Potonie, 1900.  
*Pseudosagenopteris elliptica* (Fontaine) Henry Potonie, 1900, p. 503. For *Sagenopteris elliptica* Fontaine, 1889, p. 149, pl. 27, figs. 9, 11-17; leaf, Caytoniales?; Potomac formation, Cretaceous; Maryland.
- PSEUDOSALVINIA** Piton, 1940.  
*Pseudosalvinia dubia* Piton, 1940, p. 17, pl. 13, fig. 6; pinnule fragment, compared with *Salvinia*; Eocene; Menat, France.
- PSEUDOSCLEROCARYA** Reid and Chandler, 1933.  
*Pseudosclerocarya lentiformis* Reid and Chandler, 1933, p. 303, pl. 13, figs. 25-28; endocarp, Anacardiaceae; London Clay, Eocene; Sheppey, Kent, England.
- PSEUDOSIGILLARIA** Grand'Eury, 1877.  
*Pseudosigillaria monostigma* (Lesquereux) Grand'Eury, 1877, p. 144. For *Sigillaria monostigma* Lesquereux, 1870, p. 449, pl. 42, figs. 1-5; lycopod stem impression; Upper Carboniferous; France.
- PSEUDOSPHEOPTERIS** Grand'Eury, 1877.  
*Pseudospheopteris integra* (Andrae) Grand'Eury, 1877, p. 389. For *Sphenopteris integra* Andrae, in Germar, 1844-53, p. 67, pl. 28, figs. 1-4.
- PSEUDOSPOROCHNUS** Henry Potonie and Bernard, 1903.  
*Pseudosporochnus krejčí* Henry Potonie and Bernard, 1903, p. 25, figs. 54-81; Psilophytales; upper Middle Devonian; Bohemia.
- PSEUDOSPOROGONITES** Stockmans, 1948.  
*Pseudosporogonites hallei* Stockmans, 1948, p. 61, pl. 11, figs. 18, 18a; Upper Devonian; Belgium.
- PSEUDOSTROMATOPOREA** Simionescu, 1926.  
*Pseudostromatopora rumana* Simionescu, 1926, p. 105, figs. 4-6; alga?; Cretaceous; Cernavoda, Rumania.
- PSEUDOSYRINGODENDRON** Grand'Eury, 1890.  
*Pseudosyringodendron pachyderma* (Brongniart) Grand'Eury, 1890, p. 246. For *Sigillaria pachyderma* Brongniart, 1828a-38, p. 452, pl. 150, fig. 1.
- PSEUDOTORELLIA** Florin, 1936.  
*Pseudotorellia nordenskiöldi* (Nathorst) Florin, 1936b. For *Feildenia nordenskiöldi* Nathorst, 1897, p. 56, pl. 3, figs. 16-27; pl. 6, figs. 33, 34; Upper Jurassic; Advent Bay, Spitzbergen.
- PSEUDOTSUGOIDITES** Robert Potonie, 1950.  
*Pseudotsugoidites* sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 48; nom. nud.
- PSEUDOVOLTZIA** Florin, 1927.  
*Pseudovoltzia liebeana* (Gelnitz) Florin, 1927, p. 5. See also Florin, 1929, p. 257, pl. 4, fig. 10; and 1944, p. 479. For *Voltzia liebeana* H. B. Gelnitz, 1880, p. 26, pl. 5, figs. 1, 2, 5-7; Upper Permian; Trebnitz, near Gera, Saxony.
- PSILODENDRION** Hoeg, 1942.  
*Psilodendron spinulosum* Hoeg, 1942, p. 26, pls. 5-7; some resemblance to *Psilophyton*; Devonian; Spitzbergen.
- PSILOPHYTON** Dawson, 1859.  
*Psilophyton princeps* Dawson, 1859, p. 478, figs. 1a-1; Psilophytales; Devonian; Gaspé, Canada.
- PSILOTIPTHYLLUM** Henry Potonie, 1891?  
*Psilotiphyllum bifidum* (Gelnitz) Henry Potonie, 1891, p. 979.
- PSILOTTITES** (Braun) Münster, 1842.  
*Psilotites filiformis* Münster, 1842, p. 108, pl. 13, fig. 11; pl. 15, fig. 20; Permian; Daiting near Monheim, Rhenish Prussia. Earliest citation: *Psilotites robustus* Braun, 1840, p. 98; nom. nud.
- PSILOTOPSIS** Heer, 1883.  
*Psilotopsis racemosa* Heer, 1883, p. 55, pl. 100, figs. 6, 7; incertae sedis; Tertiary; Unartok, Greenland.
- PSYCHOTRIPHYLLUM** Dean, 1902.  
*Psychotriphyllum attenuatum* Dean, 1902a, p. 60, pl. 15, fig. 2; leaf, compared with *Psychotria loniceroides* (Rubiaceae); Tertiary; Wingello, New South Wales.

**PSYGMATOPTERIS** Lesley, 1880.

*Psygmatopteris grandis* Lesley, 1880, p. 133; nom. nud.; Pennsylvanian; West Virginia.

**PSYGMOCARPUS** Susta, 1932.

Přirod. spol. v Moravské Ostravé Sborník, svazek 7, p. 155 (not seen, cited in Gothan, 1942b, p. 145).

**PSYGMOCLADUS** Susta, 1932.

Přirod. spol. v Moravské Ostravé Sborník, svazek 7, p. 155 (not seen, cited in Gothan, 1942b, p. 145).

**PSYGMOPHYLLUM** Schimper, 1870.

*Psygmyphyllum flabellatum* (Lindley and Hutton) Schimper, 1870, (1869-74), p. 193. For *Noeggerathia flabellata* Lindley and Hutton, 1832 (1831-37), p. 89, pls. 28, 29; large cuneate leaves, affinities uncertain; Upper Carboniferous; England.

**PSYGMOSTROBOPHYLLUM** Susta, 1932.

Přirod. spol. v Moravské Ostravé Sborník, svazek 7, p. 162 (not seen, cited in Gothan, 1942b, p. 145).

**PSYGMOSTROBUS** Susta, 1932.

Přirod. spol. v Moravské Ostravé Sborník, svazek 7, p. 156 (not seen, cited in Gothan, 1942b, p. 145).

**PTELEACARPUM** Weyland, 1948.

*Pteleacarpum bronni* Weyland, 1948, p. 130, pl. 31, fig. 5; winged fruit; Tertiary.

**PTOLEIDITES** Thomson, 1950.

*Pteleidites* sp. Thomson, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 58; nom. nud.; pollen compared with *Ptelea*; Miocene; Chatt-Aquitain, Germany.

**PTENOSTROBUS** Lesquereux, 1874.

*Ptenostrobis nebrascensis* Lesquereux, 1874, p. 114, pl. 24, fig. 1; cone, Coniferales?; Cretaceous; near Winnebago, Nebr.

**PTERALETES** Zalesky, 1939.

*Pteraletes* Zalesky, 1939a, p. 326; nom. nud.

**PTERIDITES** Tuzson, 1914.

*Pteridites stauhi* Tuzson, 1914, p. 236, pl. 13, fig. 4; fern foliage; compared with *Pteridium*; Oligocene; Zsilvolgy Valley, Petroseny, Hungary.

**PTERIDOLEIMMA** Debey and Ettlingshausen, 1859.

*Pteridoleimma elisabethae* Debey and Ettlingshausen, 1859b, p. 222, pl. 5, figs. 5-9; sterile fern foliage; Upper Cretaceous; Aachen, Rhenish Prussia.

**PTERIDOPSIS** Howse, 1890.

*Pteridopsis plumosa* Howse, 1890, p. 85, pl. 3; fernlike frond fragment, some similarity to *Alchopteris*; Upper Carboniferous; Jarrow-on-the-Tyne, England.

**PTERIDORACHIS** Nathorst, 1902.

*Pteridorachis striata* Nathorst, 1902a, p. 12, pl. 1, fig. 8; fern? rachis fragment; Upper Devonian; Bear Island, Norway.

**PTERIDOTHECA** Scott, 1907.

*Pteridotheca williamsoni* Scott, 1907, p. 184, fig. 14; annulate fern sporangia, family uncertain; Upper Carboniferous; England. See also Scott, 1920, p. 265.

**PTERIDOZAMITES** Corsin, 1929.

*Pteridozamites zamioides* (Bertrand) Corsin, 1929, p. 230, pls. 7-10; frond, male fructification and seeds, affinities with pteridosperms and cycadophytes; Westphalian, Carboniferous; mines of Bruay, France.

**PTERIGOPHYCOS** Massalongo, 1858.

*Pterigophycos spectabilis* Massalongo, 1858b, p. 743. alga; Eocene; Monte Bolca, Italy.

**PTERISPERMOSTROBUS** Stopes, 1914.

*Pterispermostrobus bifurcatus* Stopes, 1914, p. 74, pl. 17, fig. 45; pl. 25, fig. 69; pteridosperm cupulate organ?; Pennsylvanian; Fern Ledges, Lancaster, New Brunswick, Canada.

**PTERISPERMOTHECA** Carpentier, 1919.

*Pterispermotheca* sp. Carpentier, 1919a, p. 89, pl. 3, figs. 5-7; microsporangia compared with *Archaeopteris hitchcocki*; Lower Carboniferous; France.

**PTEROBALANUS** E. W. Berry, 1922.

*Pterobalanus texanus* E. W. Berry, 1922c, p. 20, pl. 15, figs. 1, 2; winged fruit, incertae sedis; Wilcox group, Eocene; half a mile west of Carrizo Springs, Dimmit County, Tex.

**PTEROCARPITES** Keferstein, 1834.

*Pterocarpites antiquus* Keferstein, 1834, p. 862.

**PTEROCYCADITES** C. F. W. Braun, 1840.

*Pterocycadites münsteri* C. F. W. Braun, 1840, p. 100; nom. nud.

**PTERODICTYON** Unger, 1856.

*Pterodictyon annulatum* Unger, 1856, p. 172, pl. 8, fig. 17; incertae sedis; Upper Devonian; Saalfeld, Thuringia.

**PTEROPETALUM** Menge, 1858.

*Pteropetalum palaeogonum* Menge, 1858, p. 14, figs. 20-23; Tertiary; Baltic Prussia.

**PTEROPHYCUS** Herzer, 1902.

*Pterophycus plicatus* Herzer, 1902, p. 40, fig. 1; "fucoid," incertae sedis; Carboniferous; Marietta, Ohio.

**PTEROPHYLLUM** Brongniart, 1828.

*Pterophyllum longifolium* Brongniart, 1828b, p. 95. For *Alguicites filicoides* Schlotheim, 1822, pl. 4, fig. 2. Problem of citing a type species here is noted by Seward, 1897, p. 548-550. See also Harris, 1932b, p. 20, 40.

**PTERORRACHIS** Frenguelli, 1942.

*Pterorrachis ambigua* Frenguelli, 1942, p. 303, pl. 1, fig. 1; probably male organ of *Zuberia* (see Frenguelli, 1944); Triassic; Argentina.

**PTEROSPERMITES** Heer, 1859.

*Pterospermites vagans* Heer, 1859, p. 36, pl. 109, figs. 1-5; winged seeds?; Tertiary; Oeningen, Switzerland.

**PTEROSPERMUM** E. A. N. Arber, 1914.

*Pterospermum anglicum* E. A. N. Arber, 1914, p. 94, pl. 8, figs. 51, 52; seed; Middle Coal Measures; Upper Carboniferous; Cosely, South Staffordshire, England.

**PTEROTRILETES** Zalesky, 1939.

*Pterotriletes* Zalesky, 1939a, p. 326; nom. nud.

**PTEROZAMITES** C. F. W. Braun, 1843.

*Pterozamites scitamineus* (Sternberg) C. F. W. Braun, in Münster, 1843, p. 29. For *Taeniopteris scitaminea* Presl, in Sternberg, 1820-38, p. 139. For illustrations, see *Phyllites scitamineaeformis* Sternberg, 1820-38, p. 39, pl. 37, fig. 2.

**PTERUCHUS** Thomas, 1933.

*Pteruchus africanus* Thomas, 1933, p. 234, pl. 24, figs. 71, 72; pteridosperm microsporangiate inflorescence; Moltano beds, base of Stormberg series, Triassic; Upper Umkomas Valley, Natal.

**PTERYGOPTERIS** Johansson, 1922.

*Pterygopteris angelini* (Nathorst) Johansson, 1922, p. 2, pl. 1; fertile fern frond fragment, compared with *Laccopteris*; Rhaetic; Skromberga, Sweden.

**PTILOCARPUS** Lesquereux, 1870.

*Ptilocarpus bicornutus* Lesquereux, 1870, p. 493; winged seed; Carboniferous; Coshocton, Ohio.

**PTILOPHYLLUM** Morris, 1840?

*Ptilophyllum acutifolium* Morris, in Grant, 1840, p. 327, pl. 21, figs. 1a-3; cycadophyte leaf; "south of Charivar Range," East India. See also Seward, 1917, p. 512-522.

**PTILOPHYTON** Dawson, 1878.

*Ptilophyton thomsoni* Dawson, 1878, p. 385, pl. 4; lycopod; Devonian; Calthness, Scotland.

**PTILORHACHIS** Corda, 1845.

*Ptilorhachis dubis* Corda, 1845, p. 84, pl. 54, figs. 17-19.

**PTILOTTITES** Massalongo, 1859.

In Massalongo and Scarabelli, 1859, p. 92; a suggested name change for *Chondrites penicillatus* Kurr, 1845, p. 15, pl. 3, fig. 7; Lower Lias; Bodelshausen, Württemberg.

**PTILOZAMITES** Nathorst, 1878.

*Ptilozamites nilssoni* Nathorst, 1878b, p. 23; pl. 3, figs. 1-5, 8; cycadophyte foliage; Rhaetic; Höganäs, Sweden.

**PTYCHOCARPUS** C. E. Weiss, 1869.

*Ptychocarpus hexastichus* C. E. Weiss, 1869, p. 95, pl. 11, fig. 2; fertile fern compression; Upper Carboniferous; Breitenbach, Rhenish Prussia.

**PTYCHOPHYLLUM**.

Error for *Pychnophyllum*, in Brongniart, 1849, p. 138.

**PTYCHOPTERIS** Corda, 1845.

*Ptychopteris macrodiscus* (Brongniart) Corda, 1845, p. 76. See also Brongniart, 1828a-38, pl. 139; and Posthumus, 1931.

**PTYCHOTESTA** Brongniart, 1874.

*Ptychotesta tenuis* Brongniart, 1874, p. 263, pl. 22, figs. 9-11; silicified seed; Carboniferous; St.-Etienne, France.

**PTYCHOXYLON** Renault, 1896.

*Ptychoxylon levyi* Renault, 1896a, p. 313, pl. 69, figs. 57-63; petrified cycadophyte stem; Upper Carboniferous; Champ des Borgis, France.

**PUCGINITES** Ettingshausen, 1853.

*Puccinities lanceolatus* Ettingshausen, 1853, p. 26, pl. 4, fig. 11; *Puccinia*-like rust?; Eocene; Haering, Tirol, Austria.

**PUNCTATASPORITES** Ibrahim, 1933.

*Punctatasporites sabulosus* Ibrahim, 1933, p. 37, pl. 5, fig. 43; spore; Carboniferous.

**PUNCTATISPORITES** Ibrahim, 1933.

*Punctatisporites punctatus* Ibrahim, 1933, p. 21, pl. 2, fig. 18; spore; Carboniferous.

**PUNCTATOSPORITES** Ibrahim, 1933.

*Punctatosporites minutus* Ibrahim, 1933, p. 40, pl. 5, fig. 33; spore; Carboniferous.

**PUNICITES** Weber, 1855.

*Punicites hesperidum* Weber, in Wessel and Weber, 1855, p. 157, pl. 30, fig. 11; calyx; Tertiary; Rott, Germany.

**PURSONGIA** Zalesky, 1937.

*Pursongia amalitzkii* Zalesky, 1937a, p. 13, fig. 1; *Glossopteris*-like leaf; Permian; near village of Koltehoumkin, Oural, Russia.

**PUSTULARIA** Royle, 1840.

*Pustalaria calderiana* Royle, 1840 (1833-40), p. xxix\*; nom. nud.

**PYCNOIS** Stenzel, 1872.

*Pycnois densa* (Unger) Stenzel 1872, p. 71. For *Fasciculites densus* Unger, 1850, p. 337; Tertiary; India.

**PYCNOLBIUM** Saporta, 1861.

*Pycnolobium tetraspermum* Saporta, in Heer, 1861, p. 162; fruit; Leguminosae; Miocene; Manosque, France.

**PYCNOPHYLLITES** Tuzson, 1911.

*Pycnophyllites brandlingi* (Lindley and Hutton) Tuzson, 1911, p. 22. For *Pinites brandlingi* Lindley and Hutton, 1831-37, p. 1, pl. 2; Upper Carboniferous; Wideopen, near Newcastle, England.

**PYCHNOPHYLLUM** Brongniart, 1849.

*Pychnophyllum borassifolia* (Sternberg) Brongniart, 1849, p. 114. For *Flabellaria borassifolia* Sternberg, 1825 (1820-38), p. 32, pl. 18. See note under *Cordaites*.

**PYCHNOPORIDIUM** Yabe and Toyama, 1928.

*Pychnoporidium lobatum* Yabe and Toyama, 1928, p. 146, pl. 20, fig. 3; pl. 21, figs. 1-5; pl. 22, fig. 1; alga, compared with *Solenoporella*, *Ortonella*, etc.; Torinosa limestone; "Younger Mesozoic"; Iwaki, Japan.

**PYCNOXYLON** Cribbs, 1938.

*Pycnoxylon leptodesmon* Cribbs, 1938, p. 321, pls. 1-4; petrified stem, Cordaitales; Reeds Spring limestone, Mississippian; Missouri.

**PYTHITES** Pampaloni, 1902.

*Pythites disodilis* Baccarini, in Pampaloni, 1902, p. 124, pl. 10, figs. 5, 6; fungus mycelium and spores, Oomycete?; Miocene; Melilli, Sicily.

**Q**

**QUERCINIUM** Unger, 1842.

*Quercinium sabulosum* Unger, 1842b, p. 173; wood; Tertiary; Austria. First, species illustrated: *Q. austriacum* Unger, 1841-47, p. 107, pl. 29, figs. 4-6.

**QUERCIPHYLLUM** Nathorst, 1888.

*Querciphyllum lonchitis* Nathorst, 1888, p. 205, pl. 18, fig. 8; leaf, compared with *Quercus*; Miocene; Yamakumadamura, Echigo province, Japan. Generic name cited in Nathorst, 1886, p. 53; nom. nud.

**QUERCIPOLLENITES** Wolff, 1934.

*Quercipollenites callosus* Wolff, 1934, p. 71, pl. 5, fig. 10; Pliocene; Freigericht mine near Dettingen, Bavaria.

**QUERCITES** Berger, 1832.

*Quercites lobatus* Berger, 1832, p. 22, pl. 4, figs. 1, 3-5; Lower Lias; Coburg, Germany.

**QUERCROIDITES** Robert Potonie, 1950.

*Quercroidites henrici* Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 54, pl. B, figs. 22, 23; pollen, Fagaceae?; Miocene; Chatt-Aquitain, Germany.

**QUERCOPHYLLUM** Fontaine, 1889.

*Quercophyllum grossedentatum* Fontaine, 1889, p. 307, pl. 156, fig. 9; leaves, compared with *Quercus*; Potomac group, Lower Cretaceous; Brooke, Va.

**QUERVAINIA** T. M. Harris, 1932.

*Quervainia spectabilis* T. M. Harris, 1932a, p. 16, fig. 9; cycadophyte leaf?; *Stachyotaxus* bed, Rhaetic; Scoresby Sound, east Greenland.

**R**

**RABDOTUS** Presl, 1838.

*Rabdotus verrucosus* Presl, in Sternberg, 1838 (1820-38), p. 193, pl. 13; incertae sedis; Carboniferous; Swina, Bohemia.

**RACHIOPTERIS** Williamson, 1874.

*Rachiopteris aspera* Williamson, 1874a, p. 684, pls. 51, 52. See Posthumus, 1926.

**RACOBLASTITES** Reinsch, 1881.

*Racoblastites* sp. Reinsch, 1881, p. 80, pl. 19, figs. 1-5; pl. 20, figs. 1-6; pl. 21, figs. 1-4; Upper Carboniferous; Zwickau, Saxony.

**RACOSTROMIUM** Reinsch, 1881.

*Racostromium* sp. Reinsch, 1881, p. 53, pl. 12a, figs. 1-4; pl. 13a, fig. 6; Upper Triassic (Keuper); Basel, Switzerland.

**RADICITES** Henry Potonie, 1893.

*Radicites capillacea* (Lindley and Hutton) Henry Potonie, 1893, p. 261, pl. 34, fig. 2.

**RADICOPSIS** Fucini, 1938.

Reference not seen; cited in Gothan, 1942b, p. 146.

**RADICULITES** Lignier, 1906.

*Radiculites reticulatus* Lignier, 1906, p. 193, figs. 1-3; roots; described as of Sequoian affinities; possibly Cordaitan (see Seward, 1917, p. 217); Carboniferous (Stephanien); Grand Croix near St.-Etienne, France.

**RADICULITES** Zalesky, 1937.

*Radiculites luganicus* Zalesky, 1937d, p. 191, figs. 40, 41; roots?, incertae sedis; Permian; Russia.

**RADIMSKYA** Ettingshausen, 1890.

*Radimskya trinervia* Ettingshausen, 1890, p. 81, pl. 2, fig. 22; flower, Alismaceae?; Miocene; Schoenegg, Styria.

**RADIOPHYTON** Meunier, 1887.

*Radiophyton strix* Meunier, 1887, p. 59, fig. 1; Jurassic; near Boulogne-sur-Mer, France.

**RADIOSPERMUM** E. A. N. Arber, 1914.

*Radiospermum perpusillum* (Lesquerieux) E. A. N. Arber, 1914, p. 102, pl. 7, fig. 31; seed; Middle Coal Measures; Upper Carboniferous; Billingsley Colliery, Wyre Forest, Shropshire, England.

**RADIX** Fritsch, 1908.

*Radix corrugatus* Fritsch, 1908, p. 8, pl. 6, fig. 8; plant?; Silurian; Bohemia.

**RADSTOCKIA** Kidston, 1923.

*Radstockia sphenopteroides* Kidston, 1923b, p. 373, pl. 7f, figs. 3, 3a; fertile Coenopterid? fern; Radstock group, Upper Carboniferous; Raostock, Somerset, England.

**RADULITES** Sadebeck, 1886.

*Radulites macrolobus* Sadebeck, 1886, p. 121; moss; Tertiary; Prussia; nom. nud.

**RAISTRICKIA** Schopf, Wilson, and Bentall, 1944.

*Raistrickia grovensis* Schopf, in Schopf, Wilson, and Bentall, 1944, p. 55, fig. 3; No. 6 coal, uppermost Carboniferous formation, Pennsylvanian; near Middle Grove, Fulton County, Ill.

**RAJMAHALIA** Sahni and Rao, 1934.

*Rajmahalia paradoxa* Sahni and Rao, 1934, p. 265, pl. 36, figs. 12, 13; top of Bennettitalean receptacle; Jurassic; Rajmahal Hills, India. See also Sahni and Rao, 1935.

**RAMALINITES** C. F. W. Braun, 1840.

*Ramalinites lacerus* C. F. W. Braun, 1840, p. 94; nom. nud.

**RAMICALAMUS** Matthew, 1906.

*Ramicalamus dumosus* Matthew, 1906a, p. 115, pl. 8, figs. 2-5; articulate stem impression; *Dadoxylon* sandstone, Little River group, Devonian; Duck Cove, Lancaster, New Brunswick, Canada.

**RAMMUS.**

See *Ramulus*.

**RAMULARITES** Pia, 1927.

*Ramularites oblongisporus* (Caspary) Pia, in Hirmer, 1927, p. 122; fungus, Mucedinaceae; Fungi Imperfecti; Eocene. For *Ramularia oblongispora* Caspary, 1887, p. 8. See also Caspart, 1907, p. 15, pl. 1, figs. 11, 11a.

**RAMULUS.**

Sze, 1930, p. 29, cites *Ramulus cordaitoides* Schenk. The latter refers to *Ramulus cordaitidis* which was given by Schenk, 1883c, on page opposite pl. 44. It was evidently not intended as a binomial but rather as a descriptive phrase for a cordaitan branch.

**RANUNCULITES** Hector, 1880.

*Ranunculites peltatofolia* Hector, 1880, p. 49; nom. nud.

**RAPHALIA** Debey and Ettlinghausen, 1859.

*Raphalia neuropteroides* Debey and Ettlinghausen, 1859b, p. 220, pl. 4, figs. 23-28; pl. 5, figs. 18-20; fern frond fragments; Upper Cretaceous; Aachen, Rhenish Prussia.

**RARITANIA** Hollick and Jeffrey, 1909.

*Raritania gracilis* (Newberry) Hollick and Jeffrey, 1909, p. 26, pl. 6; coniferous leafy twig; Cretaceous; Kretscherville, Staten Island, N. Y.

**RAUMERIA** Goeppert, 1853.

*Raumeria schulziana* Goeppert, 1853c, p. 259, pl. 7, figs. 1-5; pl. 8, figs. 1-3. Earlier citation: Goeppert, 1844, p. 217; nom. nud. See also Wieland, 1934.

**RAVENALOSPERMUM** Saporta, 1894.

*Ravenalospermum invertissimum* Saporta, 1894, p. 200, pl. 36, figs. 13, 14; winged seeds?; referred to Musaceae or Bromelladaceae; Cretaceous (Albien Superieur); Nazareth, Portugal.

**RAZUMOVSKYA** Vologdin, 1939.

*Razumovskya uralica* Vologdin, 1939, p. 251, pl. 1, figs. 1, 2; pl. 5, figs. 3, 4; calcareous alga; Middle Cambrian; South Urals.

**RECEPTACULES** Defrance, 1827?

*Receptacules neptuni* Defrance, 1827, p. 7.

**REIMANNIA** Arnold, 1935.

*Reimannia aldenense* Arnold, 1935, p. 5, pl. 1, figs. 1, 6, 9; petrified psilophyte? stem; Ludlowville shale, Middle Devonian; Spring Creek, near Alden, Erie County, N. Y.

**REINSCHIA** C. E. Bertrand and Renault, 1893.

*Reinschia australis* C. E. Bertrand and Renault, 1893, p. 321, pls. 4-7; "Permian-Carboniferous"; Australia. Earlier citation: Bertrand, C. E., and Renault, Bernard, 1892, p. 172; nom. nud.

**REINSCHOSPORA** Schopf, Wilson, and Bentall, 1944.

*Reinschospora bellitas* Bentall, in Schopf, Wilson, and Bentall, 1944, p. 53, fig. 2; spore, Battle Creek coal seam, Pennsylvanian; north side of Sweden Cove, Marion County, Tenn.

**RENAULTIA** Stur, 1883.

*Renaultia intermedia* (Renault) Stur, 1883, p. 759, fig. 26; fertile fern pinules, Marattiaceae?

**RENAULTIA** Zeiller, 1883.

*Renaultia chaerophyllioides* (Brongniart) Zeiller, 1883, p. 208, 185; pl. 9, figs. 16, 17; fertile fern foliage; Carboniferous; France.

**RESTIACITES** Saporta, 1861.

*Restiacites pleiocaulis* Saporta, in Heer, 1861, p. 144; Eocene; Provence, France.

**RETICULATASPORITES** Ibrahim, 1933.

*Reticulatasporites facetus* Ibrahim, 1933, p. 38, pl. 5, fig. 36; spore; Carboniferous.

**RETICULATISPORITES** Ibrahim, 1933.

*Reticulatisporites reticulatus* Ibrahim, 1933, p. 33; spore; Carboniferous. For *Sporonites reticulatus* Ibrahim, 1932, p. 447, pl. 14, fig. 3.

**RETICULUM** Stefani, 1879.

*Reticulum textum* (Heer) Stefani, 1879, p. 446. For *Palaeodictyon textum* Heer, 1876, p. 118, pl. 43, figs. 18-20.



**RETINODENDRON** Zenker, 1833.

*Retinodendron pityodes* Zenker, 1833, p. 3, pl. 1, figs. 1-3; coniferous wood; Tertiary (Braunkohle); Altenburg, Germany.

**RETINODENDRON** Renault, 1892.

*Retinodendron rigolotti* Renault, 1892a, p. 339; Carboniferous; Autun, France. See also Renault, 1893, pl. 77, figs. 9-14.

**RETINOMASTIXIA** Kirchheimer, 1938.

*Retinomastixia schultzei* Kirchheimer, 1938b, p. 350, pl. 7, figs. 7-13; seed; Cornaceae; Oligocene; Germany.

**RETINOSPORITES** Holden, 1915.

*Retinosporites indica* (Feistmantel) Holden, 1915, p. 221, pl. 11, figs. 1, 4, 9; coniferous twigs with cuticle of foliage preserved, some resemblance to *Retinospora*; Triassic; Rajmahal Hills, India.

**RETINOXYLON** Endlicher, 1847.

*Retinoylon pityoides* (Zenker) Endlicher, 1847, p. 282; coniferous wood; Tertiary?; Altenburg, Saxony. For *Retinodendron pityoides* Zenker, 1833, p. 3, pl. 1, figs. A-D.

**RETIOFUCUS** Keeping, 1882.

*Retiofucus extensus* Keeping, 1882, p. 488, pl. 11, figs. 6, 7; alga; Constitution Hill, Aberystwyth, Wales. Earlier citation: Keeping, 1881, p. 152; nom. nud.

**RETIPHYCUS** Ulrich, 1904.

*Retiphyucus hexagonale* Ulrich, 1904, p. 139, pl. 18, fig. 5; plant?; Yakutat formation, Lower Jurassic?; Pogibshi Island, opposite village of Kadiak, Alaska.

**REUSSIA** Presl, 1838.

*Reussia scolopendrioides* (Brongniart) Presl, in Sternberg, 1838 (1820-38), p. 125. For *Filicites scolopendrioides* Brongniart, 1828a-38, p. 388, pl. 137, figs. 2, 3.

**RHABDOCARPOS** Goeppert and Berger, 1848.

*Rhabdocarpus tunicatus* Goeppert and Berger, 1848, p. 20, pl. 1, fig. 8; seed compression; Carboniferous; Charlottenbrunn, Silesia. The spelling *Rhabdocarpus* adopted by later writers.

**RHABDOPORELLA** Stolley, 1893.

*Rhabdoporella bacillum* Stolley, 1893, p. 139, pl. 7, figs. 7a-c; siphonaceous alga; Silurian; Holstein, Kiel.

**RHABDOSPERMUM** Seward, 1917.

*Rhabdospermum cyclocaryon* Seward, 1917, p. 344, figs. 501C, 501E; Carboniferous.

**RHABDOTOCAULON** Fliche, 1910.

*Rhabdotocaulon zeilleri* Fliche, 1910, p. 257, pl. 25, fig. 5; stem compression, incertae sedis; Triassic (Keuper); Suriauville, Vosges, France.

**RHACHIOPTERIS** Dawson, 1862.

*Rhachiopteris pinnata* Dawson, 1862, p. 323, pl. 16, fig. 60; fragment of fern? rachis; Devonian; New York.

**RHACOGLOSSUM** Debey, 1848.

*Rhacoglossum heterophyllum* Debey, 1848, p. 117; nom. nud.

**RHACOPHYLLUM** Schimper, 1869.

*Rhacophyllum lactuca* (Sternberg) Schimper, 1869 (1869-74), p. 684, pl. 46, fig. 1; pl. 47, figs. 1, 2.

**RHACOPHYTON** Murlon, 1875.

*Rhacophyton condrusorum* (Crepin) Murlon, 1875, p. 658. For *Psilophyton condrusorum* Crepin, 1874, p. 358, pl. 1; Upper Devonian; Condruz, Belgium.

**RHACOPTERIDUM** Hirmer, 1940.

*Rhacopteridum* Hirmer, 1940, p. 50 (not seen, cited in Gothan, 1942b, p. 147).

**RHACOPTERIS** Schimper, 1869.

*Rhacopteris elegans* (Ettingshausen) Schimper, 1869 (1869-74), p. 482. For *Asplenites elegans* Ettingshausen, K.-k. geol. Reichsanst. Abh., 1852, Band 1, p. 15, pl. 3, figs. 1-3.

**RHAMNACINIUM** Felix, 1894.

*Rhamnacinium affine* Felix, 1894a, p. 88, pl. 8, figs. 3a-d; wood; Rhamnaceae; Eocene; Apscheron, Transcaucasia.

**RHAMNITES** Forbes, 1851.

*Rhamnites multinervatus* Forbes, 1851, p. 103, pl. 3, fig. 2; leaf; Miocene; Isle of Mull, Scotland.

**RHAMNOSPERMUM** Chandler, 1925.

*Rhamnospermum bilobatum* Chandler, 1925, p. 30, pl. 5, figs. 1a-c; seed; Rhamnaceae?; upper Eocene; Hordle, Hampshire, England.

**RHETINANGIUM** Gordon, 1912.

*Rhetinangium arberi* Gordon, 1912, p. 821, pls. 1-3; petrified pteridosperm stem; Calceiferous Sandstone series, Lower Carboniferous; Pettycur, Fife, Scotland.

**RHEXOXYLON** Bancroft, 1913.

*Rhexoxylon africanum* Bancroft, 1913, p. 100, pls. 10-11; petrified polystelle stem; Triassic; southern Rhodesia. See also Walton, 1923.

**RHINANTHAEIDES** Stiehler, 1861.

*Rhinanthaeides goeppertana* Stiehler, 1861, p. 159.

**RHINIPTERIS** Harris, 1931.

*Rhinipteris concinna* (Presl) Harris, 1931b, p. 58, pls. 12, 13; fertile leaf, Marattiaceae; Lepidopteris zone, Rhaetic; Scoresby Sound, east Greenland.

**RHIPIDION** Zalesky, 1937.

*Rhipidion tyrganum* Zalesky, 1937c, p. 136, fig. 19; leaf fragment; incertae sedis; Permian; Russia.

**RHIPIDOPSIS** Schmalhausen, 1879.

*Rhipidopsis ginkgoidea* Schmalhausen, 1879, p. 50, pl. 8, figs. 3-12; pl. 6, fig. 1; ginkgo type? foliage; Permian; Petschoralanes, Russia.

- RHIPTOZAMITES** Schmalhausen, 1879.  
*Rhiptozamites goepperti* Schmalhausen, 1879, p. 32, pl. 4, figs. 2-4; cordiatean leaves?; Permian; Russia.
- RHIZOALNOXYLON** Conwentz, 1880.  
*Rhizoalnoxyton inclusum* Conwentz, 1880, p. 38, pl. 8, figs. 33-35; wood; Tertiary; Karlsdorf, Silesia.
- RHIZOCALAMOPTYS** Solms Laubach, 1896.  
*Rhizocalamoptys* sp. Solms Laubach, 1896, p. 77; Lower Carboniferous; Saalfeld, Prussian Saxony.
- RHIZOCARPITES** Heer, 1878.  
*Rhizocarpites singularis* Heer, 1878b, p. 15, pl. 3, figs. 20, 21; Marsiliaceae?; Upper Jurassic; Siberia.
- RHIZOCAULON** Saporta, 1861.  
*Rhizocaulon macrophyllum* Saporta, in Heer, 1861, p. 135; Gramineae?; Eocene; France. See also Saporta, 1862, p. 198, pl. 1, figs. 4a-e.
- RHIZOCEDROXYLON** Felix, 1882.  
*Rhizocedroxylon hoheneggeri* Felix, 1882a, p. 33, coniferous wood; Tertiary. See also Felix, 1882b, p. 268, pl. 2, fig. 6.
- RHIZOCORDAITES** Grand'Eury, 1890.  
*Rhizocordaites* sp. Grand'Eury, 1890, p. 314, pl. 7, fig. 12; cordaitan roots; Upper Carboniferous; Gard, France.
- RHIZOCUPRESSINOXYLON** Conwentz, 1880.  
*Rhizocupressinoxylon uniradiatum* (Goeppert) Conwentz, 1880, p. 25, pls. 1-7; wood; Tertiary; Germany.
- RHIZODENDRON** Goeppert, 1865.  
*Rhizodendron oppoliense* Goeppert, 1865a, p. 399; tree fern; Cretaceous. See also Stenzel, 1886, p. 5, pl. 1, figs. 1-3, 5-12; pl. 2, figs. 13-19; pl. 3, figs. 20-29; and Posthumus, 1931.
- RHIZOLITHES** (C. W. Braun) Lesquereux, 1860.  
First valid species appears to be: *Rhizolithes palmatifidus* Lesquereux, 1860, p. 313, pl. 5, fig. 9; Pennsylvanian; Frog Bayou, Ark. Original citation: *Rhizolithes cylindricus* Braun, 1847, p. 86; nom. nud.
- RHIZOMITES** Geyler, 1887.  
*Rhizomites moenanus* Geyler, in Geyler and Kinkel, 1887, p. 38, pl. 4, fig. 11. Pliocene; Frankfurt am Main.
- RHIZOMOPSIS** Gothan and Sze, 1933.  
*Rhizomopsis gemmifera* Gothan and Sze, 1933, p. 26, pl. 4, fig. 6; rhizome?; Carboniferous; Kiangsu province, China.
- RHIZOMOPTERIS** Schimper, 1869.  
*Rhizomopteris lycopodioides* Schimper, 1869 (1869-74), p. 699, pl. 49, fig. 2; fern rhizome?; Carboniferous; near Dresden.

- RHIZOMORPHITES** (Goeppert) Trevisan, 1856.  
*Rhizomorphites intertextus* (Sternberg) Trevisan, in Zigno, 1856 (1856-68), p. 2. For *Algacites intertextus* Sternberg, 1820-38, p. 37, pl. 21, fig. 6. Earliest citation: *Rhizomorphites geanthracis* Goeppert, 1848, p. 1085; nom. nud. Meschinelli in Saccardo, 1892, p. 802, erroneously attributes this genus to Roth.
- RHIZONIUM** Corda, 1845.  
*Rhizonium orchideiforme* Corda, 1845, p. 46, pl. 27.
- RHIZOPALMOXYLON** Felix, 1883.  
*Rhizopalmoxyton* sp. Felix, 1883b, p. 27; palm root; Antigua, West Indies.
- RHIZOPALMOXYLON** Gothan, 1942.  
*Rhizopalmoxyton glasei* Gothan, 1942a, p. 13, pl. 1; stump (root zone) of petrified palm; Tertiary (Braunkohle); Bohlen, Germany.
- RHIZOPHIDITES** Daugherty, 1941.  
*Rhizophidites triassicus* Daugherty, 1941, p. 43, pl. 34, fig. 1; fungus, Chytridiales; Triassic; Arizona.
- RHIZOPHORITES** Bayer, 1914.  
*Rhizophorites bornbacaceus* Bayer, 1914, p. 56, fig. 28; leaf, Rhizophoraceae; Bohemia.
- RHIZOPHOROCARPUS** Velenovsky and Viniklar, 1926.  
*Rhizophorocarpus dekapetalus* Velenovsky and Viniklar, 1926, p. 51, pl. 1, fig. 19; fruit, Rhizophoraceae; Cretaceous; Vyserovic, Bohemia.
- RHIZOPTERODENDRON** Goeppert, 1881.  
*Rhizopterodendron oppoliense* Goeppert, 1881, p. 3; Cretaceous; Oppeln, Silesia.
- RHIZOSTAEMIS** Reinsch, 1884.  
*Rhizostaemis* sp. Reinsch, 1884, p. 15, pl. 23; Carboniferous; Russia.
- RHIZOTAXODIOXYLON** Felix, 1882.  
*Rhizotaxodioxyton palustre* Felix, 1882b, p. 278, pl. 2, figs. 2-4; coniferous wood; Quarternary?
- RHODEA** Presl, 1838.  
*Rhodia trichomanoides* (Brongniart) Presl, in Sternberg, 1838 (1820-38), p. 109. For *Sphenopteris trichomanoides* Brongniart, 1828a-38, p. 182, pl. 48, fig. 3. See also Kidston, 1923, p. 223.
- RHODEITES** Nemejc, 1937.  
*Rhodeites guttieri* (Ettingshausen) Nemejc, 1937, p. 6. For *Sphenopteris guttieri* in Ettingshausen, Die Steinkohlenflora von Radnitz, pl. 19, figs. 1, 2; "Permo-Carboniferous"; Czechoslovakia.

**RHODOMELITES** Sternberg, 1833.

*Rhodomelites strictus* (Agardh and Brongniart) Sternberg, 1833 (1820-38), p. 25. For *Fucoides strictus* Agardh and Brongniart, in Brongniart, 1822, p. 237, 239, pl. 3, fig. 3; alga; Lower Cretaceous; Aix, near Rochelle, France.

**RHODOMENITES** Miquel, 1851.

*Rhodomenites marginatus* Miquel, 1851a, p. 268; alga; Tertiary.

**RHODYMENITES** Trevisan, 1858.

*Rhodymenites ciliatus* (Sternberg) Trevisan, in Zigno, 1858 (1856-58), p. 35. For *Sphaerococcites ciliatus* Sternberg, 1820-38, p. 28, pl. 4, fig. 1.

**RHOIDIUM** Unger, 1850.

*Rhodium juglandinum* Unger, 1850a, p. 475; wood, Anacardiaceae; Tertiary; Hungary. First illustrated species: *Rhodium ungeri* Mercklin, 1856, p. 21, pl. 1, figs. 1, 2; pl. 2.

**RHOIPITES** Wodehouse, 1933.

*Rhoipites bradleyi* Wodehouse, 1933, p. 513, fig. 45; pollen, Anacardiaceae; Parachure Creek member, Green River formation, Eocene; Colorado and Utah.

**RHOODITES** Robert Potonie, 1950.

*Rhooidites pseudocingulum* Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 57, pl. B, figs. 41-42; pl. C, figs. 25, 26; pollen, Anacardiaceae?; Miocene and Pliocene.

**RHOOPHYLLUM** Dusen, 1899.

*Rhoophyllum nordenskjoeldi* Dusen, 1899, p. 103, pl. 11, fig. 1; leaf fragment, dicotyledon; Oligocene; Rio de las Minas near Punta Arenas, Chile.

**RHOPALOPHYLLUM** Ettingshausen, 1888.

*Rhopalophyllum acuminatum* (Unger) Ettingshausen, 1888, p. 314, pl. 4, figs. 16-19; leaf; Miocene; Münzenberg, Austria.

**RHOPALOSPERMITES** Saprota, 1862.

*Rhopalospermites strangeaeformis* Saprota, 1862, p. 258, pl. 8, fig. 7; seed, compared with *Rhopala* and *Strangea*; Tertiary; Aix, Provence, France.

**RHYNCHOGONIOPSIS** Neumann, 1907.

*Rhynchgoniopis neocomiensis* Neumann, 1907, p. 87, pl. 1, fig. 3; seed?; Wealden; Peru.

**RHYNCHOGONIUM** Heer, 1876.

*Rhynchogonium crassirostre* Heer, 1876b, p. 20, pl. 5, figs. 3, 4; leaf fragment, incertae sedis; Carboniferous; Spitzbergen.

**RHYNIA** Kidston and Lang, 1917.

*Rhynia gwynne-vaughani* Kidston and Lang, 1917, p. 780, pls. 1-10; Psilophytales; Old Red Sandstone, Devonian; Muir of Rhynie, Aberdeenshire, Scotland.

**RHYSSOPHYCUS** Eichwald, 1854.

*Rhyssophycus embolus* Eichwald, 1854, p. 51, alga. See also Eichwald, 1860-68, p. 54, pl. 1a, fig. 4.

**RHYTIDOCARYON** Mueller, 1876.

*Rhytidocaryon wilkinsonii* Mueller, 1876, p. 124, pl. 1, figs. 1-3; fruit, Menispermaceae; upper Tertiary; Benerea, New South Wales.

**RHYTIDODENDRON** Boulay, 1876.

*Rhytidodendron munitifolium* Boulay, 1876, p. 39, pl. 3, fig. 1; Upper Carboniferous; Fresnes, France.

**RHYTIDOLEPIS** Sternberg, 1822.

*Rhytidolepis ocellata* Sternberg, 1822 (1820-38), p. 32, pl. 15; Sigillarian stem; Carboniferous.

**RHYTIDOPHLOYOS** Corda, 1845.

*Rhytidophloyos tenuis* Corda, 1845, p. 30, pl. 9, fig. 20; lycopod leaf base impression; Carboniferous; Radnitz, Bohemia.

**RHYTIDOTHECA** Mueller, 1871.

*Rhytidotheca lynchii* Mueller, 1871 (1871-82), p. 39, pl. 4, fig. 1-8; Pliocene; Hadron, Victoria.

**RHYTISMITES** Meschinelli, 1892.

*Rhytismites palaeoacernum* (Engelhardt) Meschinelli, in Saccardo, 1892, p. 780. For *Rhytisma palaeoacernum* Engelhardt, 1885, p. 310, pl. 8, figs. 8a-c; Miocene; Kundratitz, Bohemia.

**RHYTISMOPSIS** Geyler, 1887.

*Rhytismopsis* sp. Geyler, 1887a, p. 488, pl. 32, fig. 4; fungus; Eocene; Labuan, Borneo.

**RHYZODENDRON** Zalesky, 1937.

*Rhyzodendron rossicum* Zalesky, 1937d, p. 159, figs. 9, 10; lycopod stem impression; Permian; Russia.

**RIENITSIA** Walkom, 1932.

*Rienitsia spathulata* Walkom, 1932, p. 124, pl. 5, figs. 1, 2; fig. 1. See also Jones and Jersey, 1947, p. 42.

**RIMNOCLADON** Zalesky, 1930.

*Rimnocladon minutum* Zalesky, 1930c, p. 227, pl. 1, figs. 7, 8; lycopod? stem impression; Lower Carboniferous; Urals, Russia.

**RIVULARITES** Fliche, 1905.

*Rivularites repertus* Fliche, 1905a, p. 47, pl. 3, fig. 4; alga, Cyanophyceae?; Triassic; Gemmelaincourt, Vosges, France.

**ROBERTIAE** Choubert, 1932.

*Robertiae katangae* Choubert, in Haquaert, 1932, p. 266; Devonian; Katanga, Belgian Congo.

**ROBINIOXYLON** Falqui, 1907.

*Robinioxyylon zuricensis* Falqui, 1907, p. 11; wood; Oligocene; Italy.

**RODEITES** Sahni, 1943.

*Rodeites dakshini* Sahni, in Sahni, Birbal, and Sitholey, R. V., 1943, p. 180, pl. 9, fig. 42; early Tertiary (probably Eocene); Mohgaon Kalan and Sausar, India.

**ROEMERIA** Unger, 1852.

*Roemeria americana* Unger, in Roemer, Ferdinand, 1852, p. 95; wood; Cretaceous; near Gonzales, Tex.

**ROGERSIA** Fontaine, 1889.

*Rogersia longifolia* Fontaine, 1889, p. 287, pl. 139, fig. 6; pl. 144, fig. 2; pl. 150, fig. 1; leaf, Proteaceae; Potomac group, Lower Cretaceous; Fredericksburg, Va.

**ROHLFSIA** Schenk, 1883.

*Rohlfisia celastroides* Schenk, 1883a, p. 9, pl. 4, fig. 12; wood, dicotyledon; Upper Cretaceous; Libya, North Africa.

**ROMEROITES** Spegazzini, 1924.

*Romerioites argentinensis* Spegazzini, 1924b, p. 139, figs. 5, 6; seed-bearing cone, Coniferales; Upper Cretaceous; Patagonia.

**RONZOCARPON** Marion, 1872.

*Ronzocarpon hians* Marion, 1872, p. 358, pl. 23, figs. 28, 29; fruit, dicotyledon; Tertiary; Ronzon, France.

**ROSELLINITES** Meschinelli, 1892.

*Rosellinites congregatus* (Beck) Meschinelli, in Saccardo, 1892, p. 750; Pyrenomycete; Oligocene; Saxony. For *Rosellina congregata* (Beck) Engelhardt, 1888, p. 33, pl. 1, figs. 1-9.

**ROSELLINITES** Henry Potonie, 1893.

*Rosellinites beysschlagii* Henry Potonie, 1893b, p. 27, pl. 1, fig. 8; fungus perithecia; Permian (Rothliegendes); Manebach, Kammerberg, Germany.

**ROSENBUSCHIA** Sterzel, 1895.

*Rosenbuschia schalcht* Sterzel, 1895, p. 270, pl. 10, figs. 14-18; alga?; Permian; Oppenau, Baden.

**ROSSOVITES** Zalesky, 1934.

*Rossovites petchorensis* Zalesky, 1934b, p. 289, fig. 77; leaf fragment, incertae sedis; Permian; Pechora basin, Russia.

**ROSTHORNIA** Unger, 1842.

*Rosthornia carinthiaca* Unger, 1842b, p. 175.

**ROTHENBERGIA** Cotta, 1843.

*Rotherbergia hollebenii* Cotta, 1843, p. 411, pl. 2, fig. D; incertae sedis; Saalfeld, East Prussia.

**ROTODONTIOSPERMUM** Arnold and Steidtmann, 1937.

*Rotodontiospermum illinoense* Arnold and Steidtmann, 1937, p. 647, figs. 1, 11-14; petrified seed; Pteridospermae; McLeansboro formation, Pennsylvanian; Richland County, Ill.

**ROTTIA** Weyland, 1943.

*Rottia incerta* Weyland, 1943, p. 108, pl. 19, figs. 3-7; leaf, dicotyledon; Tertiary; Rott, Siebergelbirge, Germany.

**ROTULARIA** Sternberg, 1825.

*Rotularia marsileaeifolia* Sternberg, 1825 (1820-38), Tentamen, p. xxxii; *Annularia* foliage; Carboniferous; Swina, Bohemia.

**RUBIAECARPUM** Menzel, 1913.

*Rubiaceacarpum multicarpellare* Menzel, 1913, p. 10, pl. 1, figs. 20-24; fruit, Rubiaceae; Tertiary (Braunkohle).

**RUBIAECOCARPUM** Kräusel, 1939.

Bayer. Akad. Wiss., Math.-naturwiss. Abh., 1939, Neue Folge, 47, p. 108 (not seen, cited in Gothan, 1942b, p. 148).

**RUBIACITES** Weber, 1855.

*Rubiactites asperuloides* Weber, in Wessel and Weber, 1855, p. 149, pl. 26, fig. 12; Miocene; Rott, Germany.

**RUBIAEPHYLLUM** Bayer, 1893.

*Rubiaephyllum gaylussaciae* Bayer, in Fric, 1893, p. 131, fig. 192; Cretaceous (Senonian); Priesen, Bohemia.

**RUBIDGEA** Tate, 1867.

*Rubidgea mackayi* Tate, 1867, p. 141, pl. 5, fig. 8; *Glossopteris*-like leaf; Karroo beds, Carboniferous; Bloemkop, near Sunday's River, South Africa.

**RUBIIPHYLLITES** Hector, 1880.

*Rubiiphyllites linearis* Hector, 1880, p. 49; nom. nud.

**RUBIODES** Perkins, 1904.

*Rubiodes lignita* Perkins, 1904, p. 193, pl. 78, figs. 80, 84; fruit, compared with *Rubia tinctoria* (Rubiaceae); Tertiary; Brandon, Vt.

**RUFFORDIA** Seward, 1894.

*Ruffordia goepperti* Seward, 1894a, p. 76, pl. 3, figs. 5, 6; pl. 4; pl. 5, pl. 6, fig. 1; fertile fern foliage, Schizaeaceae?; Wealden; England.

**RUSOPHYCUS** Hall, 1852.

*Rusophycus clavatus* Hall, 1852, p. 23, pl. 8, figs. 1a, 1b; plant?; Clinton group, Silurian; New Hartford, Oneida County, N. Y.

**RUTAEACARPUS** Velenovsky and Viniklar, 1926.

*Rutaeacarpus quadrilobus* Velenovsky and Viniklar, 1926, p. 52, pl. 1, fig. 9; fruit, Rutaceae?; Cretaceous; Otruby, Bohemia.

**RUTAPHYLLUM** E. W. Berry, 1930.

*Rutaphyllum trifoliatum* E. W. Berry, 1930, p. 92, pl. 42, fig. 3; leaf, Rutaceae; Grenada formation, lower Eocene; 1 mile north of Somerville, Fayette County, Tenn.

**RUYSCHIOXYLON**, Hermann Hofmann, 1844.  
*Ruyschioxylon sumatrense* Hermann Hofmann, 1884b, p. 32; wood; Tertiary; Sumatra.

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**SAARODISCITES** Hirmer, 1940.  
*Palaeontographica*, 1940, Supp. 9, p. 13 (not seen, cited in Gothan, 1942b, p. 148).  
**SAAROPTERIS** Hirmer, 1940.  
*Palaeontographica*, 1940, Supp. 9, p. 37 (not seen, cited in Gothan, 1942b, p. 148).  
**SABALITES** Saporta, 1865.  
*Sabalites oxyrhachis* Saporta, 1865, p. 82, pl. 3, fig. 3; palm leaf fragment; Tertiary; St.-Jean-de-Garguier, France.  
**SABALOIDITES** Robert Potonie, 1950.  
*Sabaloidites areolatus* Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 49, pl. B, figs. 1, 2; pl. C, fig. 15; pollen, Palmaceae; Miocene; Chatt-Aquitain, Germany.  
**SABIOCAULIS** Stopes and Fujii, 1910.  
*Sabiocaulis sakuraii* Stopes and Fujii, 1910, p. 66, pl. 8, fig. 54; pl. 9, figs. 55-57; petrified stem, Sabiaceae; Upper Cretaceous; Hokkaido, Japan.  
**SABIOXYLON** Madler, 1939.  
*Sabioxylon francfortense* Madler, 1939, p. 120, pl. 12, figs. 1-7; wood, Sabiaceae; Pliocene; near Niederrad, Germany.  
**SABULIA** Stopes, 1913.  
*Sabulia scottii* Stopes, 1913, p. 93, pl. 6, fig. 2; pl. 8, fig. 9; wood, dicotyledon; Lower Greensand, Lower Cretaceous; Woburn Sands, Bedfordshire, England.  
**SACCHAROMYCETES** Gruss, 1928.  
 Preuss. geol. Landesanst. Jahrb., 1928, Band 49, p. 1046 (not seen, cited in Gothan, 1942a, p. 148).  
**SACCOPHYCUS** U. P. James, 1879.  
*Saccophycus intortus* U. P. James, 1879, p. 17; Lower Silurian; near Lebanon, Ohio.  
**SACCOPTERIS** Stur, 1883.  
*Saccopteris essinghi* (Andrae) Stur, 1883, p. 696, fig. 18; fern?; sporangia.  
**SACHEOCLADUS** Zalessky, 1937.  
*Palaeophytographica*, Moskau-Leningrad, 1937, p. 21 (not seen, cited in Gothan, 1942b, p. 148).  
**SACHERIA**, Ettingshausen, 1852.  
*Sacheria asplenoides* Ettingshausen, 1852a, p. 40, pl. 20, fig. 1; fertile fern foliage; Radnitz, Bohemia.  
**SACHYOGYRUS** Zalessky, 1939.  
*Sachyogyrus multifarius* Zalessky, 1939b, p. 336, figs. 7, 8; articulate cone; Permian: Matveyevo, Krasnaya Glinka, USSR.

**SAGENARIA** Brongniart, 1822.  
*Sagenaria coelata* Brongniart, 1822, p. 224, pl. 12, fig. 6; a *Lepidodendron* stem impression; Carboniferous.  
**SAGENOPTERIS** Presl, 1838.  
*Sagenopteris nilssoniana* (Brongniart) Ward; this species designated as the type by Harris, 1932b, p. 5. For *Filicites nilssoniana* Brongniart, 1825b, p. 218, pl. 12, fig. 1. [First species designated is *S. rhoifolia* Presl, in Sternberg, 1838 (1820-38), p. 165, pl. 35, fig. 1.]  
**SAHNIANTHUS** Shukla, 1944.  
*Sahnianthus parijai* (Sahn) Shukla, 1944, p. 2, pls. 1-8; petrified flower, Lythraceae; base of Interrapian series, Tertiary; Mohgaon Kalan, Chhindwara district, Central Provinces, India.  
**SAKRISTROBUS** K. Jacob, 1943.  
*Sakristobus sahnii* K. Jacob, in Sahn, Birbal, and Sitholey, R. V., 1943, p. 177, figs. 9, 10; Jurassic; Sakrigalighat, India.  
**SALICINIUM** Unger, 1850.  
*Salicinium populinum* Unger, 1850a, p. 420; wood, Salicaceae. Only species illustrated: *S. messinianum* Pampaloni, 1904, p. 545, figs. 10, 11.  
**SALICINOXYLON** Kaiser, 1880.  
*Salicinoxydon miocenicum* Kaiser, 1880b, p. 511; wood, Salicaceae; probably Miocene; Island of Sylt, Prussia.  
**SALICINOXYLON** Lingniet, 1907.  
*Salicinoxydon biradiatum* Lingniet, 1907, p. 272, pl. 18, figs. 18-24; wood, dicotyledon; Upper Cretaceous (Cenomanian); Hève, France.  
**SALICIPHYTELLUM** Conwentz, 1886.  
*Saliciphyllum succineum* Conwentz, 1886, pl. 4, figs. 17-19; leaf, in amber, Salicaceae; Tertiary; West Prussia.  
**SALICIPHYTELLUM** Fontaine, 1889.  
*Saliciphyllum longifolium* Fontaine, 1889, p. 302, pl. 150, fig. 12; leaves, compared with *Salix*; Potomac group, Lower Cretaceous; near Potomac Run, Va.  
**SALICITES** Hisinger, 1837.  
*Salicites wahlbergii* Hisinger, 1837, p. 112, pl. 34, fig. 9; leaf dicotyledon; Scania, Sweden.  
**SALICOIDITES** Robert Potonie, 1950.  
*Salicoidites* sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 50, pl. B, fig. 3; pollen, Salicaceae?; upper Pliocene; Chatt-Aquitain, Germany.  
**SALICORNITES** Principi, 1926.  
*Salicornites massalongoi* Principi, 1926, p. 64, pl. 2, figs. 8, 9. Earlier citation: Principi, 1821b, p. 90; nom. nud.  
**SALPINGOPORELLA** Pia, 1918.  
*Salpingoporella mühlbergii* (Lorenz) Pia, 1918, p. 211, fig. 4a; alga, Dasycladaceae; Eocene; Radstadt, Austria.

- SALPINGOSTOMA** Gordon, 1941.  
*Salpingostoma dasu* Gordon, 1941, p. 447, pls. 1-6; pteridosperm seed; Cementstone group, lower part of Calcliferous Sandstone series, Lower Carboniferous; Oxroad Bay, Tantallon, East Lothian, Scotland.
- SAMARAVECTIS** Reid and Chandler, 1926.  
*Samaravectis ovalis* Reid and Chandler, 1926, p. 142, pl. 9, figs. 14-16; winged fruit, compared with fruits of Polygonaceae, Ulmaceae, Urticaceae; Bembridge marl, Oligocene; Isle of Wight, England.
- SAMAROPSIS** Goeppert, 1864.  
*Samaropsis ulmiformis* Goeppert, 1864, p. 177, pl. 28, figs. 10, 11; winged seed; Permian; Braunau, Bohemia.
- SAMAROSPERMUM** E. A. N. Arber, 1914.  
*Samarospermum moravicum* (Helmhacker) E. A. N. Arber, 1914, p. 99, pl. 6, figs. 19, 20; winged seed; Middle Coal Measures, Upper Carboniferous; Kent coalfield, England.
- SAMBUCOIDITES** Thomson, 1950.  
*Sambucoidites* sp. Thomson, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 62, pl. B, fig. 63; pollen, Caprifoliaceae; Pliocene; Chatt-Aquitain, Germany.
- SANTALIAPHYLLITES** Hector, 1880.  
*Santaliaphyllites maireoides* Hector, 1880, p. 49; nom. nud.
- SAPINDIPHYLLUM** Nathorst, 1888.  
*Sapindophyllum dubium* Nathorst, 1888, p. 212, pl. 22, fig. 5; leaf, compared with *Sapindus* (Sapindaceae); Tertiary; Tanagori, Musashi province, Japan.
- SAPINDOIDEA** Kirchheimer, 1936.  
*Sapindoidea margaritifera* (Ludwig) Kirchheimer, 1936b, p. 89, pl. 9, figs. 1a-f; seed, Sapindaceae; Tertiary (Braunkohle); Salzhausen, Germany.
- SAPINDOIDES** Perkins, 1904.  
*Sapindoides varius* Perkins, 1904, p. 206, pl. 81, figs. 116, 117, 122; fruit; Tertiary; Brandon, Vt.
- SAPINDOPHYLLUM** Ettingshausen, 1886.  
*Sapindophyllum spinulosodentatum* Ettingshausen, 1886, p. 26, pl. 46, fig. 27; leaf, Sapindaceae; Miocene; Kutschlin, Bohemia.
- SAPINDOPSIS** Fontaine, 1889.  
*Sapindopsis cordata* Fontaine, 1889, p. 296, pl. 147, fig. 1; leaf fragment, compared with *Sapindus* (Sapindaceae); Potomac group, Lower Cretaceous; Fredericksburg, Va.
- SAPINDOSPERMUM** Reid and Chandler, 1933.  
*Sapindospermum ovoideum* Reid and Chandler, 1933, p. 371, pl. 18, figs. 1-5, seed, Sapindaceae; London Clay, Eocene; Herne Bay, Kent, England.
- SAPINDOSTROBUS** Ettingshausen, 1887.  
*Sapindostrobus dubius* Ettingshausen, 1887a, p. 137, pl. 15, fig. 38; incertae sedis; Eocene; Vegetable Creek, near Emmaville, New South Wales.
- SAPINDOXYLON** Kräusel, 1922.  
*Sapindoxylon janssonii* Kräusel, 1922, p. 124, pl. 1, fig. 9; pl. 2, fig. 3; pl. 3, fig. 6; pl. 5, fig. 5; wood, Sapindaceae; Miocene; Sumatra.
- SAPORTAEA** Fontaine and White, 1880.  
*Saportaea salisburyoides* Fontaine and White, 1880, p. 102, pl. 38, figs. 1-3; roof shale of Waynesburg coal; Pennsylvanian; Cassville, W. Va.
- SAPORTAIA** Seward, 1895.  
*See note under Withamia armata* (Saportia) Seward.
- SAPORTIA** Squinabol, 1891.  
*Saportia striata* Squinabol, 1891b, p. xx, pl. D, fig. 8; pl. E; alga?; Tertiary; Liguria, Italy.
- SAPOTACITES** Ettingshausen, 1853.  
*Sapotacites sideroxyloides* Ettingshausen, 1853, p. 61, pl. 21; fig. 21; leaf, Sapotaceae; Eocene; Haering, Tirol, Austria.
- SAPOTAPHYLLITES** Hector, 1880.  
*Sapotaphyllites linearis* Hector, 1880, p. 49; nom. nud.
- SAPOTEITES** Andrae, 1855.  
*Sapoteites ackneri* Andrae, 1855, p. 19, pl. 3, fig. 8; leaf, Sapotaceae; Miocene; Szakadat, Transylvania.
- SAPOTICARPUM** Reid and Chandler, 1933.  
*Sapoticarpum rotundatum* Reid and Chandler, 1933, p. 467, pl. 26, figs. 24-30; fruit, Sapotaceae; London Clay, Eocene; Sheppey, Kent, England.
- SAPOTISPERMUM** Reid and Chandler, 1933.  
*Sapotispermum sheppeyense* Reid and Chandler, 1933, p. 471, pl. 27, figs. 1, 2; seed, Sapotaceae; London Clay, Eocene; Sheppey, Kent, England.
- SAPOTOPHYLLUM** Velenovsky, 1889.  
*Sapotophyllum obovatum* Velenovsky, 1889, p. 54. For *Sapotacites obovata* Velenovsky, 1884, p. 3, pl. 3, fig. 6; Upper Cretaceous; Kuchelbad, Bohemia.
- SAPOTOXYLON** Felix, 1882.  
*Sapotoxylon gümbelii* Felix, 1882a, p. 54; wood, Sapotaceae?; Quarternary; Waghshofen near Neuberg. *See also* Felix, 1883a, p. 67, pl. 2, figs. 5, 8.
- SARCOPTERIS** Renault, 1883.  
*Sarcopteris bertrandi* Renault, 1883a, p. 129, pl. 21, figs. 12-15; petrified fertile pectopterid foliage; Upper Carboniferous.
- SARCOSPERMUM** Deevers, 1937.  
*Sarcospermum ovale* Deevers, 1937, p. 580, figs. 27-36; petrified seed, Trigonocarpaceae; Pennsylvanian; Wilmington, Ill.

**SARCOSTROBILUS** Fliche, 1900.

*Sarcostrobilus paulini* Fliche, 1900, p. 23, pl. 1, figs. 2-5; petrified cone, Araucariaceae; Cretaceous; France.

**SARCOTAXUS** Brongniart, 1874.

*Sarcotaxus angulosus* Brongniart, 1874, p. 248, pl. 21, fig. 16; silicified seed; Carboniferous; St.-Etienne, France.

**SARDOA** Krasser, 1920.

*Sardoa robitschekii* Krasser, 1920, p. 21; Jurassic; Sardinia.

**SARDYKPHYLLUM** Zalesky, 1929.

*Sardykphyllum crassinervosum* Zalesky, 1929c, p. 688, fig. 14; *Sphenophyllum?* leaf; Permian; Bolchoi Sardyk, Republic of Tatars, Russia.

**SARGASSITES** Sternberg, 1833.

*Sargassites septentrionalis* (Agardh) Sternberg, 1833 (1820-38), p. 36. For *Sargassum septentrionale* Agardh, see Brongniart, 1828a-38, p. 50, pl. 2, fig. 24; alga?; Upper Carboniferous; Högabäck, Sweden.

**SAKOPTERIS** Tschirkova, 1937.

*Saropteris rossica* Tschirkova, 1937, p. 244, fig. 12; sphenopteridlike fertile foliage; Carboniferous; Bredy, Russia.

**SASSAFROPHYLLUM** Velenovsky, 1889.

*Sassafrasphyllum acutilobum* (Lesquereux) Velenovsky, 1889, p. 58. For *Sassafras acutilobum* Lesquereux, 1874, p. 79, pl. 14; Upper Cretaceous; Kansas.

**SAURUROPSIS** Stopes and Fujii, 1910.

*Saururopsis nipponensis* Stopes and Fujii, 1910, p. 58, pl. 7, figs. 42-47; stem, Saururaceae; Upper Cretaceous; Hokkaido, Japan.

**SAUSAROSPERMUM** Sahni and Srivastava, 1940.

*Sausarospermum fermori* Sahni and Srivastava, in Sahni, 1940, p. 14, pl. 3, fig. 12. See also Sahni and Srivastava, 1934, p. 318; petrified seed; Deccan Intertrappean series; Tertiary; Sausar, India.

**SAEGETHOPSIS** Dusen, 1899.

*Saegethopsis fuegianus* Dusen, 1899, p. 105, pl. 11, fig. 10; leaf, Podocarpaceae; Oligocene; Barancas de Carmen Sylva, Chile.

**SAXIFRAGACEAE** CARPUM Menzel, 1913.

*Saxifragaceae* carpum bifolliculare Menzel, 1913, p. 32, pl. 4, figs. 7-10; fruit, Saxifragaceae; Tertiary (Braunkohle); Germany.

**SAXIFRAGISPERMUM** Reid and Chandler, 1933.

*Saxifragispermum spinosissimum* Reid and Chandler, 1933, p. 245, pl. 8, figs. 30-35; fruit, Saxifragaceae; London Clay, Eocene; Sheppey, Kent, England.

**SAXIFRAGITES** Ettingshausen, 1868.

*Saxifragites crenulatus* Ettingshausen, 1868a, p. 7, pl. 41; figs. 1-3; leaf, Saxifragaceae?; Miocene; Kutschlin, Bohemia.

**SBOROMIRSKIA** Zalesky, 1936.

*Sboromirskia asiatica* Zalesky, 1936a, p. 234, fig. 18; coniferous? foliage; Carboniferous; Russia.

**SCALITES** Reinsch, 1881.

*Scalites* sp. Reinsch, 1881, p. 74, pl. 17b, figs. 1-4; Upper Carboniferous; Zwickau, Saxony.

**SCAPANITES** Gottsche, 1886.

*Scapanites acutifolius* Gottsche, 1886, p. 122; nom. nud.

**SCAPANOPHYLLUM** Zalesky, 1929.

*Scapanophyllum sitzense* Zalesky, 1929b, p. 133, fig. 14; fern? pinnae; Permian; Sitsa village near Vladivostok.

**SCAPHIDOPTERIS** Renault, 1883.

*Scaphidopteris gillii* Renault, 1883, p. 128, pl. 22, figs. 5-7; petrified pinnales compared with *Pecopteris*; Upper Carboniferous; Peronnère, France.

**SCAPINA** Poeta, 1889.

*Scapina cambrica* Poeta, 1889, p. 429, fig. 10 [unnumbered plate]; Cambrian; Příbram, Bohemia.

**SCHAFARZIKIA** Tuzson, 1914.

*Schafarzikia oligocaenica* Tuzson, 1914, p. 251, pl. 19, fig. 1; leaf fragment; upper Oligocene; Zsll valley, near Petrozseny, Hungary.

**SCHAFFERIA** Fucini, 1938.

*Schafferia* Fucini, 1938, app. 2, p. 133 (not seen, cited in Gothan, 1942b, p. 149).

**SCHAFHAUTLIA** Naegeli, 1863.

*Schafhautlia teisenbergensis* Naegeli, in Schafhautl, 1863, p. 29, pl. 65, figs. 1, 2; wood, dicotyledon; Upper Cretaceous; Tiesenberg, South Bavaria.

**SCHIDOLEPIUM** Heer, 1880.

*Schidolepium gracile* Heer, 1880a, p. 27, pl. 8, figs. 6-12; cone, Coniferales; Jurassic; Siberia.

**SCHILDERIA** Daugherty, 1934.

*Schilderia adamanica* Daugherty, 1934, p. 363, pl. 5; petrified wood; Triassic; Arizona.

**SCHIMPERITES** Schleiden, 1855.

*Schimperites leptotichus* Schleiden, in Schmid and Schleiden, 1855, p. 42; Tertiary; Libethen, Hungary; nom. nud.

**SCHISTOSTACHYUM** Schenk, 1864.

*Schistostachyum thyrsoides* Schenk, 1864, p. 110, pl. 6, figs. 3a, 3b; Upper Triassic (Keuper); Estenfeld, Bavaria.

**SCHIZAEITES** Henry Potonie, 1893.

*Schizaeites angustus* Henry Potonie, 1893a, p. 161, pl. 20, fig. 4; fern leaf fragment; Permian; Manebach, Prussian Saxony.

**SCHIZAEOPSIS** E. W. Berry, 1911.

*Schizaeopsis expansa* (Fontaine) E. W. Berry, 1911c, p. 194, pl. 12; compared with *Schizaea*; Patuxent formation, Lower Cretaceous; Fredericksburg, Va.

**SCHIZAEOPTERIS** Stopes and Fujii, 1910.

*Schizaeopteris mesozoica* Stopes and Fujii, 1910, p. 10, pl. 2, fig. 1; sporangia, Schizaeaceae; Upper Cretaceous; Hokkaido, Japan.

**SCHIZEITES** Guembel, 1859.

*Schizeites dichotomus* Guembel, 1859a, p. 101, fig. 7; incertae sedis; Permian; Steinbruch, near Erbendorf, Bavaria.

**SCHIZODENDRON** Eichwald, 1860.

*Schizodendron tuberculatum* Eichwald, 1860, p. 266, pl. 18, fig. 10; fern stem?; Permian; Bjelbeli, Orenbourg, Russia. Generic name cited in Mercklin, 1856, p. 81; nom. nud.

**SCHIZOLEPIDELLA** Halle, 1913.

*Schizolepidella gracilis* Halle, 1913, p. 90, pl. 9, figs. 18-21; liverwort?; Jurassic; Hope Bay, Graham Land.

**SCHIZOLEPIS** C. F. W. Braun, 1847.

*Schizolepis Hasokeuperinus* C. F. W. Braun, 1847, p. 86; cone scales, Abietinae; Triassic. Later described as *Schizolepis braunii* Schenk, 1867 (1865-67), p. 179, pl. 44, figs. 1-8. See also Seward, 1919, p. 439.

**SCHIZONEURA** Schimper and Mougeot, 1844.

*Schizoneura paradoxa* Schimper and Mougeot, 1844, p. 50, pls. 24-26; articulate stems and foliage; Mulhouse, Germany.

**SCHIZONEUROPSIS** Richter, 1906.

*Schizoneuropsis posthuma* Richter, 1906 (1906-09), p. 13, pl. 6, fig. 10; Lower Cretaceous; Quedlinburg, Prussian Saxony.

**SCHIZONEUROPSIS** Yabe and Shimakura, 1940.

*Schizoneuropsis tokuadi* Yabe and Shimakura, 1940, p. 177, pl. 15; some similarity to *Schizoneura*; Permian; Huainan coal mines, Anhwei province, China.

**SCHIZOPODIUM** Morière, 1888.

*Schizopodium renaultii* Morière, 1888, p. 133, pls. 1, 2; petrified cycadophyte trunk; Lower Jurassic (Lias); Montigny, France.

**SCHIZOPODIUM** Harris, 1929.

*Schizopodium davidi* Harris, 1929, p. 408, pls. 91-93; petrified stem intermediate in anatomy between *Asteroxylon* and *Cladoxylon*; Burdekin beds, Middle Devonian; Burdekin basin, Queensland.

**SCHIZOPTERIS** Brongniart, 1828.

*Schizopteris anomala* Brongniart, 1828b, p. 63; fern frond compared with *Schizaea* and certain *Asplenium* species; Carboniferous. See also Brongniart, 1828a-38, p. 384, pl. 135.

**SCHIZOSPERMUM** E. A. N. Arber, 1914.

*Schizospermum noeggerathi* (Sternberg) E. A. N. Arber, 1914, p. 103, pl. 8, figs. 48-50; Upper Carboniferous; south Wales and south England.

**SCHIZOSTACHYS** Grand'Eury, 1877.

*Schizostachys frondosus* Grand'Eury, 1877, p. 201, pl. 17, fig. 3; coenopterid fern fructification; Carboniferous; France. [The name *Androstachys frondosus* Grand'Eury appears on the plate.]

**SCHIZOXYLON** Unger, 1856.

*Schizoxylon taeniatum* Unger, 1856, p. 180, pl. 12, fig. 8; regarded as identical with *Cladoxylon* (see discussion in Seward, 1917, p. 200); Upper Devonian; Saalfeld, Thuringia.

**SCHLEIDENITES** Unger, 1842.

*Schleidenites compositus* Unger, in Endlicher, 1842, p. 102; wood, incertae sedis; Tertiary; Hungary.

**SCHLOTHEIMIA** Sternberg, 1822.

*Schlotheimia arborescens* Sternberg, 1822 (1820-38), p. 32; *Asterophyllites* foliage; Carboniferous. For *Casuarinites equisetiformis* Schlotheim, 1820, pl. 2, fig. 3; pl. 1, fig. 1.

**SCHMIDITES** Schleiden, 1855.

*Schmidites vasculosus* Schleiden, in Schmid and Schleiden, 1855, p. 39; wood, Leguminosae?; Tertiary (Braunkohle); Tapolesan, Hungary.

**SCHMIEDELOPSIS** Felix, 1882.

*Schmiedelopsis zirkei* Felix, 1882a, p. 72; wood; Antigua, West Indies. See also Felix, 1883, p. 16, pl. 2, figs. 6, 8; pl. 3, fig. 9.

**SCHOINOPHYTUM** Jaeger, 1851.

*Schoinophytum contortum* Jaeger, in Stizenberger, 1851, p. 43; nom. nud.; Jurassic; Mundelfinger, Baden.

**SCHOPPIA** Janssen, 1940.

*Schoppia deucli* Janssen, 1940, p. 102, pl. 28, figs. 5, 6; incertae sedis; coal No. 2, Pennsylvanian; Mazon Creek, Ill.

**SCHOPPIASTRUM** Andrews, 1945.

*Schoppiastrum decussatum* Andrews, 1945, p. 334, pl. 10, figs. 17, 18; pl. 11, figs. 20-22; pl. 15, fig. 36; petrified stem, Pteridospermae, affinities with *Rhetinangium*; Des Moines group, Pennsylvanian; Urbandale coal mine, Des Moines, Iowa.

**SCHOPFITES** Kosanke, 1950.

*Schoppites dimorphus* Kosanke, 1950, p. 52, pl. 13, figs. 1-3; spore; No. 2 coal, Pennsylvanian; Franklin County, Ill.

**SCHULZOSPORA** Kosanke, 1950.

*Schulzospora rara* Kosanke, 1950, p. 53, pl. 13, figs. 5-8; Battery Rock coal, Pennsylvanian; Hardin County, Ill.



**SCHUTZIA** H. B. Geinitz, 1863.

*Schutzia anomala* H. B. Geinitz, 1863, p. 525, pl. 6, figs. 1-3; inflorescence, Cordaitales; Carboniferous; Ottendorf, near Braunau, Bohemia.

**SCIADIPTERIS** Sternberg, 1838.

*Sciadipteris radnicensis* Sternberg, 1838 (1820-38), p. 118, pl. 37, fig. 1; fern-like foliage; Upper Carboniferous; Brzas, near Radnitz, Bohemia.

**SCIADISCA** Zalesky, 1934.

*Sciadisca petchorensis* Zalesky, 1934b, p. 271, fig. 49; incertae sedis; Permian; Pechora basin, Russia.

**SCIADOPHYTON** Kräusel and Weyland, 1930.

*Sciadophyton steinmanni* Kräusel and Weyland, 1930, p. 220.

**SCIADOPITYOXYLON** Schmalhausen, 1879.

*Sciadopityoxylon vestuta* Schmalhausen, 1879, p. 40; wood, affinities with *Sciadopitys* (Taxodiaceae); Jurassic; Halbinsel, Mangyschlag, Russia. First? illustrated species: *Sciadopityoxylon wettsteini* Jurasky, 1928, p. 258, figs. 1-5.

**SCIADOPITYTES** Goeppert and Menge, 1883.

*Sciadopitytes linearis* Goeppert and Menge, 1883, p. 36, pl. 13, figs. 117-119; *Sciadopitys*-like leaves; middle Miocene; Samland, Baltic Prussia.

**SCIRPITIS** Dusen, 1908.

*Scirpitis* sp. Dusen, 1908, p. 16; leaf fragment, compared with *Scirpus* (Cyperaceae); Tertiary; Seymour Island, Antarctic Ocean.

**SCITAMINITES** Sternberg, 1825.

*Scitaminites musaeformis* Sternberg, 1825 (1820-38), Tentamen, p. xxxvi, pl. 5, fig. 2; incertae sedis; Upper Carboniferous; Radnitz, Bohemia.

**SCITAMINOPHYTON** Massalongo, 1858.

*Scitaminophyton meneghinianum* Massalongo, 1858b, p. 783; leaf, Scitaminaeae?; Oligocene; Ronca, Italy.

**SCLEROPHYLLINA** Heer, 1864.

*Sclerophyllina furcata* Heer, 1864, p. 55, pl. 2, fig. 9; fern?; Upper Triassic (Keuper); Switzerland.

**SCLEROPHYLLOIDES** Heer, 1862.

*Sclerophylloides furcatus* Heer, in Muller, 1862, p. 54; nom. nud.

**SCLEROPTERIDIUM** Heer, 1877.

*Scleropteridium dahlium* Heer, 1877a, p. 12, pl. 1, fig. 1; fern? foliage; Jurassic; Andø, Norway.

**SCLEROPTERIS** Saporta, 1872.

*Scleropteris pomelii* Saporta, 1872a-73, p. 370, pl. 46, fig. 1; pl. 47, figs. 1, 2; fern foliage; Jurassic; near Verdun, France.

**SCLEROPTERIS** H. N. Andrews, 1942.

*Scleropteris illinoensis* H. N. Andrews, 1942, p. 3, pls. 1-3; rhizome, closely related to *Botrychioxylon*; coal No. 6, Pennsylvanian; Pyramid coal mine, Pinckneyville, Ill.

**SCLEROTHAMNIUM** Airoidi, 1936.

*Sclerothamnium nitens* Airoidi, 1936, p. 18, figs. 1, 2, 4; alga; Middle Triassic; northern Italy.

**SCLEROTITES** Meschinelli, 1892.

*Sclerotites acericola* (Heer) Meschinelli, in Saccardo, 1892, p. 803. See also Meschinelli, 1898, p. 98, pl. 26, fig. 10.

**SCOLECOLITHUS** Goeppert, 1852.

*Scolecolithus linearis* (Haldemann) Goeppert, 1852b, p. 101. For *Skolithos linearis* Haldemann, 1840, p. 3; Cambrian; Reading, Pa. Goeppert refers to Paleontology of New York, Albany, 1847, v. 1, p. 2, pl. 1, fig. 1.

**SCOLECopteris** Zenker, 1837.

*Scolecopteris elegans* Zenker, 1837, p. 509, pl. 10; fern foliage, fertile, Marattiaceae; Permian; Chemnitz, Germany.

**SCOLITHUS** Hall, 1847.

*Scolithus linearis* Hall, 1847, p. 2, pl. 1, figs. 1a-c; plant?; Potsdam sandstone, Upper Cambrian; Adams, Mass., New Jersey, Pennsylvania, etc.

**SCOLOPENDRITES** Goeppert, 1836.

*Scolopendrites jussieu* Goeppert, 1836, p. 276; fertile fern frond. For *Filicites scolopendroides* Brongniart, 1828d, p. 443, pl. 18, fig. 2; Triassic; Alsace-Lorraine. See also Brongniart, 1836 (1828a-38), p. 388, pl. 137, figs. 2, 3.

**SCOLOPENDRITES** Lesquereux, 1854.

*Scolopendrites grossedentata* Lesquereux, in Lesquereux and Rogers, 1854, p. 425; Pennsylvania. See also Rogers, 1858, p. 868, pl. 8, fig. 7.

**SCOLOPIOIDEA** Langeron, 1899.

*Scolopioidea palaecenica* Langeron, 1899, p. 454, pl. 2, fig. 4; leaf, compared with *Scolopia*, Bixaceae; Eocene; Sézanne, France.

**SCORESBYA** Harris, 1932.

*Scoresbya dentata* Harris, 1932a, p. 38, pls. 2, 3; leaf, related to *Sagenopteris*?; *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**SCOTTIELLA** Schuster, 1931.

A generic name proposed for *Medullosa anglica*, *M. pusilla*, and *M. centroflis*. See Schuster, 1931, p. 235.

**SCOUGOUPHYTON** Henri and Geneviève Termier, 1950.

*Scougouphyton abdallahense* Henri and Geneviève Termier, 1950, p. 206, figs. 49-52; Devonian; Dechra Ait Abdallah, Central Morocco.

- SCOYENIA** David White, 1929.  
*Scoyenia gracilis* David White, 1929, p. 115, pl. 4, fig. 3, pl. 5; probably not plant; lower Hermit shale, Permian; Arizona.
- SCROPHULARINA** Heer, 1859.  
*Scrophularina oblita* Heer, 1859, p. 17, pl. 103, fig. 17; calyx?, Scrophulariaceae; Tertiary; Oeningen, Switzerland.
- SCUTOCORDAITES** Renault and Zeiller, 1885.  
*Scutocordaites grand'euryi* Renault and Zeiller, 1885, p. 869; stem and foliage, Cordaitales; Upper Carboniferous; Commeny, France. *See also* Renault and Zeiller, 1890, p. 605, pl. 63, fig. 6.
- SCYTOPHYLLUM** Bornemann, 1856.  
*Scytophyllum bergeri* Bornemann, 1856, p. 75, pl. 7, figs. 1-6; fernlike leaf fragment; Keuper?; Mülhausen, Germany.
- SEDGWICKIA** Goeppert, 1848.  
*Sedgwickia yuccoides* Goeppert, in Bronn, 1848, p. 1131. For *Endogenites crosa* Stokes and Webb, 1824, p. 423, pl. 46, figs. 1, 2; pl. 47, figs. 5a, 5b; Wealden; Tilgate Forest, Sussex, England. *See also* Read and Brown, 1937, p. 106.
- SEDITES** H. B. Geinitz, 1842.  
*Sedites radenhorstii* H. B. Geinitz, 1842 (1839-42), p. 97, pl. 24, fig. 5; leaves and stem, compared with *Sedum*, Crassulaceae.
- SELAGINELLITES** Zeiller, 1906.  
*Selaginellites suisseti* Zeiller, 1906, p. 141, pl. 39, figs. 1-5; pl. 40, figs. 1-10; pl. 41, figs. 4-6; fertile lycopod shoot; Permian; Blanzy, France.
- SELAGINITES** Brongniart, 1828.  
*Selaginites patens* Brongniart, 1828b, p. 84; lycopod foliage shoots; Carboniferous. *See also* Brongniart, 1838 (1828a-38), p. 68, pl. 26.
- SELENOCARPUS** Schenk, 1866.  
*Selenocarpus münsterianus* Schenk, 1866, p. 89, pl. 22, figs. 1-6; fertile fern, Gleicheniaceae; Rhaetic; Strullendorf and Reindorf, near Bamberg, Bavaria.
- SELENOCHLAENA** Corda, 1845.  
*Selenochlaena microrrhiza* Corda, 1845, p. 81. For *Tubicaulis dubius* Cotta, 1832, p. 25, pl. 1, figs. 3, 4. *See also* Posthumus, 1931.
- SELENOPTERIS** Corda, 1845.  
*Selenopteris radnicensis* Corda, 1845, p. 84, pl. 52; coenopterid petiole?; Carboniferous; Radnitz, Bohemia. *See also* Posthumus, 1931.
- SEMAPTERIS** Unger, 1870.  
*Semapteris carinthiaca* Unger, 1870, p. 788, pl. 3, fig. 1; partly decorticated lycopod? stem; Upper Carboniferous; Carinthia, Austria-Hungary.
- SEMECARPITES** Fritel, 1912.  
*Semecarpites linearifolius* Fritel, 1912, p. 643, pl. 22, fig. 1; leaf, compared with *Semecarpus* (Anacardiaceae); Oligocene (Aquitanién); Bois d'Asson, France.
- SEMEN** Velenovsky and Viniklar, 1927.  
*Semen trigonum* Velenovsky and Viniklar, 1927, p. 43, pl. 14, fig. 9; seed, incertae sedis; Cretaceous; Slivenec, Bohemia.
- SENDELIA** Goeppert and Berendt, 1845.  
*Sendelia ratzeburgiana* Goeppert and Berendt, in Berendt, 1845, p. 81, pl. 5, figs. 18-20; staminate flower; Miocene; Prussia.
- SENFTENBERGIA** Corda, 1845.  
*Senftenbergia elegans* Corda, 1845, p. 91, pl. 57, figs. 1-6; fertile foliage, Schizaeaceae; Carboniferous; Nachod, Bohemia. *See also* Radforth, 1938, 1939.
- SEQUIOIDITES** Thiergart, 1950.  
*Sequoioidites polyformosus* Thiergart, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 49, pl. A, figs. 20, 21; pl. C, fig. 8; pollen, compared with *Sequoia*, *Metasequoia*; Miocene-Pliocene; Chatt-Aquitain, Germany.
- SEQUIOOPSIS** Saporta, 1876-84.  
*Sequoiopsis buvignteri* Saporta, 1876-84, p. 540, pl. 201, figs. 1-5; twigs, foliage, Coniferales; Jurassic; Creue, near St. Mihiel, France.
- SEQUIOXYLON** Torrey, 1923.  
*Sequioxylon montanense* Torrey, 1923, p. 74, pl. 10, figs. 19-23; wood, Coniferales; Laramie formation, Upper Cretaceous; bank of Missouri River, Culbertson, Mont.
- SEQUIOXYLON** Yusui, 1928.  
*Sequioxylon hondoense* Yusui, 1928, p. 420, pl. 17, figs. 59-63; wood, compared with *Sequoia*; upper Tertiary; Aichi coalfield, central Japan.
- SEQUIOITES**.  
*See* *Sequoiites*.
- SEQUIOTES** Brongniart, 1849.  
Type species?: *Sequoiites taxiformis* (Unger) Brongniart, 1849, p. 117. For *Cupressites taxiformis* Unger, 1842, (1841-47), p. 18, pls. 8, 9; foliage, cones Coniferales; Haering. Spelling *Sequoiites* adopted by some authors.
- SERENOPSIS** Hollick, 1893.  
*Serenopsis kempii* Hollick, 1893b, p. 169, pl. 149; palm leaf; Cretaceous; Glen Cove, Long Island, N. Y.
- SESTROSPHAERA** Pla, 1920.  
*Sestrospheera lasina* Pla, 1920, p. 138, pl. 7, figs. 27, 28; alga, Siphonaeae Verticillatae; Jurassic; Italy.

**SETOSISPORITES** Ibrahim, 1933.

*Setosiporites subpilosus* Ibrahim, 1933, p. 27, pl. 5, fig. 40; spore; Carboniferous. [Ibrahim cites *S. hirsutus* as the type species, but I find no record of an illustration. The first species illustrated in his work is *S. subptilosus*.]

**SEWARDIA** Zeiller, 1900.

*Sewardia latifolia* Zeiller, 1900, p. 233, fig. 160. For *Withamia saportae* Seward, 1895, p. 174, pl. 2, figs. 1, 2; pl. 5, fig. 1; cycadophyte frond fragment; Wenden; England. See also Seward, 1919, p. 103.

**SEWARDIELLA** Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 150.

**SEZANNELLA** Vigulier, 1908.

*Sezannella major* Vigulier, 1908, p. 13, pl. 5, figs. 1, 4, 7, 10; flower, Sterculiaceae; Eocene (Thanetien); Sézanne, France. [In Vigulier, 1907b, p. 1004, a generic description is given and two species listed, *S. major* and *S. minor*.]

**SEZANNIA** Saporta, 1865.

*Sezannia credneriaeformis* Saporta, 1865, p. 45; leaf, dicotyledon (some resemblance to *Credneria*); Tertiary; Sézanne, France.

**SHERMANOPHYCUS** J. H. Johnson, 1940.

*Shermanophycus gouldi* J. H. Johnson, 1940, p. 582, pl. 2, figs. 1, 2; alga. Cyanophyceae?; near top of Weber shale, Pennsylvanian; Park County, Colo.

**SHIRAKIA** Kawasaki, 1934.

*Shirakia bilobifolia* Kawasaki, 1934 (1927-34), p. 98, pl. 22, figs. 32, 33; fertile fernlike foliage, compared with *Eboracia lobifolia*; Koboson series, beds I, H, G, Mesozoic; Samch'ök, South Korea.

**SHIRAKIOPTERIS** Kon'no, 1950.

*Shirakiopteris kawasaki* Kon'no, 1950, p. 95, 5 figs.

**SHOREOXYLON** Berger, 1923.

*Shoreoxylon palembangense* (Kräusel) Berger, 1923, p. 145; wood, compared with *Shorea*; Tertiary; Sumatra. For *Caesalpinioxylon palembangense* Kräusel, 1922, p. 247, pl. 2, fig. 1; pl. 3, figs. 1, 2; pl. 7, figs. 6, 11.

**SHRUBSOLEA** Reid and Chandler, 1933.

*Shrubsolea jenkinsi* Reid and Chandler, 1933, p. 262, pl. 10, figs. 11, 12; seed, Rutaceae; London Clay, Eocene; Herne Bay, Kent, England.

**SIDERELLA** Read, 1936.

*Siderella scotti* Read, 1936b, p. 226, figs. 12, 14-16; petrified stem, Siderellales, link between zygopterid ferns and Sphenophyllales?; Upper Devonian; Junction City, Boyle County, Ky.

**SIGILLARIA** Brongniart, 1822.

*Sigillaria scutellata* Brongniart, 1822, p. 222, pl. 12, fig. 4; stem impression showing leaf bases; Carboniferous; France.

**SIGILLARIOIDES** Lesquereux, 1870.

*Sigillarioides radicans* Lesquereux, 1870, p. 449, pl. 31, fig. 4; roots of *Sigillaria*; Upper Carboniferous; Mazon Creek, Ill.

**SIGILLARIOPHYLLUM** Grand'Eury, 1877.

A generic name proposed for leaves which Grand'Eury reports having seen attached to *Sigillaria*. He cites as an example: *Cypterites bicarinatus* Lindley and Hutton, 1833 (1831-37), p. 123, pl. 43, figs. 1, 2.

**SIGILLARIOPSIS** Renault, 1879.

*Sigillariopsis decaisnei* Renault, 1879, p. 270, pl. 12, figs. 15-19; pl. 13, figs. 1-4; petrified leaves and small stems of sigillarian affinities; Carboniferous; France.

**SIGILLARIOSTROBUS** (Schimper) Eugen Geinitz, 1873.

*Sigillariostrobus bifidus* Eugen Geinitz, 1873, p. 70, pl. 3, figs. 5-7; terminally forked sporophylls with sporangia at base; Permian (lower Dyas); near Pillnitz, Saxony. Generic name given by Schimper, 1870 (1869-74), p. 105, pl. 67, figs. 13-24.

**SIGILLODENDRON** C. E. Weiss, 1889.

*Sigiliodendron frondosum* (Goepfert) C. E. Weiss, 1889, p. 164, pl. 2, fig. 1.

**SIGNACULARIA** Zalesky, 1929.

*Signacularia noinski* Zalesky, 1929a, p. 192, pl. 17, figs. 1, 2; partly decorticated stem impression; Carboniferous; Donetsk, Russia.

**SILESIOPTERIS** Posthumus, 1924.

*Silesiopteris sinuosa* (Goepfert) Posthumus, 1924, p. 885. For *Gyropteris sinuosa* Goepfert, 1852b, p. 138, in part. See also Posthumus, 1931.

**SILLIMANIA** Unger, 1850.

*Sillimania texana* Unger, 1850a p. 524; wood, incertae sedis; Cretaceous; Texas.

**SILPHIDIUM** Massalongo, 1853.

*Silphidium visianicum* Massalongo, 1853a, p. 16. For illustration, see Massalongo, 1858e, p. 122, pl. 4, figs. 1-3; pl. 5, fig. 2.

**SIMARUBITES** E. W. Berry, 1930.

*Simarubites eocenicus* E. W. Berry, 1930, p. 94, pl. 44, figs. 15, 16; winged fruit, Simarubaceae; Wilcox group, Lower Eocene; La Grange, Fayette County, Tenn.

**SIMARUBINIUM** Platen, 1908.

*Simarubinium crystallophorum* Platen, 1908, p. 54; Pliocene; Callistoga, Calif.

**SINOCTENIS** Sze, 1931.

*Sinoctenis grabauiana* Sze, 1931, p. 14, pl. 2, fig. 1; pl. 4, fig. 2; cycadophyte foliage; Lower Jurassic (Lias); Pinghsiang, Kiangsi province, China.

**SINUSIA** Krestew, 1928.

Preuss. geol. Landesanst. Jahrb., 1928, Band 49, p. 574 (not seen, cited in Gothan, 1942b, p. 151).

**SIPHODENDRON** Saporta, 1884.

*Siphodendron girardoti* Saporta, 1884, p. 38, pl. 6, figs. 6, 7; Jurassic; Chatelneuf, France.

**SIPHODICTYTES** Reinsch, 1881.

*Siphodictytes* sp. Reinsch, 1881, p. 75, pl. 18a, figs. 1-4; pl. 18b, figs. 9-11; Permian (Dyas); Stockheim, Württemberg.

**SIPHONEMA** Bornemann, 1886.

*Siphonema incrustans* Bornemann, 1886, p. 18, pl. 2, figs. 1, 2; alga?; Cambrian; Sardinia.

**SIPHONITES** Saporta, 1872.

*Siphonites heberti* Saporta, 1872-73, p. 111, pl. 22, figs. 1, 2; alga?; Jurassic; Chalindrey, France.

**SIPHONOTHALLUS** Rothpletz, 1896.

*Siphonothallus taeniatus* Rothpletz, 1896, p. 896, pl. 22, fig. 10; alga; upper Oligocene; Wernleite, near Siegsdorf, Bavaria.

**SIRODESMITES** Pia, 1927.

*Sirodesmites subgranulosus* (Renault) Pia, in Hirmer, 1927, p. 123; fungus, Dematiaceae, Fungi Imperfecti; Oligocene. For *Sirodesmium subgranulosum* Renault, 1899, p. 980, pl. 17, fig. 18.

**SITZIA** Zalesky, 1930.

*Sitzia kloeki* Zalesky, 1930f, p. 929, fig. 9; fern frond fragment; Permian; Pechora basin, Russia.

**SITZOPTERIS** Zalesky, 1930.

*Sitzopteris superba* Zalesky, 1930f, p. 929, fig. 10; fern frond fragment; Permian; Pechora basin, Russia.

**SJÖGRENIA** Felix, 1894.

*Sjögrenia crystallophora* Felix, 1894a, p. 93, pl. 9, figs. 1, 2; wood, dicotyledon; Eocene; Apscheron, Transcaucasia.

**SLOANEOPSIS** Kuntze, 1904.

*Sloaneopsis* Kuntze, in Post and Kuntze, 1904, p. 522.

**SMEYSTERSIA** Fraipont, 1921.

*Smeystersia minuta* Fraipont, 1921, p. M51; male cone, Coniferales; Wealden; Belgium. Pollen grains only figured; other illustrations and specimens destroyed during German invasion of Liège in August 1914.

**SMILACIPITES** Wodehouse, 1933.

*Smilacipites molloides* Wodehouse, 1933, p. 500, fig. 25; pollen, Liliaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

**SMILACITES** Brongniart, 1828.

*Smilacites hastata* Brongniart, 1828c, p. 45, pl. 3, fig. 8; Tertiary; Armissan, France.

**SOLANITES** Saporta, 1862.

*Solanites brongniartii* Saporta, 1862, p. 262, pl. 11, fig. 2; flower, Solanaceae; Tertiary; Aix, Provence, France.

**SOLENIOPSIS** Massalongo, 1851.

*Soleniopsis linzoides* Massalongo, 1851, p. 67; alga; Tertiary; Italy.

**SOLENITES** Lindley and Hutton, 1834.

*Solenites murrayana* Lindley and Hutton, 1834 (1831-37), p. 105, pl. 121; foliage, Ginkgoales; Jurassic; Gristhorpe Bay, near Scarborough, England. See also Seward, 1919, p. 64.

**SOLENOPHYLLUM** Maslov, 1935.

*Solenophyllum paleozoicum* Maslov, V. P. This reference not checked; it was reported by J. H. Johnson, 1943, as: Inst. Econ. Mineralogy Moskva Trans., 1935, v. 72, p. 1-28.

**SOLENOPLASMIUM** Reinsch, 1881.

*Solenoplasmium* sp. Reinsch, 1881, p. 27, pl. 4, figs. 1-6; pl. 5, figs. 1-5; pl. 6, figs. 1-3; Upper Carboniferous; Zwickau, Saxony.

**SOLENOPORA** Dybowski, 1877.

*Solenopora spongioides* Dybowski, 1877, p. 124, pl. 2, figs. 11a, 11b; Ordovician; Herrküll, Russia.

**SOLENOPORELLA** Rothpletz, 1908.

*Solenoporella jurassica* (Brown) Rothpletz, 1908, p. 10, pl. 2, figs. 5, 6.

**SOLENOSTELOPTERIS** Kershaw, 1910.

*Solenostopteris japonica* Kershaw, 1910, p. 689, pl. 58; petrified fern rhizome; Upper Cretaceous; Hokkaido, Japan. See also Posthumus, 1931.

**SOLENOSTROBUS** Endlicher, 1847.

*Solenostrobos subangulatus* (Bowerbank) Endlicher, 1847, p. 272. For *Cupressinites subangulatus* Bowerbank, 1840, p. 60, pl. 10, figs. 24, 25; Eocene; Isle of Sheppey, England.

**SOLENOULA** Wood, 1861.

*Solenoula psilophloeus* Wood, 1861b, p. 238, pl. 4, fig. 3; stem impression, incertae sedis; Pennsylvanian; St. Clair, Schuylkill County, Pa.

**SOMPHOSPONGIA** Beede, 1899.

*Somphospongia multiformis* Beede, 1899, p. 128, pl. 33, figs. 1-10; described as a sponge but believed by later workers to be an alga (Cyanophyta); Burlingame limestone, upper Pennsylvanian; Kansas. See Johnson, J. H., 1946, p. 1104.

**SOPHORITES** Kuntze, 1904.

*Sophorites* Kuntze, in Post and Kuntze, 1904, p. 524.

**SORITHAMNION** Heydrich, 1900.

See Heydrich, 1900a, p. 82. A new genus erected to include species previously assigned to other genera, the first listed being *Nullipora ramosissima* Reuss, 1848, p. 29, pl. 3, figs. 10, 11.

**SOROCLADUS** Lesquereux, 1880.

*Sorocladus stellatus* Lesquereux, 1880, p. 328, pl. 48, text fig. 8; fertile fern frond fragment?; Carboniferous; Arkansas.

**SOROSACCUS** Harris, 1935.

*Sorosaccus gracilis* Harris, 1935, p. 145, pls. 24, 28; cone, *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**SOROTHECA** Stur, 1883.

*Sorotheca crepini* Stur, 1883, p. 807; fig. 3a; Upper Carboniferous; Belgium.

**SPARGANILITHES** Woodward, 1879.

*Sparganilithes gemmatus* Woodward, 1879, p. 391, pl. 10, fig. 4; compared with infructescence of *Sparganium* (Sparganiaceae); Eocene; Sumatra.

**SPARGANIOCARPUS** Velenovsky and Viniklar, 1929.

*Sparganiocarpus terminalis* Velenovsky and Viniklar, 1929, p. 29, pl. 21, figs. 17-19; inflorescence, Sparganiaceae?; Cretaceous; Slivenec, Bohemia.

**SPARGANIOIDITES** Robert Potonie, 1950.

*Sparganioidites* sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friederich, 1950, p. 50, pl. C, fig. 11, no description given; pollen, Typhaceae; lower Miocene; Senftenberg, Bohemia.

**SPARGANOFILIX** Kuntze, 1904.

*Sparganofilix* Kuntze, in Post and Kuntze, 1904, p. 525.

**SPARGANUM** Unger, 1856.

*Sparganium maximum* Unger, 1856, p. 167, pl. 8, fig. 1; fibrous cortical strands; Upper Devonian; Saalfeld, Thuringia.

**SPARTHOPHYCOS** Massalongo, 1859.

*Sparthophycos funalis* Massalongo, in Massalongo and Scarabelli, 1859, p. 92 (footnote). For *Cylindrites funalis* Massalongo, 1856, pls. 1, 2; pl. 3, fig. 1; Eocene; Monte Spilecco, Italy.

**SPATHITES** Stanton and Knowlton, 1897.

*Spathites* sp. Stanton and Knowlton, 1897, p. 140; nom. nud.; Laramie formation; Upper Cretaceous.

**SPATHULOPTERIS** Kidston, 1923.

*Spathulopteris obovata* (Lindley and Hutton) Kidston, 1923a, p. 173, pl. 42, figs. 1-7; pl. 44, fig. 1; sphenopteridlike foliage; Calcareous Sandstone series, Lower Carboniferous; various localities in Midlothian, Dumfriesshire, Linlithgowshire, Scotland.

**SPEGAZZINITES** Felix, 1894.

*Spegazzinites cruciformis* Felix, 1894a, p. 279, pl. 19, fig. 8; spores, compared with *Spegazzinia ornata*; Pleistocene; Mecklenburg, Germany. See also Meschinelli, 1898, p. 82.

**SPEIROCARPUS** Stur, 1888.

*Spirocarpus bartoneci* Stur, 1888b, p. 107. Genus cited earlier in Stur, 1885, p. 97; nom. nud.

**SPENCERITES** Scott, 1897.

*Spencerites insignis* (Williamson) Scott, 1897a, p. 167; petrified lycopodiaceous cone; Lower Coal Measures, Upper Carboniferous; near Halifax, England. For full description, see Scott, 1898a, p. 86, pls. 14, 15.

**SPERMATITES** Miner, 1935.

*Spermatites elongatus* Miner, 1935, p. 597, pl. 19, figs. 30-36, 38; Upper Cretaceous; Skansen, Disko Island, Greenland.

**SPERMATOCODON** Thomas, 1933.

*Spermatocodon sewardi* Thomas, 1933, p. 225, pl. 24, fig. 66; inflorescence of cupulate seeds; Molteno beds, Karroo system, Triassic; Upper Umkomas Valley, Natal.

**SPERMATOSTROBUS** Velenovsky and Viniklar, 1927.

*Spermatostrobus suspectus* Velenovsky and Viniklar, 1927, p. 30, pl. 11, figs. 7-9; cone, Coniferales; Cretaceous; Vyserovic, Bohemia.

**SPERMITES** Saporta, 1889.

*Spermites semialatus* Saporta, 1889, p. 142, pl. 20, figs. 27, 28; winged seed; Tertiary; Aix, Provence, France.

**SPERMOLITHUS** Thomas Johnson, 1917.

*Spermolithus devonicus* Thomas Johnson, 1917, p. 249, pl. 11, figs. 4-6; pl. 12, figs. 1, 2; isolated microsporangia and seeds, Pteridospermae?; Upper Devonian; Kiltorcan, County Kilkenny, Ireland.

**SPHAECIDIUM**.

Error for *Phacidium*, in Ettingshausen. 1869, p. 74.

**SPHAENOPHORA** Massalongo, 1851.

*Sphaenophora crassa* Massalongo, 1851, p. 95, Tertiary; Italy. See also Massalongo, 1858b, p. 179, pl. 3, fig. 2; pl. 7, fig. 1.

**SPHAEREDA** Lindley and Hutton, 1837.

*Sphaereda paradoxa* Lindley and Hutton, 1837 (1831-37), p. 17, pl. 159; Jurassic; Grinstead, Yorkshire, England.

**SPHAERIODES** Reid and Chandler, 1933.

*Sphaeriodes ventricosa* (Bowerbank) Reid and Chandler, 1933, p. 331, pl. 15, figs. 18-23; endocarp, Icacinaceae; London Clay, Eocene; Sheppey, Kent, England.

**SPHAERIOPSIS** Geyler, 1887.

*Sphaeropsis* sp. Geyler, 1887, p. 488, pl. 32, fig. 3; fungus; Eocene; Labuan, Borneo.

**SPHAERITES** Unger, 1850.

*Sphaerites punctiformis* Unger, 1850a, p. 37; Miocene; Parschlug, Styria. Cited as nom. nud. in Unger, 1848, p. 53. See also Engelhardt, 1895, p. 9, pl. 1, fig. 1. Meschinelli, 1892, p. 751, erroneously attributes this genus to Haller.

**SPHAEOCOCCIDES** Schimper, 1869.

*Sphaeococcides cartilagineus* (Unger) Schimper, 1869 (1869-74), p. 163, pl. 4, fig. 6.

**SPHAEROCOCCITES** Sternberg, 1833.

*Sphaerococcites ciliatus* Sternberg, 1833 (1820-38), p. 28, pl. 4, fig. 1; alga?; Jurassic; Solenhofen, Bavaria.

**SPHAEROCODIUM** Rothpletz, 1890.

*Sphaerocodium bornemanni* Rothpletz, 1890, p. 9; siphonaceous alga. See also Rothpletz, 1891, p. 299, pl. 15, figs. 2-9, 11-13; pl. 16, figs. 3, 5, 6.

**SPHAERONITES** Hisinger, 1828.

*Sphaeronites pomum* (Wahlenberg) Hisinger, 1828, p. 240, pl. 5, figs. 2-4.

**SPHAEROSPERMUM** Renault, 1907.

*Sphaerospermum* sp. Renault, in Bertrand, C. E., 1907, p. 223.

**SPHAEROSTOMA** Benson, 1909.

*Sphaerostoma ovale* (Williamson) Benson, 1909, p. 239; petrified seed, Pteridospermae; thought to be seed of *Heterangium grievii*; Calcareous Sandstone series, Lower Carboniferous; Pettycur, Fifeshire, Scotland. For full treatment, see Benson, 1914, p. 2, pls. 1, 2.

**SPHAEROSTROBUS** Harris, 1935.

*Sphaerostrobos clandestinus* Harris, 1935, p. 143, pl. 29; isolated male cone, possibly belonging to *Podozamites*; *Leptodopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**SPHAERANEMA** John Smith, 1896.

*Sphaeranema curta* John Smith, 1896, p. 319, pl. 7, fig. 1; fungus mycelium?, in amber; Upper Carboniferous; Annandale, near Kilmarnock, Scotland.

**SPHALLOPTERIS**.

See *Sphalmopteris* Corda, in Posthumus, 1931.

**SPHALLOPTERIS** Corda, 1845.

*Sphalmopteris mougeotii* (Brongniart) Corda, 1845, p. 76. For *Anomopteris mougeotii* Brongniart, 1828a-38, p. 258, pl. 80. Brongniart originally based this species on fern foliage and a stem although there apparently was no evidence of organic connection; therefore Corda removed the stem to his new genus *Sphalmopteris*. [Eichwald, 1860, p. 92, believing that *Sphalmopteris* contained a typographical error, changed it to *Sphallopteris*.]

**SPHEGOPHYLLUM** Zalesky, 1939.

*Sphegophyllum striatum* Zalesky, 1939b, p. 372, fig. 54; leaf fragment, incertae sedis; Permian; Matveyevo, Kroutaia Katouchka, USSR.

**SPHEGOPTERIS** Zalesky, 1939.

*Sphegopteris rugosa* Zalesky, 1939b, p. 358, fig. 36; fernlike foliage; Permian; Matveyevo, USSR.

**SPHENASPIS** Hollick and Jeffrey, 1909.

*Sphenaspis statenensis* Hollick and Jeffrey, 1909, p. 51, pls. 10, 26; cone scales, Coniferales; Cretaceous; Kreischerville, Staten Island, N. Y.

**SPHENASTROPHYLLITES** Sterzel, 1907.

*Sphenastrophyllites diersburgensis* Sterzel, 1907, p. 694, pl. 56, figs. 1-3; Upper Carboniferous; Offenburg, Baden.

**SPHENOBAIERA** Florin, 1936.

*Sphenobaiera spectabilis* (Nathorst) Florin, 1936b, p. 38, pl. 5, figs. 1-4; ginkgophyte; Jurassic; Franz Joseph Land. See also Florin, 1936a, p. 108.

**SPHENOCALLIPTERIS** Zeiller, 1898.

*Sphenocallipteris* sp. Zeiller, 1898, p. 19.

**SPHENOCYCLOPTERIDIUM** Stockmans, 1948.

*Sphenocyclopteridium belgicum* Stockmans, 1948, p. 47, pl. 7, figs. 1-9a; Upper Devonian; Belgium.

**SPHENOGLOSSUM** Emmons, 1856.

*Sphenoglossum quadrifolium* Emmons, 1856, p. 335, pl. 1, fig. 2; Triassic; Haywood, Chatham County, N. C.

**SPHENOLEPIDIUM** Heer, 1881.

*Sphenolepidium sternbergianum* (Dunker) Heer, 1881, p. 19, pl. 13, figs. 1a, 2-3; pl. 14; twigs, foliage, Coniferales; Cretaceous; Valle de Lobos, Portugal.

**SPHENOLEPIS** Schenk, 1871.

*Sphenolepis sternbergiana* (Dunker) Schenk, 1871, p. 243, pl. 37, figs. 3, 4; pl. 38, figs. 3-13; foliage and cones, Coniferales; Wealden; Minden, Prussia, etc.

**SPHENOPHYCUS** Ruedemann, 1912.

*Sphenophycus latifolius* (Hall) Ruedemann, 1912, p. 74, pl. 1; pl. 2, figs. 1-14; alga?; Schenectady beds, Silurian; near Schenectady, N. Y.

**SPHENOPHYLLITES** Brongniart, 1822.

*Sphenophyllites emarginatus* Brongniart, 1822, p. 234, pl. 13, fig. 8; sphenophyllaceous foliage; Carboniferous.

**SPHENOPHYLLOSTACHYS** Seward, 1896.

*Sphenophyllostachys dawsoni* (Williamson) Seward, 1896b, p. 436; a generic name created by Seward for cones believed to have been borne by *Sphenophyllum*. For *Volkmannia dawsoni* Williamson, 1871b, p. 29, pls. 1-3. See also Hoskins and Cross, 1943.

- SPHENOPHYLLOSTROBUS** Carpentier, 1919.  
*Sphenophyllostrobos* sp. Carpentier, 1919b, p. 247, pl. 3, fig. 7; no description; Carboniferous; France.
- SPHENOPHYLLUM** Koenig, 1825.  
*Sphenophyllum emarginatum* (Brongniart) Koenig, 1825, pl. 12, fig. 149. For *Sphenophyllites emarginatus* Brongniart, 1822 p. 234, pl. 13, fig. 8.
- SPHENOPTERIDIUM** Schimper, 1874.  
*Sphenopteridium dissectum* (Goeppert) Schimper, 1874 (1869-74), p. 488, pl. 107, fig. 12; fernlike foliage, compared with *Triphylopteris* and *Aneimites*; Carboniferous; near Hausdorf, Silesia. For *Cyclopteris dissecta* Goeppert, 1852b, p. 161, pl. 14, figs. 3, 4.
- SPHENOPTERIS** (Brongniart) Sternberg, 1825.  
*Sphenopteris elegans* (Brongniart) Sternberg, 1825 (1820-38), p. 15. For *Filicites elegans* Brongniart, 1822, pl. 2, fig. 2; fernlike foliage; Carboniferous; Silesia. [When raised to generic rank by Sternberg, the name was spelled *Sphaenopteris* although Brongniart's usage as a subgenus was *Sphenopteris*, and the latter has been followed by later writers.]
- SPHENOSTROBUS** Levittan and Barghoorn, 1948.  
*Sphenostrobos thompsonii* Levittan and Barghoorn, 1948, p. 353, figs. 1-12; petrified strobilus of sphenopsid affinities; Des Moines group, Pennsylvanian; Shuler mine, Dallas County, Iowa.
- SPHENOTHALLUS** Hall, 1847.  
*Sphenothallus angustifolius* Hall, 1847, p. 261, pl. 68, fig. 1; alga?; Silurian; between Canajoharie and Schoharie, N. Y.
- SPHENOTHECA** Kirchheimer, 1934.  
*Sphenotheca incurva* Kirchheimer, 1934b, p. 789, fig. 19; fruit, Symplocaceae; Tertiary (Braunkohle); Elfriede, near Gohra, Germany. See also Kirchheimer, 1936, p. 71, pl. 10, figs. 27a-1.
- SPHENOZAMIA** (Pomel) Zwanzlger, 1872.  
*Sphenozamia augustae* Zwanzlger, 1872, p. 337; Triassic (Keuper); Klagenfurt, Carinthia.
- SPHENOZAMITES** (Brongniart) Miquel, 1851.  
*Sphenozamites beani* (Lindley and Hutton) Miquel, 1851b, p. 210. For *Cyclopteris beani* Lindley and Hutton, 1832 (1831-37), p. 127, pl. 44; cycadophyte leaf; Jurassic; Grinstead Bay, Yorkshire, England. Cited as subgenus of *Otozamites* in Brongniart, 1849, p. 61.
- SPHERITES** Dijkstra, 1949.  
*Spherites spinosus* Dijkstra, 1949, p. 27, pl. 2, fig. 12; Hystrichosphaeridae; Senonian; South Limburg, Netherlands.
- SPHINXIA** Reid and Chandler, 1933.  
*Sphinxia ovalis* Reid and Chandler, 1933, p. 397, pl. 20, figs. 12-23; fruit, Sterculiaceae; London Clay, Eocene; Sheppey, Kent, England.
- SPHYGMIMUM** Debey, 1881.  
*Sphygmium paradoxum* Debey, in Moulton, 1881, p. 133; nom. nud.
- SPHYROPTERIS** Stur, 1883.  
*Sphyropteris crepini* Stur, 1883, p. 656, fig. 6c; fertile fern pinnule; Upper Carboniferous; Belgium.
- SPILOSPHAERITES** Massalongo, 1857.  
*Spiilosphaerites maculans* Massalongo, in Massalongo and Scarabelli, 1857, p. 8. See also Massalongo and Scarabelli, 1859, pl. 1, figs. 2, 3, 13, 14; fungus; Miocene; Sinigaglia, Italy.
- SPIRALIA** Toulou, 1900.  
*Spiralia neudorfensis* Toulou, 1900, p. 11; nom. nud.
- SPIRANGIUM** Schimper, 1870.  
*Spirangium carbonaria* Schimper, 1870 (1869-74), p. 516. Not a plant; for recent discussion of this and related fossils, see Brown, R. W., 1950.
- SPIRAXIS** Newberry, 1885.  
*Spiraxis major* Newberry, 1885, p. 33. Not a plant; for recent discussion of this and related fossils, see Brown, R. W., 1950.
- SPIREMATOSPERMUM** Chandler, 1925.  
*Spirematospermum wetzleri* (Heer) Chandler, 1925, p. 17, pl. 1, figs. 8a-c; fruit, Zingiberaceae; upper Eocene; Hordle, Hampshire, England.
- SPIROCHORDA** Schimper, 1879.  
*Spirochorda* Schimper, in Schimper and Schenk, 1879 (1879-90), p. 51. No species designated but intended for *Dictyota spiralia* Ludwig; alga; Chordophyceae.
- SPIROPHYTON** Hall, 1863.  
*Spirophyton typum* Hall, 1863, p. 80, pl. 2, figs. 1-3; Devonian; Otsego, N. Y.
- SPIROPTERIS** Schimper, 1869.  
*Spiropteris milloti* (Brongniart) Schimper, 1874 (1869-74), p. 19, pl. 49, fig. 4. See also Schimper, 1869, p. 688-690. Figure 4 is designated as type, because it conforms most closely with generally accepted usage.
- SPIRORAMMA** Massalongo, 1859.  
*Spiroamma spiralis* Massalongo, in Massalongo and Scarabelli, 1859, p. 92. For *Münsteria spiralis* Massalongo, 1857a, p. 778; nom. nud.
- SPIROXYLON** Hartig, 1848.  
*Spiroxylon ratzeburgii* Hartig, 1848a, p. 172; wood; Tertiary; north Germany.
- SPIROXYLON** Walton, 1925.  
*Spiroxylon africanum* Walton, 1925b, p. 18, pl. 2, fig. 12; pl. 3, figs. 15, 16; coniferous wood; horizon unknown; Harmsfontein, South Africa.

**SPONDIAECARPON** Langeron, 1899.

*Spondiaecarpon dubium* Langeron, 1899, p. 454, pl. 3, figs. 2, 4; fruit, compared with *Spondias* (Anacardiaceae); Eocene; Sézanne, France. Menzel, 1913, p. 6, gives spelling as *Spondiaecarpum*.

**SPONDIAECARPUM**.

See *Spondiaecarpon*.

**SPONDICARYA** Reid and Chandler, 1933.

*Spondicarya trilocularis* Reid and Chandler, 1933, p. 306, pl. 13, figs. 35, 36; endocarp, Anacardiaceae; London Clay, Eocene; Minster, Kent, England.

**SPONDIOCARPUS** Warburg, 1897.

*Spondiocarpus verbeekii* Warburg, 1897, p. 229, pl. 4, figs. 6-15; Pliocene; Bangka Island, Malay [Indonesia].

**SPONDYLPHYTON** Schultes and Dorf, 1938.

*Spondylphyton hyenoides* Schultes and Dorf, 1938, p. 21, figs. 1, 2; sphenopsid; Lower Devonian; Beartooth Butte, Wyo.

**SPONDYLOSTROBUS** Müller, 1870.

*Spondylostrobos smythii* Müller, in Müller and Smyth, 1870, p. 610; cone fragment, Coniferales; Haddon, near Smythesdale, Victoria. See also Müller, 1871 (1871-82), p. 48, pl. 1.

**SPONGELIOMORPHA** Saporta, 1887.

*Spongeliomorpha iberica* Saporta, 1887, p. 299, pl. 6, figs. 2, 3; incertae sedis; Miocene; Alcoy, France.

**SPONGILOPSIS** H. B. Geinitz, 1862.

*Spongilopsis dyatica* H. B. Geinitz, 1862, p. 132, pl. 24, figs. 2, 3; incertae sedis, probably not a plant; Permian; Saxony and Bohemia.

**SPONGIOSTRQMA** Gurich, 1906.

*Spongiostroma maeandrinum* Gurich, 1906, p. 41, pl. 7, fig. 1; alga?; placed in Rivulariaceae in Hirmer, 1927, p. 36; Carboniferous?; Namur, Belgium.

**SPORANGIOSTROBUS** Bode, 1928.

*Sporangiostrobos orzeschenis* Bode, 1928, p. 247, pl. 22, fig. 2; Upper Carboniferous; Upper Silesia.

**SPORANGITES** Dawson, 1863.

*Sporangites papillata* Dawson, 1863b, p. 454; generic name proposed "for spores or spore cases of *Lepidodendron*, *Calamites* and similar plants, not referred to the species to which they belong"; Carboniferous; Nova Scotia. See also Dawson, 1866, p. 165, pl. 12, fig. 80.

**SPORITES** Henry Potonie, emended by

Schopf, 1938.  
*Sporites plicatus* Schopf, 1938a, p. 51, pl. 7, figs. 7-9.

**SPORLEDERIA** Stiehler, 1860.

*Sporlederia carbonaria* (Schimper) Stiehler, 1860, p. 8, pl. 1. [For *Palaeozyrus*, not a plant, see Brown, R. W., 1950.]

**SPOROCARPON** Williamson, 1878.

*Sporocarpion celluloseum* Williamson, 1878, p. 347 (footnote); pl. 23, figs. 75, 75a, 75b; problematical reproductive organs. Several specimens are described and figured, and, judging from a later contribution (Williamson, 1880, p. 507), the figures cited above are intended to illustrate *S. celluloseum*. Another species, *S. ornatus* (Williamson, 1879, p. 511), is reported by Seward, 1917, p. 309 as being *Physostoma elegans*; Upper Carboniferous.

**SPOROCYSTIS** Lesquereux, 1880.

*Sporocystis planus* Lesquereux, 1880, p. 458, pl. 69, fig. 15; spores?; Carboniferous; Pittston, Pa.

**SPOROgonITES** Halle, 1916.

*Sporogonites exuberans* Halle, 1916b, p. 79; compared with sporogonium of moss; Devonian; Røragen, Norway. See also Halle, 1916, 1936.

**SPOROLITHES** Eichwald, 1853.

*Sporolithes cordatus* Eichwald, in Mercklin, 1853, p. 304; nom. nud.

**SPORONITES** Robert Potonie, 1931.

*Sporonites neddeni* Robert Potonie, 1931b, p. 332. See also Potonie, Robert, 1931, 1932; Potonie, Robert, and Gelletich, J., 1933.

**SPOROPOLLENITES** Thiergart, 1949?

*Sporopollenites rostratus* Thiergart, 1949, p. 7, pl. 1, fig. 7; spore; Triassic (Keuper).

**SPOROTRICHITES** Goeppert and Berendt, 1845.

*Sporotrichites heterospermus* Goeppert and Berendt, in Berendt, 1845, p. 116, pl. 6, figs. 42-46; fungus on insect, in amber; Miocene; Prussia. Meschinelli, 1892, p. 790, and 1898, p. 79, erroneously attributes this genus to Link.

**SQUAMA** Renault, 1885.

*Squama taxinoides* Renault, 1885, p. 82, pl. 5, figs. 11, 12; petrified microsporophylls, Coniferales?; Carboniferous; Grand Croix, near Rive-de-Gier, France. This seems to be the first use of this name in a generic sense; see discussion under *Squamae*.

**SQUAMAE**.

"*Squamae cycadeorum*," Nathorst, 1876, pl. 12, figs. 14-17; apparently cycadophyte bracts; Rhaetic; Palyo, Sweden. This is evidently not intended as a generic name. The term *Squamae* (Latin, scales) has been used by other authors, for example, Feistmantel, 1881, p. 119, as a general term to describe gymnosperm scales.

**SQUAMOPSIS** Fucini, 1938.

*Palaeontographia Italia*, 1938, app. 2, p. 182 (not seen, cited in Gothan, 1942b, p. 152).



**SQUAMULARIA** Rothpletz, 1896?

*Squamularia cicatricosa* (Heer) Rothpletz, 1896, p. 893, pl. 22, fig. 5.

**STACHANNULARIA** C. E. Weiss, 1876.

*Stachannularia tuberculata* (Sternberg) C. E. Weiss, 1876, p. 17, pl. 1, figs. 2-4; pl. 2, figs. 1-3, 5; pl. 3, figs. 3-10, 12; articulate cone; pl. 2, fig. 1 shows attachment to calamitean? stem; Carboniferous.

**STACHYCARPITES** Ogura, 1932.

*Stachycarpites projectus* Ogura, 1932b, p. 458, pl. 23, figs. 8-10; petrified seed, Coniferales; Cretaceous; Hokkaido, Japan.

**STACHYCARPUS** Meunier, 1898.

*Stachycarpus eocenica* Meunier, 1898, 17, fig. p. 17; infructescence, Phytolacaceae?; Eocene; Beuvry, Bethune, France.

**STACHYOPTIS** Schenk, 1867.

*Stachyoptis preslii* Schenk, 1867, p. 185, pl. 44, figs. 9-12; microsporangiate cone?; Rhaetic; Strullendorf, near Bamberg, Bavaria.

**STACHYOTAXUS** Nathorst, 1886.

*Stachyotaxus septentrionalis* (Agardh) Nathorst, 1886c, p. 98, pl. 22, figs. 20-23, 33, 34; pl. 23, fig. 6; pl. 25, fig. 9; twigs, foliage, Coniferales; Rhaetic; Bjuf, Sweden.

**STACHYPTERIS** Pomel, 1849.

*Stachypteris spicans* Pomel, 1849, p. 336; fern; Jurassic; St. Mihiel, France. Apparently first illustrated species is *S. lithophylla* Saporta, 1872 (1872-73), p. 387, pl. 50, figs. 1-5. See also Thomas, 1912.

**STACHYURA** Velenovsky and Viniklar, 1927?

*Stachyura spicata* Velenovsky and Viniklar, 1927, p. 41, pl. 9, fig. 2; pl. 12, figs. 3-6; pl. 14, fig. 8; Cretaceous; Slivenec, Bohemia.

**STANGERITES.**

See *Strangerites*.

**STAPHIDIOPHORA** Harris, 1935.

*Staphidiophora secunda* Harris, 1935, p. 114, pl. 8; seed-bearing fructification, ginkgophyte?; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**STAPHIDOIDES** Perkins, 1906.

*Staphidoides venosus* (Lesquereux) Perkins, 1906, p. 223, pl. 58, fig. 1; fruit; Tertiary; Brandon, Vt.

**STAPHYLOPTERIS** Presl, 1838.

*Staphylopteris polybotrya* (Brongniart) Presl, 1838, in Sternberg, 1820-38, p. 174. For *Filicites polybotrya* Brongniart, 1828-38 p. 390, pl. 137, fig. 6; fernlike foliage; Tertiary; Armissan, near Narbon, France.

**STATZIA**, Weyland, 1938.

*Statzia divaricata* (Wessel and Weber) Weyland, 1938a, p. 101; pl. 12; figs. 1-13; inflorescence with male flowers, family uncertain; Tertiary; Rott, Siebengebirge, Germany.

**STAUBIA** Felix, 1884.

*Staubia eriodendroides* Felix, 1884, p. 29, pl. 2, figs. 2, 4-6, 8; wood, dicotyledon; Miocene; Medgyazo, Hungary.

**STAUROPHYTON** Meunier, 1891.

*Staurophyton bagnolensis* Meunier, 1891, p. 134, fig. 1; incertae sedis.

**STAUROPTERIS** Binney, 1872.

*Stauropteris oldhamia* Binney, 1872b, p. 69; very briefly cited. Anatomy of frond described and illustrated by Williamson, 1874. More fully treated in Scott, 1905b, p. 114, figs. 1, 2; petrified coenopterid fern; Upper Carboniferous; England. See also Posthumus, 1931.

**STEFFENSIA** Goeppert, 1836.

*Steffensia davallioides* Goeppert, 1836, p. 269, pl. 11, figs. 3, 4; fertile fern foliage; Carboniferous; Waldenburg, Silesia.

**STEGITES** Meschinelli, 1892.

*Stegites poacitum* (Alexander Braun) Meschinelli, in Saccardo, 1892, p. 779. See also Meschinelli, 1898, p. 55, pl. 16, fig. 20; Discomycete; Tertiary; Oenigen, Switzerland.

**STEINHAUERA** Presl, 1838.

*Steinhauera subglobosa* Presl, in Sternberg, 1838 (1820-38), p. 202, pl. 49, fig. 4; pl. 57, figs. 1-4; cone, Coniferales?; Miocene; Alsatel, Bohemia.

**STELEOPTERIS** Goeppert, 1865.

*Steleopteris angiopteroides* Goeppert, 1865a, p. 267, pl. 61, figs. 7, 8; Permian. See also Posthumus, 1931.

**STELOXYLON** Solms-Laubach, 1897.

*Steloxylon ludwigii* (Goeppert and Leuckart) Solms-Laubach, 1897, p. 198. For *Medullosa ludwigii* Goeppert and Leuckart, in Goeppert and Stenzel, 1881, p. 126, pl. 17.

**STEMMATOPTERIS** Corda, 1867.

*Stemmatopteris peltigera* (Brongniart) Corda, 1867, p. 76. For *Sigillaria peltigera* Brongniart, 1828-38, pl. 138. See also Posthumus, 1931.

**STENIXYS** Harris, 1938.

*Stenixys cosmaritoides* Harris, 1938, p. 15, pl. 5, fig. 4; desmid?; *Natadita* Bed, upper Rhaetic; Bristol, England. Generic name cited in Kellaway, 1937, p. 226; nom. nud.

**STENOCARPITES** Brongniart, 1861.

*Stenocarpites anisolobus* Brongniart, 1861, p. 1237; leaf, Proteaceae; Tertiary; near Koumi, Greece.

**STENOGRAMMITES** Kretschetovitch, 1936.  
*Stenogrammites pseudocostata* Kretschetovitch, 1936, p. 261, figs. 1-6; red alga; Jurassic; Gor'kia district, Russia.

**STENOMISCHUS** Harris, 1935.

*Stenomischus athrous* Harris, 1935, p. 144, pl. 24; male cone possibly related to *Cunninghamia*; *Thaumatopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**STENOMYELON** Kidston, 1909.

*Stenomyelon tuedianum* Kidston, in Scott, 1909, p. 498; stem, Pteridospermae; Calcareous Sandstone Series, Lower Carboniferous; Norham Bridge, Berwickshire, Scotland. For detailed account, see Kidston and Gwynne-Vaughan, 1912.

**STENONIA** Endlicher, 1847.

*Stenonia ungeri* Endlicher, 1847, p. 290. See also Geoppert, 1850, p. 228, pl. 37, figs. 1-3.

**STENOPHRAGMIUM** Reinsch, 1881.

*Stenophragmium* sp. Reinsch, 1881, p. 104, pl. 46, figs. 1-8; Upper Carboniferous; Newcastle, England.

**STENOPHYCUS** Fenton, 1943.

*Stenophycus teichertii* Fenton, 1943, p. 112, fig. 1; alga; Upper Goniatile Beds; Devonian; 2 miles west of Mt. Pierre, Kimberley Division, western Australia.

**STENOPHYLLUM** Zalesky, 1937.

*Stenophyllum uninervium* Zalesky, 1937c, p. 139, fig. 23; leaf fragment, incertae sedis; Permian; Russia.

**STENOPORIDIUM** Yabe and Toyama, 1928.

*Stenoporidium chaetiformis* Yabe and Toyama, 1928, p. 150, pl. 22, figs. 2-4; alga?; Hiraiga sandstone, Lower Cretaceous; Rikuchū province, Japan.

**STENOPTERIS** Saporta, 1872.

*Stenopteris desmomera* Saporta, 1872-73, p. 292, pl. 32, figs. 1, 2; pl. 33, fig. 1; foliage, Pteridospermae?; Jurassic (Kimmeridgian); Morestel, near Lyon, France.

**STENORHACHIS** Saporta, 1879.

*Stenorhachisponseleti* (Nathorst) Saporta, 1879, p. 193, fig. 22; cone of *Podozamites*?; Lower Jurassic. Various spellings employed by later writers as *Stenorachis*, *Stenorrachis*.

**STENZELIA** Goepfert, 1864.

*Stenzelia elegans* (Cotta) Goepfert, 1864, p. 218, pls. 38, 39; medullosan petiole; Permian; Chemnitz, Germany. See also Seward, 1917, p. 106.

**STEPHANIDA** Unger, 1856.

*Stephanida gracilis* Unger, 1856, p. 170, pl. 8, fig. 11; Devonian; Saalfeld, Thuringia. Earlier citation: Unger, 1854b, p. 599; nom. nud. See also Posthumus, 1931.

**STEPHANOFILIX** Kuntze, 1904.

*Stephanofilix* Kuntze, in Post and Kuntze, 1904, p. 536.

**STEPHANOPHYLLUM** Florin, 1936.

*Stephanophyllum solmsi* (Seward) Florin, 1936b, p. 82, pl. 11, figs. 7-10; pls. 12-16; structurally preserved ginkgophyte foliage; Jurassic; Franz Joseph Land.

**STEPHANOSPERMUM** Brongniart, 1874.

*Stephanospermum achenioides* Brongniart, 1874, p. 260, pl. 23, figs. 13-15; petrified seed; Carboniferous; St.-Étienne, France.

**STEPHANOSTEMON** Caspary, 1881.

*Stephanostemon brachyandra* Caspary, 1881, p. 29; flower, Saxifragaceae; Miocene; Samland, Baltic Prussia. First illustrated species: *A. helmi* Conwentz, 1886, p. 89, pl. 9, figs. 4-7.

**STEPHANOXYLON** Felix, 1882.

*Stephanoxylon dubium* Felix, 1882a, p. 43; wood, dicotyledon.

**STERCULIOCARPUS** E. W. Berry, 1916.

*Sterculiocarpus coccineus* E. W. Berry, 1916b, p. 288, pl. 74, figs. 1-3; large capsular fruit, Sterculiaceae; Wilcox group, Eocene; Frierson Mill, De Soto Parish, La.

**STERCULIPHYLLUM** Nathorst, 1886.

*Sterculiphyllum umbatum* (Velenovsky) Nathorst, 1886a, p. 52. For *Sterculia umbata* Velenovsky, 1883, p. 21, pl. 5, figs. 2-5; pl. 6, figs. 1.

**STERCULITES** Dawson, 1888.

*Sterculites vetustula* Dawson, 1888, p. 193, leaf, Malvaceae?; Kootenai formation, Lower Cretaceous; Rocky Mts. For *Sterculia vetustula* Dawson, 1885, p. 10, pl. 3, fig. 2.

**STEREOPTERIS** Scott and Jeffrey, 1914.

*Stereopteris annularis* Scott and Jeffrey, 1914, p. 341, pl. 32, fig. 42; pl. 33, figs. 45-48 petiole, Zygopteridae; Mississippian; Kentucky.

**STERNBERGIA** Artis, 1825.

*Sternbergia transversa* Artis, 1825, p. 8, pl. 8; stem cast; Upper Carboniferous; England.

**STERZELIA** Gothan, 1928.

*Sterzelia nindeli* Gothan, 1928a, p. 4, pl. 3; compared with *Bothrodendron*; Carboniferous; Flöha, Saxony.

**STICHOPORELLA** Pia, 1927.

*Stichoporella cylindrica* (Lignier) Pia, in Hirmer, 1927, p. 69; alga, Dasycladaceae; Middle Jurassic (Dogger); France. For *Gontolina cylindrica* Lignier, 1913, p. 70, fig. 1.

**STICHOPTERIS** H. B. Geinitz, 1858.

*Stichopteris ottonis* (Gutbier) H. B. Geinitz, 1858, p. 14. For *Pecopteris ottonis* Gutbier, in Geinitz H. B., and Gutbier, 1849 (1848-49), p. 15, pl. 9, fig. 1.

**STICHOSTROMIUM** Reinsch, 1881.

*Stichostromium* sp. Reinsch, 1881, p. 56, pl. 12a, figs. 5-8; Upper Carboniferous; Zwickau, Saxony.

**STICHUS** Etheridge, 1904.

*Stichus mermisoides* Etheridge, 1904, p. 255, pls. 30, 31; fungus?; Cretaceous; Australia.

**STICTODICTYTES** Reinsch, 1881.

*Stictodictytes* sp. Reinsch, 1881, p. 74, pl. 18, figs. 1-5; pl. 18b, figs. 1-8; Upper Carboniferous; Zwickau, Saxony.

**STICTOPLASMIUM** Reinsch, 1881.

*Stictoplasmium* sp. Reinsch, 1881, p. 43, pl. 9, figs. 1-7; Upper Carboniferous; Zwickau, Saxony.

**STIGMARIA** Brongniart, 1822.

*Stigmara fcooides* (Sternberg) Brongniart, 1822, p. 228, pl. 12, fig. 7; lycopod "rootstock" cast; Carboniferous.

**STIGMARIOCARPUM** Achepohl, 1883.

*Stigmariocarpum* sp. Achepohl, 1883, p. 50, pl. 13; incertae sedis; Upper Carboniferous; Westphalia.

**STIGMARIOIDES** Lesquereux, 1870.

*Stigmarioides truncatus* Lesquereux, 1870, p. 453, pl. 29, fig. 4; said to differ from *Stigmara* in lack of regularity of appendage arrangement; Pennsylvanian; Mazon Creek, Ill.

**STIGMARIOPSIS** Grand'Eury, 1877.

*Stigmariopsis inaequalis* Grand'Eury, 1877, p. 173; compared with *Stigmara*; Carboniferous; France. First species illustrated: *Stigmariopsis eveni* (Lesquereux) Grand'Eury, 1890, p. 243, pl. 13, figs. 7, 13.

**STIGMARITES** Fliche, 1903.

*Stigmarites nicklesi* Fliche, 1903a, p. 908; rhizome?; Triassic; Meurthe-et-Moselle; France. See also Fliche, 1905a, p. 138, pl. 13, fig. 2.

**STIGMATIOPHYLLUM** Guembel, 1859.

*Stigmatiophyllum lepidophylloides* Guembel, 1859a, p. 106, pl. 8, fig. 13; Permian; Erbdorf, Bavaria.

**STIGMATOCANNA** Goeppert, 1852.

*Stigmatocanna volkmanniana* Goeppert, 1852a, p. 126, pls. 8, 9; stem casts; Landeshtut, Silesia.

**STIGMATODENDRON** Eichwald, 1860.

*Stigmatodendron ledebourii* Eichwald, 1860, p. 208, pl. 18, fig. 5; pl. 19, figs. 7, 8; Carboniferous; Artinsk, Russia. First citation: Mercklin, 1856, p. 81; nom. nud.

**STIGMOPHYTON** Kräusel and Weyland, 1933.

*Stigmophyton sturi* Kräusel and Weyland, 1933, p. 40, pl. 3, fig. 6; vascular plant, incertae sedis; Middle Devonian; Bohemia. First citation: Kräusel and Weyland, 1932, p. 189 (nom. nud.?).

**STILBITES** Pla, 1927.

*Stilbites succini* (Caspary) Pla, in Hirmer, 1927, p. 124, fig. 117; fungus, Stilbaceae; Eocene; Samland, Baltic Prussia. For *Stilbum succini* Caspary, 1887, p. 7.

**STIPTOPTERIS** Grand'Eury, 1877.

*Stiptopteris aequalis* Grand'Eury, 1877, p. 81, pl. 13, fig. 2; rachis of an arborescent fern; Carboniferous; France. See also Posthumus, 1931.

**STIPTOSTROMIUM** Reinsch, 1881.

*Stiptostromium* sp. Reinsch, 1881, p. 57, pl. 14b, figs. 1-5; Upper Carboniferous; Mittelbexbach, Bavaria.

**STIZOCARYA** Reid and Chandler, 1933.

*Stizocarya communis* Reid and Chandler, 1933, p. 336, pl. 15, figs. 35-42; endocarp, Icacinaceae; London Clay, Eocene; Sheppey, Kent, England.

**STOLIDERMIUM** Reinsch, 1884.

*Stolidermium* sp. Reinsch, 1884, p. 34, pls. 84-85D; Upper Carboniferous; Metschowk, Russia.

**STOLIPLASMIUM** Reinsch, 1881.

*Stoliplasmium* sp. Reinsch, 1881, p. 42, pl. 10b, figs. 2-6; pl. 10c, fig. 1; pl. 29a, fig. 5; Upper Carboniferous; Zwickau, Saxony.

**STOLISPHAERITES** Reinsch, 1881.

*Stolisphaerites* sp. Reinsch, 1881, p. 30, pl. 7c, figs. 13-17; Upper Carboniferous; England.

**STOLITES** Reinsch, 1881.

*Stolites* sp. Reinsch, 1881, p. 119, pl. 52a, figs. 4-7; Upper Carboniferous; Zwickau, Saxony.

**STOLLEYA** Schubert, 1907.

*Stolleya* sp. Schubert, 1907, p. 212.

**STOLLEYELLA** Schubert, 1908.

*Stolleyella velebitans* Schubert, 1908, p. 383, pl. 16, figs. 8, 10, 12; Upper Carboniferous; Dalmatia, Yugoslavia.

**STORGAARDIA** Harris, 1935.

*Storgaardia spectabilis* Harris, 1935, p. 58, pls. 11, 12, 16; coniferous foliage; Rhaetic; Scoresby Sound, east Greenland.

**STORMBERGIA** Seward, 1911.

*Stormbergia gardneri* Seward, 1911a, p. 299, pl. 14; *Cladophlebis* type foliage; Stormberg series; Cyphergat, Cape Colony.

**STRAELENIPTERIS** Stockmans, 1936.

*Straelenipteris eocenica* Stockmans, 1936, p. 15, pl. 1; petrified fern rhizome; Eocene; Brussels.

**STRANGERITES** Bornemann, 1856.

*Strangerites vittatus* (Brongniart) Bornemann, 1856, p. 60. For *Taeniopteris vittata* Brongniart, 1828-38, p. 263, pl. 82, figs. 1-4.

**STRATIOTITES** Heer, 1855.

*Stratiotites najadum* Heer, 1855, p. 106, pl. 46, figs. 9-11; flower, Hydrocharideae; Tertiary; Oeningen, Switzerland.

**STREPHOPTERIS** Presl, 1838.

*Strephopteris ambigua* Presl, in Sternberg, 1838 (1820-38), p. 120, pl. 50, figs. 2a, 2b; fernlike foliage; Carboniferous; near Plass, Bohemia.

**STREPTOTRICHITES** Meschinelli, 1892.

*Streptotrichites spiralis* (Berkeley) Meschinelli, in Saccardo, 1892, p. 790. See also Meschinelli, 1898, p. 81, pl. 21, fig. 11; pl. 22, fig. 7.

**STRIAESTROBUS** Velenovsky and Viniklar, 1926.

*Striaestrobis bohemicus* Velenovsky and Viniklar, 1926, p. 43, pl. 1, fig. 4; seed-bearing cone, compared with *Picea*; Cretaceous; Berovice, Bohemia.

**STRICKLANDIA** Buckman, 1845.

*Stricklandia acuminata* Buckman, in Murchison, 1845, p. 94, pl. 2, fig. 2; leaf; Stonesfield slate; Sevenhampton Common, England.

**STROBILANTHUS** Velenovsky and Viniklar, 1929.

*Strobilanthus cretaceous* Velenovsky and Viniklar, 1929, p. 13, pl. 21, figs. 14-16; inflorescence, related to *Myrica*; Cretaceous; Slivenec, Bohemia.

**STROBILITES** Lindley and Hutton, 1833.

*Strobilites elongata* Lindley and Hutton, 1833 (1831-37), p. 23, pl. 89; cone, Coniferales?; Lower Jurassic (Blue Lias); Lyme, Dorsetshire, England.

**STROBILOSTROBUS** Bayer, 1914.

Archiv Pflrod. Výzkum Cech, svazek 15, p. 29 (not seen, cited in Gothan, 1942b, p. 153).

**STROBILUS** Hildreth, 1837.

*Strobilus caryophyllus* Hildreth, 1837, p. 32, fig. 8; incertae sedis; New York.

**STROMATOCERIUM** Seely, 1904.

*Stromatocerium rugosum* Seely, 1904, p. 144, pl. 70; coral or alga?; Black River limestone, Ordovician; Isle La Motte, Vt.

**STRZELECKIA** Johnston, 1896.

*Strzeleckia gangamopteroides* Johnston, 1896, p. 58, figs. 5-7; leaves, compared with *Gangamopteris* but lacks anastomosed veins; upper Mesozoic; Mt. Nicholas, Tasmania.

**STURIA** Němejc, 1934.

*Sturia amoena* (Stur) Němejc, 1934, p. 2, figs. 1-6 [unnumbered plate]; sphenopterid foliage bearing sporangia; Carboniferous; central Bohemia.

**STURIELLA** C. E. Weiss, 1885.

*Sturiella intermedia* (Renault) C. E. Weiss, 1885a, p. 492. For *Pecopteris intermedia* Renault, 1883, p. 122, pl. 22, figs. 8-11.

**STURIELLA** Kräusel, 1948.

*Sturiella langeri* Kräusel, 1948, p. 141, figs. 1-7; inflorescence, Bennettitales; Triassic; Lunz, Austria.

**STYCHITES** Reinsch, 1881.

*Stychites* sp. Reinsch, 1881, p. 66, pl. 15c, figs. 1-6; Upper Triassic (Keuper); Mittelbronn, Württemberg.

**STYLOCALAMITES** C. E. Weiss, 1884.

*Stylocalamites arborescens* (Sternberg) C. E. Weiss, 1884a, p. 206, pl. 2, fig. 2; pl. 3, fig. 1; pl. 8, fig. 3; Upper Carboniferous; Swina, Bohemia. For *Volkmannia arborescens* Sternberg, 1833 (1820-38), p. 52.

**STYLOCODIUM** Derville, 1931.

*Stylocodium rhopaloides* Derville, 1931, p. 106, pl. 14, figs. 48-51; pl. 15, figs. 52-56; alga, Codiaceae; Carboniferous; Bas-Boulonnais, France.

**STYLOPHYCUS** J. H. Johnson, 1940.

*Stylophycus carbonarius* J. H. Johnson, 1940, p. 587, pl. 4, fig. 2; calcareous alga, probably Cyanophyceae; Weber formation, Pennsylvanian; Park County, Colo.

**SUBLEPIDODENDRON** Hirmer, 1927?

*Sublepidodendron mirabile* (Nathorst) Hirmer, 1927, p. 204.

**SUBLEPIDOPHLOIOS** Sterzel, 1907.

*Sublepidophloios hagenbachensis* Sterzel, 1907, p. 728, pl. 61, figs. 1-3; pl. 62, figs. 1-4; arborescent lycopod stem impression; Upper Carboniferous; Hagenbach, Baden.

**SUBTETRAPEDIA** Renault, 1899.

*Subtetrapedia russiana* Renault, 1899, p. 1036; alga?; Carboniferous; Alexandrowski, Kourakino, Russia.

**SUEVIOXYLON** Kräusel, 1928.

*Suevioxylon zonatum* Kräusel, 1928, p. 253, figs. 5-8; wood, dicotyledon; Jurassic; Heubach, Germany.

**SULCOCARPOLITHES** Kuntze, 1904.

*Sulcocarpolithes* Kuntze, in Post and Kuntze, 1904, p. 543.

**SULCODIPTERIS** Kuntze, 1904.

*Sulcodipteris* Kuntze, in Post and Kuntze, 1904, p. 543.

**SUMATROXYLON** Berger, 1923.

*Sumatroxylon mollii* (Kräusel) Berger, 1923, p. 145; wood, Burseraceae; Tertiary; Sumatra. For *Anacardioxylon mollii* Kräusel, 1922, p. 252, pl. 2, fig. 5; pl. 5, figs. 4, 5; pl. 5, figs. 2-4.

**SUPAIA** David White, 1929.  
*Supaia thinnfeldioides* David White, 1929, p. 62, pl. 14; pl. 15, figs. 1-3; pl. 16, figs. 2, 3; frond, compared with *Danaeopsis* and *Protoblechnum*; lower part of Hermit shale, Permian; Hermit basin, 7.5 miles west of Grand Canyon station, Arizona.

**SUTCLIFFIA** Scott, 1906.  
*Sutcliffea insignis* Scott, 1906b, p. 62, pls. 7-10; petrified stem, Medulloseae; Lower Coal Measures, Upper Carboniferous; Shore, Littleborough, Lancashire, England.

**SUVUNDUKIA** Zalesky, 1948.  
*Suvundukia aciculata* Zalesky, 1948, p. 42, 7 figs.

**SVALBARDIA** Hoeg, 1942.  
*Svalbardia polymorpha* Hoeg, 1942, p. 70, pls. 20-31; psilophyte; Devonian; Spitzbergen.

**SWEDENBORGIA** Nathorst, 1876.  
*Swedenborgia cryptomerides* Nathorst, 1876, p. 66, pl. 16, figs. 6-12; cones, Coniferales?; Lower Jurassic (Hörsandstein, Lias); Palsjö, Sweden.

**SWIETENIOXYLON** Hermann Hoffmann, 1883.  
*Swietenioxylon sternbergense* Hermann Hoffmann, 1883, p. 105; Tertiary; Mecklenburg, Germany.

**SYCIDIDIUM** Sandberger, 1849.  
*Sycidium reticulatum* Sandberger, 1849, p. 672, pl. 8b, figs. 1a-d; Devonian; Eifel, Rhenish Prussia.

**SYCOPHYLLUM** Schulze, 1887.  
*Sycophyllum dentatum* Schulze, 1887, p. 464; Upper Cretaceous (Senonian); Helmberg, Switzerland.

**SYLVELLA** Zalesky, 1937.  
*Sylvella alata* Zalesky, 1937b, p. 86, figs. 53-55; winged seed; Permian; Matveyevo, USSR.

**SYLVIA** Zalesky, 1937.  
*Sylvia striata* Zalesky, 1937b, p. 66, fig. 28; fernlike foliage; Permian; Matveyevo, USSR.

**SYLVOPTERIS** Zalesky, 1937.  
*Sylvopteris conspicua* Zalesky, 1937b, p. 52, fig. 17, fernlike foliage; Permian; bank of river Sylva near river Tchekarda, Russia.

**SYMPHONIOXYLON** Chiarugi, 1933.  
*Symphonioxylon stefaninii* Chiarugi, 1933, p. 118, pl. 15, figs. 1, 2; Cretaceous; Scecgure, southern Italian East Africa (Somaland).

**SYMPHOROCARPOPHYLLUM** Dawson, 1886.  
*Symphorocarpophyllum albertum* Dawson, 1886, p. 30, pl. 2, fig. 17; leaf, dicotyledon; upper Laramie, Upper Cretaceous; Great Valley, Canada.

**SYMPHYOPLASMIUM** Reinsch, 1881.  
*Symphyoplasium* sp. Reinsch, 1881, p. 44, pl. 7, figs. 1, 2; pl. 31a, figs. 1-7; Algonkian, pre-Cambrian; Thiersheim, Bavaria, etc.

**SYMPLOCOIDES** Chandler, 1926.  
*Symplocoides glandulosa* Chandler, 1926, p. 41, pl. 7, fig. 5; endocarp, Symplocaceae?; upper Eocene; Hordle, Hampshire, England.

**SYNCARPITES**.  
 Mistake for *Syncarpites*, in Pimenova, 1929, p. 187.

**SYNCARDIA** Unger, 1856.  
*Syncardia pusilla* Unger, 1856, p. 171, pl. 8, fig. 16; petiole of *Cladoxylon*?; Upper Devonian; Saalfeld, Thuringia. See also Posthumus, 1931.

**SYNCARPITES** Schmalhausen, 1883.  
*Syncarpites ovalis* Schmalhausen, 1883, p. 321, pl. 38, figs. 16-20; fruit, compared with *Syncarpia*; Oligocene; Magelno in Wolhynien, Russia.

**SYNIA** Zalesky, 1934.  
*Synia perelegans* Zalesky, 1934b, p. 252, fig. 21; fernlike foliage; Permian; Pechora basin, Russia.

**SYNIOPTERIS** Zalesky, 1929.  
*Syniopteris nesterenkoi* Zalesky, 1929a, p. 729, figs. 1-3; foliage, compared with *Callipteris*; Upper Permian; Pechora basin, Russia.

**SYRINGODENDRON** Sternberg, 1820.  
*Syringodendron organum* Sternberg, 1820 (1820-38), p. 24, pl. 13, fig. 1; decorticated sigillarian stem.

**SYRINGOMORPHA** Nathorst, 1886.  
*Syringomorpha nilssonii* (Torell) Nathorst, 1886b, p. 47, fig. 22.

**SYRINGOXYLON** Dawson, 1862.  
*Syringoxylon mirabile* Dawson, 1862, p. 305, pl. 12, figs. 1-5; wood, incertae sedis; Hamilton group, Devonian; Eighteen-mile Creek, Lake Erie.

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**TABERNAEMONTANOPHYLLUM** Geyler, 1887.  
*Tabernaemontanophyllum* sp. Geyler, 1887a, p. 496, pl. 33, fig. 8; leaf fragment, Apocynaceae; Eocene; Labuan, Borneo.

**TAENIDIUM** Heer, 1877.  
*Taenidium serpentinum* Heer, 1877a, p. 117, pl. 45, figs. 9, 10; plant?; Lower Jurassic (Lias); Ganel, Switzerland.

**TAENIOCRADA** David White, 1902.  
*Taeniocrada lesquereuxi* David White, 1902, p. 603. For *Hallsites dechentanensis* Goepfert as described and illustrated by Penhallow, 1893b, p. 109, pl. 10, fig. 6; Catskill beds, Devonian; Factoryville, Pa.

**DIMORPHOSIPHON** Hoeg, 1927.

*Dimorphosiphon rectangulare* Hoeg, 1927, p. 4, pls. 1-3; petrified alga, Codiaceae; Middle Ordovician; south of Bergviken. Island of Helgöen, Norway.

**DIMORPHOSTROMA** Reis, 1921.

*Dimorphostroma varians* Reis, 1921, p. 313; Tertiary; Rhenish Bavaria. See also Reis, 1923, pl. 4, fig. 12.

**DINEURON** Renault, 1896.

*Dineuron pteroides* Renault, 1896a, p. 22, fig. 19; coenopterid fern petiole; Esnost, France. See also Posthumus, 1931.

**DIOONIPITES** Wodehouse, 1933.

*Dioonipites* sp. Wodehouse, 1933, p. 484, figs. 4, 5; cycad pollen; Parachute Creek member, Green River formation. Eocene; Colorado and Utah.

**DIOONITES** Miquel, 1851.

Designation of a type species is problematical. *Dioonites feneonis* (Brongniart) Miquel, 1851b. For *Zamia feneonis* Brongniart, 1828b, p. 99, illustrated in Miller, 1857, p. 69, fig. 36. Other species described by Emmons, 1856, 1857; and Schenk, 1871.

**DIOONITOCARPIDIUM** Lillienstern, 1928.

*Dioonitocarpidium pennaeforme* (Schenk) Lillienstern, 1928, p. 103, pls. 5, 6; fig. 1; cycadophyte megasporophyll; Upper Triassic (Keuper); Estenfeld, Bavaria. For *Dioonites pennaeformis* Schenk, 1864b.

**DIOONOPTERIS** Goeppert, 1864.

*Dioonopteris permica* Goeppert, 1864, p. 126, pl. 13, figs. 3, 4; leaf fragment; Permian; Braunau, Bohemia.

**DIOSCORITES** Saporta, 1863.

*Dioscorites resurgens* Saporta, 1863, p. 42, pl. 4, fig. 5; leaf, Dioscoreae; Tertiary; France.

**DIOSCOROIDES** Fritel, 1904.

*Dioscoroides lyelli* (Watelet) Fritel, 1904, p. 233, figs. 1, 2; Eocene; Belleu, Paris, France.

**DIOSPYROPHYLLUM** Velenovsky, 1889.

*Diospyrophyllum provectum* Velenovsky, 1889, p. 50. For *Diospyros provecta* Velenovsky, 1884, p. 49, pl. 8, fig. 1-5, 10; Upper Cretaceous; Melnik, near Liebenau, Bohemia.

**DIPHYLLITES** Heer, 1883.

*Diphyllites membranaceus* Heer, 1883, p. 45, pl. 60, fig. 4a; leaf fragment, Leguminosae; Upper Cretaceous; Patoot, Greenland.

**DIPLASIOPHYLLUM** Frenguelli, 1943.

*Diplasiophyllum hughesi* (Feistmantel) Frenguelli, 1943a, p. 299, figs. 23, 24; sterile fern? frond; Rhaetic to Keuper; China, India, South Africa.

**DIPLASTEROTHECA** Hirmer, 1927.

*Diplasterotheca exigua* (Renault) Hirmer, 1927, p. 585; fertile pectopterid foliage; Permian; Autun, France. For *Pecopteris exigua* Renault, 1883, p. 115, pl. 19, figs. 13-18. Hirmer refers to Renault in Zeiller, 1890, p. 70-72.

**DIPLAZITES** Goeppert, 1836.

*Diplazites emarginatus* Goeppert, 1836, p. 274, pl. 16, fig. 12; fern pinnules; Carboniferous.

**DIPLOCYMA** Steinmann and Elberskirch, 1929.

*Diplocyca elberskirchianum* Steinmann and Elberskirch, 1929, p. C57, fig. 21; Lower Devonian; Wahnachtals near Sieburg, Germany.

**DIPLODENDRON** Eichwald, 1846.

*Diplodendron hastatum* Eichwald, 1846, p. 456. See also Eichwald, 1860, p. 225, pl. 17, figs. 3, 4; fern or cycadophyte stem; upper Paleozoic; mines of Kloutschewsk, Orenbourg, Russia.

**DIPLODICTYUM** Braun, 1843.

*Diplodictyum obtusilobum* Braun, in Münster, 1843 (1839-43), p. 14, pl. 13, figs. 11, 12; Jurassic; Bayreuth, Bavaria.

**DIPLOLABIS** Renault, 1896.

*Diplolabis forensis* Renault, 1896a, p. 14, figs. 6-10; coenopterid fern.

**DIPLOMASTIXIA** Kirchheimer, 1934.

*Diplomastixia carinat* Kirchheimer, 1934b, p. 789, fig. 17; fruit, Cornaceae; Tertiary (Braunkohle); Germany.

**DIPLOPHACELUS** Corda, 1845.

*Diplophacelus arboreus* Corda, 1845, p. 87, pl. 55; fern petiole; Upper Carboniferous; Radnitz, Bohemia.

**DIPLOPHRAGMIUM** Reinsch, 1881.

*Diplophragmium* sp. Reinsch, 1881, p. 102; pl. 41, fig. 6; pl. 42, figs. 1-5; pl. 43, figs. 1-5; Pennsylvanian; Swickau, Saxony.

**DIPLOPHYLLUM** Velenovsky and Viniklar, 1929.

*Diplophyllum cretaceum* Velenovsky and Viniklar, 1929, p. 25, pl. 17, fig. 10; pl. 19, fig. 10; pl. 20, fig. 5; leaf, Leguminosae?; Cretaceous; Cernikov, Bohemia.

**DIPLOPORA** Schafhautl, 1863.

*Diplopore annulata* Schafhautl, 1863, p. 324, pl. 65e, fig. 6; alga, Dasycladaceae.

**DIPLOPTERIDIUM** Walton, 1931.

*Diplopteridium teilianum* (Kidston) Walton, 1931, p. 349, pl. 23; sphenopterid foliage, probably bore *Telangium*-like fructifications; Lower Carboniferous; Gwaenysgor, Flintshire, England.

**TCHERNOVIA** Zalesky, 1929.

*Tchernovia synensis* Zalesky, 1929a, p. 189, pl. 16, figs. 4, 5; incertae sedis; Carboniferous; Donets, Russia.

**TCIRKOVIELLA** Zalesky, 1930.

Acad. sci. U. R. S. S. Bull., 1930, p. 924 (not seen, cited in Gothan, 1942b, p. 154).

**TECTOCARYA** Kirchheimier, 1934.

*Tectocarya lusatica* Kirchheimier, 1934a, p. 773, fig. 15, fruit, Cornaceae; Tertiary (Braunkohle); Germany. See also Kirchheimier, 1936a, p. 62, pl. 7, figs. 22a-n.

**TEICHOSPERMA** Renner, 1907.

*Teichosperma spadiciflorum* Renner, 1907, p. 219, figs. 1-6; Lower Oligocene; Egypt.

**TEILHARDIA** Seward, 1913.

*Teilhardia valdensis* Seward, 1913, p. 96, pl. 11, figs. 7a-9b; fern foliage; Fairlight Clay, Wealden; Ecclesbourne, near Hastings, England.

**TELANGIUM** Benson, 1904.

*Telangium scotti* Benson, 1904, p. 162, pl. 11; microsporangiate organ, Pteridospermae; Gannister beds, Upper Carboniferous; Dulesgate and Hough Hill, England.

**TELEPHRAGMOXYLON** Torrey, 1921.

*Telephragmoxylon brachyphylloides* Torrey, 1921, p. 74, pl. 3; wood, Coniferales; Lower Cretaceous; Texas.

**TELEUTOSPORA** Renault, 1894.

*Teleutospora milloti* Renault, 1894, p. 171; Carboniferous (Culm); Combres near Rigny, France. See also Renault, 1896, p. 427, fig. 80.

**TELEUTOSPORITES** Meschinelli, 1898.

*Teleutospores milloti* (Renault) Meschinelli, 1898, p. 13, pl. 5, fig. 13; fungus, in *Lepidodendron* megaspore; Carboniferous; Loire, France.

**TEMPSKYA** Corda, 1845.

*Tempskya pulchra* Corda, 1845, p. 81, pl. 58, figs. 1-5; fern trunk composed of numerous siphonostelic stems; Upper Cretaceous; Germany. See also Andrews and Kern, 1947; Read, 1939; Read and Brown, 1937; Posthumus, 1931.

**TENUICUTITES** C. E. Bertrand, 1898.

*Tenuicutites chytridiaeformis* C. E. Bertrand, 1898, p. 183, pl. 10, fig. 113; pl. 11, fig. 140; Chytrideaceae; Upper Carboniferous.

**TERMINALIOPHYLLUM** Geyler, 1887.

*Terminaliophyllum* sp. Geyler, 1887, p. 502, pl. 34, fig. 1; Eocene; Labuan, Borneo.

**TERMINALIOXYLON** Georg Schonfeld, 1947.

*Terminalioxylon naranjo* Georg Schonfeld, 1947, p. 36, pl. 5, figs. 1-3; wood, Combretaceae; Tertiary; Colombia.

**TERMINALIPHYLLUM** Velenovsky, 1889.

*Terminaliphyllum rectinerve* Velenovsky, 1889, p. 54. For *Terminalia rectinervis* Velenovsky, 1884, p. 5, pl. 5, figs. 1, 2; Combretaceae; Upper Cretaceous; Kaulnic, Bohemia.

**TERNITHRIX** Reiss, 1921.

*Ternithria compressa* Reiss, 1921, p. 313. See also Reiss, 1923, p. 105, pl. 4, figs. 1, 2; Miocene; Bavaria.

**TERNSTROEMIOXYLON** Eric Schonfeld, 1930.

*Ternstroemioxylon krauseli* Eric Schonfeld, 1930, p. 119, figs. 10-18; wood, dicotyledon; Miocene; Vogelsberg, Germany.

**TERNSTROEMIPHYLLUM** Velenovsky, 1889.

*Ternstroemiphyllum crassipes* Velenovsky, 1889, p. 54. For *Ternstroemia crassipes* Velenovsky, 1884, p. 7, pl. 3, figs. 3, 4; Upper Cretaceous; Vyserovic, Bohemia.

**TERNSTROEMITES** E. W. Berry, 1916.

*Ternstroemites coligniticus* E. W. Berry, 1916b, p. 294, pl. 76, figs. 1, 2; pl. 78, fig. 5; leaf, Ternstroemiaceae; Lagrange formation, lower Eocene; Puryear, Henry County, Tenn.

**TERNSTROMIACINIUM** Felix, 1894.

*Ternstromiacinium euryoides* Felix, 1894a, p. 99, pl. 10, fig. 4; wood, Ternstroemiaceae; Eocene; Apscheron, Transcaucasia. See also Schonfeld, Eric, 1930, p. 119.

**TERQUEMELLA** (Munier-Chalmas) Morellet and Morellet, 1913.

*Terquemella parisiensis* Munier-Chalmas, in Morellet and Morellet, 1913, p. 25, pl. 3, fig. 11; Eocene; Orme, France. Cited in Munier-Chalmas, 1877, p. 817; nom. nud.

**TESCHIA** Reid and Reid, 1915.

*Teschia crassicurpa* Reid and Reid, 1915, p. 108, pl. 10, figs. 22a, 22b; fruit, Anacardiaceae; Pliocene (Reuverian); Reuver, Swalmen, Netherlands.

**TESSELLARIA** Eichwald, 1860.

*Tessellaria antiqua* Eichwald, 1860, p. 221, pl. 17, fig. 5; cycadophyte? stem; Permian?; Bjelebel, Orenbourg, Russia. Cited as *Tessellaria* Schimper and Mougeot, in Mercklin, 1856, p. 81; nom. nud.

**TETONOPHYCUS** Fenton and Fenton, 1939.

*Tetonophycus blackwelderii* Fenton and Fenton, 1939, p. 99, pl. 4, figs. 1, 2; calcareous alga; House-top Mtn., Grand Teton Park, Wyo.

**TETRACENTRONITES** Mathiesen, 1932.

*Tetracentronites hartzi* Mathiesen, 1932, p. 5, figs. 1-3; wood, compared with *Tetracentron*; early Tertiary; Cape Dalton, east Greenland.

**TETRAGONIS** Eichwald, 1842.

*Tetragonis murchisoni* Eichwald, 1842, p. 81, pl. 3, fig. 18; Upper Silurian; Russia.

**TETRAMERIDIUM** Gothan, 1913.

*Tetrameridium caducum* Gothan, 1913a, p. 132, pl. 27, figs. 1, 2; sphenopterid foliage; Upper Carboniferous; Upper Silesia.

**TETRANTHEROIDEA** Langeron, 1899.

*Tetrantheroidea polita* Langeron, 1899, p. 445, pl. 4, fig. 3; leaf, compared with *Tetranthera*; Eocene; Sézanne, France.

**TETRAPLOPORELLA** Steinmann, 1903.

*Tetraploporella remesi* Steinmann, 1903, p. 45, fig. 11; alga, Dasycladaceae; Cretaceous; Stramberg, Moravia.

**TETRAPTILON** Frenguelli, 1950.

*Tetraptilon heteromerum* Frenguelli, 1950, p. 15, figs. 1, 2; fern? frond; Upper Jurassic; between Villa Union and Guandacal, La Rioja, Argentina.

**TETRASPHENOPHYLLUM** Lotsy, 1909.

*Tetrasphenophyllum majus* (Kidston) Lotsy, 1909, p. 526, fig. 350.

**TETRASPORITES** Fliche, 1886.

*Tetrasporites alsaticus* Fliche, 1886, p. 350; Oligocene; near Mulhouse, Alsace-Lorraine.

**TETRASTICHIA** Gordon, 1938.

*Tetrastichia bupatides* Gordon, 1938, p. 362, pls. 1-6; pteridosperm stem; Calcareous Sandstone series, Lower Carboniferous; Oxroad Bay, east of Tantallon Castle, East Lothian, Scotland.

**TEUTLOPORELLA** Pia, 1912.

*Teutloporella herculea* (Stoppani) Pia, 1912, p. 37, pl. 2, fig. 27; pl. 3, figs. 1, 2; alga, Siphonaceae Verticillatae; Triassic; Rohrbach, Austria.

**THALASSOCHARIS** Debey, 1853.

*Thalassocharis bosqueti* Debey, in Miquel, 1853, p. 51, pl. 6, fig. 1. Cited in Debey, 1848, p. 119; nom. nud.

**THALICTROIDES** Mantell, 1844.

*Thalictroides parisensis* Mantell, 1844, p. 190, fig. 1; seed?; illustration only; Tertiary; Paris.

**THALLITES** Walton, 1925.

*Thallites erectus* (Leckenby) Walton, 1925a, p. 564; for thalloid liverworts of doubtful familial affinities. For *Marchantites erectus* Leckenby, 1864, p. 74, pl. 1, figs. 2a, 2b.

**THALLOMIA** Heard and Jones, 1931.

*Thallomia llandyfriensis* Heard and Jones, 1931, p. 557, pls. 43-46; a liverwort-like plant but with spirally thickened

elements; Lower Downtonian, Devonian; Carmarthenshire. A striking example of the liberality that is occasionally taken with paleobotanical taxonomy. The fossil was originally described as *Eohepatica dyfriensis* (British Assoc. Adv. Sci. Rept., 1930, p. 330-331 [1931]), a name which conveyed to some botanists that it was a liverwort rather than liverwortlike, and as "This name has not proved to be a very happy one," it was changed to *Thallomia*.

**THAMNITES** Reinsch, 1881.

*Thammites* sp. Reinsch, 1881, p. 60, pl. 13a, fig. 4; Upper Carboniferous; Zwickau, Saxony.

**THAMNOCLADUS** David White, 1902.

*Thamnocladus clarkii* David White, 1902, p. 596, pl. 3, fig. 1; pl. 4, figs. 1, 2; alga; Chemung formation, Upper Devonian; East Windsor, N. Y.

**THAMNOPTERIS** Brongniart, 1849.

*Thamnopteris schlechtendali* (Eichwald) Brongniart, 1849, p. 85. For *Anomopteris schlechtendali* Eichwald, 1842, p. 180, pl. 4, figs. 3-5; petrified stem, Osmundaceae; Permian; Kamskowitzin, Russia. See also Kidston and Gwynne-Vaughan, 1909; Posthumus, 1931.

**THAUMASIODENDRON** Bureau, 1905.

*Thaumasiodendron andegavense* Bureau, 1905, p. 157, figs. p. 150, 152, 154, 156.

**THAUMATOPORELLA** Pia, 1927.

*Thaumatoportella parvo-vesiculifera* (Raineri) Pia, in Hirmer, 1927, p. 69, alga, Dasycladaceae; Upper Cretaceous; Libia. For *Gyroportella parvo-vesiculifera* Raineri, 1922, p. 83, pl. 3, figs. 17, 18.

**THAUMATOPTERIS** Goeppert, 1841.

*Thaumatopteris münsteri* Goeppert, 1841a, p. 33, pls. 1-3; fertile frond, Dipteridaceae; Rhaetic; Bayreuth, Bavaria.

**THECOPHYLLUM** Massalongo, 1858.

*Thecophyllum flabellatum* Massalongo, 1858b, p. 815; nom. nud.

**THECOPTERIS** Miner, 1935.

*Thecopteris major* Miner, 1935, p. 591, pl. 18, figs. 11-15; fern sporangia?; Upper Cretaceous; Skansen, east coast Disco Island, Greenland.

**THEOBALDIA** Heer, 1877.

*Theobaldia ractica* Heer, 1877a, p. 114, pl. 44, figs. 1-3, 15b; alga?; Lower Jurassic (Lias); Ganel, Switzerland.

**THESIANTHIUM** Conwentz, 1886.

*Thesanthium inclusum* Conwentz, 1886, p. 132, pl. 13, figs. 1-5; flower, in amber, Santalaceae; early Tertiary; West Prussia.



**THINNFELDIA** Ettingshausen, 1852.

*Thinnfeldia rhomboidalis* Ettingshausen, 1852a, p. 2, pl. 1, figs. 4-7; pteridosperm? foliage; Lower Jurassic (Lias); Stelersdorf, Hungary.

**THOMASIÖDENDRON.**

Error for *Thaumasiodendron*, in Bureau and Bureau, 1908, p. 653.

**THOREITES** Massalongo, 1850.

*Thoreites brongniartii* Massalongo, 1850, p. 21; alga; Eocene; Monte Bolca, Italy.

**THOUINOPSIS** MacGinitie, 1941.

*Thouinopsis myricaefolia* MacGinitie, 1941, p. 144, pl. 36, figs. 2, 4; pl. 37, figs. 6-9; pl. 45, fig. 9; leaves and winged fruits, Sapindaceae; Chalk Bluffs flora, middle Eocene; near You Bet, Nevada County, Calif.

**THUIOXYLON.**

See *Thuyoxylum*.

**THUITES** Sternberg, 1825.

*Thuites alienus* Sternberg, 1825 (1820-38), Tentamen, p. xxxviii, pl. 45, fig. 1; coniferous foliage twigs; Cretaceous; Smetschna, Bohemia.

**THUJOXYLON.**

See *Thuyoxylum*.

**THUOXYLON.**

See *Thuyoxylum*.

**THUR SOPHYTON** Nathorst, 1915.

*Thursophyton milleri* Nathorst, 1915, p. 17, pl. 5, figs. 3-9; pl. 6, figs. 1-5; pl. 7, fig. 1; lycopod stem impression; Middle Devonian; Roeragen, Norway.

**THUYOXYLON.**

See *Thuyoxylum*.

**THUYOXYLUM** Unger, 1842.

*Thuyoxylum juniperinum* Unger, 1842 (1841-47), p. 31. See also Unger, 1854, p. 172, pl. 1, figs. 1-3. Various later spellings as: *Thuoxylon* (Unger, 1854); *Thuioxylon* (Unger, 1852); *Thuyoxylon* (Unger, 1854); *Thuyoxylon* (Roemer, 1852); *Thujoxylon* (Hartig, 1848).

**THYLAX** Renault, 1896.

*Thylax britannicus* Renault, 1896a, p. 549, fig. 144, alga, in boghead coal; Carboniferous; Autun, France.

**THYLLOXYLON** Gothan, 1910.

*Thylloxyton irregulare* Gothan, 1910, p. 34, pl. 6, figs. 2-8; coniferous wood; Upper Jurassic; Green Harbour, Spitzbergen.

**THYRSOPORELLA** Guembel, 1871.

*Thyrsoarella cancellata* Guembel, 1871, p. 266, pl. Di, figs. 14a, 14b; Miocene; Parnes, Greece.

**THYSANOSPERMA** Zalesky, 1937.

*Thysanospema ovatum* Zalesky, 1937, p. 87, fig. 57, winged seed; Permian; Matveyevo, USSR.

**THYSANOTESTA** Nathorst, 1914.

*Thysanotesta sagittula* Nathorst, 1914, p. 33, pl. 15, figs. 69, 70; seed; Paleozoic; Spitzbergen.

**TIETEA** Solms-Laubach, 1913.

*Tietea singularis* Solms-Laubach, 1913, p. 673, pls. 6, 7; petrified fern stem; near São Paulo, Brazil. See also Posthumus, 1931.

**TIGILLITES** Rouault, 1850.

*Tigillites duforenyi* Rouault, 1850, p. 740; plant?; Silurian; Gahard, Brittany, France. See also Lebesconte, 1883, p. 68, pl. 20, figs. 21-22.

**TILIAEPHYLLUM** Newberry, 1895.

*Tiliaephyllum dubium* Newberry, 1895, p. 109, pl. 15, fig. 5; leaf, Tiliaceae; Ambey clays, Cretaceous; New Jersey.

**TILIAEPOLLENITES** Robert Potonie, 1934.

*Tiliaepollenites instructus* Robert Potonie, in Potonie, Robert, and Venitz, H., 1934, p. 37, pl. 4, figs. 109-110; pollen, Tiliaceae; Miocene; Oberlausitz, Germany.

**TILOXYLON** Hartig, 1848.

A new generic name proposed for *Peuce lindleyana* Witham, 1833, p. 70, pl. 9, figs. 1-5. See Hartig, 1848b, p. 137.

**TINGIA** Halle, 1925.

*Tingia carbonica* (Schenk) Halle, 1925, p. 5, pl. 1, figs. 1-4; compared with *Noeggerathia*; Permian; China.

**TINGIOSTACHYA** Kon'no, 1929.

*Tingioistachya tetralocularis* Kon'no, 1929, p. 145, pl. 23, fig. 5; pl. 24, figs. 4, 5; pl. 27, figs. 1-5; cone of *Tingia*; Jido and Lower Kobosan series, Permian-Triassic; northern Korea.

**TINOMISCOIDEA** Reid and Chandler, 1933.

*Tinomiscoidea scaphiformis* Reid and Chandler, 1933, p. 162, pl. 4, figs. 1-4; fruit, Menispermaceae; London Clay, Eocene; Sheppey, Kent, England.

**TINPAHARIA** K. Jacob, 1943.

*Tinpaharia sinuosa* K. Jacob, in Sahni, Birbal, and Sitholey, R. V., 1943, p. 175, fig. 8; Jurassic; Tinpahar, India.

**TITANOPHYLLUM** Renault, 1890.

*Titanophyllum grand'eurvi* Renault, in Renault and Zeiller, 1890, p. 623, pl. 69, figs. 1-14; leaves, probably Cordaitales; Carboniferous; Commentry, France.

**TITHYMALITES** Presl, 1838.

*Tithymalites diformis* Presl, in Sternberg, 1838 (1820-38), p. 205, pl. 53 figs. 1-6; cordaitan pith cast.

**TMEMATOSTROBUS** Harris, 1935.

*Tmematostrobos eremus* Harris, 1935, p. 119, pls. 23, 28; cone, incertae sedis; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**TOBLERIA** Jongmans and Gothan, 1925.

*Tobleria biscuspis* Jongmans and Gothan, 1925, p. 294, pl. 2, figs. 8, 9; seeds?; Upper Carboniferous; Soengei Garing and Soengi Menkarang, Sumatra.

**TODEOPSIS** Renault, 1896.

*Todeopsis primaeva* Renault, 1896a, p. 21, fig. 18; sporangia, compared with *Todea*, Osmundaceae; Lower Carboniferous (Culm); Esnost, France.

**TODITES** Seward, 1900.

*Todites williamsoni* (Brongniart) Seward, 1900, p. 87, pl. 14, figs. 2, 5, 7; pl. 15, figs. 1-3; pl. 21, fig. 6; foliage, compared with *Todea*, Osmundaceae; Jurassic.

**TOMIPHYTON** Zalessky, 1937.

*Palaeophytographica*, p. 27; Moskvau, Akad. Nauk SSSR (not seen, cited in Gothan, 1942b, p. 156).

**TOMISTACHYS** Zalessky, 1934.

*Tomistachys thyrsiculus* Zalessky, 1934c, p. 772, fig. 37; fructification, incertae sedis; Permian; Ivanovka, Kuznets, Russia.

**TORELLIA** Heer, 1870.

*Torellia rigida* Heer, 1870, p. 44, pl. 6, figs. 3-12; pl. 16, fig. 1b; leaf, Taxaceae; Miocene; Cape Staratschin, Spitzbergen. See also Florin, 1936a.

**TORREYITES** Seward, 1919.

*Torreyites carolianus* (Berry) Seward, 1919, p. 420; coniferous foliage; middle Cretaceous; North Carolina. For *Tumion carolianum* Berry, 1908, p. 383, figs. 1-3.

**TORULITES** Pia, 1927.

*Torulites conventzi* (Felix) Pia, in Hirmer, 1927, p. 124, fig. 116; fungus, Dematiaceae, Fungi Imperfecti; Upper Cretaceous.

**TRACHEOTHECA** F. W. Oliver, 1904.

*Tracheotheca* sp. F. W. Oliver, 1904, p. 395 (footnote); sporangium; Upper Carboniferous?; Grand Croix, France. Described but not named in Oliver, 1902, p. 60-67.

**TRACHYPHYTON** Gothan, 1928.

*Trachyphyton negligibile* Gothan, 1928b, p. 296, pl. 14, figs. 3, 4; stem cast; Carboniferous; Peru.

**TRAMETITES** Meschinelli, 1892.

*Trametites pini* (Brotero) Meschinelli, in Saccardo, 1892, p. 747. See also Meschinelli, 1898, p. 6, pl. 4, fig. 5; fungus in pine? wood; Upper Cretaceous; Ryedal, Sweden.

**TRAPOPHYLLUM** Massalongo, 1858.

*Trapophyllum europaeum* Massalongo, 1858b, p. 768; Tertiary; Italy.

**TRAQUAIRIA** (Carruthers) Rina Scott, 1911.

*Traquairia carruthersii* Rina Scott, 1911, p. 463, pl. 39, figs. 5-7; pl. 40, fig. 14; spores or radiolarians?; Lower Coal Measures, Upper Carboniferous; Lancashire and Yorkshire, England. The generic name proposed by Carruthers, 1873, p. 126. See also Williamson, 1880, p. 511.

**TREMATOCARYON** Mueller, 1871.

*Trematocaryon mclellani* Mueller, 1871 (1871-82), p. 48, pl. 3; Pliocene; Had-don Goldfield, Nintingbool, Australia.

**TREMATOSPHAERITES** Meschinelli, 1892.

*Trematosphaerites lignitum* (Heer) Meschinelli, in Saccardo, 1892, p. 751. See also Meschinelli, 1898, p. 17, pl. 9, figs. 24-26; fungus, in *Sequoia coultisae*; Bovey Tracey, Devon, England.

**TREMATOSPHAERITES** Gruess, 1924.

*Trematosphaerites intercellularis* Gruess, 1924, p. 77, pl. 6, figs. 17-19; fungus, Devonian; Magdalena Bay, Spitzbergen.

**TREMATOXYLON** Hartig, 1848.

*Trematoxylon leunisi* Hartig, 1848c, p. 187; coniferous wood; Tertiary (Braunkohle); Germany.

**TREVISANIA** Zigno, 1856.

*Trevisania furcellata* Zigno, 1856a, (1856-68), p. 23, pl. 1, fig. 4; incertae sedis; Middle Jurassic (Lower Oolite); Val d'Assa near Rotzo, Italy.

**TRIANThERA** Conwentz, 1886.

*Trianthera cusideroxyloides* Conwentz, 1886, p. 50, pl. 5, figs. 1-5; flower, in amber, Lauraceae; early Tertiary; West Prussia.

**TRICALYCITES** Newberry, 1895.

*Tricalycites papyraceus* Newberry, 1895, p. 132, pl. 46, figs. 30-38; incertae sedis; Cretaceous (Amboy clay); Woodbridge, N. J.

**TRICARPELLITES** Bowerbank, 1840.

*Tricarpellites communis* Bowerbank, 1840, p. 79, pl. 11, figs. 25-31; London Clay, Eocene; Sheppey, Kent, England.

**TRICHOBLASTES** Reinsch, 1881.

*Trichioblastes* sp. Reinsch, 1881, p. 37, pl. 8, figs. 3, 6-8; Middle Triassic (Muschelkalk); Rothenburg, Franconia.

**TRICHOBLASTIUM** Reinsch, 1881.

*Trichoblastium* sp. Reinsch, 1881, p. 107, pl. 46a, figs. 1-9; Upper Carboniferous; Zwickau, Saxony.

**TRICHODES** Reinsch, 1881

*Trichodes* sp. Reinsch, 1881, p. 88, pl. 28, figs. 1-5; pl. 28a, figs. 1-5; Upper Carboniferous; Zwickau, Saxony.

**TRICHOIDES** Harkness, 1855.

*Trichoides ambiguus* Harkness, 1855, p. 474; alga; Silurian; Scotland.

**TRICHOMANIDES** Tenison-Woods, 1884.

*Trichomanides lazum* Tenison-Woods, 1884, p. 95, pl. 10, fig. 2; "this fossil cannot be distinguished from *Trichomanes*"; age uncertain; Ipswich, New South Wales.

**TRICHOMANITES** Goeppert, 1836.

*Trichomanites myriophyllum* Goeppert, 1836, p. 263; fern of supposed hymenophyllaceous affinities. *See also* Brongniart, 1828-38, pl. 55.

**TRICHOPELTINITES** Cookson, 1947.

*Trichopeltinites pulcher* Cookson, 1947b, p. 211, pl. 14, figs. 22, 23; *Trichopeltaceae*; Oligocene-Miocene; Yallourn and Hazelwood, Victoria.

**TRICHOPHRAGMIUM** Reinsch, 1881.

*Trichophragmium* sp. Reinsch, 1881, p. 105, pl. 44, fig. 206; Upper Carboniferous; Zwickau, Saxony.

**TRICHOPHYCUS** Miller and Dyer, 1878.

*Trichophycus lanosus* Miller and Dyer, 1878, p. 25, pl. 1, figs. 3, 4; plant?; Upper Ordovician; Warren County, Ohio.

**TRICHOPHYLLUM**.

*Trichophyllum heteromorpha*. Mistake? for *Trichopitys heteromorpha* Saporta, in Grand-Bury, 1877, p. 274.

**TRICHOPITYS** Saporta, 1875.

*Trichopitys heteromorpha* Saporta, 1875b, p. 1020; foliage, Coniferales; Permian; Lodève, France. *See also* Renault, 1885, p. 64, pl. 3, fig. 2.

**TRICHOPLASMIUM** Reinsch, 1881.

*Trichoplasmium* sp. Reinsch, 1881, p. 26, pl. 10, figs. 1-4; pl. 10a, fig. 5; Upper Carboniferous; Zwickau, Saxony.

**TRICHOPTERIS** Hall, 1845.

*Trichopteris flamentosa* Hall, in Fremont, 1845, p. 306, pl. 2, fig. 6; fragment of fern frond; probably from Frontier formation, Upper Cretaceous; Cumberland, Wyo.

**TRICHOSPORITES** Felix, 1894.

*Trichosporites conventzi* Felix, 1894a, p. 273; conidia, compared with *Trichosporium*; Upper Cretaceous; Ryedal, Sweden. This genus erroneously attributed to Saccardo in Meschinelli, 1898, p. 80, pl. 22, fig. 5. *See also* Stopes, 1913, p. 270, fig. 25.

**TRICOCCITES** Rode, 1933.

*Tricocites trigonum* Rode, 1933, p. 172, figs. 1-3; petrified fruit, probably *Palmaeae*; Intertrappan beds, Tertiary; Mahgaon Kalan, Chhindwara district, Central Provinces, India. *See also* Sahni and Rode, 1937, p. 187.

**TRICOILOLOCARYON** Mueller, 1878.

*Tricoilocaryon barnardi* Mueller, 1878 (1871-82), p. 35, pl. 14, Pliocene; Gulgong, Australia.

**TRICOLPITES** Erdtman, 1948.

*Tricolpites troedssonii* Erdtman, 1948, p. 267, figs. 5-10; pollen, dicotyledon; Lower Jurassic (Liasic); Palsjo, Scanla, Sweden.

**TRIGONOCARPOLITHUS** Arnold, 1948.

*Trigonocarpolithus typicus* Arnold, 1948, p. 139, figs. 2, 13-16; seed cuticle, *Trigonocarpales*; Saginaw formation, lower Pennsylvanian; Big Chief No. 8 mine, St. Charles; Saginaw County, Mich.

**TRIGONOCARPON**.

*See Trigonocarpus*.

**TRIGONOCARPUM**.

*See Trigonocarpus*.

**TRIGONOCARPUS** Brongniart, 1828.

*Trigonocarpus parkinsoni* Brongniart, 1828b, p. 137; Brongniart refers to Parkinson, 1804, pl. 7, figs. 6-8. Apparently first described and illustrated in full in Geinitz, H. B., 1855, p. 43, pl. 22, figs. 17-20; see also Scott and Maslen, 1907. Name originally given as *Trigonocarbon* by Brongniart although he adopted *Trigonocarpus* in 1881, p. 39, and this usage has been followed by most later writers, as Seward, 1917; Scott, 1923; Arnold, 1947.

**TRILETES** Reinsch, 1881.

*Triletes reinschi* (Ibrahim) Schopf, 1936b, 173, figs. 1, 2; Pennsylvanian.

**TRIOBIUM** Saporta, 1861.

*Trilobium ungeri* Saporta, in Heer, 1861, p. 148; flower calyx, *Anacardiaceae*; Eocene; Provence, France. *See also* Saporta, 1862, p. 279, pl. 13, fig. 6.

**TRIMATOPTERIS** Corda, 1845.

*Trimatopteris spectiosa* Corda, 1845, p. 106; cited as synonym for *Psaronius speciosus* Corda, 1845, p. 106, pl. 44, figs. 1-4.

**TRINOCLADUS** Raineri, 1922.

*Trinocladus tripolitanus* Raineri, 1922, p. 79, pl. 3, figs. 15, 16; siphonaceous alga; Cretaceous (Cenomanian); Uadi Msaaba, Libya.

**TRIOOLEPIS** Zeiller, 1903.

*Trioolepis leclerei* Zeiller, 1903, p. 208, pl. 50, fig. 15; cone, some resemblance to *Picea*; Rhaetic; Tonkin. *See also* Seward, 1919, p. 424.

**TRIORITES** Cookson, 1950.

*Triorites magnificus* Cookson, 1950, p. 175, pl. 3, figs. 32-35; pollen, *Proteaceae*?; Oligocene-Miocene; Moorlands, South Australia.

**TRIPHYLLOPTERIS** Schimper, 1869.

*Triphylopteris collombiana* Schimper, 1869 (1869-74), p. 479, pl. 107, fig. 13; sphenopteridlike foliage.

- TRIPLICARPUS** Velenovsky and Viniklar, 1926.  
*Triplicarpus purkynei* Velenovsky and Viniklar, 1926, p. 52, pl. 2, fig. 5; fruit, family uncertain; Cretaceous; Vyserovic, Bohemia.
- TRIPLOPORELLA** Steinhmann, 1880.  
*Triploporella fraasi* Steinhmann, 1880, p. 136, pl. 5, figs. 1-8; siphonaceous alga; Cretaceous.
- TRIPLOSPORITES** Unger, 1850.  
*Triplosporites brownii* Unger, 1850a, p. 270; lycopod cone?; Carboniferous. See also Brown, Robert, 1851, p. 473, pls. 23, 24.
- TRIPTEROCARPUS** Grand'Eury, 1877.  
*Tripteroecarpus* sp. Grand'Eury, 1877, p. 519; nom. nud.
- TRIPTEROSPERMUM** Brongniart, 1874.  
*Tripterospermum rostratum* Brongniart, 1874, p. 262, pl. 22, figs. 6-8; petrified seed, compared with *Trigonocarpus*; Upper Carboniferous; St.-Étienne, France.
- TRIQUITRITES** L. R. Wilson and Coe, 1940.  
*Triquitrites arcuatus* L. R. Wilson and Coe, 1940, p. 185, pl. 1, fig. 8; spore; Des Moines group, Pennsylvanian; Green County coal mine, Franklin Township, Green County, Iowa.
- TRISTACHYA** Lilpop, 1937.  
*Tristachya raciborskii* Lilpop, 1937, p. 2, pl. 1; articulate, cones and foliage; Karniowice limestone, "Permo-Carboniferous"; Karniowice, 35 km west of Cracow, Poland.
- TRISTANITES** Saporta, 1865.  
*Tristanites cloeziaeformis* Saporta, 1865, p. 217, pl. 13, fig. 3; infructescence, Myrtaceae; Tertiary; Armissan, France.
- TRISTANITES** Deane, 1902.  
*Tristanites angustifolia* Deane, 1902a, p. 23, pl. 3, fig. 1; pl. 6, fig. 7; Tertiary?; Berwick, Australia.
- TRITICOIDES** De Stefani, 1948.  
*Triticoides bianchii* De Stefani, 1948; grass; Tertiary; Italy.
- TRIZYGIA** Royle, 1840.  
*Trizygia speciosa* Royle, 1840 (1833-1840), p. xxix\*, pl. 2, fig. 8; *Sphenophyllum*-like foliage.
- TROCHILISCUS** Karpinsky, 1906.  
*Trochiliscus ingricus* Karpinsky, 1906, p. 112, pl. 2, figs. 23-28; oogonium, Characeae; Devonian; Pawlowsk, Russia.
- TROCHODENDROIDES** E. W. Berry, 1922.  
*Trochodendroides rhomboideus* (Lesquerex) E. W. Berry, 1922b, p. 166, pl. 36, fig. 6; leaf; Trochodendraceae; Woodbine formation, Upper Cretaceous; Arthur Bluff, Tex.
- TROCHODENDROMAGNOLIA** Zander, 1923.  
Braunkohle, 1923, Band 22, p. 41. (not seen, cited in Gothan, 1942b, p. 157).
- TROCHOPHYLLUM** Wood, 1861.  
*Trochophyllum fertilis* (Sternberg) Wood, 1861b, p. 438. This is a proposed name change for *Annularia fertilis* Sternberg on the grounds that *Annularia* had been used for a mollusk. Wood gives the spelling *Trochophyllum* in 1861, p. 522.
- TROCOPHYLLUM**.  
See *Trochophyllum*.
- TRYPTEROCARPUS** Grand'Eury, 1890.  
*Trypteroecarpus arcuatus* Grand'Eury, 1890, p. 310, pl. 4, fig. 14; seed impression; Upper Carboniferous; Traquette, France.
- TSUGAEPOLLENITES** Robert Potonie, 1934.  
*Tsugaepollenites igniculus* Robert Potonie, in Potonie, Robert, and Venitz, H., 1934, p. 17, pl. 1, fig. 8; pollen, compared with *Tsuga*; Miocene; Oberlausitz, Germany.
- TSUGITES** Fliche, 1896.  
*Tsugites magnus* Fliche, 1896, p. 211, pl. 9, fig. 2; petrified cone, Coniferales; Lower Cretaceous (Albien); Clermont, France.
- TUBERCULARITES** Arcangeli, 1903.  
*Tubercularites iani* Arcangeli, in Barsanti, 1903, p. 12; fungus; Upper Carboniferous; Iano, Italy.
- TUBERCULATISPORITES** Ibrahim, 1933.  
*Tuberculatisporites tuberosus* Ibrahim, 1933, p. 22, pl. 3, fig. 27; spore; Carboniferous.
- TUBICAILIS** Cotta, 1832.  
*Tubicaulis solenites* (Sprengel) Cotta, 1832, p. 22, pl. 2, figs. 1, 3; petrified fern, Tubicaulidaceae (Hirmer, 1927, p. 540); Permian; Chemnitz, Germany.
- TUBICULITES** Grand'Eury, 1877.  
*Tubiculites relaxatomaximum* Grand'Eury, 1877, p. 102; apparently a *Pearonius* stem; no specific designations are given with figures; Upper Carboniferous; France.
- TUMULISTIGMA** Bayer, 1914.  
*Tumulistigma furculorum* Bayer, 1914, p. 64; Cretaceous; Ober-Haatz, Bohemia.
- TUSSILAGITES** Grüss, 1927.  
*Tussilagites tertiaria* Grüss, 1927, p. 205, figs. 1-3; Tertiary; Preschen near Bilin, Bohemia.
- TUZSONIA** Andreanszky, 1949.  
*Tuzsonia hungarica* Andreanszky, 1949, p. 31, illustrated; Palmaceae; Tertiary; Hungary.
- TYCHTOPTERIS** Zalesky, 1930.  
*Tychtopteris cuneata* (Schmalhausen) Zalesky, 1930f, p. 926; Permian; Pechora basin, Russia.

**TYLODENDRON** C. E. Weiss, 1870.

*Tylo dendron speciosum* C. E. Weiss, 1870b, p. 47; Upper Carboniferous; Otzenhausen, Prussia.

**TYLOPHORA** Hick, 1892.

*Tylophora radiculosa* Hick, 1892a, p. 101, pls. 16, 17; stigmarian "rootstock"; Upper Carboniferous; Clnder Hills, near Halifax, England. This name later withdrawn; see *Xenophyton*.

**TYMPANOPHORA** Lindley and Hutton, 1837.

*Tympanophora simplex* Lindley and Hutton, 1837 (1831-37), p. 57, pl. 170; fertile frond, Cyatheaceae; Jurassic (Oolitic); Cloughton Wyke, Scarborough, England. See also Seward, 1910, p. 367.

**TYPHACITES** Saporta, 1890.

*Typhacites rugosus* Saporta, 1890, p. 3, pl. 13, fig. 4; leaf fragment, Typhaceae?; Cretaceous; Fuveau, Provence, France.

**TYPHAELOIPUM** Unger, 1845.

*Typhaeloipum lacustre* Unger, 1845 (1841-47), p. lxix; leaf fragment of *Typha*-like plant: Miocene; Radoboj. Illustrated in Unger, 1852, p. 90, pl. 30, figs. 6-8; pl. 28, figs. 6, 7.

**TYRGAEINA** Zalesky, 1944.

*Tyrgaeina mamillaris* Zalesky, 1944, p. 250.

**TYSONIA** Fontaine, 1889.

*Tysonia marylandica* Fontaine, 1889, p. 193, pls. 174-180; petrified trunk, Bennettitales; Potomac group, Lower Cretaceous; Maryland.

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**ULARIA** Zalesky, 1937.

*Palaeophytographica*, p. 10: Moskva, Akad. Nauk SSSR, 1937 (not seen, cited in Gothan, 1942b, p. 157).

**ULLMANNIA** Goeppert, 1850.

*Ullmannia bronni* Goeppert, 1850, p. 185, pl. 20, figs. 1-26; cones and foliage; Permian (Zechstein), Frankenberg, Saxony.

**ULLMANNITES** Tuzson, 1911.

*Ullmannites deinertianus* (Goeppert) Tuzson, 1911, p. 24, fig. 2.

**ULMACITES** Caspary, 1886.

*Ulmacites succineus* Caspary, in Conwentz, 1886, p. 47; leaf, in amber, compared with *Ulmus*; Tertiary.

**ULMINIUM** Unger, 1842.

*Ulinium diluviale* Unger, 1842b, p. 174; wood; Tertiary; Bohemia. See also Unger, 1841-48, p. 97, pl. 25, figs. 6-9.

**ULMIPHYLLUM** Fontaine, 1889.

*Ulmiphyllum brookense* Fontaine, 1889, p. 312, pl. 155, fig. 8; pl. 163, fig. 7; leaves, compared with *Ulmus*; Potomac group, Lower Cretaceous; Brooke, Va.

**ULMIPOLLENITES** Wolf.

*Ulmipollenites undulosus* Wolff, 1934, p. 75, pl. 5, fig. 25; Pliocene; Freigericht mine near Dettingen, Bavaria.

**ULMITES** Dawson, 1890.

*Ulmities pusillus* Dawson, 1890, p. 88, fig. 24; leaf; Tertiary; British Columbia.

**ULMOPHYLLUM** Ettingshausen, 1887.

*Ulmophyllum oblongum* Ettingshausen, 1887a, p. 104, pl. 10, figs. 12, 12a; leaf, Ulmaceae; Vegetable Creek, near Emma-ville, New South Wales.

**ULMOXYLON** Kaiser, 1879.

*Ulmoxylon lapidarium* (Unger) Kaiser, 1879, p. 100. For *Cottaites lapidarium* Unger, 1842b, p. 176. See also Unger, 1854, p. 182, pl. 7, figs 1-3.

**ULODENDRON** Lindley and Hutton, 1831.

*Ulodendron majus* Lindley and Hutton, 1831 (1831-37), p. 22, pl. 5; lycopod stem impression; Carboniferous; Jarrow Colliery, near Newcastle-upon-Tyne, England.

**ULODENDROSTROBUS** Renier, 1931?

*Ulodendrostrobus squarrosus* Renier, 1931, p. 276; Westphalien, Upper Carboniferous; coal basin of Charleroi, Belgium.

**ULOSPERMUM** Pomel, 1849.

*Ulospermum conicum* (Lindley and Hutton) Pomel, 1849, p. 346. For *Carpolithes conicus* Lindley and Hutton, 1836 (1831-37), p. 101, pl. 189, figs. 1, 2, 4; Jurassic; Malton, England.

**ULVITES** Reinsch, 1881.

*Ulvites* sp. Reinsch, 1881, p. 60, pl. 13, figs. 1-5; Upper Carboniferous; Zwickau, Saxony.

**ULVOPTERIS** Schuster, 1908.

*Ulvopteris ammonis* Schuster, 1908, p. 184, fig. 2 facing p. 192; Upper Carboniferous; Germany.

**UMBELLIFERITES** Engelhardt and Kinkel, 1908.

*Umbelliferites* sp. Engelhardt and Kinkel, 1908, p. 249, pl. 32, fig. 12; Upper Pliocene; Klärbecken near Niederrad, Hesse.

**UMBELLIFEROSPERMUM** E. W. Berry, 1929.

*Umbelliferospermum latahense* E. W. Berry, 1929c, p. 261, pl. 64, figs. 10-12; fruit, Umbelliferae; Latah formation, Miocene; brickyard at Spokane, Wash.

**UMKOMASIA** Thomas, 1933.

*Umkomasia macleani* Thomas, 1933, p. 203, pl. 23, fig. 56; figs. 1-4; pteridosperm inflorescence bearing cupulate seeds; Molteno beds, Karroo system, Triassic; Upper Umkomas Valley, Natal. Cited briefly in Thomas, 1931, p. 663.

**UNATHECA** Kidston, 1891.

*Unatheca oblongus* Kidston, 1891, p. 32, pl. 3, fig. 33; fertile coenopterid? frond; Radstock series, Upper Carboniferous; Camerton, Somerset, England.

**UNCINULITES** Pampaloni, 1902.

*Uncinulites baccharinii* Pampaloni, 1902, p. 125, pl. 10, fig. 7; fungus perithecia; Miocene?; Sicily.

**UNGERIA** Salfeld, 1908.

*Ungeria solnhofensis* Salfeld, 1908, p. 385, fig. p. 385; fern frond; Jurassic; Solenhofen, Bavaria.

**UNGERITES** Schleiden, 1855.

*Ungerites tropicus* Schleiden, in Schmid and Schleiden, 1855, p. 37; wood; Leguminosae?; Oligocene; Kolstenblatt, Bohemia.

**UPHANTENIA** Vanuxem, 1842.

*Uphantenia chemungensis* Vanuxem, 1842, p. 184, fig. 50; plant?; Chemung group, Upper Devonian; New York.

**URALIDIUM** Zalesky, 1939.

*Uralidium singulare* Zalesky, 1939 b, 373, fig. 57; incertae sedis; Permian; Matveyevo, USSR.

**URALOBAIERA** Zalesky, 1939.

*Uralobaiera bairmica* Zalesky, 1939b, p. 361, fig. 41; incertae sedis; Permian; Matveyevo, USSR.

**URALODENDRON** Zalesky, 1939.

*Uralodendron verticillatum* Zalesky, 1939b, p. 368, fig. 50; foliage twig, Coniferales?; Permian; Matveyevo, USSR.

**URALOPHYLLUM** Krystofowitsch and Prynada, 1933.

United Geol. Prosp. Service USSR, 1933, Trans. 346, p. 25 (not seen), cited in Gothan, 1942b, p. 157.

**URALOPTERIS** Zalesky, 1939.

*Uralopteris valida* Zalesky, 1939b, p. 355, fig. 34; fern? pinnule fragment; Permian; Mikhailovskole, USSR.

**URALOSPERMA** Zalesky, 1939.

*Uralosperma insigne* Zalesky, 1939b, p. 372, fig. 55; seed; Permian; Sivkova, USSR.

**URANIOPHYLLITES** Savi, 1843.

*Uraniophyllites spathulata* Savi, 1843, p. 75, pl. 1 fig. 8; Miocene; Monte Bamboli, Italy.

**UREDINITES** Velenovsky, 1889.

*Uredinites cretaceus* Velenovsky, 1889, p. 29, pl. 3, fig. 14; Upper Cretaceous (Cenomanian); Vyserovic, Bohemia.

**URNATOPTERIS** Kidston, 1884.

*Urnatopteris tenella* (Brongniart) Kidston, 1884, p. 594; fertile sphenopterid foliage; Upper Carboniferous; various localities, Scotland, England. For *Sphenopteris tenella* Brongniart, 1828a-38, p. 186, pl. 49, fig. 1.

**UROHELMINTHOIDA** Sacco, 1888.

*Urohelminthoida dertonensis* Sacco, 1888, p. 184, pl. 2, figs. 8, 16; probably not a plant; Eocene; Lombardy, Italy.

**UROMYCETITES** C. F. W. Braun, 1840.

*Uromycetites concentricus* C. F. W. Braun, 1840, p. 93; nom. nud; Triassic; Eckersdorf, Bavaria.

**UROPHYLYCTITES** Magnus, 1903.

*Urophyllyctites oliverianus* Magnus, 1903, p. 249; fungus; Carboniferous. Apparently first illustrated species: *Urophyllyctites stigmariae* Weiss, 1904b, p. 68, figs. 66, 67.

**UROPLASMIUM** Reinsch, 1881.

*Uroplasmium* sp. Reinsch, 1881, p. 46, pl. 6, figs. 4-8; Upper Carboniferous; Zwickau, Saxony.

**URSATOPTERIS**.

Error for *Urnatopteris*, in Kidston, 1884b, p. 295.

**URTICICARPUM** Reid and Chandler, 1933.

*Urticicarpum scutellum* Reid and Chandler, 1933, p. 146, pl. 3, fig. 14; fruit, Urticaceae?; London Clay, Eocene, Minster, Kent, England.

**UTERIA** Michelin, 1847.

*Uteria encrinella* Michelin, 1845 (1840-47), p. 177, pl. 46, fig. 26; alga?; Upper Cretaceous; Cuisse-la-Motte, France.

**UTRICULARITES** Massalongo, 1857.

*Utricularites protogaeus* Massalongo, in Massalongo and Scarabelli, 1857, p. 11; for illustrations, see Massalongo and Scarabelli, 1859, pls. 3, 4; incertae sedis; Miocene; Sinigaglia, Italy.

## V

**VACCINOPHYLLUM** Dawson, 1890.

*Vaccinophyllum quaeatum* Dawson, 1890, p. 88, fig. 23; leaf; Tertiary; Similkameen River, British Columbia.

**VALERIANELLITES** Saporta, 1862.

*Valerianellites capitatus* Saporta, 1862, p. 260, pl. 10, fig. 3; inflorescence Rubiaceae?; Tertiary; Aix, Provence, France.

**VALIDOPTERIS** Paul Bertrand, 1932.

Reference not seen; cited in Gothan, 1942b, p. 157.

**VALLISNERITES** Heer, 1878.

*Vallisnerites jurassicus* Heer, 1878b, p. 8, pl. 1, figs. 22-27; grasslike leaves; Jurassic; Ust-Balei, Siberia.

**VALONITES** Sordelli, 1873.

*Valonites utriculosus* Sordelli, 1873, p. 367, fig. C; incertae sedis; Pliocene; Lombardy, Italy.

**VALVISPORITES** Ibrahim, 1933.

*Valvisporites trilobus* Ibrahim, 1933, p. 33, pl. 4, fig. 30; spore; Carboniferous.

**VARDEKLOEFTIA** Harris, 1932.

*Vardekloeftia sulcata* Harris, 1932b, p. 109, pls. 15, 17, 18; female portion of cone (gynaecium), Bennettitales; *Lepidopteris* zone, Rhaetic; Scoresby Sound, east Greenland.

**VARIOLARIA** Sternberg, 1820.

*Variolaria ficoides* Sternberg, 1820 (1820-38), p. 22, pl. 12, figs. 1, 2; *Stigmaria*; Carboniferous.

**VECTIA** Stopes, 1915.

*Vectia lucombensis* Stopes, 1915, p. 247, pls. 23-25; petrified phloem; Lower Greensand, Cretaceous; Isle of Wight, England.

**VERBENOPHYLLUM** Ettingshausen, 1858.

*Verbenophyllum aculeatum* Ettingshausen, 1858, p. 749, pl. 3, fig. 11; Miocene; Koeflach, Styria.

**VERMICULITES** Rouault, 1850.

*Vermiculites panteri* Rouault, 1850, p. 744; plant?; Silurian; Guichen, Brittany, France.

**VERMIPORELLA** Stolley, 1893.

*Vermiporella fragilis* Stolley, 1893, p. 140, pl. 8, figs. 7-11; siphonaceous alga; Silurian.

**VERONICITES** Heer, 1859.

*Veronicites oeningensis* Heer, 1859, p. 191, pl. 153, fig. 54; seeds, Labiatae?; Miocene; Oeningen, Switzerland.

**VERRUCANIA** Fucini, 1936.

Reference not seen; cited in Gothan, 1942b, p. 157.

**VERRUCARITES** Goeppert, 1844.

*Verrucarites geanthracis* Goeppert, 1844, p. 195; nom. nud.

**VERRUCOSISPORITES** Ibrahim, 1933.

*Verrucosisporites verrucosus* Ibrahim, 1933, p. 25, pl. 2, fig. 17; spore; Carboniferous.

**VERTEBRARIA** Royle, 1840.

*Vertebraria indica* Royle, 1840 (1833-40), p. xxix\*, pl. 2, figs. 1-3; stem, possibly of *Glossopteris*; shales of Ranigunj and Chinnakooree, India; "Permo-Carboniferous." See also Walton and Wilson, 1932.

**VESQUIA** C. E. Bertrand, 1883.

*Vesquia tournaisii* C. E. Bertrand, 1883, p. 1382; seeds, Taxaceae?; Cretaceous?; Tournai, France.

**VETACAPSULA**.

See discussion by Brown, R. W., 1950.

**VEXILLUM** Rouault, 1850.

*Vexillum labechei* Rouault, 1850, p. 734; Silurian; Brittany, France.

**VIATCHESLAVIA** Zalessky, 1936.

*Viatcheslavia vorcutensis* Zalessky, 1936b, p. 240, figs. 6, 7; lycopod leaf bases; Permian; Russia.

**VIBURNIPHYLLUM** Nathorst, 1886.

*Viburniphyllum giganteum* (Saporta) Nathorst, 1886a, p. 52. For *Viburnum giganteum* Saporta, 1868, p. 370, pl. 30, figs. 1, 2.

**VIBURNITES** Lesquereux, 1892.

*Viburnites crassus* Lesquereux, 1892, p. 124, pl. 45, figs. 1-4; leaf, Caprifoliaceae; Cretaceous; 10 miles northeast of Delphos, Kans.

**VIBURNOIDITES** Robert Potonie, 1950.

*Viburnoidites* sp. Robert Potonie, in Potonie, Robert, Thomson, Paul W., and Thiergart, Friedrich, 1950, p. 62.

**VILLARSITES** Münster, 1842.

*Villarsites ungeri* Münster, 1842 (1839-43), p. 109, pl. 4, fig. 5.

**VILLERSIA** Stockmans, 1948.

*Villersia radians* Stockmans, 1948, p. 69, pl. 10, figs. 6, 7; Upper Devonian; Belgium.

**VIRACARPON** Sahni, 1934.

*Viracarpum hexasperum* Sahni, 1934, p. 318; fruit, monocotyledon; Intertrappean series, Tertiary; India. See also Sahni, 1940, pl. 3, fig. 13; and Sahni, 1944, p. 81, pl. 3, figs. 25-28.

**VISCOPHYLLUM** Knoll, 1904.

*Viscophyllum morloti* (Unger) Knoll, 1904, p. 67, pl. 4; leaf, Lorantheae; Miocene; Kumber, Styria.

**VITICOCARPUM** Menzel, 1913.

*Viticocarpum pusillum* Menzel, 1913, p. 62, pl. 5, fig. 36; fruit, Verbenaceae; Tertiary (Braunkohle); Germany.

**VITIGENE** Saporta, 1865.

*Vitigene cissoides* Saporta, 1865, p. 48; leaf, compared with *Cissus adnata*; Tertiary; France.

**VITIPHYLLUM** Nathorst, 1888.

*Vitiphyllum raumannii* Nathorst, 1888, p. 211, pl. 22, fig. 2; leaf, compared with *Vitis*; Tertiary; Sakugori, Shimano, province, Japan.

**VITIPHYLLUM** Fontaine, 1889.

*Vitiphyllum crassifolium* Fontaine, 1889, p. 308, leaves, compared with *Vitis*; Potomac group, Lower Cretaceous; near Potomac Run; Va.

**VITIPITES** Wodehouse, 1933.

*Vitipites dubius* Wodehouse, 1933, p. 514, fig. 47; pollen, Vitaceae; Parachute Creek member, Green River formation, Eocene; Colorado and Utah.

**VITOXYLON** Schuster, 1911.

*Vitoxylon coheni* Schuster, 1911a, p. 541, pl. 20; wood, Vitaceae; early Tertiary

**VOLKELIA** Solms-Laubach, 1896.

*Volkelia refracta* (Goeppert) Solms-Laubach, 1896, p. 58. For *Sphenopteris refracta* Goeppert, 1852, p. 141, pl. 12; Lower Carboniferous; Falkenberg, Silesia.

**VOLKMANNIA** Sternberg, 1825.

*Volkmania distachya* Sternberg, 1825 (1820-38), Tentamen, p. xxx, pl. 48, figs. 3a, 3b; articulate stem and cone impression; Carboniferous; Bohemia.

**VOLNOVAKHIA** Zalesky, 1931.

Acad. Sci. U. S. S. R. Bull., 1931, p. 582 (not seen, cited in Gothan, 1942b, p. 158).

**VOLTZIA** Brongniart, 1828.

*Voltzia brevifolia* Brongniart, 1828d, p. 449, pl. 15; pl. 16, figs. 1, 2. See also Florin, 1944, p. 492.

**VOLTZIOPSIS** Henry Potonie, 1899.

*Voltziopsis coburgensis* (Schauroth) Henry Potonie, 1899, p. 304. For *Voltzia coburgensis* Schauroth, 1852, p. 540, fig. p. 539; Triassic (middle Keuper); Coburg, Prussian Saxony.

**VOLTZIOXYLON** Torrey, 1923.

*Voltzioxylon dockumense* Torrey, 1923, p. 64, pl. 8, figs. 1, 2; wood, Coniferales; Dockum group, Triassic; Spur, Tex.

**VOLTZITES** Tuzson, 1911.

*Voltzites hungarica* (Heer) Tuzson, 1911, p. 36. For *Voltzia hungarica* Heer, 1876, K. Ungarischen geol. Anst. Jahrb., Band 5, p. 12, pl. 22, figs. 1-5; pl. 23, figs. 1-4, Budapest.

**VOLUBILITES** Liburnau, 1901.

*Volubilitis praecarbonicus* (Gümbel) Liburnau, 1901, p. 566. For *Taenidium praecarbonicum* Gümbel, 1879, p. 535; Carboniferous (Lower Culm); Wurzbach, Prussian Saxony.

## W

**WAHPIA** Walcott, 1919.

*Wahpia insolens* Walcott, 1919, p. 239, pl. 57, fig. 1; alga, Rhodomelaceae; Stephen formation, Middle Cambrian; great "fossil bed" on northwest slope of Mt. Stephen, above Field, British Columbia.

**WALCHIA** Sternberg, 1825.

*Walchia fliciformis* (Schlotheim) Sternberg, 1825 (1820-38), Tentamen, p. xxii. For *Lycopodiolites fliciformis* Schlotheim, 1820, pl. 24; coniferous foliage twigs; Wettin, Germany. See also Florin, 1951, p. 316.

**WALCHIANTHUS** Florin, 1940.

*Walchianthus cylindraceus* Florin, 1940b, p. 269, pls. 155, 156, figs. 11-21; cones, Coniferales; Lower Permian; Ottendorf, near Braunau, Germany. Florin notes that, because this is an artificial genus, no type species is designated. The above is the first one described.

**WALCHIOPREMNON** Florin, 1940.

*Walchiopremnon (Lebachia) valdajolense* (Mougeot) Florin, 1940b, p. 277, pls. 157, 158, figs. 18-20; pls. 159, 160, figs. 1-23; petrified stem, Coniferales; Lower Permian; Faymont (Val-d'Ajol), France. Florin (p. 273) notes that, because this is an artificial genus, no type species is designated; *valdajolense* is the only species described.

**WALCHIOSTROBUS** Florin, 1940.

*Walchiostrobus (Lebachia?) gothanti* Florin, 1940b, pls. 151, 152, figs. 47-52; pls. 153, 154, figs. 1-10; cone, Coniferales; Lower Permian; Thüringer Wald, Germany. Florin (p. 261) notes that, because this is an artificial genus, no type species is designated. The species above in the first one described.

**WALDENBURGIA** Gothan, 1950.

*Waldenburgia corynepteroides* Gothan, 1950, pl. 1; fertile fern frond, possibly primitive Schizaeaceae; lowermost Carboniferous; Waldenburg.

**WALKOMIA** Schuster, 1931.

*Walkomia* Schuster, 1931, p. 256.

**WALKOMIA** Florin, 1940.

*Walkomia australis* (Feistmantel) Florin, 1940a, p. 8, pls. 1-4; foliage shoots, Coniferales; Newcastle series, Upper Permian; Bowenfels, near Lithgow, New South Wales.

**WALKOMIELLA** Florin, 1944.

*Walkomiella australis* (Feistmantel) Florin, 1944, p. 370. For *Walkomia australis* (Feistmantel) Florin, see above.

**WAPUTIKIA** Walcott, 1919.

*Waputikia ramosa* Walcott, 1919, p. 236, pl. 54, fig. 2; alga, Rhodomelaceae; Burgess shale, Stephen formation, Middle Cambrian; above Field, British Columbia.

**WARDIA** David White, 1904.

*Wardia fertilis* David White, 1904, p. 329, pl. 48; this name given to seeds borne by foliage described as *Aneimites fertilis* Ward; Thurmond formation, lower Pottsville, Pennsylvanian; near Nuttall, W. Va.

**WEEDIA** Walcott, 1914.

*Weedia tuberosa* Walcott, 1914, p. 108, pl. 11, figs. 1, 2; alga, Cyanophyceae?; Siyeh limestone, Algonkian; above Lake McDonald, Glacier National Park, Mont.

**WEICHSELIA** Stiehler, 1857.

*Weichselia ludoviccae* Stiehler, 1857, p. 73, pls. 12, 13; Upper Cretaceous; Quedlinburg, Prussian Saxony.

**WEISSITES** Goeppert, 1836.

*Weissites vescicularis* Goeppert, 1836, p. xiv. For *Neuropteris conferta* Sternberg, 1833 (1820-38), p. 75, pl. 22, fig. 5.

**WELTRICHIA** V. F. W. Braun, 1847.

*Weltrichia mirabilis* C. F. W. Braun, 1847, p. 86. See also Braun, C. F. W., 1840, p. 710, pl. 2, figs. 1-3.

**WESTERSHEIMIA** Krasser, 1918.

*Westersheimia pramelreuthensis* Krasser, 1918, p. 549; cycadophyte stem fragment; Upper Triassic; Pramelreith, Lunz, Austria.



**WETHERELLIA** Bowerbank, 1840.

*Wetherellia variabilis* Bowerbank, 1840, p. 89, pl. 12, figs. 1-40; fruits, Linaceae; London Clay, Eocene; Sheppey, Kent, England.

**WHITTLESEYA** Newberry, 1853.

*Whittleseya elegans* Newberry, 1853a, p. 106; microsporangiate organ, Pteridospermae; Pennsylvanian; Cuyahoga Falls and Poland, Ohio. See also Newberry, 1853b, fig. p. 116; Halle, 1933; Schopf, 1948.

**WIDDRINGTONITES** Endlicher, 1847.

*Widdringtonites ungeri* Endlicher, 1847, p. 271. For *Juniperites baccifera* Unger, 1843 (1841-47), p. 80, pl. 21, figs. 1-3.

**WIDDRINGTONOXYLON** Penny, 1947.

*Widdringtonoxylon borealis* Penny, 1947, p. 287, figs. 13, 15, 16; wood, Coniferales; Magothy formation, Upper Cretaceous; Deep Cut, west of Summit Bridge, Del.

**WIELANDIA** Nathorst, 1909.

*Wielandia angustifolia* Nathorst, 1909a, p. 22, pls. 5, 6; cycadophyte cones and foliage; Rhaetic; Bjuf, Sweden. See *Wielandiella*.

**WIELANDIELLA** Nathorst, 1910.

*Wielandiella angustifolia* Nathorst, 1910. A name that Nathorst substituted for *Wielandia*; it appears on errata slip (dated Jan. 7, 1910) to title page of Nathorst, 1909a.

**WILKINSONIA** Mueller, 1879.

*Wilkinsonia flaminata* Mueller, 1879 (1877-79), p. 170, pl. 3, fig. 4; Pliocene; Gulgong, Australia.

**WILLIAMSONIA** Carruthers, 1870.

*Williamsonia gigas* (Lindley and Hutton) Carruthers, 1870, p. 693. As treated by Carruthers, *W. gigas* consists of a combination of the foliage described by Lindley and Hutton as *Zamia gigas* and fructifications originally figured, but not named, by Young and Bird, 1822, p. 183, pl. 2, figs. 2, 6. Williamson, 1870, gave an exhaustive description of the latter. For additional information, see Seward, 1917, p. 421-423; Sahni, 1932d.

**WILLIAMSONIELLA** Thomas, 1915.

*Williamsoniella coronata* Thomas, 1915, p. 115, pls. 12-14; strobilus, Bennettiales; Gristhorpe plant bed, Jurassic; Yorkshire, England.

**WILSONIA** Kosanke, 1950.

*Wilsonia vesicatus* Kosanke, 1950, p. 54, pl. 14, figs. 1-3; spore; LaSalle coal bed, Pennsylvanian; Bureau County, Ill.

**WINCHELLIA** Lesquereux, 1893.

*Winchellia triphylla* Lesquereux, 1893, p. 209, pl. 8; leaf, Berberidaceae; Cretaceous; Yellowstone River near mouth of Powder River.

**WINCHELLINA** Herzer, 1893.

*Winchellina fascina* Herzer, 1893c, p. 286, pl. 6; apparently, a *Psaronius* trunk; Upper Carboniferous; Monroe County, Ohio.

**WINDWARDIA** Florin, 1936.

*Windwardia crookallii* Florin, 1936b, p. 91, pl. 21, figs. 1-10; pls. 17-20; structurally preserved foliage, Ginkgoales; Jurassic; Franz Joseph Land.

**WITHAMIA** Unger, 1842.

*Withamia styriaca* Unger, 1842b, p. 177; wood, incertae sedis; Tertiary; Styria.

**WITHAMIA** Seward, 1895.

*Withamia armata* (Saporta) Seward, 1895, p. 174, pl. 2, figs. 1, 2; pl. 5, fig. 1; cycadophyte frond fragment?; Wealden; Ecclesbourne, England. This is an especially confusing case. On page 174 the name is given as *Withamia saportae* although Seward states that he is transferring Saporta's *Cycadorachis armata* to the new genus *Withamia*. The plates bear the generic name *Saportaea*, but the captions opposite the plates bear the footnote that the name *Saportaea* was abandoned (after the plates were engraved) in view of its closeness to *Saportaea*, a previously established genus. *Withamia*, itself being in alid, was later changed to *Sewardia* by Zeiller.

**WOBURNIA** Stopes, 1912.

*Woburnia porosa* Stopes, 1912, p. 92, pl. 7, fig. 7; pl. 8, fig. 8; wood, dicotyledon; Lower Greensand, Aptian, Lower Cretaceous; Woburn Sands, Bedfordshire, England.

**WONNACOTTIA** Harris, 1942.

*Wonnacottia crispa* Harris, 1942b, p. 577, figs. 1-3; microsporophyll, Bennettiales; Middle Estuarine, Jurassic; Cayton Bay, Yorkshire, England.

**WOODWORTHIA** Jeffrey, 1910.

*Woodworthia arizonica* Jeffrey, 1910, p. 330, pls. 31, 32; wood, Araucariaceae; Triassic; Arizona.

**X**

**XANTHOLITHUS** (Ward) Cockerell, 1926.

*Xantholithus hastatiformis* Cockerell, 1926a, p. 11. For *Ophoglossum hastatiforme* Cockerell, 1924, p. 10, fig. p. 10, incertae sedis; Eocene; Tipperary, Wyo. [The binomial *Xantholithus propheticus* created by Ward, 1915, p. 150; nom. nud.]

**XANTHOXYLUM**.

Error for *Zanthoxylum*, in Yabe and Endo, 1930, p. 600.

**XENOCLADIA** Arnold, 1940.

*Xenocladia medullosina* Arnold, 1940, p. 61, figs. 4, 6, 7; Tully limestone, Middle Devonian; Erie County, N. Y.

**XENOPHYTON** Hick, 1892.

*Xenophyton radioulosa* Hick, 1892a, p. 216.  
For *Tylophora radioulosa* Hick, 1892b, p. 101, pls. 16; 17.

**XENOPTERIS** C. E. Weiss, 1870.

*Xenopteris brardi* (Brongniart) C. E. Weiss, 1870a, p. 765. For *Odontopteris brardi* Brongniart, 1828a-38, pls. 75, 76; fernlike foliage; Carboniferous.

**XENOTHECA** E. A. N. Arber and Goode, 1915.

*Xenotheca devonica* E. A. N. Arber and Goode, 1915, p. 96, pl. 4, figs. 1-7; pteridosperm cupule?; Devonian; Devon, England.

**XENOXYLON** Gothan, 1905.

*Xenoxylon latiporosum* (Cramer) Gothan, 1905, p. 38. For *Pinites latiporosus* Cramer, in Heer, 1868, p. 176, pl. 40, figs. 1-8. See also Gothan, 1910, p. 23, pl. 4, figs. 7-11; pl. 5, figs. 1, 2.

**XIPHOPHYLLUM** Zalesky, 1930.

*Xiphophyllum kuliki* Zalesky, 1930f, p. 917; nom. nud.; Permian; Pechora basin, Russia.

**XULINOSPRIONITES** Bowerbank, 1840.

*Xulinospirionites latus* Bowerbank, 1840, p. 143, pl. 17, figs. 43, 44; fruit, incertae sedis; London Clay, Eocene; Sheppey, Kent, England.

**XYLOCARYA** Reid and Chandler, 1933.

*Xylocarya tricularis* Reid and Chandler, 1933, p. 312, pl. 14, figs. 9-12; endocarp, Anacardiaceae; London Clay, Eocene; Sheppey, Kent, England.

**XYLOCARYON** Mueller, 1875.

*Xylocaryon lockii* Mueller, 1875 (1871-82), p. 41, pl. 11; Pliocene; Nintingbool, Victoria.

**XYLOIS** Stenzel, 1872.

*Xylois antiquensis* (Unger) Stenzel, 1872, p. 71. For *Fasciculites antiquensis* Unger, in Martius, 1846, p. lviii, pl. 2, figs. 5-7.

**XYLOLITHES** Debey, 1848.

*Xylolithes* sp. Debey, 1848, p. 124; nom. nud.

**XYLOMASTIXIA** Kirchheimer, 1938.

*Xylomastixia luetatica* Kirchheimer, 1938b, p. 348, pl. 7, figs. 1-6; endocarp, Cornaceae; Oligocene; Germany.

**XYLOMIDES** (Unger) Schimper, 1869.

*Xylomides umbilicatus* (Unger) Schimper, 1869, p. 138, pl. 1, fig. 8; fungus; Tertiary; Radoboj, Croatia.

**XYLOMITES** Unger, 1841.

*Xylomites umbilicatus* Unger, 1841 (1841-47), p. 3, pl. 1, fig. 2; fungus; Tertiary; Radoboj, Croatia. This genus erroneously attributed to Persoon in Meschnelli, 1892, p. 791.

**XYLOPHYLLITES** Massalongo, 1858.

*Xylophyllites pelagica* Massalongo, 1858a, p. 114; for illustration, see Massalongo and Scarabelli, 1859, pl. 35, figs. 18a, 18b; leaf Euphorbiaceae; Miocene; Sinigaglia, Italy.

**XYLOPSARONIUS** Pohlig, 1910.

*Xylopsaronius cottai* (Corda) Pohlig, 1910, p. 335, figs. 1-3. See also Posthumus, 1931.

**XYLOPTERIS** Frangueli, 1943.

*Xylopteris elongata* (Carruthers) Frangueli, 1943a, p. 324, figs. 30, 31; pteridosperm frond?; Upper Triassic; Queensland, Tasmania, Natal, etc.

**XYLOPHYLLUM** Zalesky, 1927.

*Xylophyllum kuliki* Zalesky, 1927a, p. 52, pl. 44, fig. 6; cordaitellike leaf; Jurassic; Pechora basin, Russia.

## Y

**YABEIELLA** Oishi, 1931.

*Yabeiella brachebuschiana* (Kurtz) Oishi, 1931a, pl. 26, figs. 4-6; taeniopterid foliage; Rhaetic; Argentina.

**YAKIA** David White, 1929.

*Yakia heterophylla* David White, 1929, p. 86, pl. 39, figs. 1-8; pteridosperm? foliage, associated fructifications compared with *Ullmannia bronni*; Hermit shale, Permian; near Bright Angel Trail, below El Tovar, Ariz.

**YARRAVIA** Lang and Cookson, 1935.

*Yarravia oblonga* Lang and Cookson, 1935, p. 437, pl. 32, figs. 37-41; terminal synangial fructification; Silurian (Lower Ludlow); Victoria, Australia.

**YATESIA** Carruthers, 1874.

*Yatesia morrisii* (Morris and Carruthers) Carruthers, 1874, p. 688, pl. 55, figs. 3-6; cycadophyte trunk; Lower Greensand, Cretaceous; Leighton-Buzzard, Pottton, Bedfordshire, England. Name cited by Carruthers, 1868, p. 80; nom. nud.

**YEZONIA** Stopes and Fujii, 1910.

*Yezonia vulgaris* Stopes and Fujii, 1910, p. 23, pl. 2, figs. 5-8; pl. 3, fig. 9; pl. 4, fig. 19; petrified gymnosperm stem; Upper Cretaceous; Hokkaido, Japan.

**YEZOSTROBUS** Stopes and Fujii, 1910.

*Yezostrobus oliverii* Stopes and Fujii, 1910, p. 33, figs. 12-14; pl. 1, fig. 8; pl. 3, figs. 10-13; cone, Coniferales; Upper Cretaceous; Hokkaido, Japan. Name cited in Stopes and Fujii, 1909, p. 553; nom. nud.

**YORKIA** Wanner, 1900.

*Yorkia gramineoides* Ward, 1900, p. 254, pl. 34, figs. 4-6; grasslike leaves; Triassic; York Haven, York County, Pa. [The generic description is given by Atrous Wanner and the description for the type species by Lester Ward.]

**YUBARIA** Ogura, 1932.

*Yubaria invaginata* Ogura, 1932b, p. 476, pl. 24, figs. 14-17; petrified petiole, dicotyledon; Cretaceous; Hokkaido, Japan.

**YUCCITES** Martius, 1822.

*Yuccites microlepis* Martius, 1822, p. 136.

**YUCCITES** Schimper and Mougeot, 1844.

*Yuccites vogesiacus* Schimper and Mougeot, 1844, p. 42, pl. 21; incertae sedis; Triassic; Soultz-les-Bains, Alsace-Lorraine.

**YUKNESSIA** Walcott, 1919.

*Yuknessia simplex* Walcott, 1919, p. 235, pl. 54, fig. 1; alga, Chlorophyceae; Stephen formation, Middle Cambrian; Burgess pass fossil quarry, above Field, British Columbia.

**Z**

**ZALESKYIA** Kidston and Gwynne-Vaughan, 1908.

*Zaleskyia gracilis* Kidston and Gwynne-Vaughan, 1908, p. 220, pl. 1, figs. 1-3; pl. 2, figs. 4, 5, 8; pl. 3, figs. 9, 10; petrified stem, Osmundaceae; Upper Permian; Bjelebel district, Orenburg, Russia. See also Posthumus, 1931.

**ZALESKYELLA** Tschirkova, 1939.

*Zaleskyella bifurcata* Tschirkova, in Zalesky, 1939b, p. 355, fig. 33; fern? frond fragment; Permian; Tchekarda, USSR.

**ZAMIOIDEA** Schuster, 1931.

*Zamioidea macrozamioides* Schuster, 1931, p. 188. For *Cycadocarpidium macrozamioides* Schuster, 1911, Svenska vetensk. akad. Handl., band 51, p. 5, fig. 11.

**ZAMIOLEPIS** Pomel, 1846.

*Zamiolepis dissecta* Pomel, 1846, p. 653; nom. nud.; Jurassic; Moselle, France.

**ZAMIOPHYLLUM** Nathorst, 1890.

*Zamiophyllum buchianum* (Ettingshausen) Nathorst, 1890, p. 46, pl. 2, figs. 1, 2; pl. 3, pl. 5, fig. 2; cycadophyte leaf; Mesozoic; Togodani, Tosa province, Japan.

**ZAMIOPSIS** Fontaine, 1889.

*Zamiosis pinnafida* Fontaine, 1889, p. 161, pl. 61, fig. 7; pl. 62, fig. 5; pl. 64, fig. 2; fern? foliage; Potomac group, Lower Cretaceous; Fredericksburg, Va.

**ZAMIOPTERIS** Schmalhausen, 1879.

*Zamiopteris glossopteroides* Schmalhausen, 1879, p. 80, pl. 14, figs. 1-3; *Glossopteris*-like leaf; Permian; Ssuka, Russia.

**ZAMIOSTROBUS** Endlicher, 1836.

*Zamiostrobis macrocephala* (Lindley and Hutton) Endlicher, 1836 (1836-40), p. 72. For *Zamia macrophylla* Lindley and Hutton, 1834 (1831-37), p. 117, pl. 125, cone, Coniferales?; Cretaceous; England. See also Seward, 1917, p. 503.

**ZAMIOPHYLLUM** Caspary and Klebs, 1907.

*Zamiophyllum sambiensense* (Caspary) Caspary and Klebs, 1907, p. 63, pl. 8, fig. 51; Tertiary; Baltic Prussia.

**ZAMITES** Brongniart, 1828.

Owing to innumerable name changes in the cycadophyte leaf genera, it is extremely difficult to cite type species, especially for *Zamites*. The following is rather arbitrarily suggested: *Zamites gigas* (Lindley and Hutton) Morris, 1843, p. 24. For *Zamia gigas* Lindley and Hutton, 1835 (1831-37), p. 45, pl. 165; cycadophyte leaf; Jurassic; Scarborough, England. See discussion in Seward, 1917, p. 529-532.

**ZANICHELLIOPSIS** Massalongo, 1851.

*Zanichelliopsis repens* Massalongo, 1851, p. 46; nom. nud.; Eocene; Monte Bolca, Italy. Later changed to *Halochloris repens* (Massalongo) Stiehler, 1869.

**ZEARAMOSUS** Webster, 1920.

*Zearamosus elliella* Webster, 1920, p. 286; marine alga; Devonian; Bloody Run, Iowa.

**ZEILLERIA** Kidston, 1884.

*Zeilleria delicatula* (Sternberg) Kidston, 1884a, p. 592, pl. 25; Pteridospermae; Upper Carboniferous; Forest of Wyre, Worcestershire, England. See also Kidston, 1924, p. 427.

**ZEILLEROPTERIS** Koidzumi, 1936.

*Zeilleropteris yunnanensis* Koidzumi, 1936, p. 135. For *Gigantopteris nicotinaefolia* Zeiller, 1907, *Annales mines*, sér 10<sup>e</sup>, tome 11, p. 480, pl. 14, fig. 15, 15a; Sine-si-Kou, Yunnan, China.

**ZEITES** Caspary, 1874.

*Zeites succineus* Caspary, 1872, p. 17; nom. nud.

**ZELKOVIDITES** Thiergart?, 1950.

*Zelkovoidites* sp. in Potonle, Robert, Thomson, Paul W., and Thiergart, Friederich, 1950, p. 57, pl. C, fig. 24; pollen; Pliocene; Chatt-Aquitain, Germany.

**ZEUGOPHYLLITES** Brongniart, 1828.

*Zeugophyllites calamoides* Brongniart, 1828b, p. 121, leaf; Carboniferous. First fully described species appears to be *Z. elongatus* Morris, in Strzelecki, 1845, p. 250, pl. 6, fig. 5.

**ZIMMERMANNIA** Gothan and Zimmerman, 1932.

*Zimmermannia eleutherophylloides* Gothan and Zimmerman, 1932, p. 113, pl. 13, fig. 4; Upper Devonian; Upper Bogen-dorf, Silesia.

**ZINGIBERITES** Heer, 1859.

*Zingiberites multinervis* Heer, 1859, p. 172, pl. 148, figs. 13-15; leaf fragments, Scitamineae?; Miocene; Rossberg, Rhensish Prussia.

**ZIPPEA** Corda, 1845.

*Zippea disticha* Corda, 1845, p. 76, pl. 26; incertae sedis; Carboniferous. See also Posthumus, 1931.

**ZITTELIA** Felix, 1882.

*Zittelia elegans* Felix, 1882a, p. 73, fig. 2; wood, Leguminosae?

**ZITTELINA** (Munier-Chalmas) Morellet and Morellet, 1913.

*Zittelina elegans* Morellet and Morellet, 1913, p. 27, pl. 3, figs. 5, 6; alga, Bortellées; Eocene; Grignon, France.

**ZIZYPHITES** Kuntze, 1904.

*Zizyphites* Kuntze, in Post and Kuntze, 1904, p. 600.

**ZIZYPHOIDES** Seward and Conway, 1935.

*Zizyphoides colombi* (Heer) Seward and Conway, 1935b, p. 23, fig. 8; leaf fragment, Rhamnaceae; Mesozoic; Kagdlungauk, west Greenland.

**ZONALASPORITES** Ibrahim, 1933.

*Zonalasporites ulughbeki* Ibrahim, 1933, p. 38, pl. 1, fig. 11; spore; Carboniferous.

**ZONALESSPORITES** Ibrahim, 1933.

*Zonalessporites saturnoides* Ibrahim, 1933, p. 27, pl. 3, fig. 26; spore; Carboniferous.

**ZONALOSPORITES** Ibrahim, 1933.

*Zonalosporites vittatus* Ibrahim, 1933, p. 41, pl. 6, fig. 45; spore; Carboniferous.

**ZONARIDES** Schimper, 1869.

*Zonarides digitatus* (Brongniart) Schimper, 1869 (1869-74), p. 186, pl. 3, fig. 2; described as alga; shows some resemblance to ginkgophyte leaf?; Permian; Mansfield, Prussian Saxony.

**ZONARITES** Sternberg, 1833.

*Zonarites flabellaris* (Brongniart) Sternberg, 1833 (1820-38), p. 34. For *Furoides flabellaris* Brongniart, 1828a-38, p. 67, pl. 8, fig. 5; alga?; Tertiary; Monte Bolca, near Verona, Italy.

**ZONOPLEURA** Massalongo, 1859.

*Zonopleura hampeana* (Stiehler) Massalongo, 1859. For *Delasserites hampeana* Stiehler, 1857, p. 56, pl. 11, fig. 12.

**ZONOPTERIS** Debey and Ettingshausen, 1859.

*Zonopteris goepperti* Debey and Ettingshausen, 1859b, p. 213, pl. 4, figs. 11-20; portion of fertile fern frond; Upper Cretaceous; Aachen, Rhenish Prussia.

**ZONOTRICHITES** Bornemann, 1887.

*Zonotrichites ussaviensis* Bornemann, 1887, p. 126, pl. 5, figs. 1, 2; pl. 6, figs. 1, 2; Rhaetic; Silesia.

**ZONOTRILETES** Waltz, 1935.

Reference not seen: cited in Gothan, 1942b, p. 160.

**ZOOGLEITES** C. E. Bertrand, 1898.

*Zoogleites claverensis* C. E. Bertrand, 1898, p. 184, pl. 10, fig. 107; pl. 11, figs. 133, 134; bacteria?; Permian; France.

**ZOOPHYCOS** Massalongo, 1855.

*Zoophycos caputmedusae* Massalongo, 1855, p. 48, pl. 1, fig. 1; figure suggests *Isoetes*?; Eocene; Monte Bolca, Italy.

**ZOSTERITES** Brongniart, 1823.

*Zosterites orbigniana* Brongniart, 1823, p. 317, pl. 21; leaf, monocotyledon; Lower Cretaceous (Neocomian); Isle of Aix, France.

**ZOSTERITES** C. F. W. Braun, 1840.

*Zosterites lignitarum* C. F. W. Braun, 1840, p. 99; nom. nud.

**ZOSTEROPHYLLUM** Pomel, 1847.

*Zosterophyllum articulatum* Pomel, in Graves, 1847, p. 708; nom. nud.

**ZOSTEROPHYLLUM** Penhallow, 1892.

*Zosterophyllum myretonianum* Penhallow, 1892, p. 9, pl. 1, fig. 1; pl. 2, figs. 1-3; psilophyte; Devonian; Myreton, Scotland.

**ZUBERIA** Frenguelli, 1943.

*Zuberia zuberi* (Szajnocha) Frenguelli, 1943a, p. 308; fronds, cupulate seeds and microsporangiate organs; Triassic; Argentina. See Frenguelli, 1944a, p. 9, pls. 4-11, for full account.

**ZYGOPHILLITES** Keferstein, 1834.

*Zygophyllites calamoides* (Brongniart) Keferstein, 1834, p. 876. For *Zeugophyllites calamoides* Brongniart, 1828b, p. 123.

**ZYGOPHYLLOCARPUM** Weyland, 1938.

*Zygophyllocarpum rottense* Weyland, 1938b, p. 153, pl. 22, figs. 1, 2; winged fruit, Zygophyllaceae; Tertiary; Rott, Siebengebirge, Germany.

**ZYGOPTERIS** Corda, 1845.

*Zygopteris primaeva* (Cotta) Corda, 1845, p. 81; coenopterid fern; Carboniferous. For *Tubicaulis primarius* Cotta, 1932, p. 20, pl. 1, figs. 1, 2. See also Sahni, 1932c; Posthumus, 1931.

**ZYGOSPORITES** Williamson, 1880.

*Zygosporites brevipes* Williamson, 1880, p. 516, pl. 19, figs. 51, 53, 55, 56; spore; Carboniferous; England.

**ZYGOSPORITES** McLean, 1912.

*Zygosporites brevipes* McLean, 1912, p. 509, fig. 5a; spore?; Upper Carboniferous; Dulesgate, England.

**ZYMPANOPHORA**.

Error for *Tympanophora*, in Hector, 1880, p. 47.