

## Plate 23. MARINE DIATOMS FROM THE GALAPAGOS ISLANDS

### Source of Material

Galapagos Islands, Santa Cruz. A very sparse sample collected by J.A. Broadhead August 16<sup>th</sup>, 1986.

Galapagos Islands, Santa Cruz. Sample 1, from Academy Bay (Puerto Ayora), south coast of Santa Cruz; skimming of thin surface film resulting from rising tide. Collected by Tui de Roy August 9<sup>th</sup>, 1991.

Galapagos Islands, Santa Cruz. Sample 2, from Academy Bay (Puerto Ayora), south coast of Santa Cruz; from thick silty mud covered in greenish algal slime on flat rock ledges at low tide. Collected by Tui de Roy August 9<sup>th</sup>, 1991.

Galapagos Islands, Santa Cruz. Sample 3, from Academy Bay (Puerto Ayora), south coast of Santa Cruz; from greenish-brown slime on mooring rope. Collected by Tui de Roy August 9<sup>th</sup>, 1991.

Sample #1 one bottle - very sparse.

Sample #2 four bottles - one unbleached (HCL rinsed); one heavy fraction; one sieved under 38 $\mu$ m and one sieved over 38 $\mu$ m.

Sample #3 four bottles - same sequence as for sample #2.

These samples are kept in the private collection of Stuart R. Stidolph and will eventually be deposited in the collections of NIWA, Wellington, New Zealand.

### Plate Twenty-three:

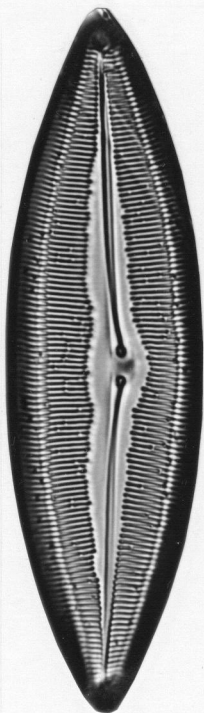
- 37 *Caloneis westii* (W. Smith) Hendey 1964. See Hendey (1964, p. 230, pl. 44, fig. 10) for range of forms.
- 38 *Caloneis probabilis* (?) (Schmidt in Schmidt et al.) Cleve 1894. See Foged (1984, pl. 44, fig. 1) and Schmidt's Atlas (1874-1959, pl. 50, fig. 46).
- 39 *Caloneis liber* var. *bicuneata* (Grunow) Cleve 1894. See Van Heurck (1896, p. 222, pl. 35, fig. 910) given as *Navicula liber* var. *bicuneata*.
- 40-41 *Dimeregramma marinum* (Gregory) Ralfs in Pritchard 1861. See Peragallo and Peragallo (1897-1908, pl. 82, fig. 10) and Hustedt (1931, fig. 642). Fig. 41 is of three frustules united.
- 42 *Glyphodesmis williamsonii* fo. *lanceolata* (Peragallo and Peragallo) Hustedt 1931.

See Hustedt (1931, fig. 646d).

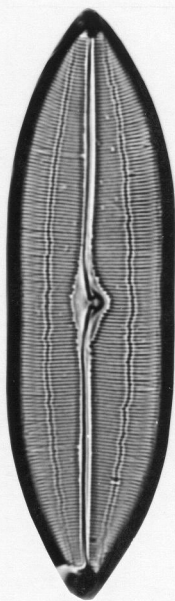
- 43 *Dimeregramma* (?) sp. indet. However, this specimen may also be a species of the genus *Glyphodesmis*.
- 44 *Diploneis litoralis* (Donkin) Cleve 1894. See Hendey (1964, pl. 32, fig. 9) also Foged (1984, pl. 41, fig. 5) and Hustedt (1937, fig. 1062a).
- 45-46 *Diploneis crabro* (Ehrenberg) Ehrenberg 1854. See Foged (1984, pl. 43, fig. 1).
- 47 *Diploneis* sp. indet.
- 48 *Diploneis smithii* (Brébisson in W. Smith) Cleve 1894. See Hustedt (1937, fig. 1051) and Hendey (1964, p. 225, pl. 32, fig. 10).
- 49 *Diploneis litoralis* (Donkin) Cleve 1894. Same specimen as fig. 44 but taken with 60x N.A. 1.4 objective.
- 50 *Diploneis papula* (Schmidt in Schmidt et al.) Cleve 1894. See Peragallo and Peragallo (1897-1908, pl. 19, fig. 24) and Hustedt (1937, fig. 1071a-c).
- 51-52 *Diploneis caffra* (Giffen) A. Witkowski, H. Lange-Bertalot and D. Metzeltin. See Witkowski, Lange-Bertalot, and Metzeltin (2000, fig. 14-17).
- 53-54 *Diploneis gemmatula* (Grunow in Schmidt et al.) Cleve 1894. See Schmidt's Atlas (1874-1959, pl. 13, figs. 20-21) and Hustedt (1937, fig. 1038).
- 55 *Diploneis chersonensis* (Grunow in Schmidt et al.) Cleve in Schmidt et al. 1892. See Hendey (1971, p. 400) for note on variations of Galapagos specimens. See also Foged (1984, pl. 53, fig. 5); Hendey (1964, pl. 32, fig. 8); Hendey (1970, pl. 5, fig. 48) which is in closest agreement with the specimen shown here; and Hustedt (1937, fig. 1088).
- 56 *Diploneis splendida* (Gregory) Cleve 1894. See Peragallo and Peragallo (1897-1908, pl. 18, fig. 17). See also Hustedt (1937, fig. 1089d) and Hendey (1964, p. 227).
- 57 *Diploneis splendida* (Gregory) Cleve 1894. Same specimen as fig. 56 but taken with 60x objective of N.A. 1.4.

Magnifications: figs. 47-52, 57: x2000; all others: x1000

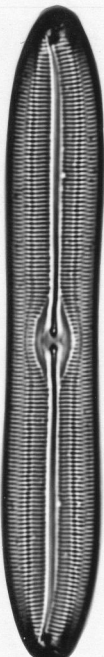
Scale Bar: scale bar is 30 microns for figures shown at x1000; 15 microns at x2000



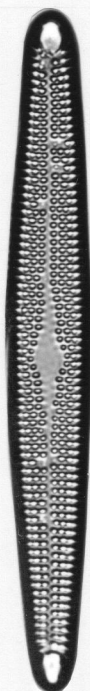
37



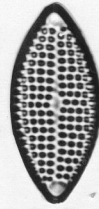
38



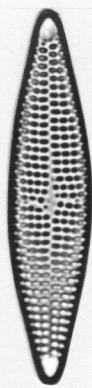
39



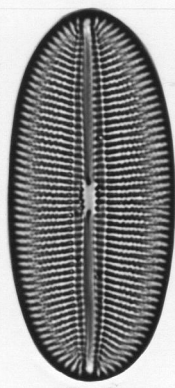
40



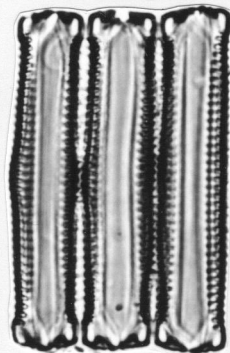
42



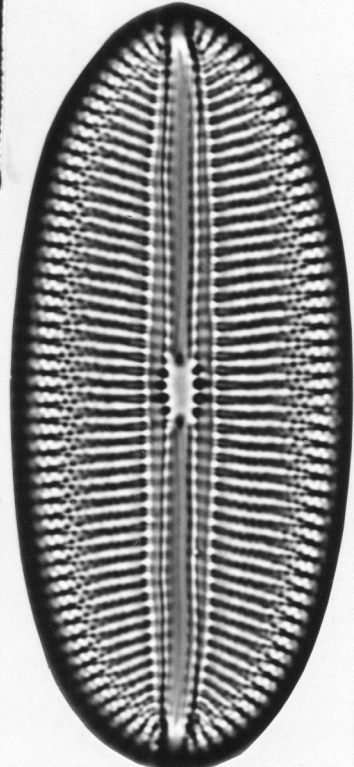
43



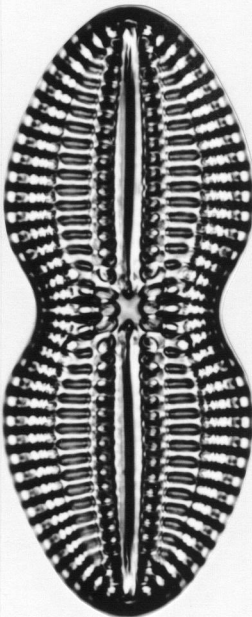
44



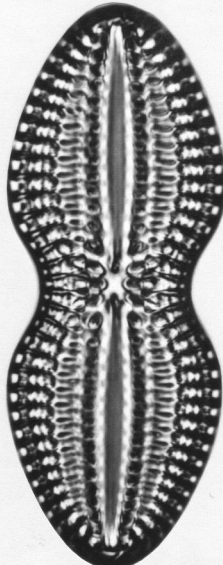
41



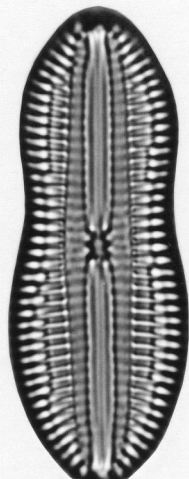
49



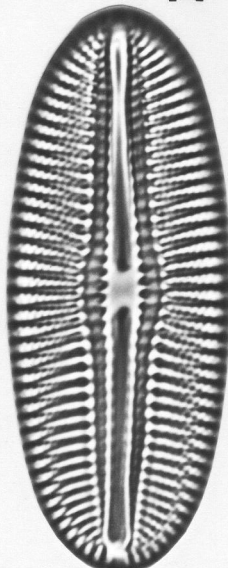
45



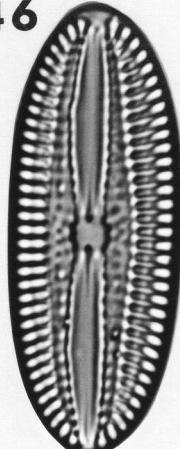
46



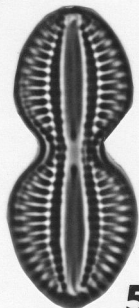
47



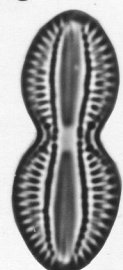
48



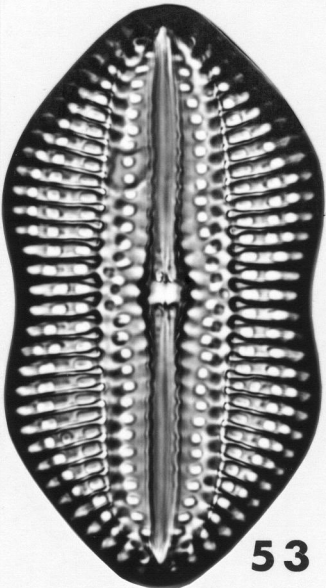
50



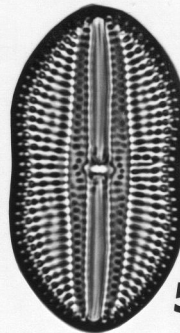
51



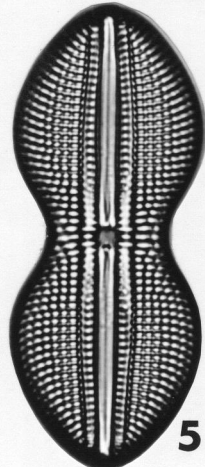
52



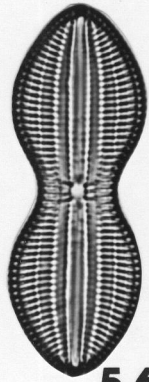
53



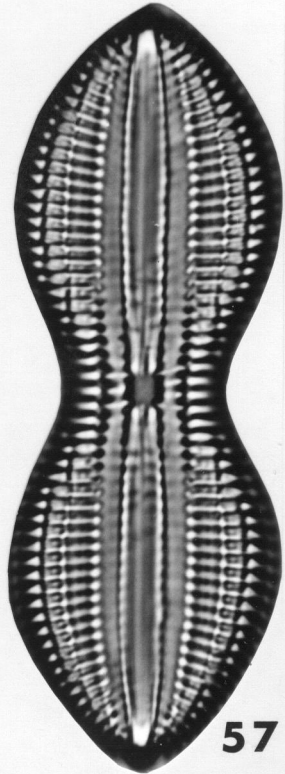
54



55



56



57