

## Plate 25. 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-five:

74-75 *Mastogloia paradoxa* Grunow in Cleve 1895. See Hustedt (1933, fig. 953); also Foged (1975, p. 32, pl. 15, figs. 3-4); Paddock and Kemp (1990, p. 96, fig. 101 showing partectal ducts, and p. 98, fig. 110). "A" is in upper focus and "B" is in lower focus in respect of both specimen pairs.

76 *Mastogloia exilis* Hustedt 1933. See Paddock and Kemp (1990, p. 82, fig. 21a-b).

77 *Nitzschia panduriformis* var. *lata* (Witt) Cleve and Möller 1878. See Peragallo and Peragallo (1897-1908, pl. 70, fig. 1).

78 *Mastogloia gieskesii* Cholnoky 1963. See Kemp and Paddock (1990, p. 315, figs. 25-26, 34-35). "A" is in upper focus and "B" is same specimen in lower focus.

- 79 *Mastogloia fimbriata* (Brightwell) Grunow 1863. See Brightwell (1859, p. 179, pl. 9, fig. 3) given as *Cocconeis fimbriata*. See also Hustedt (1933, fig. 884).
- 80 *Mastogloia fimbriata* (Brightwell) Grunow 1863. Another specimen showing partectal ducts.
- 81 *Nitzschia corpulenta* Hendey 1958. See Hendey (1958, p. 78, pl. 1, fig. 5).
- 82 *Nitzschia brittoni* Hagelstein 1939. See Hagelstein (1939, p. 393, pl. 7, fig. 14) and Hustedt (1955, p. 46, pl. 15, figs. 7-8). Also Lange-Bertalot and Krammer (1987, pl. 25, Figs. 18, 18A).
- 83 *Nitzschia panduriformis* var. *pustulata* Voigt in Meister 1937. See Meister (1937, p. 270, pl. 11, fig. 9).
- 84 *Nitzschia longa* Grunow in Cleve and Grunow 1880. See Peragallo and Peragallo (1897-1908, pl. 72, fig. 5). The measurements of 7.5 x 162.5  $\mu\text{m}$  agree well with those of Hendey (1971, p. 406). In this aspect, the valve also matches *Bacillaria paxillifer*, but there is a missing central stria (on the left), which occurs in several *Nitzschia* spp. but not in *Bacillaria*. No reliably identified photomicrograph of *N. longa* showing a resolution matching that of fig. 84 has been found in the literature.
- 85 *Nitzschia insignis* var. *marginifera* Grunow in Cleve and Grunow 1880. See Grunow in Cleve and Grunow (1880, pl. 6, fig. 105).
- 86-87 *Nitzschia longissima* fo. *costata* Hustedt in Schmidt et al. 1921. See Foged (1978, p. 107, pl. 46, fig. 9) and Hustedt in Simonsen (1987, p. 59, pl. 78, figs. 1-6 and pl. 79, fig. 1); also Ricard (1977, pl. 4, fig. 15) gives this species as *N. ventricosa* Palmer.
- 88 *Nitzschia panduriformis* var. *lata* (Witt) Cleve and Möller 1878. See Peragallo and Peragallo (1897-1908, pl. 70, fig. 1).
- 89 *Nitzschia panduriformis* var. *peralbata* Peragallo and Peragallo 1899. See Peragallo and Peragallo (1897-1908, pl. 70, fig. 2).
- 90 *Nitzschia insignis* var. *adriatica* (Grunow in Cleve and Grunow) Grunow in Van Heurck 1881. See Peragallo and Peragallo (1897-1908, pl. 75, fig. 11).
- 91 *Nitzschia costata* Pantocsek 1892. See Meister (1937, p. 270, pl. 11, figs. 5-6).
- 92 *Nitzschia vidovichii* (Grunow) Grunow in Van Heurck 1881. See Grunow in Van Heurck (1880-1885, pl. 67, fig. 7). Also Peragallo and Peragallo (1897-1908, pl. 72, fig. 13); Foged (1975, pl. 28, fig. 9) and Lange-Bertalot and Krammer (1987, pl. 10, fig. 2) which is the best illustration.
- 93 *Nitzschia angularis* W. Smith 1853. See Van Heurck (1880-1885, pl. 62, figs. 11-14) and

also Peragallo and Peragallo (1897-1908, pl. 73, fig. 6).

Magnifications: fig. 87: x750; figs. 77, 79-80, 84-86, 90-93: x1000; all others: x2000

Scale Bar: scale bar is 40 microns for fig. 87; 30 microns for all figures at x1000;  
15 microns at x2000

