

Plate 22. MARINE DIATOMS FROM THE GALAPAGOS ISLANDS

Source of Material

Galapagos Islands, Santa Cruz. A very sparse sample collected by J.A. Broadhead August 16th, 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 9th, 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 9th, 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 9th, 1991.

Sample #1 one bottle - very sparse.

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

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-two:

- 22 *Cocconeis apiculata* (Greville) Schmidt in Schmidt 1895. See Williams (1988, p. 47, pl. 54, figs. 2-3) given as *Stauroneis apiculata*. The specimen in this figure here is of a whole frustule. Figure 22a is the raphe valve and figure 22b is the rapheless valve. NOTE: this species will be transferred to the genus *Schizostauron* (A. Witkowski, written commun., 2012).
- 23 *Cocconeis latecostata* Hustedt 1955. See Witkowski, Lange-Bertalot, and Metzeltin (2000, pl. 33, fig. 10).
- 24 *Amphicocconeis debesi* (Hustedt) De Stefano in De Stefano et al. 2006. See Hustedt (1933, fig. 798) and Cleve-Euler (1953, pl. fig. 491A b). The latter is given on p. 240 of her plate keys as *Cocconeis distans* var. *debesi* which is copied from Hustedt's drawings. VanLandingham (1968b, p. 782) cites Hustedt (1933,

- fig. 798) as a nom. nov. The figure of the rapheless valve agrees well with the specimen figured here.
- 25 *Cocconeis dirupta* var. *flexella* (Janisch and Rabenhorst) Grunow in Van Heurck 1880. See Peragallo and Peragallo (1897-1908, pl. 3, figs. 28-29), Hustedt (1933, figs. 809d-i), and Witkowski, Lange-Bertalot, and Metzeltin (2000, pl. 39, fig. 7).
 - 26 *Cocconeis placentula* var. *lineata* (Ehrenberg) Van Heurck 1885. See Schmidt's Atlas (1874-1959, pl. 192, fig. 35e) which closely agrees with this figure. See also Van Heurck (1880-1885, pl. 30, fig. 32; 1896, p. 288, pl. 8, fig. 342).
 - 27 *Cocconeis* sp. indet. See Schmidt's Atlas (1874-1959, pl. 191, fig. 38) of an uncertain species recorded by Kinker from Santa Monica.
 - 28 *Cocconeis pseudomarginata* Gregory 1857. See Sar, Romero, and Sunesen (2003, p. 94, fig. 42) which agrees well with the specimen shown here.
 - 29 *Mastogloia binotata* (?) (Grunow) Cleve 1895. See Witkowski, Lange-Bertalot, and Metzeltin (2000, pl. 75, fig. 15-17). This appears to be a valve of *Mastogloia* where the partectal ring is missing.
 - 30 *Cocconeis dirupta* var. *flexella* (Janisch and Rabenhorst) Grunow in Van Heurck See Peragallo and Peragallo (1897-1908, pl. 3, figs. 28-29) and Hustedt (1933, figs. 809d-i).
 - 31 *Cocconeis scutellum* Ehrenberg 1838. See Peragallo and Peragallo (1897-1908, pl. 4, fig. 2) given as *C. scutellum* var. *adjuncta*. See also John (1983, p. 82, pl. 36, fig. 2) and Lange-Bertalot and Krammer (1989, pl. 1, fig. 2) which agrees well with this figure.
 - 32 *Cocconeis scutellum* Ehrenberg 1838. See Hendey (1951, p. 44, pl. 10, fig. 9). Also Van Heurck (1896, p. 286-287, fig. 65a) and Sar et al. (2003, p. 95, figs. 44-46).
 - 33-34 *Cocconeis* sp. indet. See Schmidt's Atlas (1874-1959, pl. 191, fig. 38) of an uncertain species recorded by Kinker from Santa Monica.
 - 35 *Cocconeis scutellum* Ehrenberg 1838. References as for fig. 32
 - 36 *Cocconeis heteroidea* var. *curvirotonda* (Tempère and Brun in Brun and Tempère) Cleve 1895. See Schmidt's Atlas (1874-1959, pl. 195, fig. 19) given as *C. curvirotonda* var. *bifrons*. See also John (1983, p. 78, pl. 34, fig. 1) which also agrees well with the specimen shown here.

Magnifications: figs. 22a-b, 26: x1500; all others: x2000

Scale Bar: scale bar is 20 microns at x1500; 15 microns at x2000

