

APPENDIX II—NEW COMBINATIONS

Four new combinations have become necessary as the result of this work. They are validated below by the synonymy and references.

Biddulphia brachiolatum (Brightw.) Taylor

Triceratium brachiolatum Brightw. *Quart. J. micr. Sci.* 1. P. 4, fig. 2, p. 228 (1853).

Biddulphia picturatum (Grev.) Taylor

Triceratium picturatum Grev. *Trans. micro. Soc.*, n.s., 14, Pl. 9, fig. 18, p. 83 (1866).

Diploneis smithii (de Bréb.) Cleve var. *minor* (Petit) Taylor

Navicula smithii de Bréb. var. *minor* Petit, *Fonds de la Mer* 3. 25 (1877).

Amphora foveauxiana Taylor

Amphora schmidtii Petit, *Fonds de la Mer* 3. 17 (1877).

Amphora sp. A. Schmidt, *Atlas der Diat.* Pl. XXVII, fig. 51 (1875).

Non *Amphora schmidtii* Grun., *Atlas der Diat.* Pl. XXVII, fig. 2, 3 (1875).

APPENDIX III—FRESHWATER SPECIES RECORDED FROM MARINE HABITATS

A number of freshwater species have been recorded from marine or presumed marine habitats. These presumed marine habitats are those from which the majority of records in the same paper are of marine diatoms. The list is in alphabetical and not systematic order.

Achnanthes inflata Kütz.—Andersons Bay, W2.

Asterionella formosa Hass.—Waitarere Beach, CC.

Asterionella gracillima (Hantz.) Heib.—Hauraki Gulf, C1; Wellington Harbour, C1; Cook Strait, C1; Kaikoura, C1.

Cocconeis placentula Ehrenb. var. *lineata* (Ehrenb.) Cleve—Lyll Bay, P.

Cyclotella stelligera Cleve & Grun.—Waitati, W2; Anderson's Bay, Otago Harbour, W2.

Cymbella aspera Ehrenb.—Waitati, W2.

C. ehrenbergi Kütz.—Bruce's Rocks, Dunedin, W2.

C. parva W. Sm. var. *hungarica* (Grun.) Cleve—Manukau Harbour, W1.

Epithemia muelleri Fricke—Waitati, W2.

Fragilaria virescens Ralfs ex Pritch.—Bruce's Rocks, Dunedin, W2.

Frustulia amphipleuroides (Grun.) Cleve (*F. rhomboides* (Ehrenb.) de Toni, var. *amphipleuroides* Grun.)—Evansdale, W2.

Gomphoneis herculeanum (Ehrenb.) Cleve—Company Bay, Otago Peninsula, W2.

G. mamilla (Ehrenb.) Cleve—Dunedin, W1.

G. manilla Ehrenb.—Waitati, W2.

Gomphonema constrictum Ehrenb.—Evansdale, W2.

Melosira crenulata (Ehrenb.) Kütz.—Hauraki Gulf, C1; Wellington Harbour, C1; New Plymouth/Kawhia, C2.

M. granulata (Ehrenb.) Ralfs ex Pritch. var. *angustissima* O. Müll.—Hauraki Gulf, C1; Wellington Harbour, C1, C2; Cook Strait, C1; Kaikoura, C1.

M. roeseana Rabenh.—Bruce's Rocks, Dunedin, W2.

Neidium affine Ehrenb. var. *undulata* (Grun.) Cleve—Lyll Bay, P.

Pinnularia nodosa Ehrenb.—St. Leonards, W2.

Stauroneis acuta W. Sm.—Foveaux Strait, P.

S. anceps Ehrenb.—Bruce's Rocks, Dunedin, W2; St Leonards, W2; Evansdale, W2.

S. fulmen Brightw. var. *capitata* Heid.—Bruce's Rocks, Dunedin, W2.

S. phoenicenteron Ehrenb.—Waitati, W2; Milford (Temuka), W2.

Stenopterobia intermedia (Lewis) Hust. (*Surirella intermedia* Lewis)—Wellington Harbour, W1; Lyll Bay, P; Waitarere Beach, CC; Portobello, W2.

Synedra ulna (Nitzsch.) Ehrenb. (incl. *S. salina* W. Sm.)—Auckland Harbour, CW2; Wellington Harbour, C1; Bruce's Bay (? misprint for Bruce's Rocks), W2; Foveaux Strait, P.

S. vaucheriae Kütz.—Hooper's Inlet, Portobello, W2.

Surirella rattrayi A. Schmidt—Evansdale, W2.