

P—Petit (1877).

T—Taylor (unpublished).

W1—Wood (1961a).

W2—Wood (1961b).

W3—Wood (1963).

WCC—Wood, Crosby and Cassie, V. (1959).

A paper by Maxwell (1956) on the diatoms of Cook Strait does not give identifications beyond genera, while Cassie (1959) provides a general account of marine diatoms and gives no further records.

Species marked with an *asterisk* (\*) are predominantly planktonic. Species marked with a *dagger* (†) are characteristically brackish-water organisms (but may be found in fully marine habitats).

The compiler does not claim finality. He would be grateful to hear of the inevitable errors and omissions, and also the whereabouts of unpublished collections of New Zealand material in other countries. He wishes to express his thanks to Mr N. Ingram Hendey for his comments on various species.

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*Note added in proof:* This check list was completed before S. L. van Landingham—"Catalogue of the fossil and recent genera and species of diatoms and their synonyms" (1968, J. Cramer, Lehre) became available.

Phylum: CHROMOPHYTA

Class BACILLARIOPHYCEAE

Order BACILLARIALES

Sub-order COSCINODISCINEAE

Family COSCINODISCACEAE

*Actinocyclus* Ehrenb.<sup>1</sup>

**A. barklyi** (Coates) Grun. var. **aggregatus** Ratt.—Anderson's Bay, Dunedin, W2; Bruce's Rocks, Dunedin, W2; Brighton, W2.

\***A. octonarius** Ehrenb. var. **octonarius** (*A. ehrenbergii* Ralfs ex Pritch.)—Lyll Bay, P; Bruce's Rocks, Dunedin, W2; Kakanui Beach, Dunedin, W2; Portobello, W2.

\***A. octonarius** Ehrenb. var. **ralfsii** (W. Sm.) Hendey. (*A. ralfsii* Ralfs ex Pritch.)—Foveaux Strait, P.

\***A. octonarius** Ehrenb. var. **sparsus** (Greg.) Hendey (*A. ralfsii* Ralfs ex Pritch. var. *sparsus* Greg.)—Lyll Bay, P.

\***A. octonarius** Ehrenb. var. **tenellus** (de Bréb.) Hendey (*A. moniliformis* Ralfs ex Pritch.; *Eupodiscus tenellus* de Bréb.; *E. minutus* Hantsch. in Rabenh.)—Lyll Bay, P (three records, as *A. moniliformis*, *E. minutus*, and *E. tenellus*); Goat Island, Otago Harbour, W2; Foveaux Strait, P.

*Coscinodiscus* Ehrenb.

**C. argus** Ehrenb. (*C. radiatus* Ehrenb. 1854, non *C. radiatus* Ehrenb. 1839)—Goat Island Bay, Leigh, T; Hauraki Gulf, CW2; Auckland Harbour, CW2; Lyll Bay, P.

\***C. asteromphalus** Ehrenb.—Goat Island Bay, Leigh, T; Hauraki Gulf, C1; Wellington Harbour, C1; Cook Strait, C1; Otago Peninsula, WCC, C2.

\***C. centralis** Ehrenb.<sup>2</sup>. Widely distributed. 11 records.