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A Further Account of the Marine Littoral Diatoms of the Saldanha Bay Lagoon, Cape Province, South Africa

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1. The diatom flora of several samples from four stations on the shores of Saldanha Bay (South Africa) has been studied.
2. A number of species new to science are described. These are:
Achnanthes navalis n. sp.
Amphora ridicula n. sp.
Navicula osterosa n. sp.
Striatella aberrans n. sp.
3. Reference is made in the text to systematic details and comments.

This paper deals with the continuation of an investigation of the marine littoral diatom flora of the Saldanha Bay Lagoon, situated on the west (Atlantic) coast of South Africa, about 110 km north of Cape Town. The author (Giffen 1975) recently published a description of the littoral diatoms from a single station viz. "Sand Baai" near the village of Langebaan on the eastern shore of the Saldanha Bay Lagoon. The six samples which were investigated proved to be very rich in taxa, 214 species including two new combinations and sixteen new species being recorded.

In view of proposed industrial development of the Lagoon entailing the building of a bulk loading harbour for iron ore, it was deemed expedient to complete the diatom survey before possible pollution of the site takes place. During 1970 and 1971 further samples were collected from four stations widely spaced around the shore of the lagoon. These stations were as follows:

- I. Noord Baai (1970) situated near the town of Saldanha.
617. Scrapings from drift algae chiefly *Ecklonia buccinalis*.
- II. Oesterwal to Flemming Point, an area south of Langebaan 4.4 km:
634–635. From the stems and leaves of *Zostera capensis* Setch. growing on mud in shallow water.
636. From masses of *Gracilaria confervoides* in shallow water.

III. Southern end of the lagoon near Schrywer's Hoek, a swampy area uncovered at low tide.
638 to 640. From algal masses on the mud or in cattle hoof marks, chiefly *Cladophora* sp. or *Enteromorpha* sp.

IV. Riet Vlei to Donker Gat. A shallow tidal flat forming a deep inlet into the north end of the peninsula which constitutes the west wall of the lagoon (1971).
664–666. From shallow swampy pools along the shore amongst *Enteromorpha* and *Cladophora*. These samples show a somewhat brackish or estuarine content rather than purely marine littoral species.

Systematic Part

Reference to original descriptions have only been given where species are of recent origin or not reported in wellknown modern literature or not previously reported by the author. Certain wellknown cosmopolitan species are dealt without citation. These species are described and figured effectively by Hustedt, 1930 (Bacillariophyta) and 1927–1966 (Kieselalgen). For convenience of reference genera and species are recorded in alphabetical order.

Achnanthes Bory 1822.

A. brevipes Agardh var. *typica* Cleve. – 638, 639, 640, 655, 666.
This species was dominant in sample 666.