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A supposedly new brachiopod from the Paleogene of Seymour Island, West Antarctica

ABSTRACT: The species of the brachiopod genus *Terebratella* d'Orbigny, which does not correspond to any one reported hitherto from the upper Eocene–?lower Oligocene La Meseta Formation of Seymour Island, West Antarctica but showing a strong affinity to the Recent *T. inconspicua* (Sowerby), is described.

Key words: Antarctica, Paleogene, paleontology (Brachiopoda).

Introduction

Brachiopods from Seymour Island have been earlier described by several authors (Buckman 1910, Owen 1980, Wiedman *et al.* 1988). The aim of this note is to announce the presence of a supposedly new brachiopod which does not

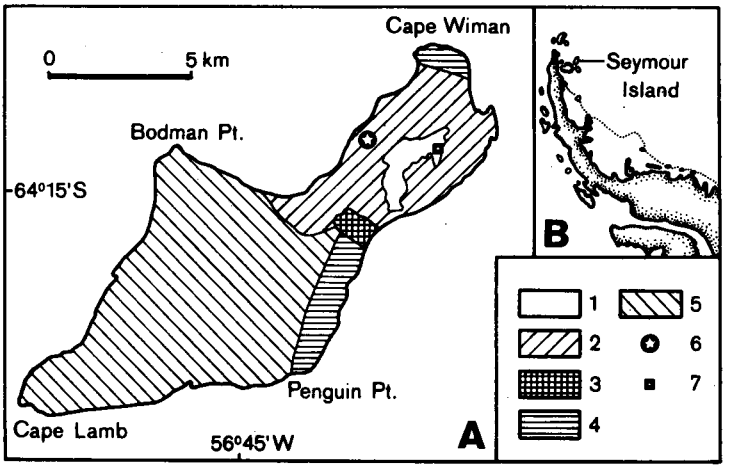

Fig. 1. Geological sketch map of Seymour Island (A) in the Antarctic Peninsula sector (B). 1 — Quaternary, 2 — La Meseta Formation, 3 — Cross Valley Formation, 4 — Sobral Formation, 5 — Lopez de Bertodano Formation, 6 — collecting site, 7 — Argentine *Vicecomodoro Marambio* Base

correspond to any species so far described from this region. It may be worth noting that numerous specimens of *Bouchardia antarctica* Buckman have been found in the same collecting site. All these brachiopods were collected by Assoc. Prof. Andrzej Gaździcki during the Argentine-Polish Field Party in 1988 (*see* Doktor *et al.* 1988). They come from the La Meseta Formation, unit II of Elliot and Trautman (1982) which is upper Eocene—?lower Oligocene in age (Zinsmeister 1982). For the location of the collecting site *see* Fig. 1. The investigated material is housed in the Institute of Paleobiology of Polish Acadamy of Sciences under the number ZPAL Bp.XXXIV.

Systematic paleontology

Family **Terebratellidae** King, 1850
Genus *Terebratella* d'Orbigny, 1847
Terebratella sp.
(Figs 2a-d)

M a t e r i a l. — Two complete specimens (one with slightly damaged umbo and lateral part).
D i m e n s i o n s: length 30.4 mm, width 25.9 mm, thickness 16.6 mm.
D e s c r i p t i o n. — Shell elongately oval in outline with maximum width about middle of the shell. Shell surface smooth with numerous growth lines visible. The shell is biconvex. Beak suberect. Hinge-line curved. Foramen large, round, of mesothyridid type. Deltidial plates small, disjunct. Anterior commissure strongly sulcate to slightly paraplicate. Interior features unknown.
R e m a r k s. — As the interior features are unknown it is difficult to determine with certainty the systematic position of the investigated specimens. There are a few genera of family Terebratellidae, *e.g. Magella* Thomson, *Magellania* Bayle or *Terebratella* d'Orbigny, which are separated mainly on the type of brachidium (*cf.* Thomson 1927). The genus *Magellania* Bayle can be excluded as it has deltidial plates forming a symphytium (compare definition of the genus in Thomson 1927 and Muir-Wood *et al.* 1965), which is absent in our material. The species belonging to the genus *Magella* Thomson are much smaller (*see* Buckman 1910, Owen 1980) than the studied specimens which have in external morphology most of the characteristic features of genus *Terebratella* d'Orbigny. However, the investigated specimens do not correspond to any species reported hitherto from Seymour Island (*see* Buckman 1910, Owen 1980, Wiedman *et al.* 1988). They are only similar to the species described and illustrated by Owen (1980, figs 27a-c) as *Terebratella crofti*, differing clearly, however, from it in the shell outline and the very strong sulcus starting at early stages. Even among the species illustrated by Wiedman *et al.* (1988) from the same formation on Seymour Island there is no form corresponding to the studied specimens. On the contrary, our species is nearly

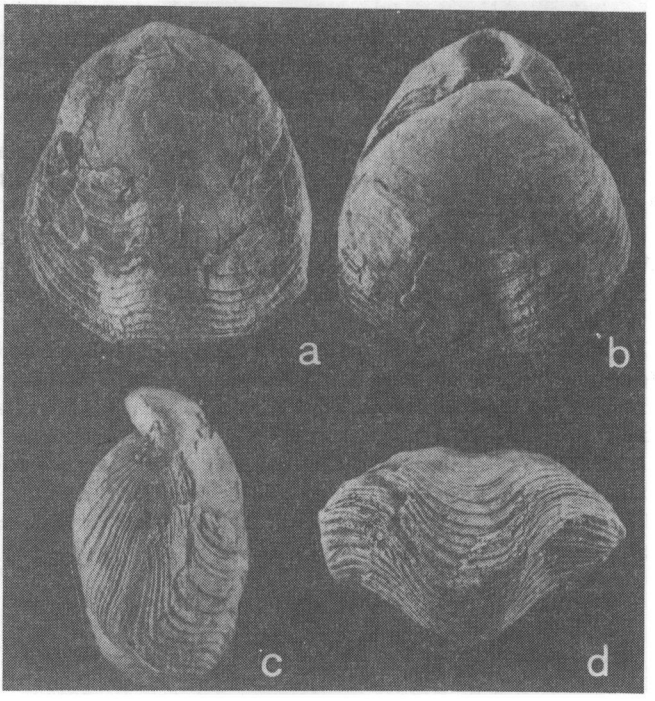

Fig. 2
Terebratella sp. ZPAL Bp.XXXIV/1
La Meseta Formation (upper Eocene—?lower Oligocene)
Seymour Island, Antarctica
a. ventral view, b dorsal view, c. lateral view, d. anterior view (with dorsal valve uppermost)
All × 1.5

identical with the Recent *Terebratella inconspicua* (Sowerby) described and illustrated by Foster (1974) from Chatham Islands, New Zealand, being only slightly larger and more elongate in outline. Thus, these brachiopods may be another example of heterochroneity of Southern Hemisphere faunas (*see* Zinsmeister and Feldmann 1984). As it follows from the above discussion the most probable assignment of the investigated specimens is to *Terebratella*, but the erection of a new species is not possible because of the insufficient material.

Occurence. — Seymour Island, La Meseta Formation (upper Eocene—?lower Oligocene), unit II. According to A. Gaździcki the collecting site corresponds to locality number 4 in Owen (1980).

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Streszczenie

Z utworów formacji La Meseta Wyspy Seymour (Antarktyka Zachodnia) opisano ramienionoga *Terebratella* sp. (fig. 1—2), reprezentującego najprawdopodobniej nowy gatunek nie notowany dotychczas w tym rejonie. Wykazuje on duże podobieństwo do współczesnego gatunku *Terebratella inconspicua* (Sowerby), znanego z Nowej Zelandii.