

ON TWO RECORDED SPECIES OF TERTIARY FORAMINIFERA FROM FOSSIL BLUFF, WYNYARD

By

P. G. QUILTY

University of Tasmania

(With one plate)

ABSTRACT

Reophax lodderae and *Nodosaria roemeri* Neugeboren var. *semicostata* were described by Goddard and Jensen from Fossil Bluff in 1907. *Reophax lodderae* probably is not a foraminifer but a broken echinoid spine. *Nodosaria roemeri* var. *semicostata* is renamed *Dentalina godjeni*, as *semicostata* and *costata* are preoccupied.

INTRODUCTION

Goddard and Jensen (1907) recorded foraminifera from Fossil Bluff (now regarded as Lower Miocene). The 'material was obtained from the debris of fossil mollusca collected at Table Cape', probably from the lower part of the section, as this is the only part of the section from which I can find the species remarked upon here.

In their paper, they described three new species. These were *Fronicularia trimorpha*, *Reophax lodderae* and *Nodosaria roemeri* var. *semicostata* (*N. costata* in plate explanation).

During a recent study on Tasmanian Tertiary foraminifera, I encountered two of the species they described, namely *Reophax lodderae* and *Nodosaria roemeri* var. *semicostata*. Both of these species deserve comment.

Goddard and Jensen did not list a repository for their type specimens. Dr A. Ritchie, Australian Museum and Dr P. Stanbury, Macleay Museum, have helped in the fruitless search for the specimens. Hence I must rely on Goddard and Jensen's figures and brief descriptions.

The newly separated specimens described are housed in the collections of the University of Tasmania, Geology Dept, and the number after the symbol U.T.G.D. represents the specimen number in that collection.

I am indebted to Mr M. R. Banks, University of Tasmania for criticising the manuscript.

1. *Reophax lodderae* Goddard and Jensen, 1907 (Figure 1)

Reophax lodderae probably is not a foraminifer. It is a small hollow echinoid spine. The specimen figured by Goddard and Jensen shows three 'chambers', the boundaries of which are delineated by the ends of several 'spicules'. I have recovered from the Freestone Cove Sandstone a single specimen of an echinoid spine which has the characters

they describe. The specimen is 1.5 mm long (twice the length of the specimen Goddard and Jensen described) and has the appearance of having five chambers, almost twice as many as their specimen. It also has a hollow core. In the new specimen, the 'spicules' do not terminate quite as regularly as Goddard and Jensen suggest, although the terminations are not random. The 'chamber' size, width of the specimen, characters of the 'spicules' and all other characters suggest that the two specimens belong to the same species.

Maximum diameter of figured specimen 1.52 mm.

Repository: U.T.G.D. 84552.

2. *Nodosaria roemeri* var. *semicostata* Goddard and Jensen, 1907 (Figure 2)

The species described by Goddard and Jensen as *Nodosaria* has a curved growth axis and thus belongs not to *Nodosaria* Lamarck but *Dentalina* Risso. The names *costata* and *semicostata* are both preoccupied several times, the former by *D. costata* de Pourtales, 1850 (*nomen nudum*), by *D. costata* Eichwald 1853 (questionably a *Nodosaria*) and perhaps by *Nautilus* (*Orthoceras*) *costatus* Batsch, 1791 [*Marginulina costata* (Batsch)]¹. *D. semicostata* is preoccupied by *D. semicostata* d'Orbigny, 1846 and *N. (Dentalina) pungens* var. *semicostata* (Reuss).

As both names proposed by Goddard and Jensen (1907) are preoccupied, the species is herein renamed *Dentalina godjeni* n. name, in honour of the original authors. The name is made up of Goddard and Jensen.

Description

Test free, uniserial, arcuate, circular in section, of about 10 chambers, forming a test on the average 4-5 mm long. All chambers but the last one or two bear about eight to ten longitudinal costae which become fainter on the later chambers. These costae are arranged slightly spirally, twisting through about 90° during the development of eight chambers. The later chambers are smooth. Aperture terminal, radiate, on the concave side of the test. Sutures moderately depressed in the last one or two chambers, almost flush in earlier chambers. Sutures initially perpendicular to the test axis, later often becoming slightly oblique, directed slightly basally on the concave side.

Chambers increase uniformly slowly in size except for the ultimate chamber which may be smaller than several preceding chambers.

The species is distinct from most initially costate forms in not having an initial spine at its basal end.

Occurrence and Age

Specimens of *D. godjeni* were recovered from Mussel Roe Bay (offshore specimens) in rocks which may be Upper Oligocene (U.T.G.D. 84483). The species is an obvious one in samples from the lower

part of the Fossil Bluff section in rocks which are Lower Miocene (U.T.G.D. 84010 a and b).

Figured specimen from Fossil Bluff (84010a).

Maximum diameter of figured specimen 4.4 mm (lectotype).

Repository: U.T.G.D.84293.

REFERENCE

- GODDARD, E. J. and JENSEN, H. I., 1907—Contributions to a knowledge of Australian foraminifera—Part II. *Proc. Linn. Soc. N.S.W.* Vol. 32, Pt. 2, pp. 291-318, pl. 6.

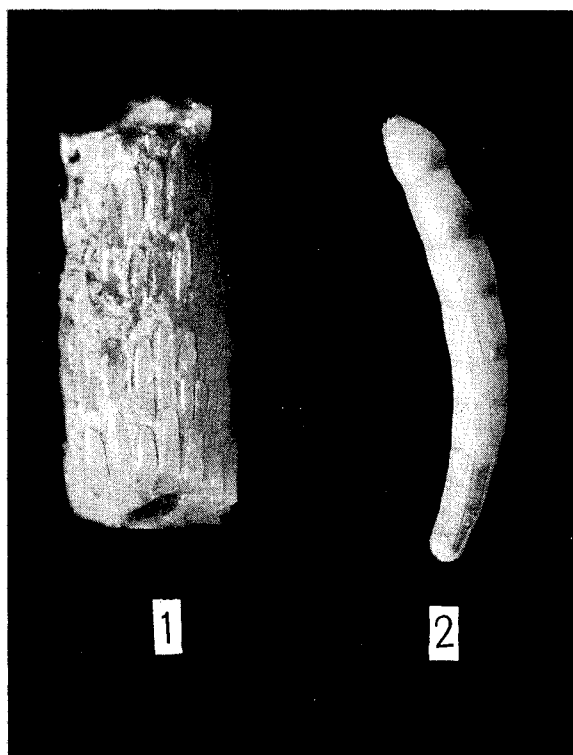


FIG. 1.—'*Reophax lodderae* Goddard and Jensen'. U.T.G.D. 84552. Lateral view, $\times 38$.

FIG. 2.—*Dentalina godjeni* n. name; lectotype, U.T.G.D. 84293, $\times 14$.

