

Description and Figures of New Lectotype and Paralectotype Material of Recent Brachiopod *Thecidellina maxilla* (Hedley, 1899)

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ABSTRACT. The material of *Thecidellina maxilla* (Hedley, 1899) from the type locality has only been illustrated as line drawings, no images have previously been published. The illustrations were a reconstruction from more than one specimen and are inaccurate for the size of the cardinal process. Hedley (1899) did not designate a holotype; newly designated lectotype and paralectotype specimens are described and figured and a new diagnosis of *T. maxilla* is provided.

Introduction

The first living thecideide described from the Pacific Ocean was collected from the western slopes of Funafuti Atoll, Ellice Islands (now Tuvalu) in the Mid-West Pacific (Fig. 1). The specimens were attached to sheets of dead coral from a depth of 70–150 m. Hedley (1899) named the species *Thecidea maxilla* and illustrated two valve interiors with line drawings (Fig. 2A,B, reproduced from Hedley, 1899, fig. 57). Thomson (1915) transferred the species *maxilla* into his new genus *Thecidellina* Thomson, 1915.

Since that first publication of Hedley, living and fossil material identified as *T. maxilla* has been described, figured, listed and discussed in many papers (see synonymy below) from localities in the West Pacific and Indian Oceans (Fig. 1). However, until this study, no images of *T. maxilla* from the type locality have ever been published. Hedley's illustrations (Fig. 2A,B) show the interiors of a dorsal and ventral valve; the collection of the Australian Museum, Sydney (AM) holds two valves of a single specimen (AM C.006202) that partially match these illustrations. When the illustrations in Hedley (1899) and images of this specimen

are compared (Fig. 2A,B and Fig. 2C,D respectively), the dorsal valve is clearly the same one, details of the canopy spicules have been copied, but the illustration is also stylized, the dorsal valve is illustrated as being more symmetrical than the actual specimen. The images of these valves (Fig. 2C,D) also show that the posterior part of the dorsal valve, including the cardinal process and many other important taxonomic features, has broken off and is still attached to the ventral valve. Therefore, the illustrations include reconstructions of the dorsal and ventral valve posteriors, based on more than one specimen, a fact not mentioned by Hedley.

A new lectotype and paralectotypes

The specimen AM C.006202 (Fig. 2C,D) is labelled as the holotype of *T. maxilla*. However, the holotype of a new species can only be fixed in the original publication by the original author (ICZN 73.1.3). Hedley (1899) provided a description of the morphological range of multiple specimens of his new species, but did not designate a single specimen as the holotype. Therefore, all the specimens he based his

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