

Taxonomic Revision of Recent Australian Nuculidae (Mollusca:
Bivalvia)
Except *Ennucula* Iredale, 1931

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SUMMARY

Taxonomy and distribution of 14 Recent Australian species of the family Nuculidae Gray, 1824 are described and discussed. Available data on biology and ecology are added. Illustrations and distribution maps of all species are given.

The genera *Pronucula* Hedley, 1902, and *Deminucula* Iredale, 1931, are considered synonyms of *Nucula* Lamarck, 1799. *Rumptonucula* is proposed as a new genus for *Pronucula vincentiana* Cotton and Godfrey, 1938. Lectotypes are selected for *Nucula pusilla* Angas, 1877, *Nucula micans* Angas, 1878, *Nucula torresi* Smith, 1885, *Nucula dilecta* Smith, 1891, *Nucula hedleyi* Pritchard and Gatliff, 1904, *Deminucula praetenta* Iredale, 1924, *Pronucula mayi* Iredale, 1930, and *Pronucula saltator* Iredale, 1939. *Nucula micans* Angas, *Nucula hedleyi* Pritchard and Gatliff, and *Pronucula concentrica* Cotton, 1930 are considered synonyms of *Nucula pusilla* Angas. *Pronucula voorwindeii* Bergmans, 1969 is synonymized with *Nucula torresi* Smith. *Nucula diaphana* Prashad, 1932 and *Pronucula flindersi* Cotton, 1930 are ranked as subspecies of *Nucula dilecta* Smith. The study also includes *Pronucula decorosa* Hedley, 1902, *Nucula beachportensis* Verco, 1907, and *Pronucula australiensis* Thiele, 1930, while four new species are described: *Nucula revei*, *Nucula covra*, *Nucula papuensis* and *Nucula brongersmai*. Notes on the zoogeography of the species involved are given.

INTRODUCTION

When, as a novice in the malacological field, I was first involved in the study of Australian species of the family Nuculidae Gray, 1824 my studies eventually resulted in two small publications (Bergmans, 1968; 1969). The first publication contained an account of six small nuculid species found in New South Wales, the second described a new species in the same category. The identifications in the first paper were mainly based on original descriptions and illustrations in literature, and the nomenclature used was taken from Hedley (1902), Iredale (1924), Cotton (1930) and Cotton and Godfrey (1938), with the assignation of all six species to the genus *Pronucula* Hedley, 1902. Both procedures, induced by the combination of the lack of comparative material and an uncritically high evaluation of earlier works, soon proved to be inadequate. Later opportunities to examine type material of these species and of others, and to study an extensive material of Australian Nuculidae in museum collections, revealed firstly that I had made — and published — several misidentifications, which needed correction, and moreover, that the taxonomy of the Australian Nuculidae required a general revision. My original intention to restrict my work to small New South Wales Nuculidae had been expanded already by the necessary study of type and other material from other Australian states.