

A New Species of the Genus *Neotrigonia* from off Western Australia

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The genus *Neotrigonia* is the well known bivalves as living fossils of Mesozoic origin and endemic in the seas around Australia. Five living species are recognized in this genus until today as follows:

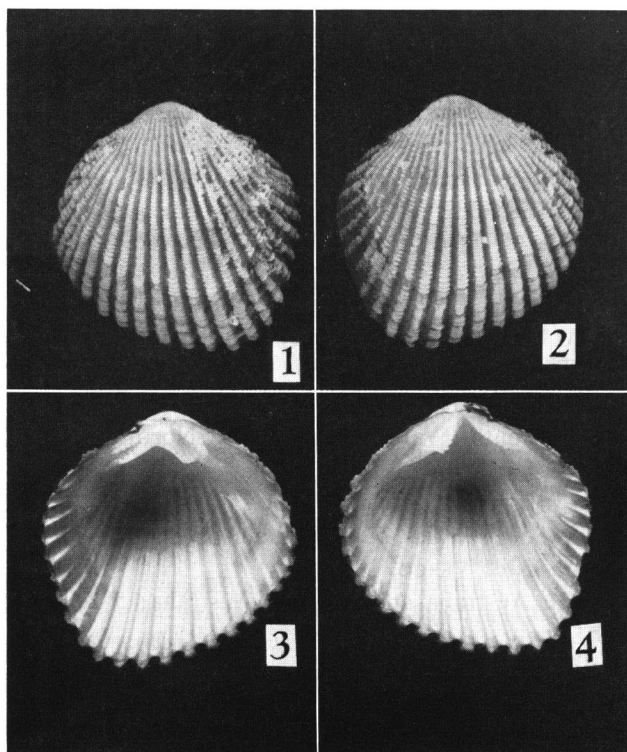
1. *Neotrigonia margaritacea* (LAMARCK, 1804)
Syn. *Trigonia antarctica* PERON, 1807; *T. pectinata* LAMARCK, 1819; *T. lamarckii* GRAY, 1838; *T. nobilis* A. ADAMS, 1854; *T. acuticostata* MCCOY, 1866; *T. reticulata* TENISON-WOODS, 1878.
Range: New South Wales, Victoria and Tasmania.
2. *Neotrigonia uniophora* (GRAY, 1847)
Syn. *Trigonia jukesii* A. ADAMS, 1850.
Range: New South Wales, Queensland, North Australia and Western Australia.
3. *Neotrigonia strangei* (A. ADAMS, 1854)
Range: New South Wales, 50–70 fathoms in depth.
4. *Neotrigonia bednelli* VERCO, 1912
Range: South Australia and Western Australia; 5–20 and 200 fathoms in depth.
5. *Neotrigonia gemma* IREDALE, 1924
Range: New South Wales, 50–70 fathoms in depth.

During the fisheries survey on the continental shelf of Western and South Australia by *R. V. Kaiyomaru* of the Far Seas Fisheries Research Laboratory, Shimizu City, in October to December of 1975, the crew collected many shells in which one live specimen of *Neotrigonia* was found by the writers. This is a very characteristic unnamed species distinguished from all the known forms by the surface sculpture as described herewith.

Neotrigonia kaiyomaruae sp. nov.

(Figs. 1-4)

Shell small for the genus, quadrately ovate in shape with the roundly curved anterior margin and widely truncated posterior margin, inaequilateral with rather long straight posterior dorsal and short anterior dorsal margins, thin, solid, ventral margin weakly arcuate. Umbo slightly prominent, rosy yellow paler to light yellowish brown marginal portion. Surface with 29 strong radial ribs with deep intersitial grooves which are narrower than radial ribs, crossing strongly and densely scaled growth cords. Hinge schizodonta as in other species. Interior pearly, pale purple and distinctly grooved corresponding with radial ribs on the surface and forming scalloped margin as the endings of ribs.



Figs. 1-4. *Neotrigonia kaiyomaruae* sp. nov. (holotype specimen). — 1, 3. Left valve. — 2, 4. Right valve.

Height 13.5 mm, length 14.0 mm and breadth 4.8 mm (figured holotype specimen preserved in the National Science Museum, NSMT-Mo 52281).

Type-locality. 35°01.1'S, 115°52.5'E, 73 m in depth (*R/V Kaiyomaru* St. 43) (Nov. 24, 1975).

Remarks. Only one specimen has been examined. It is, however, so characteristic in its shell having numerous radial ribs with densely set scales, that they cannot leave this interesting specimen without scientific name. *Neotrigonia gemma* IREDALE, collected from 40 miles east of Lakes Entrance, 50–70 fathoms, is the nearest ally in small size, but differs from this new species in having narrow radial ribs with spinous scales and broad interstitial grooves. *Neotrigonia strangei* (A. ADAMS) is the shell larger than this new species and bears stout radial ribs with strongly nodulous scales. *Neotrigonia uniophora* (GRAY) has less numerous radial ribs without scales on the posterior-portion of the surface. *Neotrigonia bednelli* VERCO has radial ribs with flat topped scales. The well known species, *Neotrigonia margaritacea* (LAMARCK), has radial ribs with distantly placed plate-like scales.

In closing, the writers wish to express their sincere thanks to the staff of the Far Seas Fisheries Research Laboratory for the kind permission to retain the type-specimen at the National Science Museum, Tokyo.

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