

Family PECTINIDAE

Genus *PARVAMUSSIUM* Sacco, 1897

1897. *Parvamussium* Sacco, I molluschi dei Terreni Terziari del Piemonte e della Liguria (24): 48.

Type species (by original designation): *Pecten duodecimlamellatus* Bronn, 1831, Miocene and Pliocene, Italy.

The taxonomy of *Parvamussium* in New Zealand is obscure, largely because the shells are exceedingly thin and fragile and are rarely well preserved as fossils. Dell (1956: 20) stated that juveniles of the Recent *P. maoria* have internal radial ribs extending to the margin of the disc, while specimens about 13mm high have the radial ribs extended over only two-thirds of the disc. Dell (1963: 206) later noted that the species reaches at least 22mm in diameter, and in specimens of this size the radial ribs extend over only the inner one-third of the valve. Most useful fossils of *Parvamussium* are steinkerns, in which the internal ribs are the only visible taxonomic character, and the variation in rib length with shell size greatly complicates taxonomy.

From Marwick's (1931: pl. 4, figs. 66, 67) figures, *Parvamussium zitteli* (Hutton) appears to be easy to recognise, as the internal ribs reach the outer margin of the shell regardless of size. No specimens larger than 25mm high have been seen with this character, and the specimen with ribs extending over about two-thirds of the disc identified as *P. aff. zitteli* by Marwick (1931: 64, pl. 4, fig. 69) is probably the adult form of *zitteli*. This specimen closely resembles the figure of the holotype of *P. papakurense* given by Clarke (1905: pl. 32, fig. 4). A specimen of *Parvamussium* 43mm high, collected by the writer from cliffs of the upper Mata River 200 yards above Ihungia Road bridge, Gisborne (?Altonian) has the ribs extending over only two-thirds of the shell, and is probably a large adult *P. zitteli*. The status of all named species is obscure, and in the present state of our knowledge small fossil specimens of *Parvamussium* appear to be impossible to identify.

Many fragments of large specimens of *Parvamussium*, from shells that must have been up to about 30mm high, were collected at N165/947, V1951, McLeod's Stream, and three small fragments were collected at N165/945, V1949, Bell's Creek. Their internal ribs extend over about two-thirds of the valve, and they are tentatively placed in *P. zitteli* (Hutton).

Parvamussium zitteli has a time range of at least Whaingaroan to Tongaporutuan (Oligocene to Upper Miocene) in New Zealand, and it is unlikely that *P. papakurense* (Clarke) is a distinct species. *P. maorium* Dell appears to be a direct descendant of *P. zitteli* (Hutton).

Family CRASSATELLIDAE

Genus *CUNA* Hedley, 1902

1902. *Cuna* Hedley, Mem. Aust. Mus. 4: 314.

Type species (by original designation): *Cuna concentrica* Hedley, 1902, Recent, Tasmania.

Cuna awheaensis n.sp. Pl. 3, a, b.

Shell small, roundly trigonal, with lightly rounded posterior margin and vertical umbones. Sculpture of 14 narrow, flat-topped, widely spaced radial riblets with square-cut sides and broad, flat interstices, becoming weak over the outer quarter of the valve, crossed by many very weak concentric growth lines. Interior of ventral margin lightly corrugated by the exterior ribs. Prodissoconch worn. Hinge typical of the genus.

DIMENSIONS: height, 3.10mm; length, 2.80mm (Holotype); height, 3.50mm; length, 3.10mm (largest paratype, VM442).

LOCALITY: N165/945, V1949, Bell's Creek, trib. of Mangaopari Stream, holotype and 20 paratypes.