

Genus *MONIA* Gray, 1850

1850. *Monia* Gray, Proc. Zool. Soc. London 17: 121 (as a section of *Placunanomia*).

Type species (subsequent designation, Kobelt, 1881): *Anomia zelandica* Gray, 1843, Pliocene to Recent, New Zealand and southern Australia.

Left valve moderately thick; right valve very thin and transparent, except in some large specimens. Byssal notch very large, open at the dorsal margin by a slit, as in *Anomia*; byssal "plug" a large, thin, vertically striated plate with a projecting dorsal spine, firmly welded to the substratum and completely free of the shell. Resilial process as in *Anomia* and *Patro*. Sculpture of weak to moderately strong radial ribs, which may bear semitubular spines.

The genera *Monia*, *Placunanomia* and *Pododesmus* are distinguished by the following features. In *Monia* the resilial crurum has only a single dorsal resilial surface, as in *Anomia*; in *Pododesmus* the crurum is approximately triangular, with anterior and posterior dorsal resilial surfaces, whereas that of *Placunanomia* consists of two completely separate slender crura. In *Monia* the right valve is very thin in all but senile specimens, but it is considerably thicker in *Placunanomia* and *Pododesmus*. The byssal plug is small and permanently fused into the shell in *Placunanomia* and *Pododesmus*, but is large, thin and completely free in *Monia*. Finally, *Monia* and *Pododesmus* have moderately coarse radial ribs that usually bear scales or spines, whereas *Placunanomia* has fine, close, radial riblets.

## SYSTEMATICS OF SPECIES

The suggested classification of Australasian species that I have been able to examine is set out below.

## Subfamily ANOMIINAE

## Genus ANOMIA Linnaeus

*Anomia trigonopsis* Hutton, 1877. Text-figs. 1b, 3 e-i.

1873. *Anomia alectus* "Gray". Hutton, Cat. Mar. Moll. N.Z.: 83 (not of Gray, 1850).  
 1873. *Anomia cytaeum* "Gray". Hutton, Cat. Mar. Moll. N.Z.: 83 (not of Gray, 1850).  
 1877. *Anomia trigonopsis* Hutton, Trans. N.Z. Inst. 9: 598.  
 1895. *Anomia walteri*. Hector, Trans. N.Z. Inst. 27: 292.  
 1913. *Anomia Huttoni* Suter, Man. N.Z. Moll.: 843, pl. 57, f. 8.  
 1913. *Anomia undata* "Hutton". Suter, Man. N.Z. Moll.: 843, pl. 57, f. 9 (not of Hutton, 1885).  
 1913. *Anomia walteri* Hector. Suter, Man. N.Z. Moll.: 844, pl. 57, f. 10.  
 1915. *Anomia trigonopsis* Hutton. Suter, N.Z. Geol. Surv. Pal. Bull. 3: 48, Pl. 6, f. 1a, 1b.  
 1918. *Anomia poculifera*. Marshall, Trans. N.Z. Inst. 50: 20, pl. 21, f. 1, 1a.  
 1920. *Anomia trigonopsis* Hutton. Thomson, Trans. N.Z. Inst. 53: 368.  
 1929. *Anomia trigonopsis* Hutton. Powell and Bartrum, Trans. N.Z. Inst. 60: 398.  
 1931. *Anomia trigonopsis* Hutton. Marwick, N.Z. Geol. Surv. Pal. Bull. 13: 66, pl. 3, f. 40, 41.

The above records only the synonyms and principal later references. A complete synonymy would fill many pages.

The type locality of *Anomia trigonopsis* is White Rock River, South Canterbury (Awamoan, Lower Miocene). Suter (1915: 48) could not find the holotype, and selected a neotype from the same locality. The holotype of *Anomia walteri* is a Recent specimen from Paihia, Bay of Islands.