



***Bullastra* Bergh, 1901**

Diagnostic features

This genus is generally similar to *Austropeplea* but differs in its larger size and in having a distinctive twist in the columella. They have a fully aquatic (rather than amphibious) habit. These large-sized globose snails have large apertures and low to medium spires. The animal has fleshy triangular tentacles.

Classification

Bullastra Bergh, 1901

Class Gastropoda

Infraclass Heterobranchia

Megaorder Hygrophila

Order Lymnaeida

Superfamily Lymnoidea

Family Lymnaeidae

Subfamily: Amphipepleinae

Genus *Bullastra* Bergh, 1901

Type species: *Bullastra velutinoides* Bergh, 1901 (= *Bullastra cumingiana* (Pfeiffer, 1855))

Original reference: Bergh, R. (1901) (1870-1908). Malacologische Untersuchungen in Semper, C. *Reisen im Archipel der Philippinen*, Theil 2. *Wissenschaftliche Resultate*. Kreidel, Weisbaden.

Type locality: Philippines

State of taxonomy

We primarily follow Puslednik et al. (2009), however, lymnaeid taxonomy is in urgent need of a comprehensive review.

Biology and ecology

Amongst aquatic vegetation in dams, ponds, billabongs, sluggish rivers and streams. Often seen with the foot uppermost floating on the surface of the water. Feeds on algae and detritus. Egg mass a crescent-shaped jelly strip containing many small eggs. Development direct.

Distribution

Philippines and mainland Australia.

Notes

Unlike *Austropeplea* species in this genus are not intermediate hosts of Liver Fluke (*Fasciola hepatica*).

Further reading

Beesley, P. L., Ross, G. J. B. & Wells, A., Eds. (1998). *Mollusca: The Southern Synthesis. Parts A & B*. Melbourne, CSIRO Publishing.

Blair, D. & Finlayson, C. M. (1981). Observations on the habitat and biology of a lymnaeid snail, *Austropeplea vinosa* (Gastropoda: Pulmonata), an intermediate host of avian schistosomes in tropical Australia. *Australian Journal of Marine and Freshwater Research* 32: 757-767.

Boray, J. C. & McMichael, D. F. (1961). The identity of the Australian lymnaeid snail host of *Fasciola hepatica* L. and its response to environment. *Australian Journal of Marine and Freshwater Research* 12: 150-163.

Hubendick, B. (1951). Recent *Lymnaeidae*: their variation, morphology, taxonomy, nomenclature and distribution. *Kongliga Svenska Vetenskapsakademiens Handlingar* 3: 1-223.

Inaba, A. (1969). Cytotaxonomic studies of lymnaeid snails. *Malacologia* 7: 143-168.

Iredale, T. (1943). A basic list of the fresh water Mollusca of Australia. *Australian Zoologist* 10: 188-230.

Puslednik, L., Ponder, W. F., Downton, M. & Davis, A. R. (2009). Examining the phylogeny of the Australasian Lymnaeidae (Heterobranchia: Pulmonata: Gastropoda) using mitochondrial, nuclear and morphological markers. *Molecular Phylogenetics and Evolution* 52: 643-659.

Remigio, E. (2002). Molecular phylogenetic relationships in the aquatic snail genus *Lymnaea*, the intermediate host of the causative agent of fascioliasis: insights from broader taxon sampling. *Parasitology Research* 88: 687-696.

Smith, B. J. (1992). Non-marine Mollusca. Pp. i-xii, 1-408 in W. W. K. Houston. *Zoological Catalogue of Australia*, 8. Canberra, Australian Government Publishing Service.

Smith, B. J. & Kershaw, R. C. (1979). *Field guide to the non-marine Molluscs of South-eastern Australia*. Canberra, A.N.U. Press.

Shea, M. (1995). Freshwater molluscs of Sydney. *Australian Shell News* 88: 4-6.

Vinarski, M. V., Clewing, C. & Albrecht, C. (2019). Lymnaeidae Rafinesque, 1815. Pp. 158-162 in C. Lydeard & Cummings, K. S. *Freshwater Mollusks of the World: a Distribution Atlas*. Baltimore, John Hopkins University Press.

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https://keys.lucidcentral.org/keys/v3/freshwater_molluscs/

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