



***Edgbastonia* Ponder, 2008 in Ponder, Wilke, Zhang, Golding, Fukuda & Mason, 2008**

Diagnostic features

Shells small to moderate in size, elongate-conic to depressed trochiform, whorls convex (angled in one species), aperture subpyriform, peristome slightly to moderately thickened, inner lip usually separated from parietal wall, attached in one species; narrowly to moderately umbilicate; one species non-umbilicate. Columella usually smooth but bears a fold in the type species. Sculpture of growth lines only, or weak axial ribs present. Protoconch of 1.1–1.5 whorls, minutely to moderately punctate to granulate. Operculum yellowish to reddish, subpyriform, paucispiral with last whorl large, nucleus acentric; inner surface usually without white smear (present in one species), usually without weak protuberance or thickening. Radula with median cusp of central teeth longer and about equal to much wider than adjacent cusps; lateral margins moderate to narrow; innermost of two (rarely one) basal cusps short to moderate, usually narrow; basal tongue narrow U-shape. Male with prostate gland pyriform to bean-shaped, with about third to slightly more than half of length in pallial wall. Pallial vas deferens strongly undulating to coiled. Penis variable, distal end usually tapering, expanded in few species, sometimes with short to long papilla; glands absent. Female with coiled oviduct rather short, forming simple vertical arch or loop. Bursa copulatrix lies mostly behind or beneath albumen gland. Vestibule simple to greatly expanded; genital opening terminal to subterminal opening ventrally to laterally; sometimes with associated cowl or gutter (from Ponder et al. 2021).

Species of *Edgbastonia* (*Barcaldinia*) differ from the typical subgenus in lacking a columellar fold, in having a yellowish (not reddish) operculum and in the ventral channel being attached and open to the capsule gland (not separate from it).

Classification

Edgbastonia Ponder in Ponder, Wilke, Zhang, Golding, Fukuda, & Mason 2008

Class Gastropoda

Infraclass Caenogastropoda

Order Littorinida

Suborder Rissoidina

Superfamily Truncatelloidea

Family Tateidae

Genus *Edgbastonia* Ponder in Ponder, Wilke, Zhang, Golding, Fukuda, & Mason 2008

Type species: *Edgbastonia alanwillsi* Ponder in Ponder *et al.*, 2008.

Original reference: Ponder, W. F., Wilke, T, Zhang, W. H., Golding, R. E., Fukuda, H, and Mason, R. A. B. 2008. *Edgbastonia alanwillsi* n. gen & n. sp. (Tateinae: Hydrobiidae s.l.: Rissoidae: Caenogastropoda); a snail from an artesian spring group in western Queensland, Australia, convergent with some Asian *Amnicolidae* *Molluscan Research* 28: 89–106.

Type locality: Unnamed spring about 11 km SSE of 'Edgbaston' homestead, about 0.8 km south of main road, 28 km northeast of Aramac, Queensland.

Two subgenera are recognised:

Edgbastonia (*Edgbastonia*) Ponder in Ponder, Wilke, Zhang, Golding, Fukuda, & Mason 2008

Edgbastonia (*Barcaldinia*) Ponder, Zhang, Hallan & Shea, 2019 (Type species *Jardinella edgbastonensis* Ponder & Clark, 1990)

Biology and ecology

Lives in (mainly artesian) springs, many of which are threatened habitats.

Distribution

Species in this genus are found in the artesian springs of the Barcaldine Supergroup and in non-GAB springs associated with the Einasleigh Uplands in the lower part of Cape York.

Further reading

Fensham, R., Ponder, W. & Fairfax, R. (2010). *Recovery plan for the community of native species dependent on natural discharge of groundwater from the Great Artesian Basin. Report to Department of the Environment, Water, Heritage and the Arts, Canberra.* Queensland Department of Environment and Resource Management, Brisbane. <https://www.environment.gov.au/system/files/resources/0cefc83a-3854-4cff-9128-abc719d9f9b3/files/great-artesian-basin-ec.pdf>

Fensham, R. J., Silcock, J. L., Kerecsy, A. & Ponder, W. F. (2011). Four desert waters: setting arid zone wetland conservation priorities through understanding patterns of endemism. *Biological Conservation* 144: 2459-2467.

Ponder, W. (2019). Tateidae Thiele, 1925. Pp. 134-138 in C. Lydeard & Cummings, K. S. *Freshwater Mollusks of the World: a Distribution Atlas*. Baltimore, John Hopkins University Press.

Ponder, W. F. & Clark, G. A. (1990). A radiation of hydrobiid snails in threatened artesian springs in western Queensland. *Records of the Australian Museum* 42: 301-363.

Ponder, W. F., Wilke, T., Zhang, W.-C., Golding, R. E., Fukuda, H. & Mason, R. A. B. (2008). *Edgbastonia alanwillsi* n. gen. and n. sp. (Tateinae: Hydrobiidae s.l.: Rissoidae: Caenogastropoda): a snail from an artesian spring group in western Queensland, Australia, convergent with some Asian *Amnicolidae*. *Molluscan Research* 28: 89-106.

Ponder, W. F., Zhang, W.-H., Hallan, A., & Shea, M. E. (2019). New taxa of Tateidae (Caenogastropoda, Truncatelloidea) from springs associated with the Great Artesian Basin and Einasleigh Uplands, Queensland, with the description of two related taxa from eastern coastal drainages. *Zootaxa* 4583(1): 1-67.

Rossini, R. A., Fensham, R. J. & Walter, G. H. (2017). Spatiotemporal variance of environmental conditions in Australian artesian springs affects the distribution and abundance of six endemic snail species. *Aquatic Ecology* 51: 511-529.

Rossini, R. A., Tibbetts, H. L., Fensham, R. J. & Walter, G. H. (2017). Can environmental tolerances explain convergent patterns of distribution in endemic spring snails from opposite sides of the Australian arid zone? *Aquatic Ecology* 51: 605-624.

Rossini, R. A., Fensham, R. J. & Walter, G. H. (2016). Determining optimal sampling strategies for monitoring threatened endemic macro-invertebrates in Australia's artesian springs. *Marine and Freshwater Research* 67: 653-665.

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

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