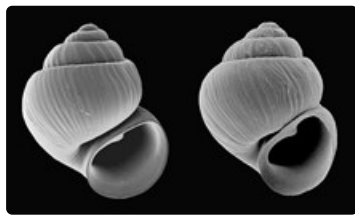




Edgbastonia (Edgbastonia) alanwillsi **Ponder in Ponder, Wilke, Zhang, Golding, Fukuda & Mason, 2008**



Edgbastonia (Edgbastonia) alanwillsi (adult size 2.0 - 2.4 mm)



Distribution of *Edgbastonia (Edgbastonia) alanwillsi*.



A small spring on Edgbaston Station, typical habitat of *Edgbastonia (Edgbastonia) alanwillsi*. Photo: J. Ponder.

Diagnostic features

Shell ovate-conic, protoconch of about 1.1 whorls; teleoconch with fine spiral threads, aperture with short columellar keel-like fold. Central teeth with two pairs of basal cusps, outer pair much smaller than inner. Male with narrow pallial vas deferens having several coils, penis long, simple, tapering to point, penial duct narrow throughout. Female with posterior bursa copulatrix and seminal receptacle; albumen gland shorter than capsule gland; common duct opens to large ventral chamber open to posterior capsule gland; chamber narrows anteriorly to form tube separate from anterior half of capsule gland, and extends anterior to gland.

Classification

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

Class Gastropoda

Infraclass Caenogastropoda

Order Littorinida

Suborder Rissoioidina

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).

Subgenus *Edgbastonia*

Original name: *Edgbastonia alanwillsi* Ponder. In 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.: Rissooidea: Caenogastropoda); a snail from an artesian spring group in western Queensland, Australia, convergent with some Asian Amnicolidae. *Molluscan Research* 28: 89–106.

Type locality: Edgbaston Station near Aramac, Spinifex Ridge Spring, Queensland.

Biology and ecology

The species is uncommon, mostly found in very small numbers (usually only one or a few even in samples that can contain hundreds of tateids) and has been found in a few of the active springs at Edgbaston and in a couple of seepages on the adjoining Myross Station. Given its general similarity to one of the most abundant of the Edgbaston tateids, and its rarity, it has not been observed in the field so its preferred microhabitat is unknown.

Distribution

Restricted to a small group of springs on Edgbaston and Myross Station near Aramac in western Queensland in the Barcaldine Supergroup.

Notes

The shape of the shell of this species somewhat resembles *Edgbastonia (Barcaldinia) edgbastonensis* Ponder & Clark, 1990, found in the springs at Edgbaston Station. *Edgbastonia alanwillsi* differs in its shell being a little smaller and narrower, and having a distinctive columellar tooth. In addition, the operculum retracts only as far as the outer part of the aperture in the species currently included in *Edgbastonia (Barcaldinia)*, whereas in *Edgbastonia (Edgbastonia)* it retracts out of sight deep within the aperture, exposing the columellar tooth.

Based on morphology, *Edgbastonia (Edgbastonia)* does not appear to be closely related to any of the species included in the subgenus *Barcaldinia* but molecular analysis places it with them. In shell characters, *Edgbastonia* resembles some members of the Asian Amnicolidae.

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>

Ponder, W. F. (2004). Endemic aquatic macroinvertebrates of artesian springs of the Great Artesian Basin—progress and future directions. *Records of the South Australian Museum Monograph Series* 7: 101-110.

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.: Rissooidea: 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.

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

To contact the authors for comment or suggestions, please email: fwmollusc@gmail.com

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