



Lymnaea (Pseudosuccinea) columella

Say 1817

mimic lymnaea

Taxonomy & Systematics. Among the families of strictly freshwater basommatophoran pulmonates, the worldwide Lymnaeidae is generally held to have retained the greatest fraction of ancestral characters. They are anatomically conservative, most species being assigned to the typical genus *Lymnaea* by Hubendick. Lymnaeids may, however, display great interpopulation diversity in life history and various aspects of external morphology, especially shell, which has led to a proliferation of specific nomena.

The gill has been lost, leaving respiration to occur across the entire mantle cavity, as is true for pulmonates in general. This can be seen as an adaptation to the colonization of warm or stagnant freshwaters, where the concentration of oxygen may be reduced. All of the lymnaeid species of southern Atlantic drainages are to some extent amphibious, often being observed above the water line. They are hermaphroditic, as is also true for pulmonates in general, typically capable of self-fertilization and laying eggs in gelatinous, sausage-shaped masses with a tough covering.

Many authors place *columella* in the monotypic genus *Pseudosuccinea*, a convention which VDGIF follows. We prefer Hubendick's simpler classification of the Lymnaeidae, however, with *Pseudosuccinea* a subgenus.

Habitat & Distribution. *Lymnaea columella* is ubiquitous in the southern Atlantic drainages and throughout Virginia, especially in the lower Piedmont and Coastal Plain. Populations reach maximum abundance in slow waters and lentic environments, especially at the margins of lakes, ponds, and swamps, on floating or emergent vegetation. Elsewhere it is widespread throughout eastern North America, and has been introduced around the world.

Ecology & Life History. Our field observations suggest that *L. columella* may rival populations of *Physa acuta* in the speed with which they invade new and disturbed habitats in southern Atlantic drainages. Less is known about its biology, however, perhaps because the amphibious habit of *L. columella* does not suit it well for culture in the tanks or cups that serve as standard laboratory vessels. It has a stronger trophic apparatus than *Physa*, adapted for consuming filamentous algae and macrophytes. Jokinen reported two generations per year in an *L. columella* population from Connecticut.

Conservation Status. NatureServe G5/S5 - Secure.

