TWO NEW NORTH AMERICAN PULMONATA: PARAVITREA SERADENS AND PHILOMYCUS SELLATUS

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ABSTRACT

Paravitrea seradens Hubricht (Zonitidae) from Gauley Bridge, Fayette Co., West Virginia, and the slug Philomycus sellatus Hubricht from Princeton, Jackson Co., Alabama, are described as new species. Additional geographical records are given for Helicodiscus triodus Hubricht. Anatomical notes are made on Triodopsis occidentalis (Pilsbry and Ferriss) and Polygyriscus virginianus (P. R. Burch).

Triodopsis occidentalis (Pilsbry & Ferriss)

Triodopsis obstricta occidentalis (Pilsbry and Ferriss), Pilsbry, H. A., 1940, Land Mollusca of North America (north of Mexico). Aca. Nat. Sci. Philadelphia, Mono. 3, 1: 829.

Mesodon sargentianus (Johnson & Pilsbry), Vagvolgyi, J., 1968, Bull. Mus. Comp. Zool. 136: 210.

I recently collected this species alive near Locust Grove, Independence Co., Arkansas. The genitalia was found to be similar to that of *T. denotata* (Férussac) (Pilsbry, fig. 473-6.). The shell appears to be a connecting link between *T. obstricta* (Say) and *T. fosteri* (F. C. Baker). The aperture is somewhat intermediate between these two species. The periphery varies from strongly angulate to carinate.

Paravitrea seradens new species FIGS, 1a-c.

Description: Shell small, pale amber, subhyaline, glossy; spire low, dome-shaped, sutures shallow, sculpture of numerous irregularly spaced radial grooves; periphery somewhat flattened giving the shell a quadrate appearance in immature shells, becoming more rounded at maturity; umbilicus deep and well-like exhibiting all the whorls, contained over 5 times in the diameter of the shell, base flattened and excavated around the umbilicus; whorls slowly expanding, last whorl expanding more rapidly and deflected downward to the aperture; aperture lunate, oblique; lip thin, simple; internal armature of one or more pairs of rather large teeth on the outer

and basal walls at all stages of growth, except in an occasional very old shell.

Height 2.8 mm., diameter 5.5 mm., aperture height 2.0 mm., diameter 2.5 mm., umbilicus diameter 1.0 mm., 6.9 whorls. Holotype.

Distribution: West Virginia: Kanawha Co.: wooded hillside, Hernshaw. Fayette Co.: below Cane Branch Falls, 1.5 miles east of Gauley Bridge, holotype 173020 and paratypes 173021 Field Museum of Natural History, other paratypes A8774 collection of the author. Wyoming Co.: mountainside, 2.8 miles northeast of Wolf Pen. Logan Co.: ravine, 4.8 miles southwest of Holden. Mingo Co.: Gyandot River bluff, opposite Justice; mountainside, 0.7 mile north of Cinderella. McDowell Co.: ravine, 4 miles northeast of Welch.

Remarks — Paravitrea seradens is most closely related to P. capsella (Gould) differing in having at least one pair of teeth at all stages of growth; in having a more expanded aperture; in having the base more impressed around the umbilicus; and in having a larger umbilicus in immature shells, the umbilicus being more well-like. The type locality for this species is also the type locality for Helicodiscus triodus Hubricht and Carychium clappi Hubricht.

Polygyriscus virginianus (P. R. Burch)

Polygyra virginianus P. R. Burch, 1947, The Nautilus 61: 40.

Polygyriscus virginianus (P. R. Burch), Burch J. B., 1962, How to Know the Eastern Land Snails. Wm. C. Brown Co., Dubuque, Iowa. p. 148.

On a recent visit to the type locality I succeeded in collecting a series of living specimens of this species by "mining" at the right spot. Immature shells have epidermal fringes on the spiral ridges, and look very much like immature *Helicodiscus fimbriatus* Wetherby, but are without teeth. After maturity these fringes wear off and they are completely gone in old shells. In adults there is a transverse tooth on the base a short distance within the aperture. This was not mentioned in the original description. *P. virginianus* seems closely related to *Helicodiscus* but whether it should be placed in that genus is left open pending anatomical studies.

Helicodiscus triodus Hubricht

This species can be added to the growing list of cave snails, as it has been found living in the two caves listed below.

West Virginia: Monroe Co.: McClungs Cave, Zenith. Greenbrier Co.: McClungs Cave, 1.5 miles northeast of Maxwelton. These two caves are not connected, although they have the same name. They are about thirty miles apart.

Philomycus sellatus new species FIGS. 1d-e

The mantle pattern is black on a Description: white or cream background in very young slugs; as they become older the pattern becomes lighter, dark gray in half-grown slugs and brownish gray in adults and the background becomes darker so that the pattern is somewhat obscured. The forward end of the mantle is irregularly mottled; behind this is an area in which the dark pigment is greatly reduced. About one-third of the way back is a transverse dark band with irregular margins. On the latter half of the mantle there is a broad dorsal band which is bordered by a series of elongated black spots. On each side there is a narrow longitudinal band with irregularly scattered mottling above and below. This mottling may become so thick as to obscure the lateral bands and merge them with the dorsal band. The tentacles are dark gray, and the foot is white. The maximum length of adults when extended in crawling is about 100 mm.

Distribution: Alabama: Jackson Co.: wooded hillside, 1.7 miles northeast of Princeton, holotype 157322 F. M. N. H., paratypes 30066 collection of the author; base of Putnam Mtn., 4 miles northwest of Princeton; Woodville (H. E. Sargent); Russell Cave

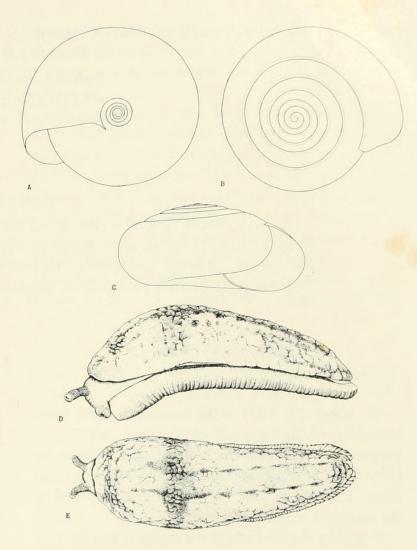


FIG. 1A-C. Paravitrea seradens Hubricht, holotype. FIG. 1D-E. Philomycus sellatus Hubricht, holotype.

National Monument. Madison Co.: wooded hillside, 1.3 miles northeast of New Hope: base of Sharp Mtn., near Sneeds Spring, Sharps Cove, northeast of Maysville. *Tennessee:* Franklin Co.: hilltop, 2.5 miles south-southeast of Huntland. Marion Co.: Raven Den Point Sink, 1.8 miles west of Martin Spring.

Remarks: Philomycus sellatus is most closely related to P. carolinianus (Bosc). The latter half of the mantle is not distinguishable, but the transverse light band followed by a dark band on the forward half will readily separate it. Philomycus sellatus is the common upland slug of northeastern Alabama and adjacent Tennessee. It sometimes occurs with P. carolinianus.

Illustrations by Miss Carole Wrigley provided through the courtesy of Field Museum of Natural History.



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