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A NEW SPECIES OF MICROMYA

BY BRYANT WALKER

*Micromya ortmanni*, new species

Shell elliptical, quite solid, not much inflated, posterior ridge scarcely observable; beaks low, their sculpture apparently a few coarse ridges looped up in the middle; surface with irregular, concentric growth-lines, occasionally inclined to be sulcate; epidermis dull colored, not shining, in mature examples, yellowish-brown, lighter or darker, with usually narrow, more or less irregular, green rays on the posterior part; there are two rather short, stout pseudocardinals in the right valve separated by a square interval for the reception of the larger pseudocardinal in the left valve, which has also a vestigial pseudocardinal near the hinge margin; two rather short, somewhat curved laterals in the left valve and one in the right; muscle scars shallow, the posterior nearly round; nacre of a peculiar salmon or flesh color, slightly suffused with purple, more intense in the beak cavities and, usually, fading

into a bluish white towards the margins but in occasional old specimens extending quite to the margin, slightly iridescent posteriorly. Male shell elliptical, somewhat full at the posterior base, behind which there is a faint indication of a radial constriction; posterior point blunt, about half way up the height of the shell, dorsal slope regularly curved from the ligament to the posterior point. The female shell has a well marked marsupial swelling at the extreme post-base and the shell is truncated from this to the posterior point, which is situated about two-thirds up from the base, behind the marsupial expansion there is a well marked radial constriction and the posterior margin is incurved where it reaches the margin.

Length, male (type, figs. 1-2) 41.9, height 24.9, diam. 16.6 mm.; female (type, figs. 5-6) 39.7, height 24.4, diam. 16 mm.; female (figs. 3-4) 42.8, height 26.7, diam. 17 mm.

Type locality: Green River, Mammoth Cave, Ky. Also Sulphur Fork of Russell Creek, Adair Co., Ky.

Types in the Museum of Comparative Zoology, Cambridge, Mass. Paratypes in the collection of Bryant Walker.

This species is more closely related to *M. vanuxemensis* Con. than to any other. While it is like that species in having a constriction behind the marsupial expansion, which, however, is not so well developed in this species, it differs in being comparatively more elongate and much more solid, the pseudocardinals are shorter and stouter, the laterals shorter, the brownish-yellow epidermis with narrow, irregular rays is characteristic and the color of the nacre is quite peculiar.

Of the twenty-five specimens in the original lot, ten are mature or nearly mature females and of these nearly all have the more depressed form shown by figs. 5 and 6 and that may be considered the normal female expression. But half-grown examples are more expanded posteriorly and resemble the specimen shown by figs. 3 and 4 and apparently in that shell the immature form has persisted to maturity. In immature shells the epidermis is smoother and lighter in color and the rays more clearly defined.

The beaks of all of the specimens in the type lot are entirely eroded, but in a single immature female from Sulphur Fork of Russell Creek enough of the beak sculpture remains to justify the statement in the description of this feature. This shell measures 38.5 x 25.4 x 14.1 mm. and resembles fig. 3 in shape.

A single female in my own collection from the Wetherby collection, but evidently from the original lot, measures 44.6 x 26.2 x 17.6 mm. and is of the normal form.

Dr. Ortmann, who collected living specimens in 1924 in the Green River, Great Onyx Cave, Edmonson Co., and the Barren River, Bowling Green, Warren Co., Kentucky, has kindly furnished me with the following notes on the soft anatomy:

"Soft parts much like those of *M. lienosa* and *vanuxemensis*. In the female, the inner mantle-edge, in front of the branchial opening, has 14-18 distinct, subcylindrical papillæ, standing not very close. They are of moderate size and rather irregular, some smaller ones standing between them, chiefly anteriorly. The papillæ increase slightly in size from the branchial opening forward. They extend not quite to the middle of the mantle margin, where they suddenly disappear. A streak of black pigment runs along the papillæ on the inner side of the mantle-edge. In the male, the papillæ are mere crenulations.

"Marsupium of the usual shape, with 8-20 ovisacs, the edge is pigmented grayish-black. Glochidia subspatulate, of the general shape of those of *M. lienosa* and *vanuxemensis* (Ortmann, Ann. Carn. Mus., VIII, 1912, pl. 20, figs. 5-6). Length, 0.22, height, 0.28 mm.

"The anatomy confirms the affinity of this species to *M. lienosa* and *vanuxemensis* (which are closely allied). See Ortmann, *l. c.*, pp. 340 and 342; Naut., XXIX, 1915, p. 65; Utterback, Am. Mid. Nat., IV, 1916, p. 169. In *M. vanuxemensis*, the papillæ of the mantle-edge stand a little more closely together and are more irregular than in *lienosa*. In this, the present form is more like *lienosa*, but the papillæ are more numerous (14-19), while in *lienosa* they are 10-12 (Ort-

mann) or 8-10 (Utterback). *M. vanuxemensis* has 10-15 papillæ.

“In typical *lienosa*, there is no pigment on the edge of the marsupium, while *M. vanuxemensis* has black or brown pigment. The size of the glochidia of *M. lienosa* is 0.20 x 0.27 (Ortmann) or 0.22 x 0.27 (Utterback) and that of *M. vanuxemensis* is 0.22-0.23 x 0.28-0.30.”

I take pleasure in naming this species after Dr. A. E. Ortmann, who is now engaged in an intensive study of the Naiad fauna of Kentucky.



## PLATE I

*Micromya ortmanni* Walker

- FIGS. 1 and 2. Male type.  
FIGS. 3 and 4. Female.  
FIGS. 5 and 6. Female type.



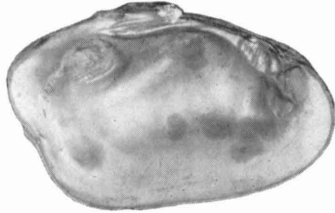
1



2



3



4



5



6





