

A new species of *Sitala* H. ADAMS
from the Usambara Mts., Tanzania
(Mollusca: Urocyclidae).

By

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In 1889 BOURGUIGNAT described and figured (Mollusques de l'Afrique Équatoriale: 18, pl. 2 figs. 13-14; 1889) *Trochonanina leroyi* collected by the Rev. Père ALEXANDRE LEROY (attached to the Mission in Zanzibar) in the Nguru ('N'gourou') Mountains in northern Usagara ('Ousaghara'). He gives a full description in which the statement 'diam. 7' is clearly a slip for '17'; the figure shows a remarkable conical shell with markedly concave sides to the spire. BOURGUIGNAT at the end of his description states 'Cette espèce remarquable par sa forme conique, similaire à celle d'un chapeau chinois, ne peut être assimilée avec aucune de ses congénères'

When dealing with this species in 1897, VON MARTENS (Beschalte Weichthiere Deutsch-Ost-Afrikas: 44) placed it in section *Trochozonites* of *Trochonanina*. He dubiously puts in synonymy *T. mamboiensis* SMITH (Ann. Mag. nat. Hist., (6) 6: 151, pl. 5 fig. 3; 1890) based on material collected by the Rev. LAST at Mamboya, 4000-5000 ft. in the Nguru Mountains. He also placed under this name material collected by L. CONRADT in the East Usambaras at Nderema and gives the dimensions as $14 \times 13 \times 10.5$ mm and 8×6 for the aperture. He mentions the error in BOURGUIGNAT's measurements and states that CONRADT's specimens agreed well with BOURGUIGNAT's description and figure. I have examined these specimens in the Zoological Museum in Berlin and also saw material from Amani, Bulwa, Tanga, Mkulumusi and the W. Usambaras but the localities may not be accurate in all cases.

When living at Amani, E. Usambaras in 1950 I found several specimens identical with those of CONRADT at Amani, in the Sigi Valley and on Mt. Tongwe, the largest measuring 15×11.5 mm. On investigating the radula (Proc. malac. Soc., 29: 207, fig. 2B; 1952) I discovered that it differed markedly from typical *Trochonanina* in having a very large number of marginal teeth; later, on the grounds of genital anatomy, particularly the presence of a very long stimulating organ, coupled with the radular structure I moved the species to the genus *Sitala* (J. de Conch., 101: 125, fig. 11; 1961). I was aware of course that this probably did not accurately reflect the relationships of the species since it is doubtful if any of the African species placed in *Sitala* actually belong to that genus; probably several new genera are involved but the elucidation of these must await more material and a monographic study of the Asian and African species.

My attempts to locate the type of BOURGUIGNAT's species have failed; it appears to be neither at Paris nor at Geneva. The E. Usambara material I have seen differs from BOURGUIGNAT's figure in having the sides of the spire much less concave but this is probably due to an exaggeration in the drawing. My attention was redrawn to the problem of the identity of *Trochonanina leroyi* when having to name a collection of molluscs from Mazumbai in the W. Usambaras made by Dr. J. A. ALLEN of Dar es Salaam University. This contained a conical shell with concave sides much like that figured by BOURGUIGNAT so far as shape is concerned but differing in size and sculpture. I have concluded that VON MARTENS was correct in referring both the E. Usambara material and SMITH's *Trochonanina mamboiensis* to *T. leroyi* BOURGUIGNAT. The specimen collected by Dr. ALLEN differs in having much more marked close ribs on the spire, the sides of which are more concave, more marked striae on the base and a very slightly undulate keel; in both there are fine spiral striae on the apical whorls, probably more marked in *T. leroyi*. I have decided to describe the W. Usambara specimen as a new species. Whatever genus *T. leroyi* is finally placed in, this new species will almost certainly prove to be congeneric but spirit material for dissection is necessary to confirm this supposition.

***Sitala mazumbaiensis* n. sp.** (Fig. 1).

Shell conic, fairly thin, of rather silky texture, narrowly and deeply umbilicate, medium horn-coloured, rather glossy. Spire with distinctly concave sides, acuminate, but actual apex obtuse. Whorls $7\frac{1}{4}$, slightly convex but faintly concave just above the suture, the body whorl very sharply keeled and compressed around the periphery, the keel slightly and irregularly crenate. Apical whorls with very fine spiral sculpture (mostly worn and smooth but sufficient remains in places of the periostracum to indicate the sculpture), rest very closely obliquely rather sinuously ribbed, the ribs 16-19 per mm and also with more strongly raised growth lines at intervals; there is no trace of a spiral element cutting the ribs; suture raised, slightly crenulate; base of shell convex save near the peripheral keel where it is distinctly concave, with fairly strong incised spiral lines crossing the growth lines. Umbilicus under 1 mm wide. Aperture transversely rhombic-lenticular, the peristome sharp, slightly reflexed over the umbilicus at the base of the columella.

Dimensions. Larger diameter 10 mm, smaller diameter 9 mm, height 7.5 mm; aperture, width 5.8 mm, height 3 mm.

Tanzania, W. Usambaras, Mazumbai Forest Reserve, $4^{\circ} 48' S$, $38^{\circ} 30' E$, 1550 m, leg. J. A. ALLEN (holotype SMF 245979).

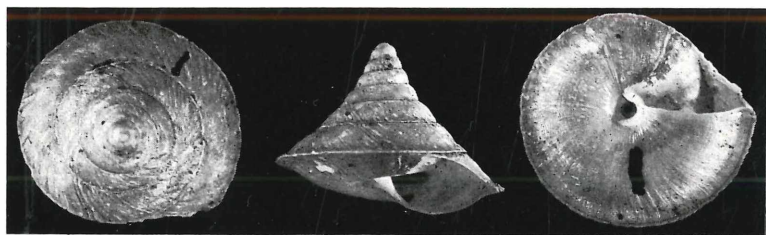


Fig. 1. *Sitala mazumbaiensis* n. sp. — holotype SMF 245979; 3 : 1.

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