

# B A S T E R I A

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## Notes on East African Land and Freshwater Snails 8. The rediscovery of *Trochozonites (Zonitotrochus) adoxa* Connolly (Gastropoda, Helicarionidae)<sup>1)</sup>

by

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CONNOLLY (Ann. Mag. Nat. Hist. (9), vol. 15, p. 459 (1925)) (as *adoxus*) described this species from a shell collected by the botanist R. A. DUMMER at Malange, Abiri Forest (? Mabira Forest). The type was stated to be in the South African Museum but when Dr. K. H. BARNARD looked through the collections he could find nothing labelled with CONNOLLY's name. Looking through the shells collected by DUMMER, however, he found, apart from specimens of *Trochozonites suturalis* d'Ailly and *T. adansoniae* (Morel.), a specimen of a third unnamed species which matched the dimensions and description of *T. adoxa*. CONNOLLY presumably returned the shell before he had decided on a name, or even to describe it at all, because the South African Museum received the shells several years before CONNOLLY's description was published. Dr. BARNARD kindly lent me this shell, which I wished to compare with another single specimen of a *Trochozonites* collected several years ago in evergreen forest near Kampala by Dr. E. PINHEY, I had been carrying this specimen around with me, comparing it with as many types in European museums as possible, but had never succeeded in naming it. It proved, however, to be identical with *T. adoxa* Connolly and is thus the second specimen to be reported. It differs quite clearly from the other species of the

<sup>1)</sup> No. 7, see: *Basteria*, vol. 25, p. 37 (1961) (title changed).

genus by having a spire with distinctly convex sides, a very pronounced and pinched keel and broadly spaced ribs. *T. sharpei* Smith described from Central Africa is smaller, more conical and has a different sculpture; *T. leptalea* Smith, which has a sculpture similar to that of *T. adoxa*, has markedly concave sides to the spire which has a projecting apex. The four species described by PRESTON in 1914 all differ in details of size and sculpture, as also do those described by PILSBRY in 1919. Dr. PINHEY's specimen has been deposited in the Coryndon Museum, Nairobi.

The following key and the figures in plates 1 and 2 will separate the species I have been able to examine from East Africa. I have included a *Sitala* species which might easily be assigned to the wrong genus.

1. Apical whorls spirally striate . . . . . 2  
    Apical whorls smooth or transversely striate . . . . . 5
2. Whorls of shell with 3 keels, apart from the main one, which cut the transverse ribs. Shell 6.5 mm tall and 7 mm wide [Uganda, Buddu (Stuhlmann & Emin Pasha)] . . . . .  
    . . . . . *Trochozonites (Trochozonites) bellula* (Von Martens)  
    Shell with only the main peripheral keel . . . . . 3
3. Transverse ribs of spire bearing triangular cuticular appendages in spiral series; shell 6-7 mm tall and 6.1-7.2 mm wide [(Uganda, Entebbe, (specimens in British Museum))] . . . . .  
    . . . . . *Trochozonites (Trochozonites) plumaticostata* Pilsbry  
    Transverse ribs of spire without appendages . . . . . 4
4. Apical whorls very finely spirally striate, rest with growth lines and spiral lines as well, base spirally striate; shell 15.5 mm tall and 11 mm wide (Tanganyika, E. Usambaras, Ngurus) . . . . .  
    . . . . . *Sitala leroyi* (Bgt.)  
    Apical whorls more coarsely spirally striate, rest with close transverse striae [Kenya, Bura Mts., Vuria Peak (Polhill & Verdcourt 27)] . . .  
    . . . . . *Trochozonites (Trochozonites) sp. nov.* (Material too poor to describe)
5. Apical whorls transversely striate, rest with strong close ribs; shells 7 mm tall and 6.5 mm wide [Uganda, Entebbe (G. D. Hale Carpenter); Sesse Islands (G. D. Hale Carpenter); Mabira Forest (R. A. Dummer); Bwamba Forest, in stomach of *Cossyphus cyanocamptus* (Bonaparte) (J. G. Williams)] . . . . .  
    . . . . . *Trochozonites (Teleozonites) adansoniae* (Morelet)  
    Apical whorls smooth or minutely pitted (subg. *Zonitotrochus*) . . . 6

Plate 1

Fig. 1: *Trochozonites adoxa* Connolly, from Kampala; fig. 2: *T. leptalea* Smith, from Bwamba. Scale: 5 mm.

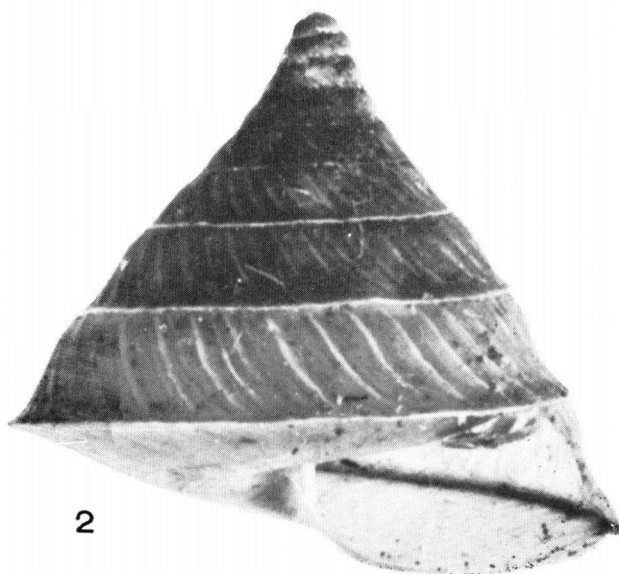
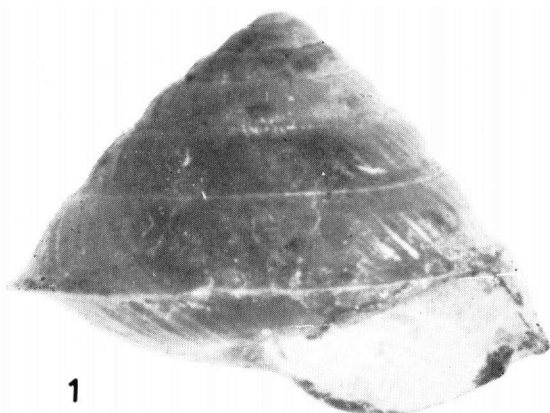
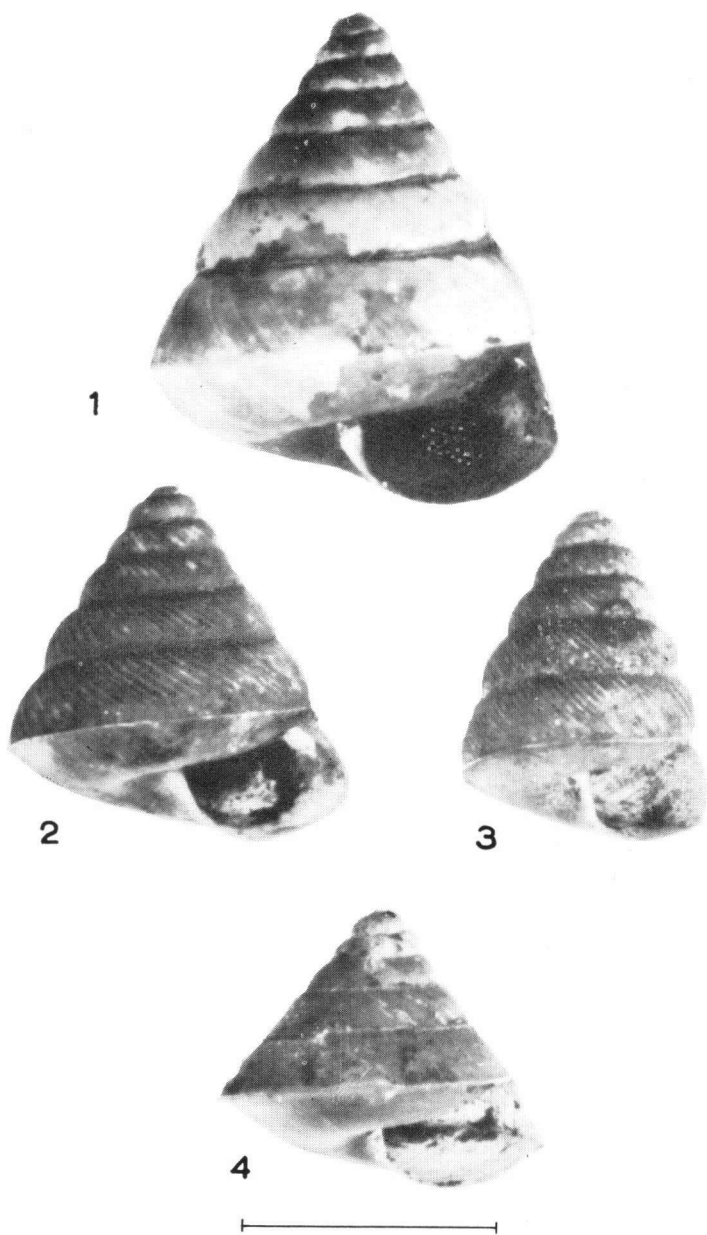


Plate 2



6. Spire with well spaced strong ribs . . . . . 7  
 Spire with close, not very well-marked growth lines or with closely placed strong ribs; spire neither very noticeably produced at apex nor with convex sides . . . . . 8
7. Shell with spire produced, sides concave at top; shell 11 mm tall and 12 mm wide [Uganda, Ruwenzories, Bwamba Forest (G. D. Hale Carpenter)] . . . . . *Trochozonites leptalea* Smith  
 Shell with noticeably convex sides to spire, keel pinched, spire with spaced ribs and some finer intermediate striae; shell 7.5 mm tall and 10.5 mm wide (Uganda, see above) . . . . . *Trochozonites adoxa* Connolly
8. Shell with close ribs on the spire below the smooth apex; shell 6 mm tall and 4.5 mm wide [Uganda, Bwamba Forest (G. D. Hale Carpenter)] . . . . . *Trochozonites aillyi* Pilsbry  
 Shell with growth lines but not closely ribbed, usually larger . . . . . 9
9. Spire with growth lines fairly spaced and not at all strong. Shell 7.5-9 mm tall and 7-7.75 mm wide [Uganda, Bwamba (G. D. Hale Carpenter); Kenya, Kapsabet, Nandi Forest (D. Powell); Nyambeni Hills (Verdcourt, Hemming and Polhill); Isuria Escarpment (C. W. P. Harries); Karura Forest (R. M. Polhill 41); Kapenguria (J. G. Williams); Kericho (? H. Copley)] . . . . . *Trochozonites medjensis* Pilsbry  
 Shell broader than tall, 5-6 mm tall and 6.5 mm broad with fine close growth lines [Uganda, Elgon, North Bugishu (G. D. Hale Carpenter)] . . . . . *Trochozonites expatriata* Preston

The group of "species" comprising *Trochozonites medjensis* Pilsbry, 1919, *T. buhambahensis* Preston, 1914, *T. expatriata* Preston, 1914 and *T. prestoni* Connolly, 1925 (= *T. suturalis* Preston, 1914, non d'Ailly) needs further collecting. I have examined paratypes of *T. medjensis* and *T. buhambahensis* and they are closely similar; the latter has more regular and stronger primary striae. *T. prestoni* is even more similar to *T. medjensis* and was described from the Mathews range, Kenya. I have adopted the latter name for the species widespread in Kenya since I have compared the material with paratypes and it matches exactly. From the description *Trochozonites mamboiensis* Smith, which was described from the Nguru mountains in Tanganyika, sounds like a not fully grown specimen of the snail which occurs in the Usambaras which VON MARTENS and I have associated with the name *leroyi* Bgt. BOURGUIGNAT's figure of this (also described from the Ngurus) shows a shell with very much more concave sides but has probably been drawn in an exaggerated man-

#### Plate 2

Fig. 1: *Trochozonites medjensis* Pilsbry, from Kapenguria; fig. 2: *T. adansoniae* (Morelet), from Sesse Islands; fig. 3: *T. aillyi* Pilsbry, from Bwamba; Fig. 4: *T. expatriata* Preston, Bugishu. Scale: 5 mm.

ner. BOURGUIGNAT's records of *Trochozonites percarinata* (Von Martens) and *Trochozonites ibuensis* (Von Martens) from Zanzibar, as common introductions in sacks of sesame, seem open to doubt. In fact I saw in Paris some shells of *Trochonanina mozambicensis* (Pfr.) with an old label "Mombasa" wrongly named up as "*percarinata* Von Martens". His *Moaria chaperiana* described from the Nguru mountains and never rediscovered, is a minute species which is probably congeneric with the species I have referred to *Guppya*. It was not figured, nor have I seen the type, although VON MARTENS refers a specimen from near Tanga to BOURGUIGNAT's species. It certainly does not belong to *Trochozonites*. *Trochozonites meruensis* d'Ailly was described from Mt. Meru in Tanganyika, from a single specimen collected in forest at 3000 m. The very well-marked keel, with the base canaliculate below it, should render its recognition easy. I saw the type in Stockholm but as it was practically destroyed it conveyed little useful information. It has a thin expanded keel and strong costae. Like nearly all East African molluscs it needs recollecting in the type locality.