

A new species of *Gulella* PFEIFFER from Kenya (Mollusca, Streptaxidae).

By

BERNARD VERDCOURT,
Nairobi (Kenya).

The following species was discovered after my synoptic key to the East African species of the genus *Gulella* went to press (VERDCOURT, 1962).

Gulella taitensis n. sp. (Fig. 1).

Shell rather large, oblong-cylindrical, imperforate, glossy, white; spire produced, sides almost straight, slightly convex; apex bluntly rounded. Whorls 8, slightly convex, gradually increasing, the first 2.75 faintly transversely striate, rest with fairly strong costulae, c. 5-9 per millimetre, between which are horizontal striolae which do not cross the costulae. The sculpture is least marked on the body whorl above the aperture; suture shallow. Aperture ovate-quadrate, narrowed below, rounded at the base, peristome rather thick, reflected, dentition 6-fold: a curved parietal lamella situated about one third of the way from the outer edge; an eminence on the outer lip bearing a strong lamella at its crest and a small tooth on the flank above it; above this is an obscure sinulus between the parietal lamella and the outer lip edge; a basal tooth towards the columella side of the base, and a mostly squarish mid-columella tooth which is sometimes binodulate (in one specimen) but usually plain and pointed or square cut; there is also a deeply inset margined lobe at the junction of the columella and the parietal wall. The top of the parietal lamella is joined to the top of the columella by a thin callus. There are three indentations just behind the peristome corresponding to the outer, basal and columella teeth respectively.

Length: 12.5-13.8 mm., breadth 6.2-6.5 mm.

Aperture: 4.5-5 mm. long and 4-4.5 mm. wide.

Kenya. Taita District: Bura Hills, Vuria Peak, in forest, 7250 ft., 17 April 1960, R. M. POLHILL and B. VERDCOURT 30 [holotype (dry) SMF 167858 and five paratypes (in spirit) SMF 167859-60/5, paratypes (dry) in Coryndon Memorial Museum and British Museum (Nat. Hist.)].

This rather large and well-characterised species does not appear to have been described which is, however, not surprising, since the Taita area has scarcely been collected in seriously by any conchologist since the days of the botanist, J. M. HILDEBRANDT, three quarters of a century ago. The plants and some animal groups show affinities with those of the West Usambaras in Tanganyika but nothing resembling this species of *Gulella* has been described from that area. One specimen has been dissected and the main features of the

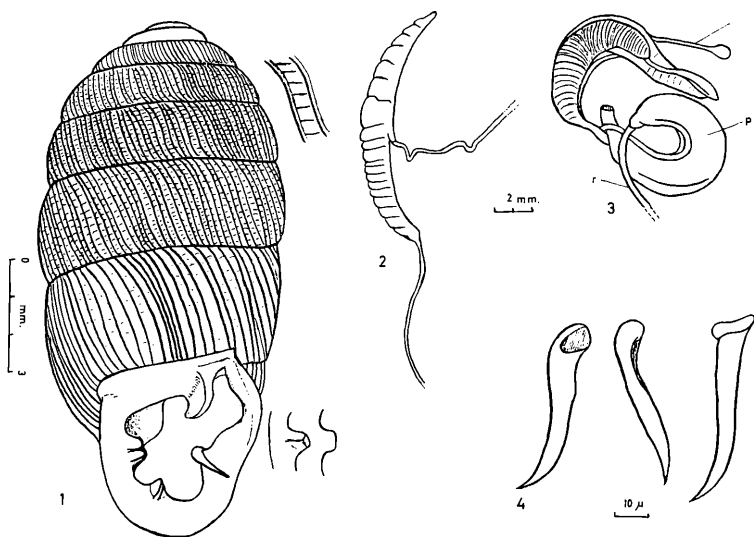


Fig. 1-4. *Gulella taitensis* n. sp. — Kenya, Taita District, Vuria Peak; leg. VERDCOURT & POLHILL. — 1. paratype; 2. salivary gland; 3. genitalia, p = penis, sp. = spermatheca, r = penial retractor; 4. radula, 7th, 6th and 6th teeth respectively.

genitalia are shown in fig. 3. The penis has no appendage. The salivary gland is extraordinarily long for so small a snail, sickle-shaped, 1 cm. long and 1.5 mm. wide at its maximum width (fig. 2). The radula from a fully-grown individual measures 5.2 mm. in length and 1.1 mm. in breadth at its broadest part near the older end; the nascent part tapers strongly and the nascent margin is angular, the rows forming an angle of about 45° . There are approximately 210 rows and the formula is 37-40. 0. 37-40 at the nascent end. At the older end the formula is approximately 40-42. 0. 40-42. The teeth are simply aculeate with curved tips, 0.05 mm. long (fig. 4). At the older end the rows, although still angled in the centre, flatten out and are almost straight nearer the margins, hence the explanation for much the same number of teeth as at the nascent end, although the width is much greater than at that end. The first teeth of each half row are not opposite each other as is usually the case in most radulae but one side of the radula appears as if it has slipped in relation to the other.

Gulella taitensis resembles certain other species to some extent e. g. *G. wahlbergi* (KRAUSS), *G. calopasa* (MELVILL & PONSONBY), *G. sellae* (POLLONERA) etc. but does not appear to be identical with any S. African species. Specimens with a bifid columellar tooth will run down to key 3 in my generic synopsis and will not quite fit even the first couplet because there is both a spiral and a transverse element in the sculpture of *G. taitensis* but not as in *G. lima* (PRESTON). If one ignores this and proceeds it will come out at couplet 6 but is clearly distinct from both *G. usambarica* (CRAVEN) and *G. caroli* (KOBELT) in having only one tooth on the outer lip and in general shape and the other dentition. Specimens with a simple columellar tooth i. e. typical specimens will run down to key 10 and will come in the first couplet, differing from *G. cancellata*

CONNOLLY in its larger size and from *G. decussatula* (PRESTON) by having a simple suture, the spiral element not crossing the costulae, and an additional inset lobe at the top of the columella, apart from coming from a distant locality.

A further species which may be added to the East African list is *G. rutshuruensis* PILSBRY collected in the Bwamba Forest, W. Uganda, by G. D. HALE CARPENTER (British Museum [Nat. Hist.]). This will key out to key 10 and comes to couplet 15 or 16; it differs from *G. funerea* (PRESTON) in its wider contour and from *G. ulugurensis* VERDCOURT in its stronger striae and usually different dentition. The shell measures $5.8-8.4 \times 3.4-3.6$ mm. and the formula is 1; 2; 1; 1, the two labral teeth being joined at their bases.

Two errors in the original keys may also be corrected here — key 5, couplet 5 on page 9. *G. lessensis* PILSBRY, for 1; $1(\pm 2)$; 1; 2(2) read 1; $1(\pm 2)$; 1; L(2). A line is missing at the top of page 23, it should read „— Shell oblong-cylindrical, suture crenellate, $8.4-9 \times 3.8-4.5$ mm. for —“

Reference.

VERDCOURT, B. (1962): Preliminary Keys for the identification of the species of the Genus *Gulella* occurring in East Africa. — Ann. Mus. Roy. Afr. Centr., Sci. Zool. 8°, no. 106.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Archiv für Molluskenkunde](#)

Jahr/Year: 1963

Band/Volume: [92](#)

Autor(en)/Author(s): Verdcourt Bernard

Artikel/Article: [A new species of Gulella Pfeiffer from Kenya \(Mollusca, Streptaxidae\). 11-13](#)