11496

3768

(*Rev. Zool. Bot. Afr., XLV, 1-2*). (*A paru le 22 décembre 1951*).

Instituut voor Zeewetenschappelijk onderzoek
Institute for Marine Scientific Research
Prinses Elisabethlaan 69
8401 Bredene - Belgium - Tel. 059 / 80 37 15

A new species of Trichotoxon from Kenya
(Mollusca, Urocyclidae)

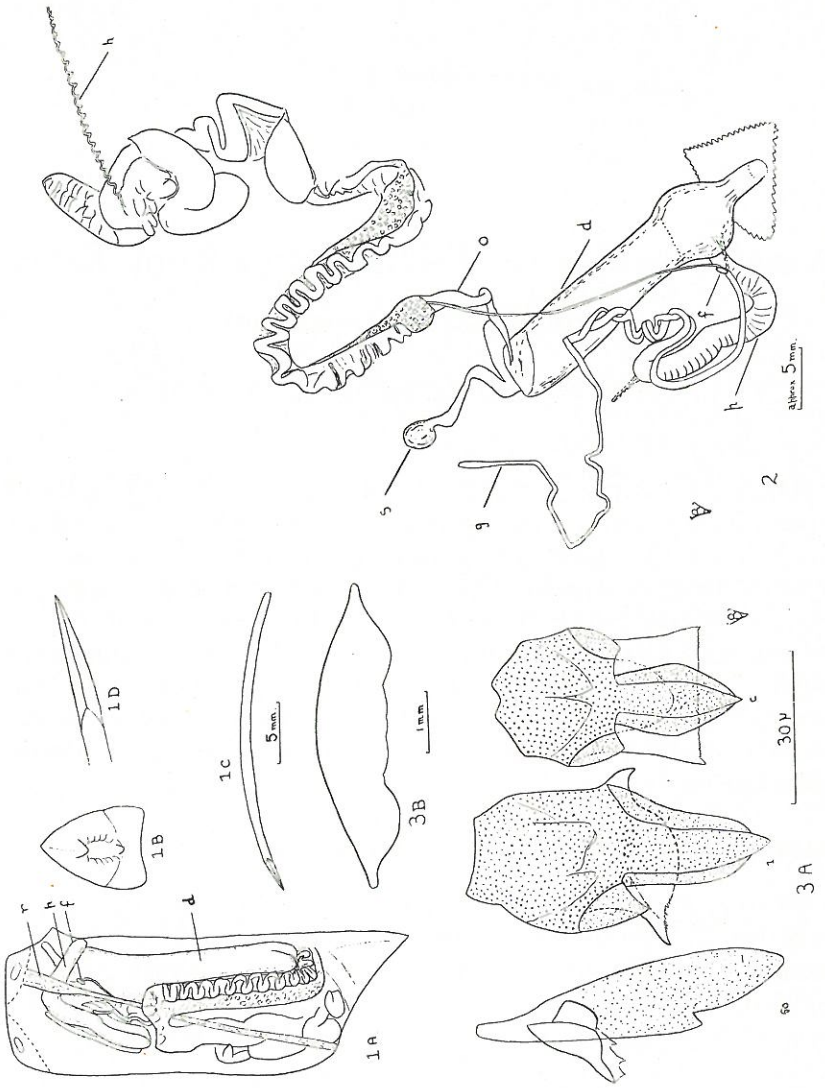
by Bernard VERDCOURT, B. Sc., F. R. M. S.

Slugs are uncommon in the dry Nairobi area of Kenya. The following apparently undescribed species was found on steep walls of volcanic rock which border the R. Thika near the Chania Falls at Thika, about 30 miles north of Nairobi. This gorge maintains a strip of streamside forest dominated by *Piptadenia buchanani* BAK. together with *Heywoodia, Filicium, Bridelia, Chaetacme, Strychnos* etc. Three specimens were found on the rock together with two species of *Ledoulxiinae* and a species of *Rachis*. One specimen of the slug differed in body colouration from the other pair but anatomically was found to be entirely identical with them.

Trichotoxon (Trichotoxon s. s.) thikensis VERDCOURT sp. ncv.

Differing from *T. pollonerae* PILSBRY by having darts five times as long, from *T. maculatum* SIMROTH, in having darts twice the length and a diverse colouration, and from *T. heynemanni* SIMROTH, by having glabrous darts. It is also closely related in external appearance to some of the ten species of Urocyclidae found by the writer in the rain forest at Amani, Tanganyika Territory. None of these has yet been examined anatomically.

External morphology. — Sole white tinged grey, middle area pale grey. Fringe white in two specimens, dull purple in the third. Back and mantle in the latter pale grey buff, in the other two darker brownish-orange or grey-brown. A small caudal process overhangs the deep well-marked triangular caudal pore. Back strongly keeled behind but only obscurely so just behind the mantle. Respiratory hole just over one third of the length of the mantle from its posterior margin. Pore over



1. A. Diagram of the genitalia *in situ* (not to scale). — B. Caudal pore (not to scale). — C. Dart. — D. Point of dart. (Not to scale),

2. — Diagram of the genitalia dissected out.

3. — A. Representative teeth from the radula (nascent row). — B. Jaw. (In these drawings the following abbreviations we used)
d = Combined dard sac & atrium. — f = Flagellum. — g = Lime gland. — h = Hermaphrodite duct. — o = Oviduct. — p = Penis. — r = Ocular retractor. — s = Spermatheca.

shell barely visible. Tentacles shortish, translucent brown. Upper part of head the same colour as the tentacles, lower part paler. Reticulation of the body well-defined but not marked with colour. Mucus thick and sticky. The mantle is soft and is constantly moving in life, dents and wrinkles appearing and then disappearing.

The body is 6.5 to 9.5 cm. long and 1.3 cm. broad when outstretched. The mantle is 3.5 to 4.5 cm. long and the respiratory orifice 1.3 to 1.8 cm. from its posterior end. Tentacles 5 to 9 mm. long.

Internal Anatomy.

Shell. — The shell lies close to the posterior border of the mantle and is a thin oval-oblong plate, greenish-white in colour, 10 by 7 mm., marked with eccentric striae. The nucleus is thicker and whiter, situated close to the posterior margin.

Jaw. — When flattened out the jaw measures 4.75 by 1.25 mm. (Fig. 3 B).

Radula. — The radula is rectangular in outline, 8.5 mm. long and 3.8 mm. broad, with about 170 transverse rows of teeth. 28 of these rows stain in acid dyes. There are 29 laterals and two additional transitional laterals, together with 54 marginal teeth (in the youngest rows). The half-rows form a very obtuse angle of about 170 degrees. Representative teeth are depicted in fig. 3 A. The central tooth is tricuspid. The laterals have a well-developed ectocone but no entocone. The basal margin is highly characteristic. The inner corner is hook shaped in the youngest teeth and the margin near the outer corner is peculiarly fimbriated. The hook is easy to mistake for an entocone. This margin can only be seen easily in stained material. The marginals are elongated and oblique, but the mesocone is not sharply aculeate and the ectocone persists in some of them. The initial portions of the teeth laid down by the first odontoblast show up remarkably clearly in material stained in Chlorazol Black E and are indicated in the figures.

Genitalia. — These are shown in Figs 1 and 2. They are in agreement with those described for the subgenus *Trichotoxon* s. s. The combined dart sac and atrium is a thick muscular cylinder 2.2 cm. long and 4 5 mm. broad in the narrower distal portion. The proximal dilated portion has a diameter of 6 mm. This cylinder contains two dart sacs each containing two long darts. They are slender, slightly curved, 2 5 cm. long, and the blade is not flattened but is triangular (equilaterally) in cross-section. The fixed end is not dilated. The whole dart is glabrous. The spermathecal duct is rather short. The lime gland is 2.5 cm. long and the flagellum a small white ellipsoidal body. The

hermaphodite duct is 3 cm. long, the ovotestis being buried far back in the visceral cavity. The right ocular retractor crosses over above the penis.

The specimens together with a slide of the radula are to be deposited in the Congo Museum, Tervuren.