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Contributions to the knowledge of the Triviidae. XIV. A further new *Triviella* Jousseaume, 1884 from South Africa.

(Mollusca: Gastropoda)

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A new species of the gastropod family Triviidae Troschel, 1863 is described as endemic from South African offshores. The new species belongs to the genus *Triviella* Jousseaume, 1884. Type species of the genus is *Cypraea oniscus* Lamarck, 1810. The new species *Triviella williami*, spec. nov. is compared with the following similar species of the genus from the same area: *Triviella magnidentata* (Liltved, 1986), *Triviella rubra* (Shaw, 1909) and *Triviella phalacra* Schilder, 1930. All five specimens of the new species differs from its most similar congener, *T. rubra*, besides other features by the narrower aperture, by the stronger, more numerous posterior basal folds and especially by the colour pattern of the animals.

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Introduction

Already during the description of *Triviella insolita* Fehse (in press) and the accompanied examination of related species it was noticed that Liltved's specimen from the Buffelsjacht area (Litlveld 2000: text figs. 233 and 234 left picture) represented a new species clearly distinguished from *Triviella magnidentata* (Liltved, 1986) by the shell morphology and the animal. Unfortunately, not enough specimens were available to describe it together with *T. insolita*. Recently, it was possible to examine the collection of the late Dr. Dr. h.c. Artur Roll. Within his collection two additional specimens could be found. Now five specimens confirm the constancy in its shell morphology different to the congenering species. Therefore, this species could be described as *Triviella williami*, spec. nov.

Abbreviations

DFB	collection Dirk Fehse, Berlin, Germany.
ZSM	Zoological State Collection Munich, Germany.
LT	absolute number of labral teeth
CT	absolute number of columellar teeth

Triviella williami, spec. nov.

Figs 1-4

Types. Holotype: Off Cape St. Francis, eastern Cape Province, South Africa; dived in 40 m; length: 17.1 mm; width: 13.1 mm; height: 10.9 mm; LT 12; CT 14 (ZSM, coll. No. 20051497). – **Paratypes:** No. 1: Off East London, eastern Cape Province, South Africa, dredged in 100 to 120 m; length: 15.5 mm; width: 12.4 mm; height: 9.9 mm; LT 11; CT – subadult (ZSM, coll. No. 20051498); No. 2: Off west coast of Cape Peninsula, Cape Province, South Africa, alive on reef at 35 m; length: 20.1 mm; width: 15.5 mm; height: 12.6 mm; LT 12; CT 15 (DFB coll. No. 5189); No. 3: Off East London, eastern Cape Province, South Africa, dived at 19 m; length: 16.5 mm; width: 13.4 mm; height: 10.6 mm; LT 10; CT 14 (DFB coll. No. 8315); No. 4: Off S of Durban, KwaZulu-Natal, South Africa; ex pisce; length: 20.4 mm; width: 15.9 mm; height: 13.1 mm; LT 12; CT 15 (DFB coll. No. 8415).

Description of holotype

Shell (15 to 24 mm) medium-sized, lightweight, solid and sub-pyriform. Spire slightly elevated. Body whorl sub-triangular, inflated and rounded, about 95 % of total height, with both terminals produced

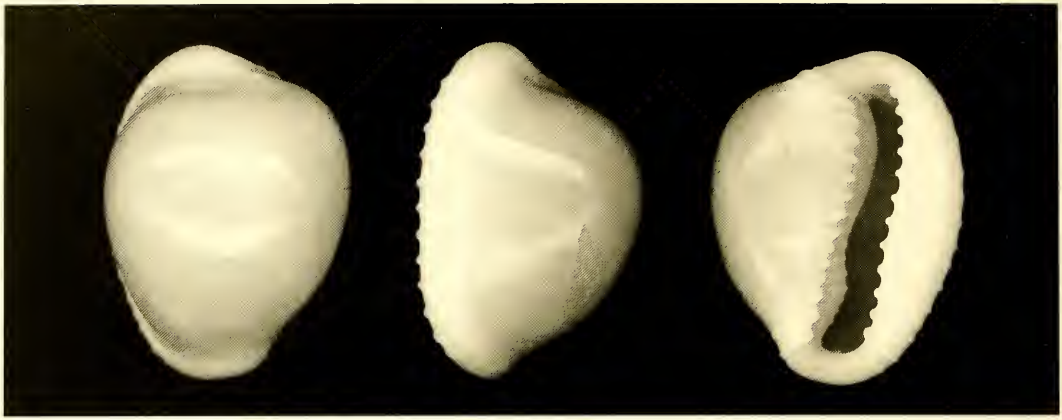

Fig. 1. *Triviella williami*, spec. nov., Holotype, ZSM, coll. No. 20051497.

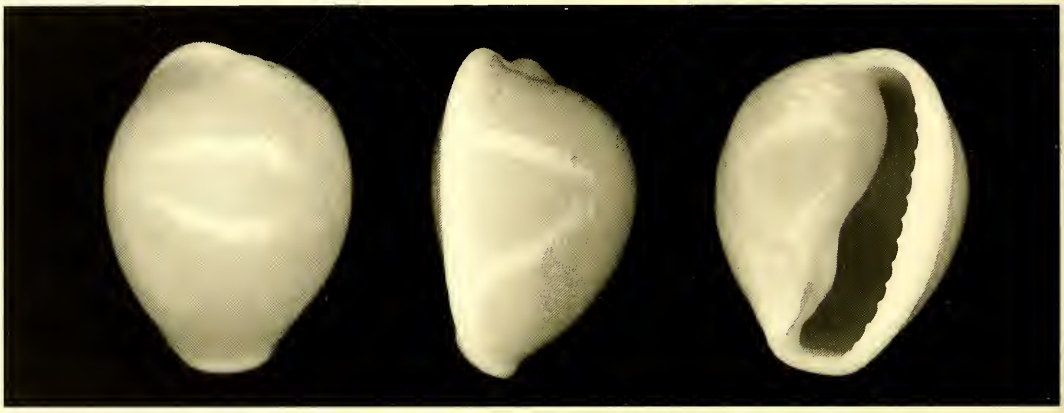

Fig. 2. *Triviella williami*, spec. nov., Paratype 1, ZSM, coll. No. 20051498.

but the posterior only slightly so. Terminal tips blunt. Dorsum roundly elevated with a hump at its posterior third, smooth. Ventrum rounded and smooth with straight terminals. Aperture fairly narrow over its entire length, widened only slightly at the fossular section, nearly straight. Labrum roundly callused, narrow, slightly curved, keeled towards its inner margin. Outer margin of lip roundly callused with a small shoulder. The labrum bears on its inner margin 11-14 coarse irregular denticles. The denticles are continued as strong folds onto the labrum and its suture but terminate immediately on the dorsal side margin. The siphonal and anal canals follow the shell profile. Both bordered adapically and abapically by callused and rounded ventral sidewalls. Columella concave, narrow and tapering steeply inwards. Along the aperture is a roundly callused parietal lip that bears 10-12 fine denticles with large interstices. The fine columellar denticles are continued as very fine folds onto the anterior columella but especially onto the fossula. The two to four columellar denticles are also continued anteriorly and posteriorly as ventral folds. Fossula concave and delimited from the rest of the columella by a strong indentition. The inner fossular edge protruded and denticulated.

The dorsal shell colour is brownish purple. All callused parts – the ventrum, labrum, terminals and the spire – are white.

Variation. All available specimens are very uniform in shell morphology. However, sometimes all columellar denticles are continued as folds onto the columella (paratype 4). The shell colour can be also brownish yellow and the labral folds are slightly further continued onto the dorsum (Liltveds specimen from Buffelsjacht area [Liltveld 2000: text fig. 233]; its whereabouts is unknown [Liltved pers. comm.]).

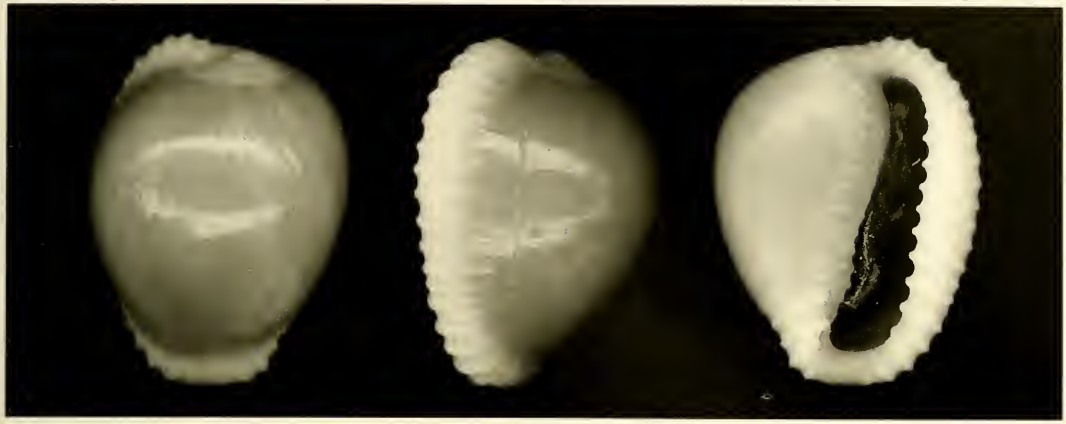

Fig. 3. *Triviella williami*, spec. nov., Paratype 2, DFB, coll. No. 5189.

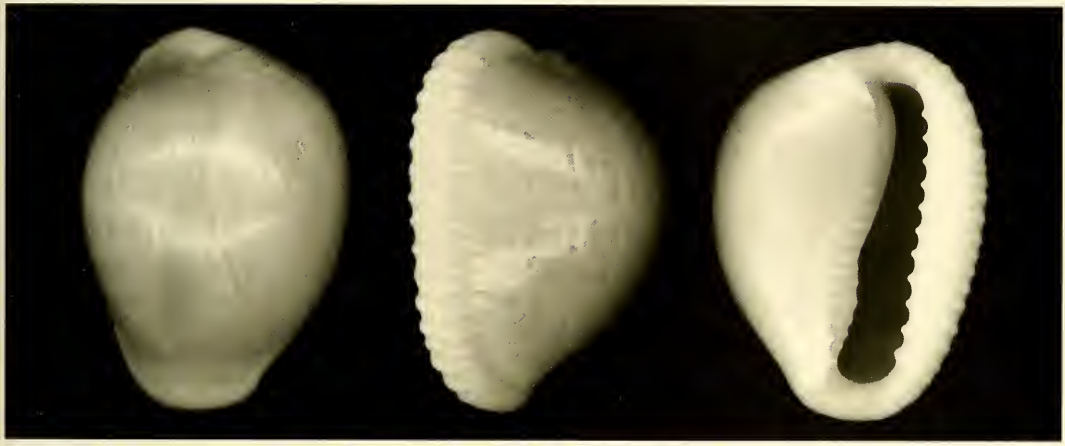

Fig. 4. *Triviella williami*, spec. nov., Paratype 3, DFB, coll. No. 8315.

External morphology

The fleshy mantle lobes of *Triviella williami*, spec. nov. collected at the Buffelsjacht area (Liltved 2000: left picture of text fig. 234), southwestern Cape Province, were opaque white and densely studded with fine, slightly protuberant yellowish white specks. The elongate recurved siphon was translucent without any markings. The slightly translucent cephalic tentacles were slenderly cylindrical and rounded apically with very small black eyes towards their bases. The opaque white foot was bulky and possessed a pronounced anterior muscular rim.

Etymology. The new species is named in honour of William Rune Liltved who has contributed much to the knowledge of the Ovulidae and Triviidae of southern Africa.

Distribution. The new species is known from the Atlantic coast of the Cape Peninsula, western Cape Province, to East London, eastern Cape Province.

Discussion

Triviella williami, spec. nov. differs from *Triviella magnidentata* (Liltved, 1986) in being sub-pyriform with a dorsal hump at its posterior third and the brownish yellow to brownish purple coloration. The animal of *T. magnidentata* is translucent with opaque white specks and very small red-brown dots and it imitates strikingly the compound tunicates that they are associated with (compare Liltved 2000: text figs 234 right picture, 235 and 236). In contrast the animal of *T. williami* is opaque white with yellowish white specks and it lacks off any dots.

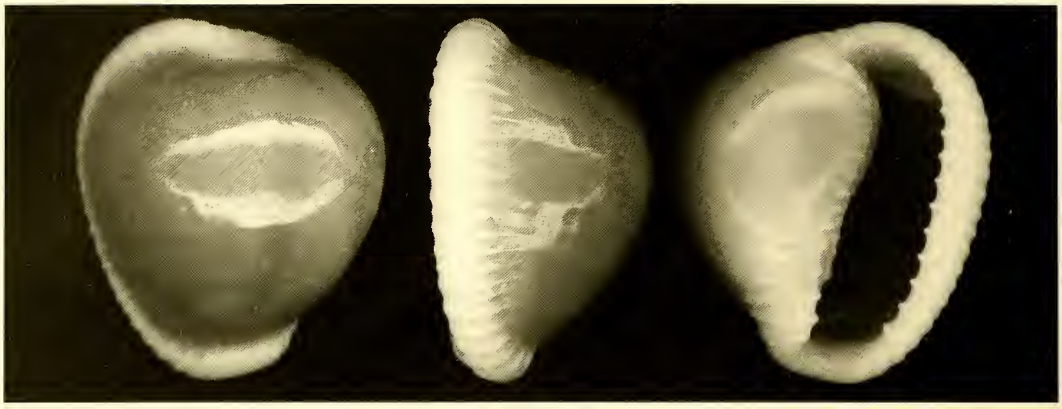

Fig. 5. *Triviella rubra* (Shaw, 1909), DFB, coll. No. 5462A. Off East London, eastern Cape Province, South Africa; alive on reef at 40 m.

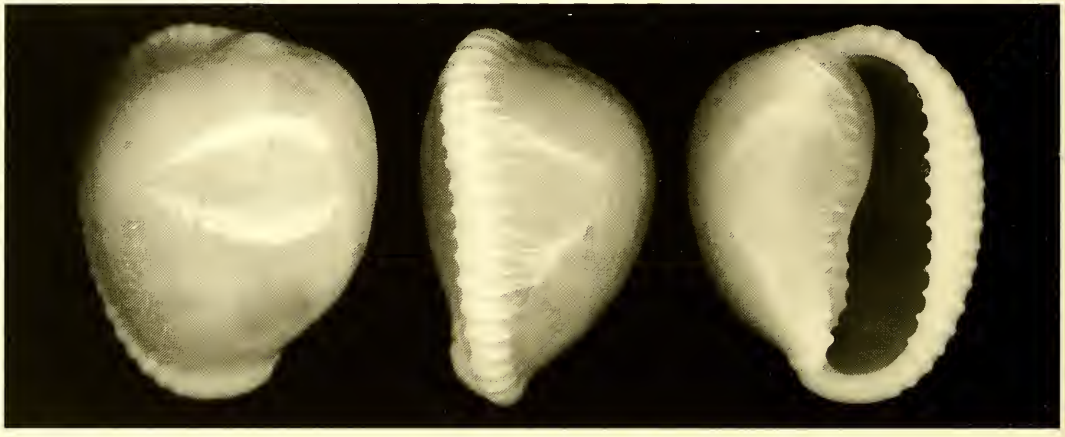

Fig. 6. *Triviella rubra* (Shaw, 1909), DFB, coll. No. 5462B. Off East London, eastern Cape Province, South Africa; alive on reef at 40 m.

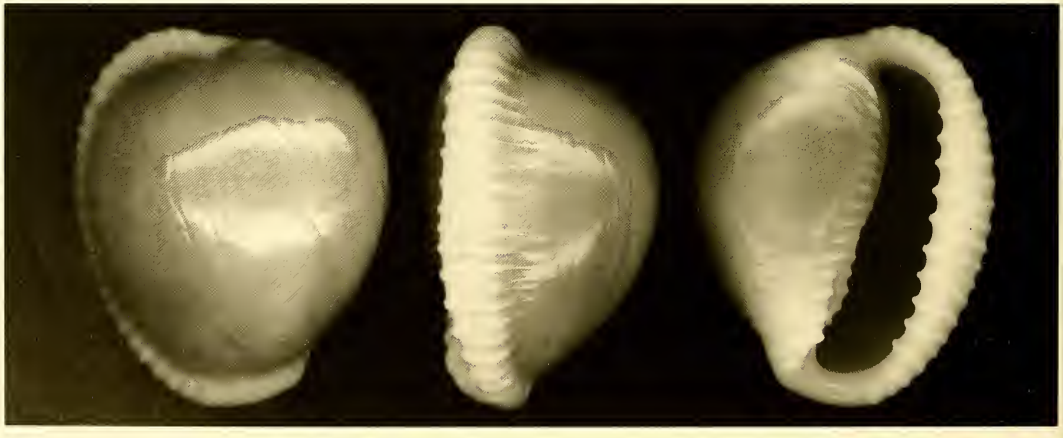

Fig. 7. *Triviella rubra* (Shaw, 1909), DFB, coll. No. 5462C. Off East London, eastern Cape Province, South Africa; alive on reef at 40 m.

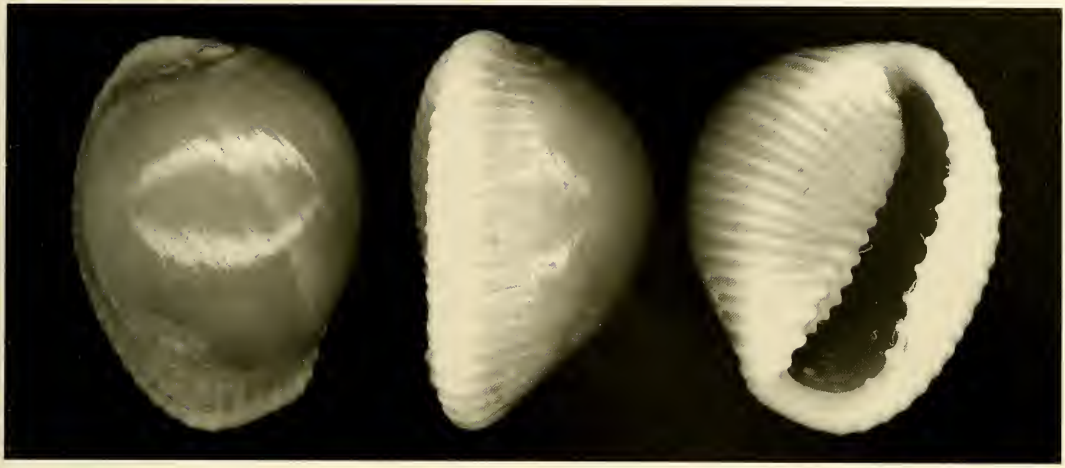

Fig. 8. *Triviella phalacra* Schilder, 1930, DFB, coll. No. 5433. Off East London, eastern Cape Province, South Africa; fresh dead in rock pool.

The new species differs from its congener *Triviella rubra* (Shaw, 1909) that shares the same shell coloration and a similar shell morphology by the narrower aperture, the fossula with finer and slightly more numerous folds, the less numerous, finer anterior basal folds and by the stronger, more numerous posterior basal folds. The animal of *T. rubra* (compare Liltved 2000: text fig. 229) with its creamy coloration and dark brown ocelli, spots and band differs essentially from *T. williami*, spec. nov.

Also the second congener of *T. williami*, spec. nov. – *Triviella phalacra* Schilder, 1930 – from the eastern Cape Province has a similar shell coloration but differs from the new species by the completely ribbed base and the less thickened labrum.

References

Fehse, D. in press. Contributions to the knowledge of the Triviidae (Mollusca: Gastropoda). XIII. A new *Triviella* Jousseaume, 1884 from South Africa. – Schr. Malakozool.

Liltved, W. R. 2000. Cowries and their relatives of Southern Africa. A study of the southern African Cypraeacean and Veluinacean gastropod fauna. – Gordon Verhoef, Seacomber Publications, 2nd enlarged edition: 1-224, 298 + numerous unnumbered text-figs.