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## Contributions to the knowledge of the Ovulidae. XVIII. A new *Crenavolva* Cate, 1973 from New Caledonia.

(Mollusca, Gastropoda)

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A new species of the gastropod family Ovulidae Fleming, 1828 is described from New Caledonia. The new species belongs to the genus *Crenavolva* Cate, 1973. Type species of the genus is *Ovulum striatulum* Sowerby, 1828. The shell of *Crenavolva marmorata*, spec. nov. is only similar to that of *Crenavolva striatula* (Sowerby, 1828) and *Crenavolva takeoi* (Cate & Azuma in Cate, 1973), but all five specimens consistently differ from that species besides other features due to their colour pattern.

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### Introduction

The species of the genus *Crenavolva* Cate, 1973 were revised three years ago (Fehse 2002). One year later four strange coloured specimens from New Caledonia were obtained. At the first glance they looked similar to the yellow coloured form of *Crenavolva striatula* (Sowerby, 1828). Unfortunately, no further specimens were available till now. During the examination and identification of the ovulid collection of the late Dr. Artur Roll two additional specimens could be found. Now six specimens confirm the constancy of the shell features that distinguish them from *C. striatula*. Unfortunately, the data concerning the locality are not very precise and the source is not known.

### Abbreviations

DFB collection Dirk Fehse, Berlin, Germany.  
ZSM Bavarian State Collection of Zoology, Munich, Germany.

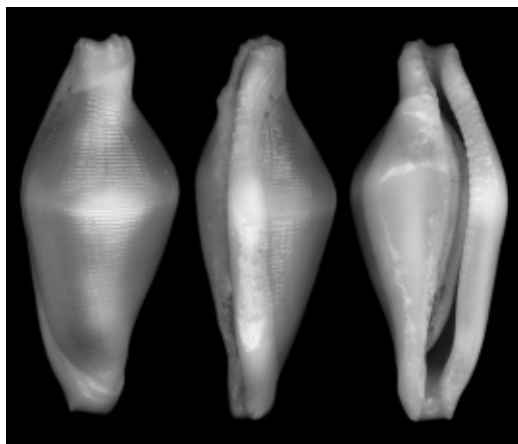
### *Crenavolva marmorata*, spec. nov.

Figs 1–4

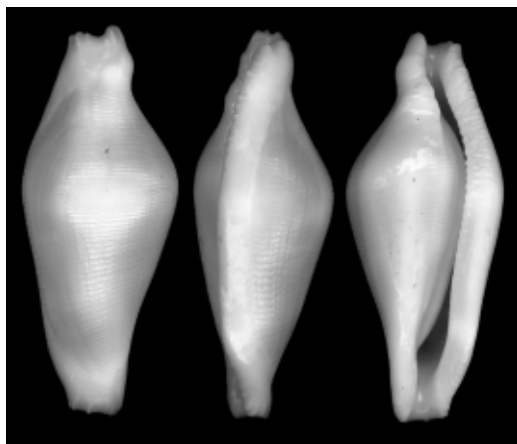
**Types.** Holotype: Off New Caledonia, dived in 15 m; length: 12.7 mm; width: 5.0 mm; height: 4.4 mm; (ZSM, coll. No. 20051500). – Paratypes: No. 1: Off New Caledonia, dived in 15 m; length: 12.0 mm; width: 4.8 mm; height: 4.2 mm; (ZSM, coll. No. 20051501); No. 2: Tanle Island, New Caledonia; length: 11.8 mm; width: 4.8 mm; height: 4.1 mm; (DFB coll. No. 7177); No. 3: Tanle Island, New Caledonia; length: 12.7 mm; width: 5.0 mm; height: 4.4 mm; (DFB coll. No. 8349A); No. 4: Tanle Island, New Caledonia; length: 13.9 mm; width: 5.4 mm; height: 4.6 mm; (DFB coll. No. 8349B).

### Description of holotype

The shell is small, sub-rhomboid and velvety shiny. The terminals are short, spatulate, crescent-shaped at the openings, thickened and outlined with a fold of callus. The terminal tips are denticulated. The left rear terminal edge is projected beyond that of the right side. The dorsum is numerous, irregularly, finely striated, transversely elevated and tapering evenly to front and rear. The ventrum is callused, roundly edged at the outer margin, smooth and glossy. The aperture is long, narrow, only slightly widened at the fossular area and somewhat curved.



**Fig. 1.** *Crenavolva marmorata*, spec. nov. Holotype, ZSM, coll. No. 20051500.



**Fig. 2.** *Crenavolva marmorata*, spec. nov. Paratype 1, ZSM, coll. No. 20051501.

The labrum is ventrally flattened over its entire length, obliquely reflected inwards, callused at the margins, denticulated and crenulated over its almost entire length. The crenulation is continued to the side margin at the posterior most part. The columella is short, obliquely reflected and extends into an adaxial inner carinal ridge. The fossula is not developed, smooth, glossy and bordered internally by the carinal ridge. The funiculum on the rear ventrum is short, thickened, crenulated and forming an edge along the anal canal.

The dorsum is brownish orange superimposed with irregularly formed and spaced white clouds. The terminal tips are light orange. The labrum is brownish orange with three white rings of irregular size. The ventral callosity and funiculum are whitish, the inner carinal ridge and the inner canals are rosy.

**Variation.** The denticulation of the terminal tips is sometimes somewhat obscured. The crenulation on the labrum varies in its strength. The dorsal coloration varies from yellow to brownish orange. The white clouds on dorsum varies considerably.

**Etymology.** After the Latin adjective, *marmoratus*, meaning marbled.

**Distribution.** Known so far only from New Caledonia.

**Discussion.** The new species is similar to *Crenavolva striatula* (Sowerby, 1828) in the shell outline. There are two colour forms of the latter – yellow and red – but without any transitions that might indicate a second species. However, the shells of *C. marmorata* have only a sub-central, rounded, transverse keel

and the terminal tips especially the posterior are denticulated. The shells of *C. marmorata* appear more elongated in comparison to *C. striatula* and the dorsal incised striae are more numerous and finer. The most distinguishing feature is the coloration. *Crenavolva striatula* possesses in the yellow and red colour form always three white transverse bands whereas there are only irregularly formed and spaced dorsal clouds in *C. marmorata* and the terminal tips are orange in the latter.

The other somewhat similar species is *Crenavolva takeoi* (Cate & Azuma in Cate, 1973). The new species differs again immediately by the coloration and colour pattern from *C. takeoi*. The latter has always a red shell with at least a yellow line along the transverse dorsal keel and with three yellow spots on the labrum. But also the shell morphology distinguish both species. *Crenavolva takeoi* possess much more and stronger denticles on the terminal tips and along the outer labral margin. The shell outline of *C. takeoi* is, furthermore, really rhomboid with its strong transverse keel and the terminal collars are recurved.

## References

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