BASTERIA, 64: 33-34, 2000

A separate duplicate penis in a specimen of *Mastus* (Gastropoda, Pulmonata, Buliminidae) from Greece

Wim J. M. MAASSEN

Nationaal Natuurhistorisch Museum, P. O. Box 9517, NL 2300 RA Leiden, The Netherlands

A specimen of *Mastus* cf. *cretensis* from the island of Crete, Greece, appears to have a separate duplicate penis; a scrutiny of the reproductive system of this animal shows that this abnormality doubtlessly precludes reproduction.

Key words: Gastropoda, Pulmonata, Buliminidae, Mastus, genitalia, teratology, Greece.

In the course of a research project on the enid genus Mastus Beck, 1837, on the island of Crete, Greece (Maassen, 1995), some hundreds individuals of various taxa were dissected. In one specimen of Mastus cf. cretensis (L. Pfeiffer, 1846) a striking abnormality

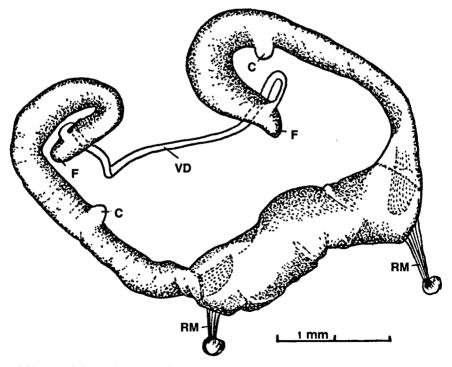


Fig. 1. Male part of abnormal genitalia of a specimen of *Mastus* cf. cretensis (L. Pfeiffer), (Colln Maassen, slide no 1189); see the text. Scale 2 mm.

was found in the reproductive system (Colln Maassen, slide no. 1189: Crete, nomos Iraklion, Kokino Hani). The genitalia of this animal do not form a proper unit, but are divided into entirely separate male and female conduits. The female part is about normal. The vas deferens does not connect with the penis however, but has a blind end. The male part (fig. 1) consists of two identical penes connected with each other and with more or less normal outside appearance. However, these copulatory organs are not connected with the female conduit, but are completely separate and isolated,. They are situated in the body cavity as a closed unit, only attached to the body wall by two retractors (RM.). The two penes, each with a caecum (C), a short flagellum (F) and a retractor muscle, are connected by a short vas deferens, (VD) but have no opening to the genital atrium. It is obvious that this abnormal composition of the generative organs precludes reproduction.

See Hausdorf (1989) for references to and discussion of the literature on abnormal pulmonate reproductive systems.

REFERENCES

- HAUSDORF, B., 1989. Über eine Anomalie der männlichen Endwege des Genitalsystems bei *Cernuella virgata* (Da Costa) (Gastropoda: Hygromiidae). — Heldia 1: 175-176.
- MAASSEN, W.J.M., 1995. Observations on the genus *Mastus* from Crete (Greece), with descriptions of twelve new species (Gastropoda Pulmonata: Buliminidae). Basteria 59: 31-64.