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FAVARTIA (FAVARTIA) PAULBOSCHI

(MURICIDAE : MURICOPSINAE)

A NEW MURICID FROM OMAN.

by

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ABSTRACT.

This paper describes a new species of muricid, *Favartia paulboschi*, from Oman. The shell, operculum and radula are illustrated. This species was first noticed in December 1980 on Masirah, Oman and since then 19 living and 28 dead examples have been recorded from Masirah and the mailand near Muscat, Oman.

Note.

Following abbreviations are used in the text :

IRSNB : Institut Royal des Sciences Naturelles de Belgique, Bruxelles.
MNHN : Muséum National d'Histoire Naturelle, Paris.
AMNH : American Museum of Natural History, New York.
USNM : National Museum of Natural History (Smithsonian Institution), Washington D.C
NMW : National Museum of Wales.
NHM : Natural History Museum, Oman.

Favartia (Favartia) paulboschi Smythe & Houart, sp. nov.

DESCRIPTION.

Shell medium sized for the genus, the largest specimen examined being 18,5 mm in lenght, solid and heavy. Exterior dull white, ivory, light brown or brownish-grey, covered with a very thin intritacalx.

Aperture ovate, the edges glossy white, the interior white, yellowish or brownish. Columellar lip smooth, completely adherent to the shell. Anal notch not apparent. Outer lip broadly crenulate, reflecting the spiral sculpture of the shell. Interior smooth.

Siphonal canal about the same length as the aperture, narrowly open in adult

specimens, more widely so in younger animals, slightly inclined to the left and recurved dorsally at the tip.

Spire high, consisting of two strongly carinate, flat nuclear whorls and five heavely sculptured postnuclear whorls. The early whorls have six to seven varices while the body whorl has five, of which the apertural one is narrow and expanded. There is a small curved, spine-like extension on the carinal part of the varices, worn in some specimens, but no other axial sculpture.

The spiral sculpture on the first three whorls consists of two heavy rope-like threads; there are five cords on the body whorl, the upper three being very strong while the anterior ones are weak. These cords become coarser towards the varices giving the impression that there are deep rectangular pits between them.

The operculum is thin, pale horn-coloured, with a terminal nucleus.

The radula is muricopsine with a short central cusp on the rachidian tooth which is strong; the laterals are slender and hooked.

TYPE MATERIAL.

Holotype : (Plate II, fig. 1) British Museum (Natural History) Reg.N° BM(NH) 1983062. Lenght 13,25 mm, maximum width 6,5 mm, lenght of aperture including canal 6,75 mm. Operculum 2,95 mm x 1,55 mm. Leg. K.R. Smythe 16 December 1980 at Dhuwwah, Masirah, Oman.

Paratype : (Plate II, fig. 2) Smythe collection. Length 12,45 mm. maximum width 6,25 mm. Leg. K.R.Smythe, 16 December 1980, Dhuwwah.

1 paratype I.R.S.N.B. n° : IG 26656/403.
1 paratype M.N.H.N., type collection.
1 paratype A.M.N.H. n° : AMNH 186117.
1 paratype N.M.W. n° : NMW:Z:1983:052.
1 paratype U.S.N.M. n° : USNM 792424.
1 paratype N.H.M., Oman.
23 paratypes K.R. Smythe collection.
2 paratypes R. Houart collection.
19 paratypes Donald T. Bosch collection.
1 paratype T. Pain collection.

TYPE LOCALITY.

Beach near fresh water distillation plant at Dhuwwah, Masirah, Oman : 20°39'N, 58°52'E. Sludgey silt with loose limestone rocks of varying sizes partially buried in the silt. Undersides of the rocks with some algae and tunicates. *Favartia paulboschi* is uncommon, usually singly under a rock. Other molluscs are *Nerita albicilla*, *Planaxis sulcatus*, *Euchelus asper*, *Chiton lamyi* and two small dorids.

Also live were marine worms, brittle starfish, crabs and scorpion fish.

DISTRIBUTION.

Favartia paulboschi has been found by K.R. Smythe and by Dr. Donald T. Bosch alive at Dhuwwah and Rassier, Masirah, under stones and at Al Bastan and Qurm near Muscat on the mainland of Oman. It has been found dead, usually crabbed, at most localities with rocks around the coast of Masirah. It is not common, and on the mainland it is rare. It is not recorded under any name by Melvill or Melvill and Standen for the Arabian Gulf, Gulf of Oman and North Arabian Sea, nor by any other author for the area that we have studied (see Smythe 1976 and 1979 for references), nor are there specimens in the British Museum (Natural History) (Townsend, Biggs, Challenger and Sykes collections especially), the National Museum of Wales (Tomlin and Melvill collections), the Royal Scottish Museum (various collections from the Arabian Gulf and Gulf of Oman), the Ferdowsi University collection, Meshhed, Iran, nor the collections of the late Professor M. Tadjalli-Pour in Paris and Iran (K.R.Smythe personal communications and searches). To date it appears to be restricted to Masirah and the nearby mainland - one of the authors (K.R.Smythe) did not find it in Dhofar, Southern Oman nor in the United Arab Emirates bordering on the Gulf of Oman.

ETYMOLOGY.

We have pleasure in naming this species for Paul Bosch, son of Donald and Eloise Bosch, who has helped us all with his enthusiastic assistance in collecting mollusca and his geological knowledge.

DISCUSSION.

This species is not described nor illustrated in Fair (1976) nor Radwin and D'Attilio (1976). Two related species are *Favartia peasei* (Tryon, 1880) and *Favartia sykesi* (Preston, 1904). *F. peasei* has a smaller, rounded aperture, heavier spiral cords and rounded varices. The siphonal canal is shorter and the right margin overlaps the left, which does not happen in *F. paulboschi*; the latter is also a more slender species.

From *F. sykesi* it differs by its much more slender form; also *F. sykesi* has more squamose and rounded varices and a very different protoconch, consisting of 3 rounded, glossy white whorls.

ACKNOWLEDGEMENTS.

We wish to thank particularly Dr. Sleurs and Dr. Wouters (IRSNB, Belgium) for mounting the radula and for the scanning micrographs. Our special thanks are also due to Dr. E.H. Vokes for her advice, Dr. P. Graham Oliver of NMW and Dr. D. Heppell

of RSM, Edinburgh for checking their collections for us, to Dr. J.D. Taylor for help and access to the Bristish Museum collections and library, to Mr. Tom Pain for help and to Dr. Donald T. Bosch and his family for taking one of the authors (K.R.Smythe) to Masirah and other places and for helping in the search for this mollusc and donation of specimens.

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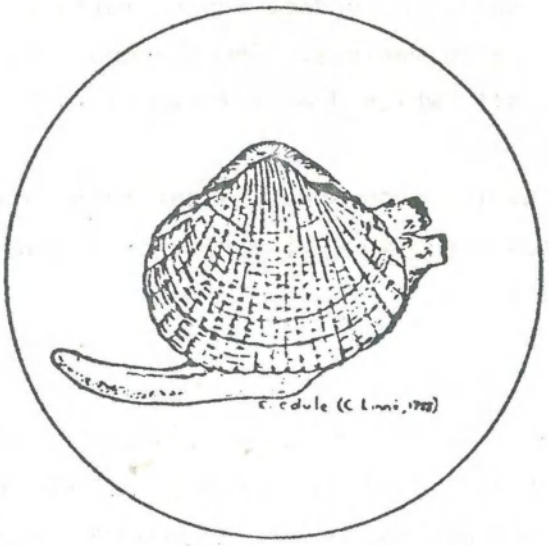
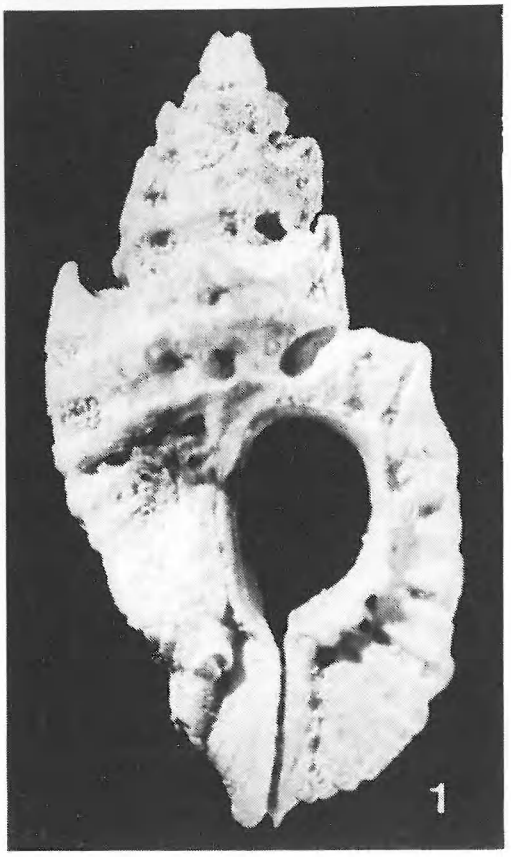
RESUME.

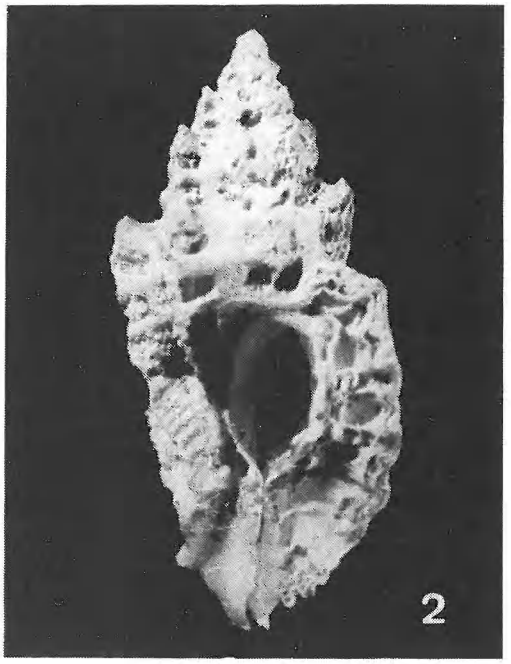
Un nouveau Muricidae (Muricopsinae) : *Favartia (Favartia) paulboschi* Smythe & Houart sp.n. est décrit et comparé à deux espèces plus ou moins proches : *Favartia peasei* (Tryon, 1880) et *Favartia sykesi* (Preston, 1904).

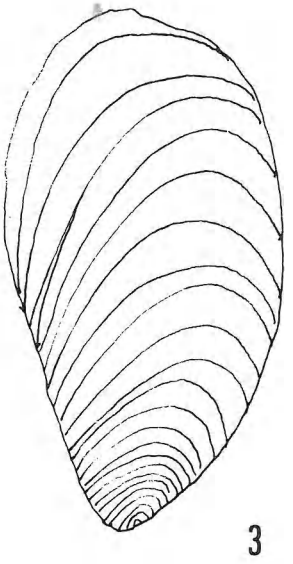
La localité type est située à Dhuwwah, Ile de Masirah, Oman, par 20°30' N et 58°52'E.

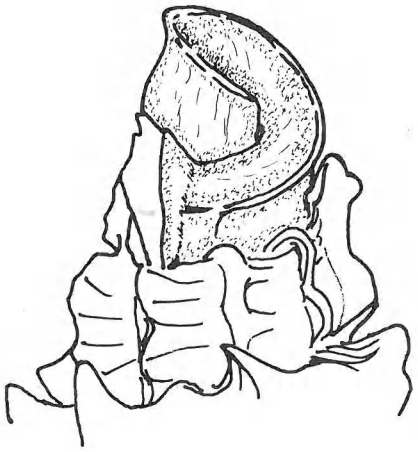
L'espèce est nommée en l'honneur de Paul Bosch, fils du Dr. Don Bosch et Eloise Bosch.

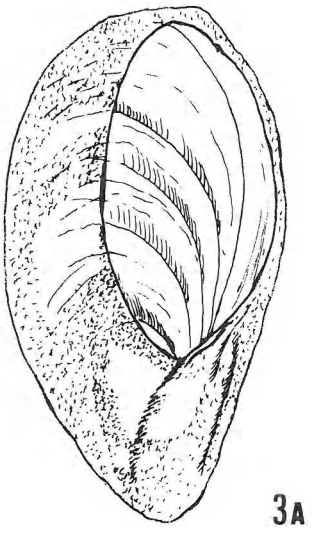












PL. II

1. *Favartia* (F.) *paulboschi* Smythe & Houart sp. nov. holotype BM(NH). 13.25 mm
2. *Favartia* (F.) *paulboschi* Smythe & Houart sp. nov. paratype Smythe coll. (12.45 mm)
3 - 3A. Operculum
4. Protoconch
5. Scanning micrograph of the radula (x 1250)