# On the identity of *Favartia peasei* (Tryon, 1880) (new name for *Murex foveolatus* Pease, 1869 *non* Hinds, 1844) (Gastropoda: Muricidae: Muricopsinae)

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**ABSTRACT.** The lectotype of *Murex foveolatus* Pease, 1969 (*non* Hinds, 1844), now *Favartia peasei* (Tryon, 1880), in the ANSP is compared with the originally illustrated paralectotype discovered afterwards in the MCZ, and with other specimens and species. The type locality is corrected.

#### INTRODUCTION

Working on a group of *Favartia* species occuring in the Indo-West Pacific and having been puzzled as to the identity and the variability of shell characters in *Favartia peasei* (Tryon, 1880), we decided to compare a few species of this group of *Favartia* that have broad axial varices and a high spire, in order to verify the conspecificity of the lectotype of *M. foveolatus* in the ANSP, designated by Myers & D'Attilio (1989), with the paralectotypes later discovered in the MCZ (Vokes, 1995).

#### **Abbreviations**

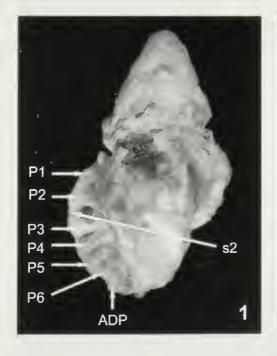
ANSP: The Academy of Natural Sciences of Drexel University, Philadelphia, USA.

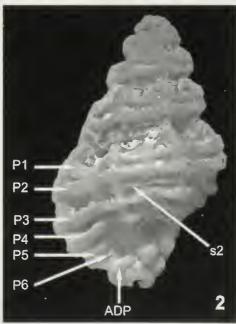
EPHE : Ecole Pratique des Hautes Etudes, Perpignan, France.

MB: Michel Boutet, Papara, Tahiti.

MCZ: Museum of Comparative Zoology, Harvard

University, Cambridge, U.S.A. RH: Collection of Roland Houart.





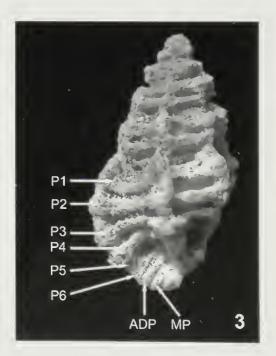


Fig. 1. Favartia peasei (Tryon, 1880), lectotype of Murex foveolatus Pease, 1869, 12.6 mm, ANSP 36144.

Fig. 2. Favartia peasei (Tryon, 1880), Afaahiti, Tahiti, 15.5 mm, RH.

Fig. 3. Favartia ponderi Myers & D'Attilio, 1995, Rabaul, Papua New Guinea, 13.8 mm, RH.

**Figures 1-3.** Terminology used to describe the spiral cords (after Merle, 1999 and 2001).

P: primary cord; s: secondary cord; P1: shoulder cord; P2-P6: primary cords of the convex part of the teleoconch whorl; s1-s6: secondary cords of the convex part of the teleoconch whorl (example: s1 = secondary cord between P1 and P2; s2 = secondary cord between P2 and P3, etc.); ADP: adapertural primary cord on the siphonal canal; MP: median primary cord on the siphonal canal.

## Favartia (Favartia) peasei (Tryon, 1880) Figs 1, 2, 4G-N

Murex foveolatus Pease, 1869: 83, pl. 8, fig. 3 (non Hinds, 1844).

*Murex peasei* Tryon, 1880 : 129, pl. 38, fig. 462 (*n. n.* for *Murex foveolatus* Pease, 1869 *non* Hinds, 1844).

**Type locality.** La Paz, Baja California, Mexico (erroneous – see below). Following recommendation 76A.2.A of ICZN (1999) "A statement of a type locality that is found to be erroneous should be corrected", the type locality of *Murex foveolatus* Pease, 1869 is here corrected to Tahiti, French Polynesia.

**Distribution.** Tahiti, Society Archipelago, French Polynesia. The conspecificity of the specimens from the Western Indian Ocean (Houart et al., 2011) still needs to be verified.

**Remarks.** Favartia peasei has a complicated history. It was introduced as a new name for Murex foveolatus Pease, 1869 non M. foveolatus Hinds, 1844, which is actually a member of the Ocenebrinae from California.

Pease (1869: 83, pl. 8, fig. 3) described *M. foveolatus* from "*La Paz, in sinu Californica*" along with a drawing of the shell (Fig. 4G). The type locality is undoubtedly erroneous, Pease having probably received false information or mixed the specimens.

After his description was published, Pease sent a specimen of *M. foveolatus* to Tryon, who recognized the homonymy with *M. foveolatus* Hinds, 1844. Tryon (1880) then renamed it *Murex peasei*.

The shell was wrongly identified by Keen (1971: 532), who illustrated a species as *Favartia peasei* and cited it as occurring along the west coast of Mexico

and Panama. This species was later named *Favartia poormani* Radwin & D'Attilio, 1976, and is now included in the subgenus *Pygmaepterys* Vokes, 1978 (Fig. 4A-B).

Vokes (1984) was the first to include *F. poormani* in *Pygmaepterys*, but she thought the original figure of *Murex foveolatus* represented *F. poormani* and that the specimen sent afterwards to Tryon by Pease was another species. Vokes thus considered *F. poormani* to be an unnecessary name.

Cernorhorsky (1985) illustrated the shell sent to Tryon by Pease and deposited in the ANSP.

This specimen was designated as the lectotype of Murex foveolatus Pease, 1869 by Myers & D'Attilio (1989). There was no locality on the label (see Radwin & D'Attilio, 1976: 152). It is not the originally illustrated specimen, but as stated by Vokes (1995: 18) and following ICZN (1985) [Art. 74 (a)] "any author may designate one of the syntypes as the lectotype" [now (1999): Art. 74(1)]: "A lectotype may be designated from syntypes to become the unique bearer of the name of a nominal species-group taxon and the standard for its application". Because it is clear that the specimen sent by Pease himself was one of the original type lot, this designation is thus valid. In her well-documented and illustrated article, Vokes (1995) wrote about her unexpected discovery of the originally illustrated specimen of Murex foveolatus, together with a second, smaller one, in the Museum of Comparative Zoology, Harvard University (Fig. 4H-J). Both were illustrated by Vokes (1995: 18, figs 2

Myers (2003) also commented on *F. peasei*. She illustrated the original drawing of Pease and the lectotype, but the distribution of the species was still unknown.

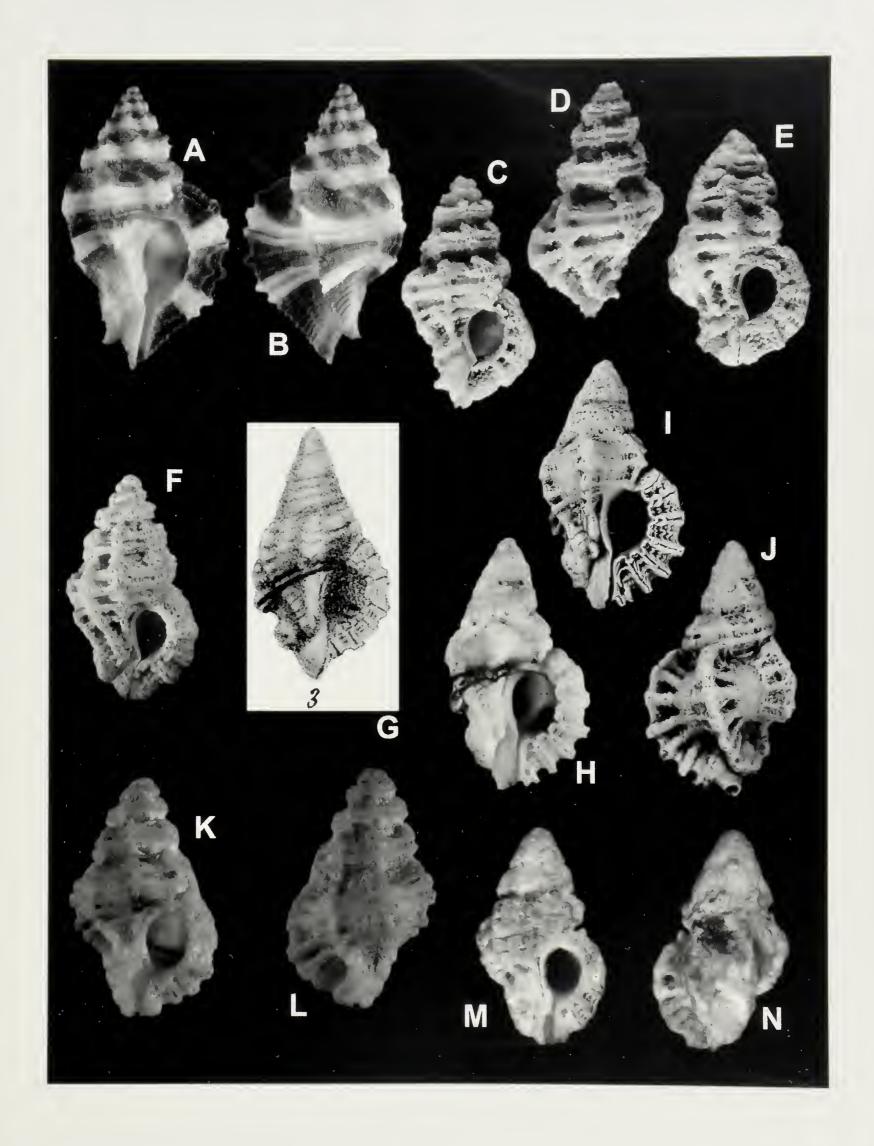
A specimen in the RH collection, from Tahiti (Figs 2, 4K-L), is similar to the shell originally figured by Pease (1868) (Fig. 4G) and thereafter illustrated by Vokes (1995) (Fig. 4H-J). It only has one additional axial varix on the last teleoconch whorl (6 vs 5 in the paralectotype), but this is a normal variation in *Favartia* species. The shell in the RH collection has also some dark brown blotches on P3, between s2 and P3 and between P3 and P4, almost forming a brown band as observed in the MCZ paralectotype.

# Figure 4

**A-B.** Favartia (Pygmaepterys) poormani Radwin & D'Attilio, 1976. Chiriqui Bay, West Panama, 21.5 mm, RH. **C-F.** Favartia (Favartia) ponderi Myers & D'Attilio, 1989

C-D. Mactan Is, Philippines, 14 mm, RH; E-F. Rabaul, Papua New Guinea. E. 15.6 mm; F. 13.8 mm, RH. G-N. Favartia (Favartia) peasei (Tryon, 1880)

G. Original figure of *Murex foveolatus* Pease, 1869 (*American Journal of Conchology*, vol. 5, pl. 8, fig. 3); **H-J.** Paralectotype of *Murex peasei*, MCZ 304068A, 16 mm (1-J: shell whitened to show detail of sculpture); (photos courtesy E.H. Vokes, scan of black and white photographs); **K-L.** French Polynesia, Afaahiti, 17°43'60" S et 149°18'0" W, Tahiti, 15.5 mm, RH; **M-N.** Lectotype of *Murex peasei*, ANSP 36144, 12.6 mm.



We also compared *F. peasei* with more or less similar looking species from the Indo-West Pacific such as *Favartia brevispira* Bozzetti, 2007, *F. dorothyae* Emerson & D'Attilio, 1979, *F. garretti* (Pease, 1868), *F. nuculata* (Reeve, 1845), *F. nucula* (Reeve, 1845), *F. ponderi* Myers & D'Attilio, 1995, *F. striasquamosa* (Ponder, 1972) and *F. sykesi* (Preston, 1904). None except *F. ponderi* seems to be close enough to enter into the variability of the shell morphology of *F. peasei*.

However, *Favartia ponderi* (Figs 3, 4C-F) differs in having a different spiral sculpture morphology, and a final teleoconch whorl with four strong primary spiral cords P1-P4, followed by small, almost or entirely obsolete P5 and P6. This compares to the broad P1-P5 followed by a narrower P6, with an occasional s2 between P2 and P3 in *F. peasei* (Figs 1-3).

The specimen in the EPHE collection identified as *Favartia ponderi* Myers & D'Attilio, 1989 by Tröndlé & Houart (1992: 83, fig. 34) turns out to be probably conspecific with *F. peasei* and not with *F. ponderi* as mentioned.

After the comparison of the worn, much encrusted and slightly smaller lectotype in the ANSP (Figs 1, 4M-N), with the photos of the MCZ paralectotypes and a specimen from Tahiti (Figs 2, 4K-L), we conclude that both the lectotype and the paralectotypes of *F. peasei* are conspecific and differ from the other species cited above.

## **ACKNOWLEDGEMENTS**

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