

## On a collection of Columbelloidea from the Red Sea

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**KEYWORDS.** Columbelloidea, Red Sea, new species.

**ABSTRACT.** The authors have studied the Columbelloidea from the Red Sea, preserved in the Muséum National d'Histoire Naturelle in Paris, especially the collection donated by Félix Jousseume. Seventeen species are reported, among them a new one, *Pyrene jousseumei* n. sp.

**RESUME.** Les auteurs ont étudié les Columbelloidea de la Mer Rouge du Muséum National d'Histoire Naturelle, Paris, spécialement de la collection léguée par Félix Jousseume. 17 espèces y ont été répertoriées, et parmi elles une espèce nouvelle, *Pyrene jousseumei*, n. sp.

### I. INTRODUCTION

One of the most remarkable and colourful characters in the malacological exploration of the Red Sea and the Gulf of Aden must have been Felix Jousseume. Born in 1835, and french medical doctor, Jousseume published from 1869 numerous notes and pamphlets on conchology, including major papers on Marginelloidea, Cancellarioidea and Triphoridae. After he had retired, he started visiting the Red Sea and the Gulf of Aden, and spent there nine winters between 1889 and 1900 (LAMY 1921). Jousseume was a gifted collector and brought together a comprehensive collection of molluscs, which to this date remains the largest known for this part of the world. In 1893, Jousseume became a *correspondant* of the Muséum National d'Histoire Naturelle in Paris, to whom he donated his superb collection and library at his death, in 1921.

Much of the Columbelloidea collected by Jousseume had remained unidentified and unreported so far; we are pleased to name a new species of *Pyrene* after him.

Except when otherwise stated, records localities are those quoted by Jousseume in each of his samples. Average lengths have been established after measuring 10 adult specimens of the species.

### II. SYSTEMATICS

*Pyrene aspersa* (Sowerby, 1844). Fig. 1.

#### Description.

Thick, biconical, whorls convex and smooth. Colour pattern made of creamy-white ocelli, often confluent, on a brown ground.

Average length : 21.2 mm.

Records : Aden, Red Sea.

*Pyrene flava* (Bruguère, 1789).

#### Description.

Very variable colour pattern of reddish-brown wavy lines and irregular blotches on a creamy background. Protoconch of 1.5 to 2 smooth whorls.

Average length : 17.7 mm.

Records : Aden, Djibouti, Obock, Perim I., Hodeidah, Abulat I. (Abu Latt I., Sawdi Arabia), Kad ed el Hamden (Sawdi Arabia), Suez.

*Pyrene jousseumei* n. sp. Figs. 2-3.

#### Description.

Biconical and rounded in shape. Teleoconch of 6 strongly convex whorls. Whorls sculptured with spiral furrows, numbering 9 on penultimate whorl, becoming less obvious on body-whorl. Aperture narrow. Outer lip thick bearing 9 denticles. Columella smooth. Base with 10 closely-set spiral furrows. Protoconch missing in type, and consisting of one smooth whorl in a juvenile paratype.

Colour fawny-brown, with small rounded creamy-white blotches, disposed in irregular spiral rows (2 on body-whorl) and axial lines (about 4 per whorl).

Dimensions: holotype height 15.7 x width 7.6 mm. Max. size of examined material: 17.3 x 9.2 mm.

#### Remarks.

This species differs from *P. pelotina* (Duclos, 1840) in its larger size, in its different colour pattern, in its

spiral furrows on whorls (*P. pelotina* is smooth on whorls), in its more convex whorls, and in its 10 spiral furrows on base instead of 5 in *P. pelotina*.

This new species differs from *P. propinqua* (E.A. SMITH 1891), that seems to be the nearest species, in its colour pattern (*P. propinqua* is white with dark-brown blotches), in its 10 spiral furrows on base instead of 8 in *P. propinqua*, and in the lack of the axial furrows that *P. propinqua* bears on the whole shell.

#### Type material.

Holotype and 29 paratypes in Muséum National D'Histoire Naturelle, Paris. 2 paratypes in the collection of J. Drivas.

#### Type Locality.

Perim I. (Yemen).

#### Distribution.

This species seems to be endemic to the Red Sea and the Gulf of Aden (Aden, Obock, Djibouti).

#### Etymology.

Named in honour of Félix Jousseume.

### *Pyrene propinqua* (E.A. Smith, 1891). Fig. 4.

#### Description.

Biconical. Whorls sculptured with fine axial ribs, intersected by spiral cords. Colour dark-brown with large widely-spaced creamy-white ocelli.

**Average length** : 12.4 mm.

**Records** : Abulat (Abu Latt) I.

### *Euplica festiva*

(Deshayes in Laborde & Linant, 1834).

*Euplica azora* (Duclos, 1840) (new synonym).

*Euplica albinodulosa* (Gaskoin, 1851) (new synonym)

#### Description.

Axial ribs more or less marked, and spiral striae stronger on base than elsewhere on body-whorl. Ground colour greyish, with white blotches on crests of axial ribs; and one single or double spiral row of brown blotches on spire whorls, and 3 rows on body-whorl. Protoconch of 1.5 to 2 smooth whorls.

**Average length** : 9.9 mm.

**Records** : Aden, Obock, Djibouti, Perim I., Massawa, Massaouah, (Massaoua), Ras Zeiti (Ras Saati, Erythrea), Abulat (Abu Latt) I., Djeddah, Tor (El Tor, Sinaï), Sherm Sheikh (Sinaï) Suez.

#### Remarks.

We previously thought that *E. azora* differed from *E. albinodulosa* only in 2 spiral rows of brown spots instead of one. Examination of more material showed

many intermediates between those two patterns.

### *Mitrella albina* (Kiener, 1841).

#### Description.

A subsutural row of large nodules developing on last half of body-whorl. Colour greyish-white, with white nodules and obsolete irregular brown blotches. Base of rostrum with a fairly characteristic brown blotch. Protoconch of 2.5 smooth whorls.

**Average length** : 14.3 mm.

**Records** : Aden, Obock, Djibouti, Perim I., Sherm Sheikh.

### *Mitrella conspersa* (Gaskoin, 1851).

#### Description.

Colour variable, but the white and brown subsutural band, continuous on body-whorl is present in all specimens examined. Aperture purple-tinted in adult specimens. Protoconch of 2.5 smooth whorls.

**Average length** : 11.2 mm.

**Records** : Al Sayad (?), Abulat (Abu Latt) I., Akaba, Suez, Red Sea.

### *Mitrella margarita* (Reeve, 1859).

#### Description.

One subsutural spiral row of quadrangular white blotches.

**Average length** : 9 mm.

**Records** : Aden, Perim I.

### *Mitrella nomadica* (Melvill & Standen, 1901). Fig.5.

#### Description.

Fusiform in shape. Spire twice as high as aperture. Colour red-brown with creamy-white ocelli; one spiral row of larger ocelli in the middle of body-whorl.

**Average length** : 15 mm.

**Records** : Aden, Suez, Akaba.

### *Mitrella nympha* (Kiener, 1841).

#### Description.

Colour pattern variable, with golden to greyish axial lines on white background. Outer lip occasionally brown-tinted.

**Average length** : 9.8 mm.

**Records** : Aden, Djibouti, Obock, Perim I., Massaoua, Souakim (Souakin, Soudan), Hodeidah, Djeddah, Suez, Akaba.

*Zafra exilis* (Philippi, 1847). Fig. 6.**Description.**

Fusiform. Whorls sculptured with axial ribs, more obvious on spire than on body-whorl. Colour brown, more or less dark, with 2 spiral rows of creamy-white blotches, one of them at the upper part of whorls, the lower one near suture on spire, and at the middle of body-whorl. The species is endemic to the Red Sea.

**Average length** : 4.3 mm.

**Records** : Aden, Djibouti, Obock, Perim, Massaouah (Massaoua), Souakim (Souakin), Hodeidah, Djeddah, Akaba, Red Sea.

*Zafra minuscula* (Gould, 1860).**Description.**

Uniform dark-brown. Protoconch of 3 smooth whorls.

**Average length** : 3.6 mm.

**Records** : Aden, Djibouti, Obock, Perim I., Massaouah, Massawa (Massaoua), Souakim (Souakin), Djeddah, Hodeidah.

*Zafra savignyi* Moazzo, 1939. Fig. 7.**Description.**

Shell much wider than *Z. exilis*, and with axial ribs that are slightly oblique and more neatly marked. Pale-brown with creamy-white blotches on ribs, on the entire height of whorls.

**Average length** : 3.7 mm.

**Records** : Suez.

*Zafra succinea* (Hervier, 1899).**Description.**

14 axial ribs on body-whorl. 10 basal lirae. One shallow subsutural groove. Pale-brown in colour, upper part of each whorl white. The brown area on body-whorl often delimited posteriorly by a darker line. Protoconch of 3 smooth whorls.

**Average length** : 3.6 mm.

**Records** : Obock, Djeddah.

*Zafra troglodytes* (Souverbie, 1866).**Description.**

More biconical in shape than *Z. succinea*, with a carinated protoconch, and a different colour pattern.

**Average length** : 3.3 mm.

**Records** : Aden, Djibouti, Obock, Perim I., Massawa (Massaoua), Souakim (Souakin), Abulat (Abu Latt) I., Djeddah, Akaba.

*Anachis fauroti* (Jousseume, 1888). Fig. 8.**Description.**

Biconical. Widely-spaced axial ribs, numbering 14 on last whorl. Creamy-white with a wide pale-brown spiral band, and dark-brown blotches on ribs.

**Average length** : 15.5 mm.

**Records** : Aden, Djibouti, Obock, Perim, Suez, Red Sea.

*Zafrona isomella* (Duclos, 1840).**Description.**

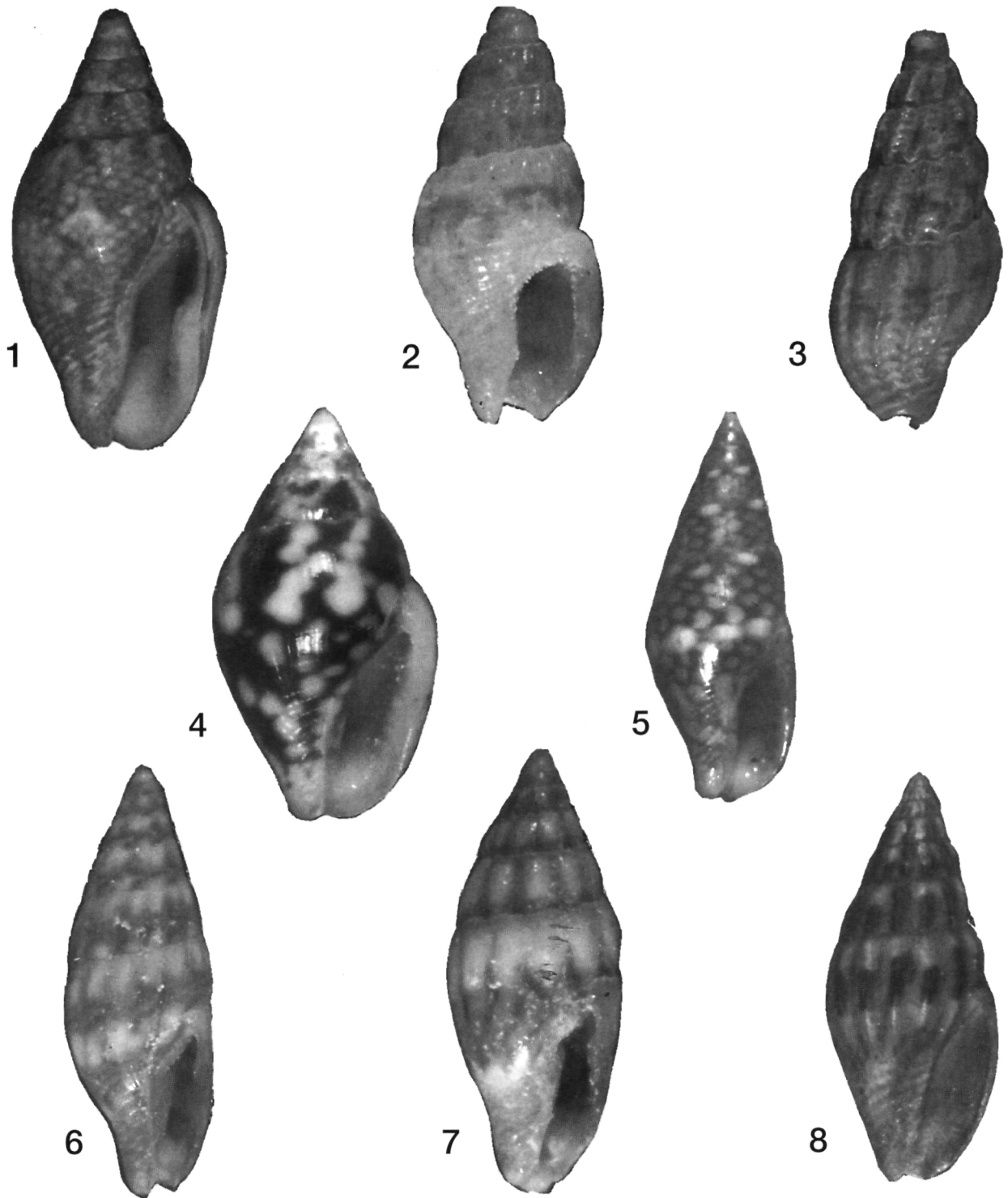
Axial ribs crossed by spiral cords. Outer lip and columella denticulate.

**Average length** : 4.1 mm.

**Records** : Djibouti.

**REFERENCES**

- DUCLOS, P.L. 1840. *Coquilles univalves marines à l'état vivant et fossile, publiée par monographies. Genre Colombella*. Paris, Didot ed.
- LAMY, E. 1921. Nécrologie. Dr. F. Jousseume. *J. Conchyl.* 66: 79-85.
- SMITH, E.A. 1891. On a collection of Marine shells from Aden, with some remarks upon the relationship of the molluscan fauna of the Red Sea and the Mediterranean. *Proc. Zool. Soc. London*: 390- 436.



**Fig. 1:** *Pyrene aspersa* (Sowerby, 1844) : 21 mm. **Figs. 2-3:** *Pyrene jousseaumei*, n.sp. Holotype : 15,7 mm, MNHN, Paris. **Fig. 4:** *Pyrene propinqua* (E.A. Smith, 1891) : 12.4 mm. **Fig. 5:** *Mitrella nomadica* (Melvill & Standen, 1901) : 15 mm. **Fig. 6:** *Zafra exilis* (Philippi, 1847) : 4.3 mm. **Fig. 7:** *Zafra savignyi* Moazzo, 1939 : 3.7 mm. **Fig. 8:** *Anachis fauroti* (Jousseaume, 1888) : 15.5 mm.



### ERRATUM

DRIVAS, J. & M. JAY. 1997. On a collection of Collumbellidae from the Red Sea. *Apex* 12(1): 27-30.

An unfortunate mistake, for which the authors apologise, has taken place in the picture illustrating the holotype of *Pyrene jousseaumei* n. sp. (DRIVAS & JAY, 1997: figs 2-3). As the readers may have realised, the erroneous picture illustrates a specimen of *Zafrona isomella* (Duclos, 1840). The real holotype (MNHN) of *Pyrene jousseaumei* Drivas & Jay, 1997 is here figured.

J. Drivas & M. Jay



*Pyrene jousseaumei* Drivas & Jay, 1997  
Holotype MNHN, 15.7 mm X 7.6 mm

**Editor's note:** we recommend to place this page between pp. 30 and 31 of *Apex* 12(1).