

New report of *Aperiovula juanjosensii* Pérez et Gómez, 1987 (Gastropoda Ovulidae) for the Sicilian coast

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ABSTRACT

One living specimen of *Aperiovula juanjosensii* Pérez et Gómez, 1987 (Gastropoda Ovulidae) was found in the Strait of Messina (North-East Sicily), at Punta Faro at a depth of about 90 m. The specimen was found in the fishing rest, in a sample rich of *Myriapora truncata* (Pallas, 1776), but with presence of *Paramuricea clavata* (Risso, 1826) and *Eunicella cavolinii* (Esper, 1791). The gorgonian *Villogorgia bebrycoides* (Koch, 1887), indicated as host in literature, even if should be present in the area, has not been found. *A. juanjosensii* was described for the area of Canary Islands and Atlantic Marocco and, up to now, only shown for a location of the Italian coast, without additional data.

KEY WORDS

Aperiovula juanjosensii; recent; Mediterranean Sea.

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INTRODUCTION

One specimen of *Aperiovula juanjosensii* Pérez et Gómez, 1987 (Gastropoda Ovulidae) was found in June 2013 in the rest of fishing material taken with trammel net laid down at a depth of about 90 m, at Punta Faro also called Capo Peloro (Strait of Messina, North-East Sicily).

The sample was rich of *Myriapora truncata* (Pallas, 1776), but were also present *Paramuricea clavata* (Risso, 1826) and *Eunicella cavolinii* (Esper, 1791). The specimen, complete of soft parts, is 7.8 mm high and 4.5 mm wide. The gorgonian *Villogorgia bebrycoides* (Koch, 1887), indicated as host in literature, even if should be present in the area, has not been found. This species was described for the area of Canary Islands and Atlantic Marocco, and, up to now, only shown for

a location of the Italian coast, without additional data.

Aperiovula juanjosensii Pérez et Gómez, 1987

ORIGINAL DESCRIPTION (Pérez & Gómez, 1987). The general shape. The shell is pyriform in shape, not very solid, with extremely small apertures, slightly translucent, and small in size. The base is convex. The aperture is rather narrow with the columella and the lip being practically parallel. The latter has hardly accentuated denticles in the internal border, which terminate toward the anterior extremity. The funiculus is well marked. The posterior extremity is enlarged and pointed, with the sinus open and slightly curved toward the dorsal part. The lip border is clearly marked. The columella is

curved with an evident small depression and dimple. The syphon canal terminates obliquely (the external lip is shorter than the internal one).

The external surface. It is sculptured by transversal striae localized at both extremities, particularly on the posterior where they are more numerous and dense. The globular area of the final whorl has no spiral sculpture, except for some so fine that they are visible only upon microscopic examination.

Colouring. The colouring is bright white, almost translucent. On the lip borders at the extremities it takes on an opaque ivory shade. An exact description of the mollusc itself is not yet possible, but local fishermen have referred that it has a reddish tint.

BIOLOGY. The Ovulidae is a family of carnivorous and ectoparasites molluscs, with a wide geographical distribution in tropical and temperate belt. The species *Xandarovula patula* (Pennant, 1777) is a northern one, reaching the latitude of England. The Ovulidae are host specific in the sense that the colour of the mollusc mantle, covering the shell, copies the host both in colour and geometry of the papillae as in the host polyps. They live on Anthozoa, and well known (Schiaparelli et al., 2005; Fehse, 2007) is the association, inside the Mediterranean, of *Neosimnia spelta* (Linnaeus, 1758) with *Eunicella cavolinii* (Koch, 1887) and *E. singularis* (Esper, 1791), and of *Simnia illyrica* Schilder, 1927 with *Leptogorgia sarmantosa* (Esper, 1791). More specimens of ovulid may live and predate on the same host, but this seems not to cause the death of the host.

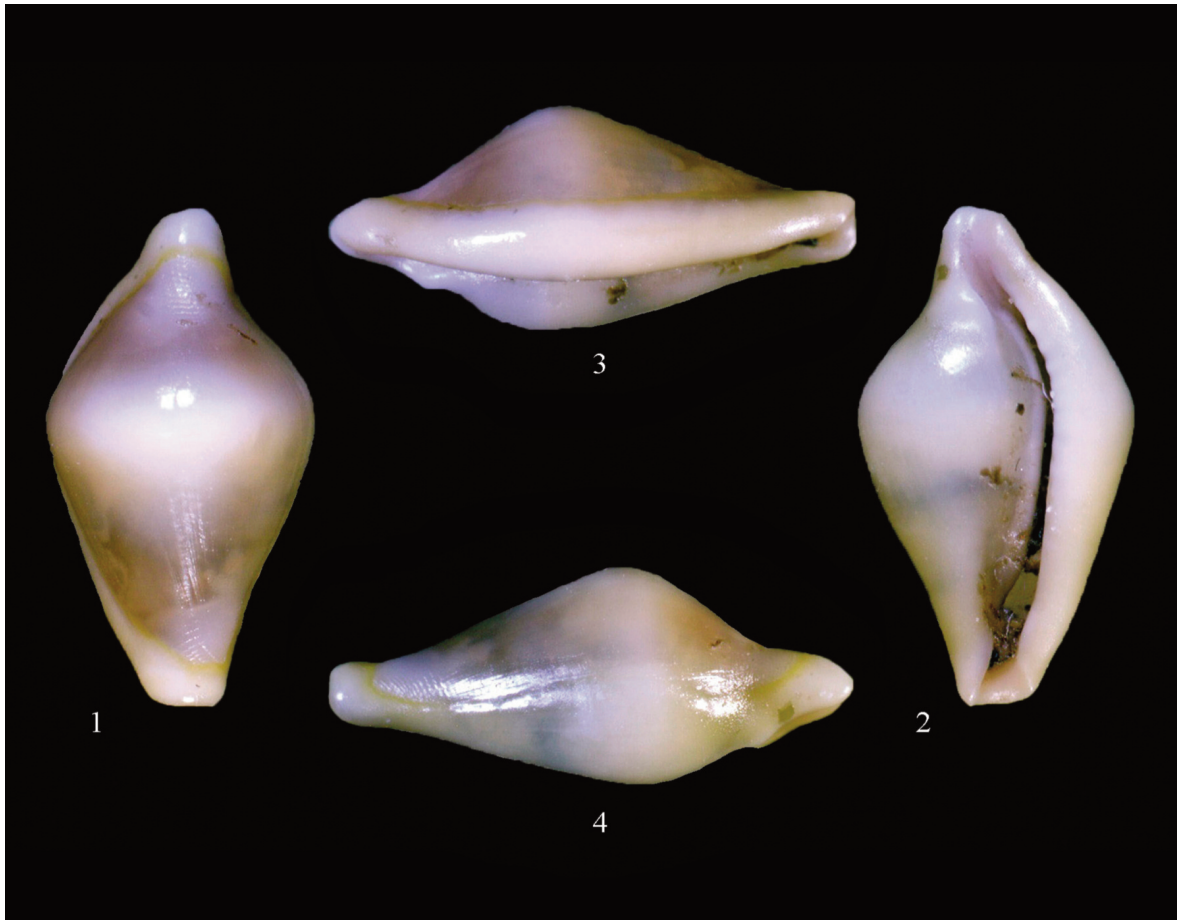
Villogorgia bebrycoides has been reported at 70-130 m depth in the gulf of St. Eufemia (Calabria, South Tyrrhenian Sea) by Bo et al. (2012) and also in the Sicily channel, always in deep waters, therefore could occur in deep water at Punta Faro. In the rest of material found in the boat together with *A. juanjosensii* there were no pieces of *V. bebrycoides*, therefore the association with this gorgonians cannot be confirmed, at the same time there is the possibility that *A. juanjosensii* may live associated to any of the other gorgonians present in the sample. As above indicated, this multi-host preference has been reported by Schiaparelli et al. (2005) for *Neosimnia spelta*.

REMARKS. *A. juanjosensii* was described on five specimens (3 living, 2 dead) from Tenerife and La

Palma islands. The species was found associated with the gorgonians *Villogorgia bebrycoides* (Koch, 1887) at a depth ranging from 100 to 250 m, caught with drag or shrimp net. Bouchet & Warén (1993: 746) report *A. juanjosensii* "on the seamounts between Madeira and Portugal in about 200-300 m". Oliverio & Villa (1998: 56) in the study on Ovulidae of the Canary islands figure a paratype (Figs. 13, 14) from Tenerife, but do not add anything to what known from previous literature.

Primovula (Adamantia) bellocqae Cardin, 1997 is described on four specimens trawled off the Atlantic coast of Morocco, between Safi and Agadir, at a depth of 50-60 m. Actually, the Author (Cardin, 1997) used the generic name "*bellocqae*" in the title and figure explanation, while in the text there is and additional "*u*" and the name is written "*bellocquae*". Similarly, also the name of the other species is wrongly written: "*juanjoseensis*" or "*juanjoneensis*". The Author states that the new species is very similar to *A. juanjosensii*, but due to the very schematic original drawing, a detailed description of the discriminant characters was not possible. Fehse (2003) put in synonymy the two names. The mediterranean records are few and the collecting locality are not detailed. One specimen 12 mm high, from Western Mediterranean, is figured by Ardovalini & Cossignani (2004: 112) under the name *Primovula bellocque*. Two specimens, one from Marsala (Western Sicily) and one from Alboran are figured by Cossignani & Ardovalini (2011: 234). Another specimen labelled from Trapani (West Sicily) is present in the collection of the Museo Malacologico of Cupra Marittima. The above records indicate a distribution in the Western Mediterranean, which is confirmed and extended up to the Eastern Sicily by our discovery.

The original description fails to indicate the marked dorsal gibbosity, well visible in lateral view. In addition the colour of our specimen clearly shows the two yellowish bands at the extremities, at the beginning of the callus, interconnected by a yellow band running behind the thickening of the outer lip. *A. juanjosensii* clearly differs from *A. adriatica* (Sowerby G. B. I, 1828) for the dorsal gibbosity, the angulated profile in frontal view, the elongated posterior extremity and the narrower aperture. The denticles on the external lip are present in both species. Same differences apply also to *Pseudosimnia carnea* (Poiret, 1789).



Figures 1-4. *Aperiovula juanjosensii* Pérez et Gómez, 1987, Punta Faro, Messina, Italy, -90 m, height 7.8 mm.
Fig. 1: dorsal view. Fig. 2: ventral view. Figs. 3, 4: lateral view.

Additional note. When the work was ready for publication, a second specimen has been found in the same locality, by same fishing boat. The second specimen is 8.2 mm high and 4.2 mm wide, very fresh.

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