

Odostomia brevicula Jeffreys, 1883 junior synonym of *Turbonilla amoena* (Monterosato, 1878) (Gastropoda, Heterobranchia, Pyramidellidae)

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ABSTRACT Based on the study of the type material of *Odostomia brevicula* Jeffreys, 1883, deposited in the United States National Museum Washington (USNM), this doubtful taxon appears to be based on two immature shells of *Turbonilla amoena* (Monterosato, 1878) of which it shall be considered a junior synonym.

KEY WORDS *Chrysallida brevicula*, *Turbonilla amoena*, recent, Mediterranean Sea.

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INTRODUCTION

Odostomia brevicula Jeffreys, 1883 was described on two specimens, indicated by the Author as “more or less imperfect”, dredged off Crete (Aegean Sea) at a depth of 70-120 fathoms (128-220 m).

Original description (Jeffreys, 1883: p. 397):

“SHELL conical, solid, opaque, and glossy; *sculpture*, short, strong, straight, and rather sharp longitudinal ribs, of which there are about a dozen on the last whorl; they terminate abruptly at the periphery, which is bluntly angulated; the interstices of the ribs have an excavated appearance; under the microscope the whole surface is covered lengthwise with very fine and close-set striae; the apex is quite smooth and polished; *colour* clear white; *spire* short; *whorls* 4 (besides the bulbous and heterostrophe embryonic nucleus), compressed, and gradually enlarging; the last is almost equal to half the spire; *suture* shallow and nearly straight; *mouth* oval, pointed at the base; *pillar* curved; *tooth* small and indistinct, tubercular,

placed on the upper part of the pillar; *umbilicus* none; L. 0.1, B. 0.05”.

The species was figured by Jeffreys (1883: pl. 16, fig. 4), but the original drawing, here copied (Fig. 1), is not much clear and has not allowed a clear recognition of this species by the later Authors.

As concerns the allocation in genus *Odostomia*, it is useful to point out that Jeffreys used to place in this genus almost all species of Pyramidellidae and, in particular, the species currently placed in *Odostomia* Fleming, 1813, *Ondina* De Folin, 1869, *Turbonilla* Risso, 1826, *Eulimella* Jeffreys, 1847 e *Chrysallida* P.P. Carpenter, 1856. Therefore the generic allocation has not helped the Authors that successively tried to understand this taxon.

Monterosato (1884: 88) proposed for this species the new name *Pyrgulina abbreviata* for *O. brevicula* Jeffreys, 1883 not Monterosato, 1878, that was however a nomen nudum, therefore there is not the need of a replacement. Really Monterosato was not aware of another and valid senior homonym that is *O. brevicula* A.

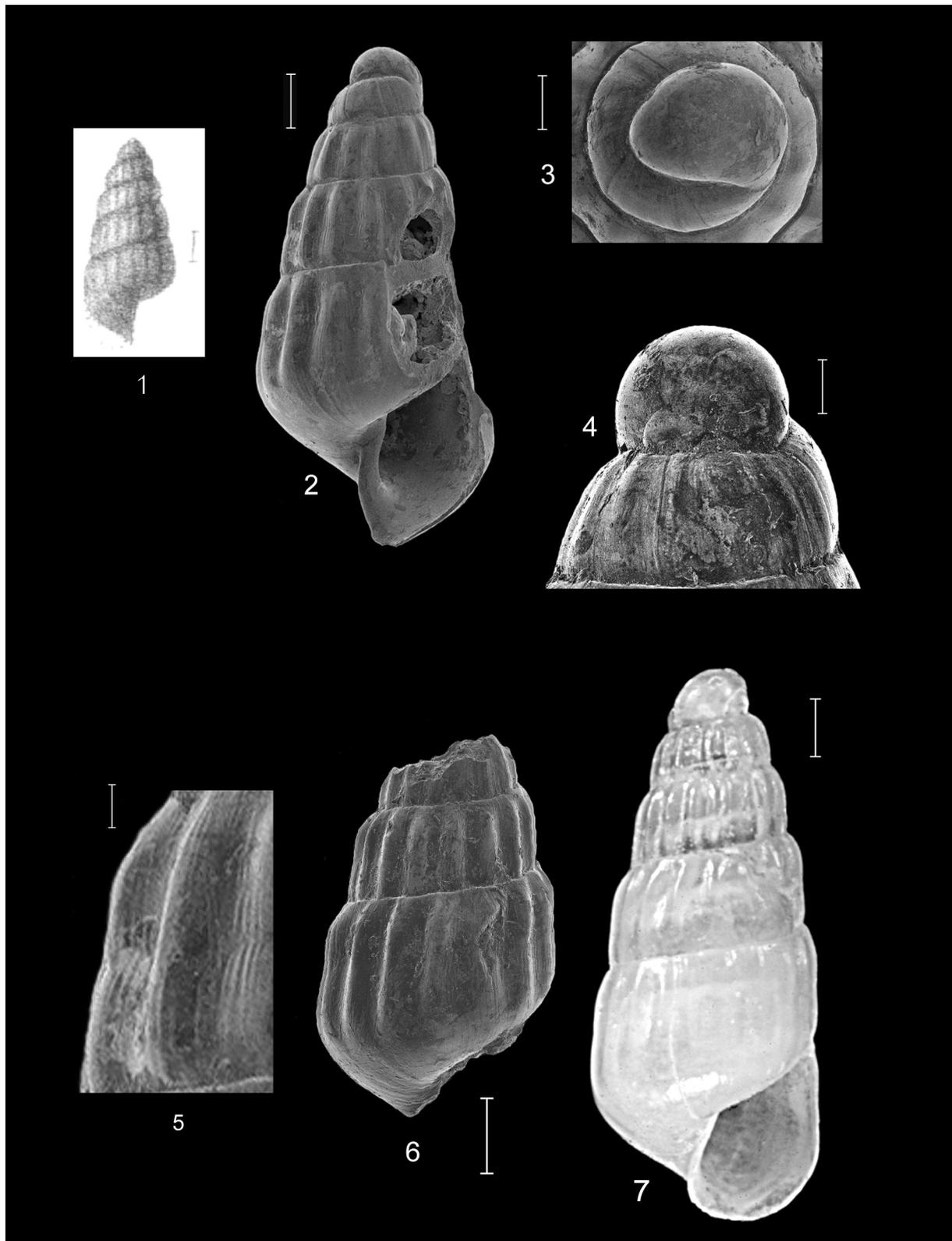


Figure 1. *Odostomia brevicula* Jeffreys, 1883, original drawing.

Figures 2-5. Holotype of *Odostomia brevicula*. Fig. 2: frontal view (bar line = 0.2 mm). Figs. 3, 4: detail of protoconch (bar line = 0.1 mm).

Fig. 5: detail of axial microsculpture (bar line = 0.05 mm).

Figure 6. Paratype of *Odostomia brevicula*, dorsal view (bar line = 0.2 mm).

Figure 7. *Turbonilla amoena*. Frontal view, shell from Vibo Marina (VV) -200 m, 2007, S. Bartolini coll. (bar line = 0.25 mm).

Adams 1861, from sea of China, and this makes available the name proposed by Monterosato.

Kobelt (1905: 133, pl. 71, fig. 18) placed *O. brevicula* in *Parthenina* B.D.D., 1883, giving a misleading description in German (it is different from the description in Latin), because the striae, indicated in the original description as “lengthwise”, that means axial, are indicated as spiral.

Nordsieck (1972: 97, pl. PII, fig. 3) drew under this name an immature specimen of *Turbonilla jeffreysii* (Forbes & Hanley, 1850).

Aartsen (1977: 52) examined the type material, pointing out that the specimens were “badly preserved and [omissis] fixed to a carton with a fair amount of adhesive”. The Author clearly stated that “the figure by Nordsieck can not be this species”.

Warén (1980: 37), in his work on Jeffreys’s types, stated that at the I’USNM (United States National Museum of Natural History) of Washington are present the “partly broken” holotype, registered at n° 132507, and a paratype registered at n° 132504. A question mark was put by the Author before the name, to indicate an uncertain systematic value.

Based on these doubtful bibliographic records, this species was included in the recent list of species (Piani 1980; Bruschi et al., 1985; Sabelli et al., 1990-1992; Cossignani & Ardochini, 2011) under the name *Chrysallida brevicula*, with doubtful specific validity.

MATERIALS AND METHODS

The present work was carried out by examining photos of two specimens of the type series kept at the Department of Invertebrate Zoology National Museum of Natural History, Smithsonian Institution, USA (Figs. 2-6)

RESULTS AND CONCLUSION

From the study of the photos it is clear that *Odostomia brevicula* is based on two immature specimens of *Turbonilla amoena* (Monterosato,

1878), a species quite rare on muddy bottoms of the bathyal zone, but widely distributed in the Mediterranean (Fig. 7).

The holotype (Figs. 2-5) is 2.46 mm high, as indicated by the Author. A characteristic of this species, but also of others belonging to same group, is the presence of an axial microsculpture consisting of irregular folds (Fig. 5), different from growth lines.

The synonymy proposed by Carrozza & Nofroni (1993) for *Turbonilla amoena* shall be therefore updated as follow:

- Turbonilla amoena* (Monterosato, 1878)
- = *Odostomia (Turbonilla) venusta* Monterosato, 1875 not Issel, 1869
- = *Odostomia compressa* Jeffreys, 1884
- = *Odostomia brevicula* Jeffreys, 1883 not A. Adams, 1861
- = *Pyrgulina abbreviata* Monterosato, 1884

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