

New report of *Neolepton discriminatum* Palazzi et Villari, 2001 for Ustica island (Bivalvia, Veneroidea, Neoleptonidae)

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ABSTRACT

A complete specimen and two loose valves of *Neolepton discriminatum* Palazzi et Villari, 2001 were found in Ustica island, at Punta Spalmatore at a depth of about 30 m. Up to now, this species was known only for the original description, based on specimens collected inside submarine caves of the coast near Taormina (North-Eastern Sicily). In the same sample of shell grit it was encountered also a specimen of *Skeneoides digeronimoi* La Perna, 1998, a species the description of which is based on material collected inside a cave of Ustica, on the opposite side of the island, about four miles away from Punta Spalmatore.

KEY WORDS

Neolepton discriminatum; submarine caves; Ustica; Mediterranean Sea.

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Neolepton discriminatum Palazzi et Villari, 2001 was described on three intact individuals and eight valves found in sediment collected inside a few caves located along the coastal stretch between Capo S. Andrea and Capo Taormina (North-Eastern Sicily) with the entrance at a depth ranging from about 15 to 30 m.

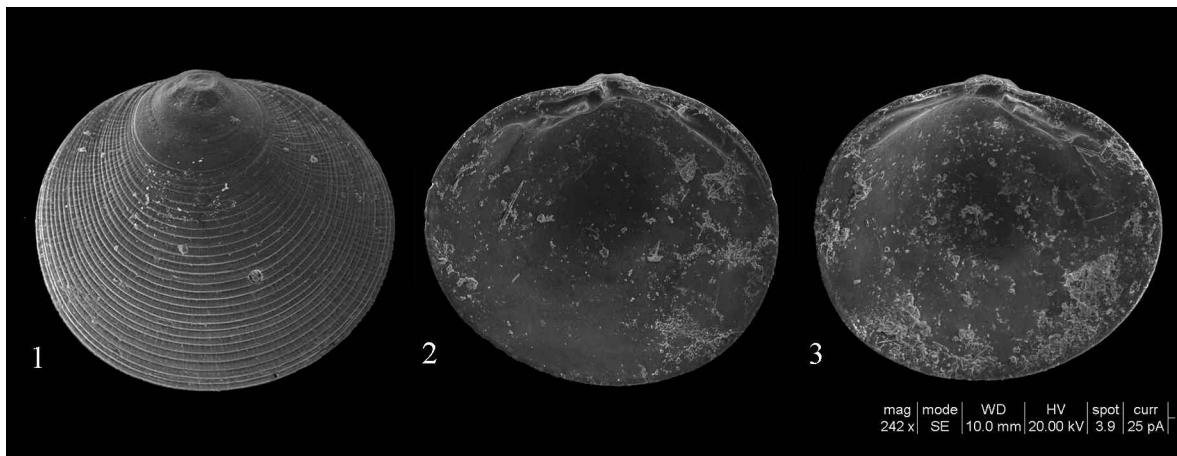
The malacofauna found in these particular and isolated environments was very interesting and, in addition to the species reported in this note, *Puncturella picciridda* Palazzi et Villari, 2001, *Muricopsis glutinosa* Palazzi et Villari, 2001 and *Lucinoma spelaenum* Palazzi et Villari, 2001 were described as new species. Out of the four species, *Lucinoma spelaenum* has been reported by Micali (2004) also in the Strait of Messina, a few tens of kilometers from Taormina.

The material in which the *N. discriminatum* specimens were found consisted of about 2 kg of debris picked up by hand while diving with Scuba diving, in the early 80's, at Ustica, Punta Spalmatore, at a depth of about 30 m (Figs. 1-3). The bottom is kind of debris, near a small submarine slope, with little mud. The malacofauna found is very rich in species, generally in a good state of freshness.

Original diagnosis of *N. discriminatum* was based only on comparisons with similar species (Palazzi & Villari, 2001: p. 25): "Si distingue da *N. sulcatulum* (Jeffreys, 1859) nel profilo orbicolare e non veneriforme come in quest'ultimo, per essere molto più appiattito e provvisto di una scultura radiale divergente, più marcata lateralmente. Ricorda un poco il genere *Arculus* (*omissis*) ma la cerniera ne è molto diversa. Dimensioni: intorno al millimetro."

In the same work (Palazzi & Villari, 2001) *N. discriminatum* was illustrated with photos taken by scanning microscopy. *Neolepton sulcatulum* (Jeffreys, 1859) is a species particularly well known, reported and figured by various authors (Tebble, 1966: 86, fig. 39; Terreni, 1981: 89, pl. 9 fig. 8; Aartsen et al., 1984: 66, fig. 331; Aartsen, 1996: 34, fig. E; Aartsen, 1997: 31, fig. 6L and R).

Aartsen (1997: 30) defines the shell outline "almost round", but this is not correct because in illustrations by the author it is clearly seen as veneriforme. The specimen drawn by Tebble (1976: 86, fig. 39) has a profile much more sub-circular; however there is a difference between figure A, which shows the external view, and figures B and D



Figures 1-3. *Neolepton discriminatum* Palazzi & Villari, 2001, Ustica -30m. Fig. 1: external shell. Fig. 2: inside of the left shell valve. Fig. 3: inside of the right shell valve.

showing the internal view. From a comparative analysis of the figures reported by several authors, it is obtained, for *N. sulcatulum*, a height/width ratio between 0.86 and 0.9, while in *N. discriminatum* the ratio is about 1.

DESCRIPTION OF THE *N. DISCRIMINATUM* SPECIMENS. Shell rather solid, equivalve, almost equilateral, sub-central umbones, eroded in the examined specimens. Color greyish-white. Sculpture concentric consisting of about 27 concentric fine ribs and divergent fine threads, passing over the ribs, more marked on the sides. Periostracus not detected. Internal ligament located behind the umbones. Right valve with an anterior tooth "hook-like", forming a right angle; a stout cardinal tooth, placed in the hollow of this but separated by a deep groove; and an elongated lateral tooth. Left valve with a stout cardinal tooth, joined to anterior tooth that appears elongated, and an elongated posterior tooth. Dimensions: height about 0.71 mm, width about 0.75 mm.

In the same sample of debris it was found a specimen of *Skeneoides digeronimoi* La Perna, 1998; this specie was described on material collected a few meters deep in the Grotta dell'Accademia, located on the opposite side of Ustica island, about four miles away from Punta Spalmatore.

This discovery, as in the case of *L. spelaeum*, evidences that the specie is not limited only to a specific cave or restricted locations, supporting the hypothesis, expressed by Palazzi & Villari (2001),

that an accumulation of large boulders can allow the formation of sciaphilous conditions similar to a proper cave. Probably the species described for submerged caves (rare, small and frequently known only for the place of description) have a geographic distribution much wider than previously known.

ACKNOWLEDGEMENTS

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