

***Alvania obsoleta* spec. nov. from the Azores  
(Gastropoda, Prosobranchia: Rissoidae)<sup>1</sup>**

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*Alvania obsoleta* spec. nov. is described from beaches on the Azores. The shell of the new species most closely resembles that of *A. mediolittoralis* Gofas, 1989.

Key words: Gastropoda, Prosobranchia, Rissoidae, *Alvania*, taxonomy, Azores.

Working on the littoral Rissoidae collected in the Azores by the CANCAP expeditions and sorting the shells collected on São Miguel by Mr. J.P. Kreps, the studies of Gofas (1989, 1990) proved to be of great assistance. It was therefore surprising that, nevertheless, the present author found a species, somewhat resembling *Alvania mediolittoralis* Gofas, 1989, but with a different protoconch, another colour pattern and very vague spiral ridges and axial ribs.

Abbreviations: KB = J.P. Kreps collection, Knokke-Heist, Belgium; LH = J. van der Linden collection, The Hague; NNM = Nationaal Natuurhistorisch Museum, Leiden.

***Alvania obsoleta* spec. nov. (figs. 1-3)**

Type material. — Holotype (fig. 1): NNM 56776, Azores, Terceira, E. coast, Porto Martins, 38° 41'N 27° 03'W, CANCAP 1979 Sta. AZO-021, 30 September 1979, shore collecting. Length 2.8 mm, five whorls (protoconch included). Paratypes from the same locality LH/22, NNM/>50. Additional paratypes: all other material examined (see below).

Dimensions. — Length 2.3-3.3 mm, major diameter 1.5-1.7 mm.

Protoconch (fig. 2). — About 1.5 whorls, smooth at 40× magnification. On the SEM photograph four barely visible, widely spaced spiral threads can be detected on the last protoconch whorl, one near the abapical suture, the other three on the upper third part.

Teleoconch. — About 3.5 whorls covered with obsolete spiral ridges and many narrow and rather vague, vertical or somewhat prosocline ribs. The whorls are sometimes moderately convex, sometimes nearly flat. The suture is not very deep, not canaliculate. The first (half) teleoconch whorl is almost smooth; on few shells barely visible ribs may be detected. The penultimate whorl has 25-30 narrow and hardly elevated ribs. In most cases only one very obscure spiral ridge can be detected on the abapical side of this whorl. Rarely about seven very obsolete spirals are visible. The last whorl has 20-30 ribs, as strong as those of the penultimate whorl and fading away on the periphery. Between the suture and the upper edge of the aperture, there are six to nine obsolete spiral ridges, often only visible on the ribs (which they cross) on the profile of the shell, as very small 'ripples'. Opposite the aperture there are an additional six or seven somewhat stronger spiral ridges. There is a broad and flat labial rib, neither

<sup>1</sup> CANCAP-contribution no. 105.

crossed by spiral ridges nor by axial ribs. Aperture rather wide, pointed adapically and peristome somewhat everted at the base. There is a microsculpture on the surface of the shell of randomly arranged pits or scratches (fig. 3).

**Colour.** — Yellowish-white, the protoconch is somewhat paler and glossy. Occasionally the shell has a uniform colour: generally there are two broad orange bands on the body whorl, one just below the suture, the other one starting at the same level as the upper edge of the aperture and finishing before the labial rib, as applies to the first colour band. The penultimate whorl has two colour bands as well, a broad one just below the upper suture, and a narrow band situated almost within the lower suture. The initial whorls have one colour band or none at all; in the former case, this is located just below the adapical suture.

**Material examined.** — Azores, Pico, S. coast, Lages harbour, 38°24'N 28°15'W, CANCAP 1979 Sta. AZO-033, 13 and 15 October 1979, shore collecting, NNM/3; São Jorge, N. coast, Faja da Caldeira, 38°38'N 27°56'W, CANCAP 1981 Sta. 5.K10, 4 and 13 June 1981, shore collecting, NNM/20; São Miguel, Lagoa, KB/3, LH/3; Santa Maria, E. coast, 36°57'N 25°01'W, CANCAP 1979 Sta. AZO-005, 14 September 1979, shore collecting, LH/8, NNM/26; São Miguel, Mosteiros, KB/1, LH/1.

**Distribution.** — Azores Islands, intertidally (not known from dredging in deep water).

**Discussion.** — The obsolete sculpture on the protoconch, ribs and spiral ridges of the shell make the identification of this species rather difficult, when there are only a few, somewhat worn and seemingly bleached, shells together with a lot of *A. mediolittoralis*. The finding of a number of fresh specimens in a shell grit sample from Terceira leads to a completely different opinion; the differences between the two taxa become visible and evident.

*A. obsoleta* (figs. 1-3)

**LENGTH:** 2.3-3.3 mm, most of the shells about 2.7 mm.

**COLOUR:** yellowish-white with orange bands.

**PROTOCONCH:** almost smooth; nucleus and first half whorl rather intorted.

**TELEOCONCH SPIRALS:** spiral ridges obsolete, often (almost) invisible, on penultimate whorl c. 7, on last whorl 12-16.

**TELEOCONCH RIBS:** very thin and almost smooth; usually just visible.

**MICROSCULPTURE:** randomly arranged.

*A. mediolittoralis* (figs. 4-6)

**LENGTH:** 2.0-2.7 mm, most of the shells about 2.3 mm.

**COLOUR:** usually brown, or yellow with brown spiral cords.

**PROTOCONCH:** with 4 clearly visible ridges; nucleus and first half whorl rather prominent and elevated.

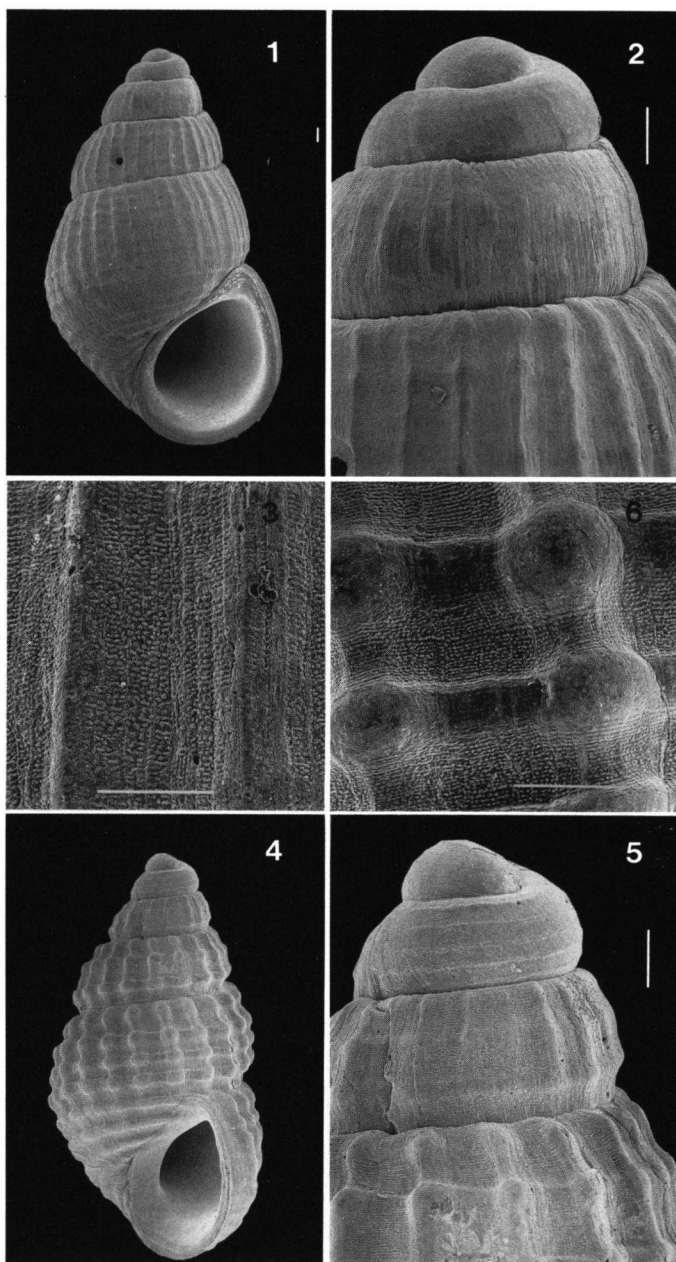
**TELEOCONCH SPIRALS:** spiral ridges strong; on penultimate whorl 3-4, on last whorl 9-11.

**TELEOCONCH RIBS:** strong and tuberculate on the crossings with the spirals.

**MICROSCULPTURE:** spirally aligned.

The shells of *A. obsoleta* from the island of São Jorge differ somewhat from those of other islands; the spiral ridges are stronger and on some specimens the ribs too, in which case the ribs are slightly knobbed.

**Acknowledgement.** — I am indebted to Mr. J. Goud (NNM) for the loan of material and for making the SEM-photographs.



Figs. 1-6. *Alvania* species. 1-3, *A. obsoleta* n. sp., holotype, NNM 56776, length 2.7 mm. 4-6, *A. mediolittoralis* Gofas, Azores, CANCAP 1979 Sta. AZO-005, Santa Maria, NNM, length 2.2 mm. All scales 0.1 mm.

## REFERENCES

- GOFAS, S., 1989. Two new species of *Alvania* (Rissoidae) from the Azores. — *Public. Ocas. Soc. Portug. Malac.* 14: 39-42.
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