Alvania multiquadrata spec. nov. from the Canary Islands
(Gastropoda Prosobranchia: Rissoidae)

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Alvania multiquadrata n. spec. is described from beaches in the Canary Islands. The shell of the new species resembles that of *A. parvula* and *A. punctura*, but shows consistent differences.

Key words: Gastropoda, Prosobranchia, Rissoidae, Alvania, taxonomy, Canary Islands.

Recently the authors received several shell grit samples from various localities on the Canary Islands, collected by Mr. F. Swinnen, who owns one of the largest private collections in Belgium. Apart from many *Manzonia* species, recently described by Moolenbeek and Faber, and several *Alvania* species which deserve further study, the authors found an unknown *Alvania* which somewhat resembles *Alvania parvula* (Jefreys, 1884). This new species is described below.

Abbreviations: LH = collection of J. van der Linden, The Hague; PO = collection of W. van Putten, Oostvoorne (The Netherlands); SB = collection of F. Swinnen, Lommel (Belgium); ZMA = Zoologisch Museum, Amsterdam.

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

Type material. — Holotype (fig. 1): ZMA Moll. 389012 (ex LH), Gran Canaria, Maspalomas. Length 1.8 mm., 4.5 whorls. Paratypes: from the same locality LH/4, SB/5. Further paratypes: all other material examined.

Dimensions. — Length 1.8-2 mm., largest diameter c. 1.2 mm.

Protoconch (fig. 3). — About 1.5 whorl. Nucleus generally dark-brown for specimens from Gran Canaria and Lanzarote: sometimes dark-brown for specimens from Tenerife. Smooth (at 40 x magnification), somewhat elevated. Subsequently about one whorl, with 6-8 close-set, equidistant spirals.

Teleconch. — Three whorls provided with spirals and axial ribs running completely parallel to the axis of the shell, which (in more than 50 of the 54 shells investigated) from almost exact squares with the spirals, until the upper edge of the aperture, where the ribs disappear. There are small knobs at the corners of these squares, where spirals and ribs cross each other. The oldest teleconch whorl has two spirals, the upper one about halfway that whorl. The penultimate whorl shows five (exceptionally four) spirals; the last whorl six or seven, completely crossed by the ribs, then still six smooth spirals near the columellar side of the aperture. Number of ribs on the last whorl c. 25. The whorls, particularly the last one, are rather convex. Last whorl c. 70% of the
Fig. 1. *Alvania multiquadrata* sp. n., holotype, Gran Canaria, Maspalomas (ZMA Moll. 389012), scale bar 1 mm. H. J. Hoenselaar del.

Figs. 2-3. *Alvania multiquadrata* sp. n., paratype, Lanzarote, bay S. of Las Crusitas, 2-6 m deep, leg. R. G. Moolenbeck, 10. VIII. 1984 (ZMA). 2, Ventral view; 3, Protoconch. Scale bars 200 µm (fig. 2) and 50 µm (fig. 3).
total length of the shell, aperture c. 45%. The aperture is circular; there is no umbilicus. The outer lip is provided with a broad, somewhat elevated, labial rib (dimension: two ribs plus interval), vaguely crossed by the spirals. The edge (small, max. 0.3 mm) is thin and smooth. The inside of the edge of the aperture is provided with a series of lamella-like teeth, c. eight, not quite reaching as far as the edge of the aperture. These teeth continue just as far as the labial rib at the outside. Suture pronounced, shallow, but emphasized by the subsutural spiral.

Colour. — Corneous to light-brown, sometimes yellowish-white, semi-transparent. Frequently specimens occur with spots somewhat darker than the main colour, just below the suture of the last whorl. Nucleus often dark-brown.

Distribution. — Canary Islands; thus far found on Gran Canaria, Lanzarote and Tenerife.


On first sight this Alvania resembles Alvania parvula. It differs, first of all, in the generally dark-brown nucleus, the labial rib and a series of lamella-like teeth on the inside of the outer lip (adult specimens). Further differences are the following: on the teleconch whorls of Alvania parvula there are fewer ribs (c. 22), and this species shows more spirals on the last whorl (c. 15). The first teleconch whorl of Alvania parvula shows three spirals, that of Alvania multiquadrata two. The interstices between spirals and ribs are squares instead of rectangles in most of the Alvania multiquadrata shells. These have no umbilicus, whereas Alvania parvula generally has a (though narrow) slit. Moreover, Alvania parvula (at the same length) has a somewhat slender appearance. The differences between Alvania multiquadrata and Alvania punctura (Montagu, 1803) are about the same as those with Alvania parvula. In addition, Alvania punctura has a totally different protoconch, which is much more acute, and has more whorls. It is quite feasible that Alvania parvula as pictured by Nordsieck & Talavera (1979: 70, pl. XV fig. 75) is actually Alvania multiquadrata, since, e.g., the lamella-like teeth seem to be visible in the drawing.

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REFERENCE