

## Another new species of *Alvania* (Mollusca: Rissoidae) from Annobón (Gulf of Guinea, West Africa)

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**ABSTRACT.** *Alvania annobonensis* spec. nov. from Annobón is described as new for science. It is compared with other species of this genus in eastern Atlantic. The differences between the genera *Alvania* and *Manzonina* are commented.

**RESUMEN.** Se describe una nueva especie para la ciencia, *Alvania annobonensis* spec. nov., procedente de Annobón y se compara con otras del mismo género en el Atlántico oriental. Se hacen comentarios sobre las diferencias entre los géneros *Alvania* y *Manzonina*.

### INTRODUCTION

*Alvania* Risso, 1826 is a genus that contains the most numerous species within the Rissoidae from the Eastern Atlantic. Gofas & Warén (1982) showed the genus in the Iberian and Moroccan coast. Moolenbeek & Hoenselaar (1989) and Hoenselaar & Goud (1998) dealt the genus in the eastern Atlantic archipelagos. Bouchet & Warén (1993) studied the bathyal and abyssal species of the northern Atlantic. Gianuzzi-Savelli, Pusateri, Palmeri & Ebreo (1996) figured the Mediterranean species. Gofas (1999) presented the descriptions of Rissoidae from West Africa, and Rolán (2001) described a new species from Annobón.

An unknown species of this genus was found in sediment obtained during the Annobón 2000 Expedition and is described in the present work.

### SYSTEMATICS

Family **Rissoidae** Gray, 1847

Genus *Alvania* Risso, 1826

*Alvania annobonensis* spec. nov.

Figs 1-4

**Type material.** Holotype (Fig. 1) in the Museo Nacional de Ciencias Naturales of Madrid (MNCN 15.05/46637). Paratypes in the following collections: Muséum National d'Histoire Naturelle, Paris (1, Fig. 2); The Natural History Museum, London (1); Zoologisch Staatmuseum, Muenchen (1), American Museum of Natural History, New York (1), Museo de Historia Natural "Luis Iglesias", Santiago de Compostela (10). All from type locality.

**Other material examined.** 7 shells from San Antonio de Palé, Annobón, 2 m; 8 fragments from the type locality.

**Etymology.** The specific name is for the island where it was collected.

**Type locality.** Isla Tortuga, Annobón, Guinea Equatorial. Obtained in sediment from 8 m depth.

**Description.** Shell (Figs. 1-2) solid, ovate-conical, dirty white. Protoconch (Fig. 3) with somewhat more than one convex whorl and a diameter of about 320 µm, sculptured by numerous irregularly undulating fine spiral threads (Fig. 4), which are occasionally fused with other closer. Teleoconch of 2.5 - 3 convex whorls, sculptured with axial ribs, narrower spiral cords, with a well defined suture. Axial ribs orthocone or scarcely opisthocline, separated by wider interspaces, which are more evident in the middle of the whorl and subsuturally, almost disappearing above the suture and absent on the base. Four spiral cords on the first whorl, 6 on the subsequent and about 11 on the last one. Last whorl with five uppermost cords closest to each other with narrower interspaces; the lower ones are more separated, being always narrower than interspaces, except the two lowermost which are very close to each other and almost vertical. All these spiral cords run on the axial ribs. Aperture almost circular, scarcely ovoid with a continuous internal peristome and other external delimiting a wide apertural border, with an external enlargement. Microsculpture formed by small striae between the spiral cords. Umbilicus absent. Dimensions: holotype 1.45 x 0.83 mm.

**Distribution:** Only known from Annobón Island from where it probably is an endemic.

**Discussion.** By its basal cords and double peristome *Alvania annobonensis* spec. nov. could be placed in the genus *Manzonina* in the sensu of Rolán (1987) and Rolán & Fernandes (1990). For these authors these characters are considered important to define the genus and they were also mentioned by Ponder (1985). In opposition to this opinion, Moolenbeek & Faber (1987) and Gofas (1999) mentioned that the main character to distinguish the genus *Manzonina* is to have pitted spiral microsculpture. Curious is the fact mentioned by Rolán (2001) that *Alvania gascoignei* from Annobón has the typical aspect of a species of the genus *Alvania* but the microsculpture of the genus *Manzonina*. With this opinion, *Alvania* is the odds and ends where the species with very different characters are included.

The genus *Manzonina* is forming a triangle with *Alvania* and *Onoba*, with unclear separation between them [see the comments on these last genera in Rolán & Hernández (2004)].

Anyway, we keep provisionally the present species in the genus *Alvania* due the most general opinion.

Related species with similar profile, double peristome and a similar microsculpture are:

-the Cape Verde species described by Rolán & Fernandes (1990), but all of them have few spiral cords and a protoconch with numerous tubercles.

-*Alvania gofasi* (Rolán & Fernandes, 1990) from Angola is larger, with only 4 spiral cords by whorl, the microsculpture consisting of lines is also present on these cords, and the protoconch have two whorls and a microsculpture consisting of few threads.

-*Alvania thomensis* (Rolán & Fernandes, 1990) (Fig. 5) from São Tomé is the closest related species. But it may be differentiated because it is larger, with only five spiral cords on the penultimate whorl and nine on the last whorl; these cords are narrow and the interspaces wider than those of *A. annobonensis*. The protoconch (Fig. 6) is scarcely smaller (diameter 286 against 320 µm, result of n=6) and its microsculpture (Fig. 7) is similar but the cords are more separate.

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#### Figures 1-7

1-4. *Alvania annobonensis* spec. nov. 1. holotype, 1.45 mm, Isla Tortuga, Annobón (MNCN); 2. paratype, 1.33 mm, Isla Tortuga, Annobón (MNHN); 3. protoconch, paratype (MNCN); 4. microsculpture of the protoconch; 5-7. *Alvania thomensis* (Rolán & Fernandes, 1990). 5. shell from Lagoa Azul, São Tomé; 6. protoconch; 7. microsculpture of the protoconch.

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