

Two more *Menkia* species (Mollusca: Gastropoda Prosobranchia: Aciculidae)

E. Gittenberger

Gittenberger, E. Two more *Menkia* species (Mollusca: Gastropoda Prosobranchia: Aciculidae). Zool. Med. Leiden 65 (18), 24.xii.1991: 251-255, figs. 1-6.— ISSN 0024-0672.

Key words: Prosobranchia; Aciculidae; *Menkia*; taxonomy; distribution; key; Spain.

Two recent *Menkia* species are described as new to science, viz. *M. dewinteri* and *M. rolani*. The generic diagnosis is adjusted and a revised identification key, as well as a new distribution map are given for the four *Menkia* species known at present. A peculiar microsculpture of unknown taxonomic relevance is described and illustrated for shells of the three recent *Menkia* species.

E. Gittenberger, Nationaal Natuurhistorisch Museum, Postbus 9517, 2300 RA Leiden, The Netherlands.

Introduction

The genus *Menkia* Boeters et al, 1985, was introduced for the recent species *M. horsti* Boeters et al., 1985, and the Pliocene *M. celleneuvea* Boeters et al., 1985. Recently, some shells representing two additional recent species from northwestern Spain were brought to my notice. They are classified with *Menkia* because of their characteristic general shape of Aciculidae and a prominent spiral sculpture. The shells of both new species are provided with a blunt spiral ridge just below the sutures. This structure is not found in the two congeneric species that were known already. Such a ridge is known to occur, however, in several species of two of the three other genera of Aciculidae, viz., *Acicula* Hartmann, 1821, and *Platyla* Moquin-Tandon, 1856. It has not been found in species of *Renea* Nevill, 1880 (see Boeters et al., 1989). While studying shells of the three recent *Menkia* species with a scanning electron microscope, a peculiar microsculpture of pits in the shell surface was observed; this structure is unknown in other species of Aciculidae, but it is only discernible at high magnifications and can easily be overlooked, therefore.

An adjusted generic diagnosis of *Menkia*, a revised conchological key and a new distribution map for the three recent species in the genus are given below. Only the two new species are described in detail.

For collections the following abbreviations are used: RMNH for Nationaal Natuurhistorisch Museum (Leiden); R for E. Rolán (Vigo).

Systematic review

Menkia Boeters, Gittenberger & Subai, 1985.

Type-species: *Menkia horsti* Boeters, Gittenberger & Subai, 1985.

Generic diagnosis.— Shells sub-cylindrical with a blunt apex, glossy, with incised transverse and spiral lines, with or without a blunt spiral ridge below the sutures

and without an external apertural rib. The lowered bases of the spiral lines are densely covered by irregular pits, which may also occur on the spiral ridge below the sutures as well as, much more widely spaced, between the spiral lines (not studied in *M. celleneuvea*). Aperture rounded, irregularly quadrangular in front-view; neither ascending nor descending clearly on the penultimate whorl (side-view). Apertural lip slightly thickened. Umbilicus closed. Height 1.85-2.8 mm; width 0.6-0.95 mm.

Key to the species of *Menkia*

1. Shell without a blunt spiral ridge below the sutures 2
- Shell with a blunt spiral ridge below the sutures, which is discernible at least along the lower whorls 3
2. Shell width over 0.8 mm; sculpture prominent *M. horsti*
- Shell width less than 0.8 mm; sculpture vague *M. celleneuvea*
3. Shell width over 0.8 mm *M. dewinteri*
- Shell width less than 0.8 mm *M. rolani*

Descriptions of the new species

Menkia dewinteri spec. nov.

(figs. 1, 2)

Material.— Spain, province of Santander, 8 km SSE. of Ramales de la Victoria, at the foot of a steep, E-exposed, limestone slope, 350 m alt., UTM VN6682; A. J. de Winter leg. (RMNH 56529/holotype).

Shell.— Shell very slender conical, with a blunt apex which is broader than that of *M. horsti*, with $5\frac{3}{4}$ moderately convex whorls. Body-whorl somewhat flattened, with its periphery below the middle. Just below the sutures there is a blunt spiral ridge, which is prominent along all teleoconch whorls. On the penultimate whorl, above the aperture, ca. 13 incised spiral striae can be counted. These spiral lines are ca. 5 μ m broad; their bases are provided with narrowly spaced, irregular pits. This microsculpture of pits was not discernible with certainty on other parts of the shell surface. The only specimen available for study is slightly eroded, however.

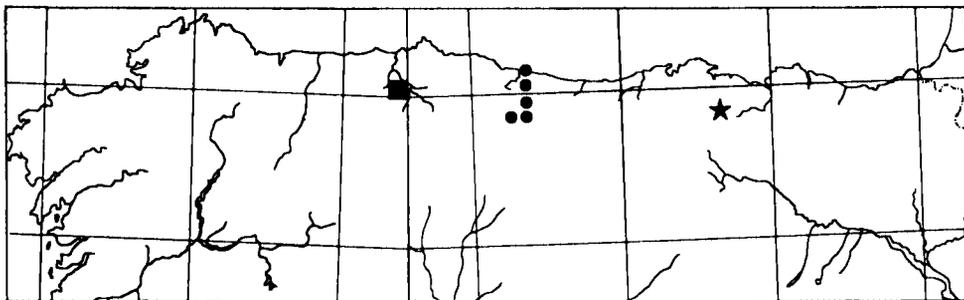
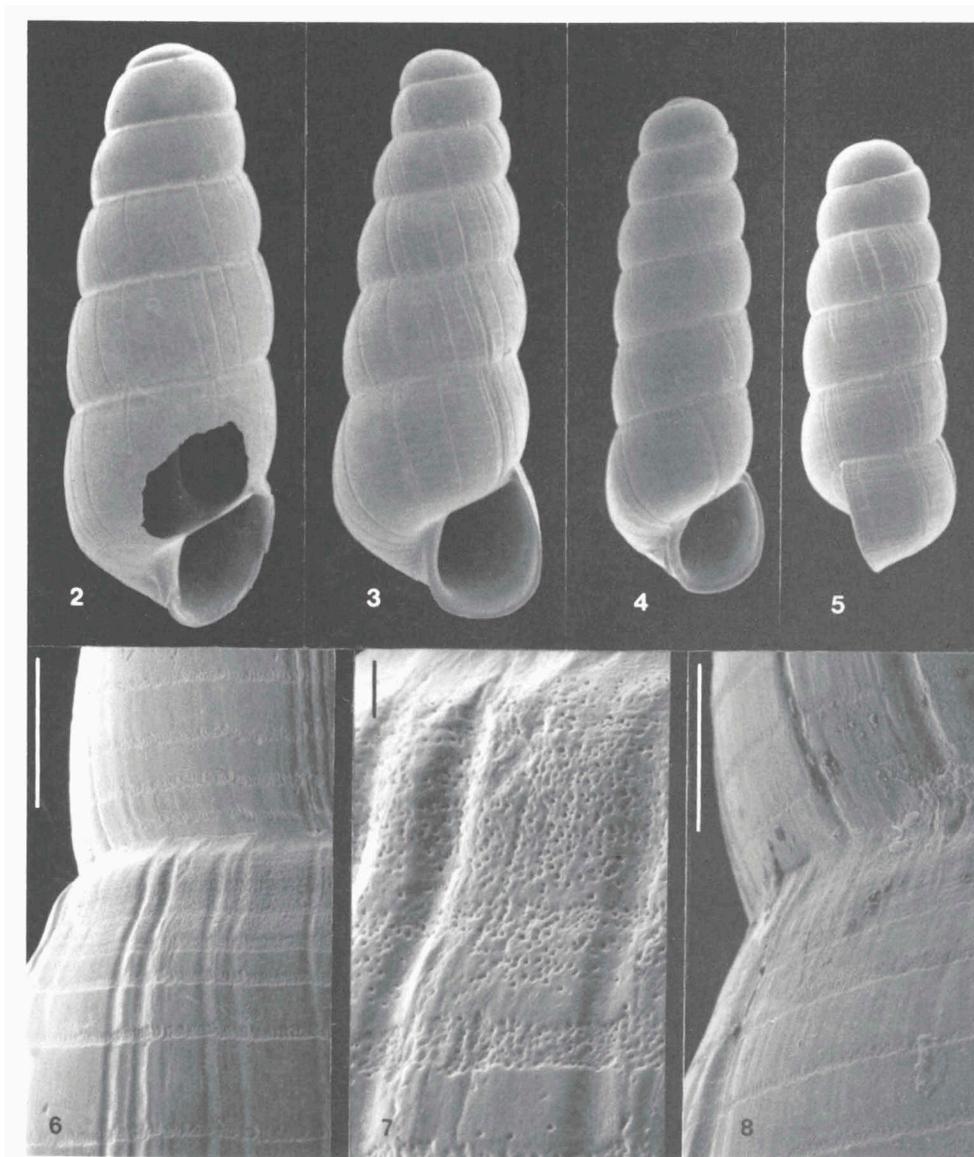


Fig. 1. UTM grid, 10-kilometre squares, distribution map for the recent species of *Menkia*: *M. dewinteri* spec. nov. (star), *M. horsti* Boeters et al., (dots [after Boeters et al., 1985: 62, 63] and square [new record]) and *M. rolani* spec. nov. (square).



Figs. 2-8. *Menkia* species. 2, *M. dewinteri* spec. nov., holotype (RMNH 56529), Santander, 8 km SSE of Ramales de la Victoria; actual height 2.6 mm. 3, 8, *M. horsti* Boeters, Gittenberger & Subai, Oviedo, between La Mata and Restiello; 3, actual height 2.55 mm; 8, detail of the sutural region of the body-whorl, scale line 0.1 mm. 4-7, *M. rolani* spec. nov., Oviedo, between La Mata and Restiello; 4, holotype (RMNH 56522), actual height 2.25 mm; 5, paratype (RMNH 56524), actual height 1.9 mm; 6, 7, details of the shell surface of the penultimate whorl; scale lines 0.1 and 0.01 mm, respectively. SEM photos: J. Goud.

Range (fig. 1).— This species is known from the type locality only. This locality is situated ca. 125 km east of the known range of *M. horsti*.

Notes.— Only a single, damaged specimen is known. Because the area in which this shell was found has been investigated by several malacologists, we may assume

that it is a rare species is involved, or at least a species living in an uncommon or poorly accessible habitat. The shell is so clearly different from specimens of *M. horsti*, both in shape and sculpture, that it may be considered representing a species new to science with little hesitation.

Etymology.— *M. dewinteri* is named in honour of Mr A. J. de Winter, who collected the holotype.

***Menkia rolani* spec. nov.**

(figs. 1, 4-7)

Material.— Spain, province of Oviedo, sifted from sand in a fountain along the road between La Mata (= 1 km S of Grado) and Restiello, opposite the beginning of the side-road to La Pereda, UTM QJ30; E. Rolán leg. (RMNH 56522/holotype, 56523/paratype, 56524/2 paratypes; R/3 paratypes).

Shell (figs. 4-7).— Shell sub-cylindrical with a blunt apex, with 5 $\frac{1}{2}$ to 6 $\frac{1}{2}$ rather convex whorls. The whorls, including the body-whorl, are regularly curved in profile and, as a consequence, the periphery is situated centrally. Below the sutures there is a blunt spiral ridge, which is hardly or not discernible along the uppermost whorls. On the penultimate whorl, above the aperture, ca. eight irregularly spaced, incised spiral striae can be counted. On the basis of the body-whorl the spiral striae are (much) more narrowly spaced. The transverse, incised lines are very irregularly spaced and unequal in prominence; their number cannot be counted exactly. The incised spiral lines are ca. 8 μ m broad, and less sharply delimited above than below; at a magnification of ca. \times 400, a microsculpture of narrowly spaced, irregular pits becomes clearly discernible at their bases. Also on the sub-sutural spiral ridge, in a zone of 50-60 μ m width, minute pits are present; this band is additionally provided with numerous very fine, short line segments that run parallel to the suture. The incised transverse lines are not provided with conspicuously sculptured bases. Elsewhere on the shell surface much more isolated pits are seen.

In front-view the aperture is rounded quadrangular. The aperture is somewhat widened basally, which is most clearly noticed in side-view. Translucent, fresh-looking shells, that were collected empty, are light yellowish brown.

Height 1.9-2.2 mm; width 0.7 mm.

Range (fig. 1).— This species is known from the type locality only.

Notes.— *M. rolani* was found at a secondary locality. Empty shells were sifted from a sandy deposit in a fountain, together with shells of two other Aciculidae, viz. the congeneric *M. horsti* (figs. 3, 8) and *Acicula fusca* (Montagu, 1803). Probably the three species live in ground litter nearby. The sympatric occurrence with *M. horsti*, without intermediate specimens, implies that separate species are involved. For *M. horsti* this record means a range extension of ca. 100 km westward.

The peculiar microsculpture of pits that was observed in this species was found on a shell of *M. horsti* as well, but in that specimen it was restricted to the bases of the incised spiral lines; a sub-sutural band of ca. 20 μ m is distinguishable here by the presence of numerous, fine, spirally arranged line segments.

Etymology.— This species is named in honour of Mr Emilio Rolán (Vigo), who collected all the specimens known and noticed their specific distinctness.

Abbreviations and acknowledgements

I wish to thank both Mr E. Rolán (Vigo) and Mr A. J. de Winter (Wageningen), for providing me with the material dealt with in the present paper.

References

- Boeters, H.D., E. Gittenberger & P. Subai, 1985. Eine neue Gattung der Aciculidae (Gastropoda: Prosobranchia) mit zwei neuen Arten.— *Basteria* 49: 59-64.
- Boeters, H.D., E. Gittenberger & P. Subai, 1989. Die Aciculidae (Mollusca: Gastropoda Prosobranchia).— *Zool. Verh. Leiden* 252: 1-234.

Received: 8.v.1991

Accepted: 12.ix.1991

Edited: J.C. den Hartog