Two new species of Onoba from southern Spain (Gastropoda: Rissoidae)

H.J. HOENSELAAR & R.G. MOOLENBEEK

Zoölogisch Museum, Amsterdam

Onoba tarifensis and O. guzmani n. spp. are described from southern Spain; the species are sympatric and appear to be fairly closely related.

Key words: Gastropoda, Prosobranchia, Rissoidae, Onoba, taxonomy, Spain.

In April 1985 the first author collected shell-grit from the beaches of Tarifa, province of Cadiz, Spain. Sorting out part of this sample, many interesting species were found, amongst them two very small specimens of a rissoid, which could not be identified. Unfortunately, both specimens were very much worn. In April 1986 another sample was collected about 300 m south of the first locality. This sample was very rich in small gastropods and about 60 specimens of the unknown rissoid could be gathered. Studying these specimens with the help of a Scanning Electron Microscope showed that two species were involved, both new to science. Since no live material is available, generic classification is difficult. According to the classification of the Rissoidae by Ponder (1985), we assign our material to the genus *Onoba*. The European species of *Onoba* were recently revised by Templado & Rolan (1986).

Abbreviation: ZMA for Zoölogisch Museum, Universiteit van Amsterdam.

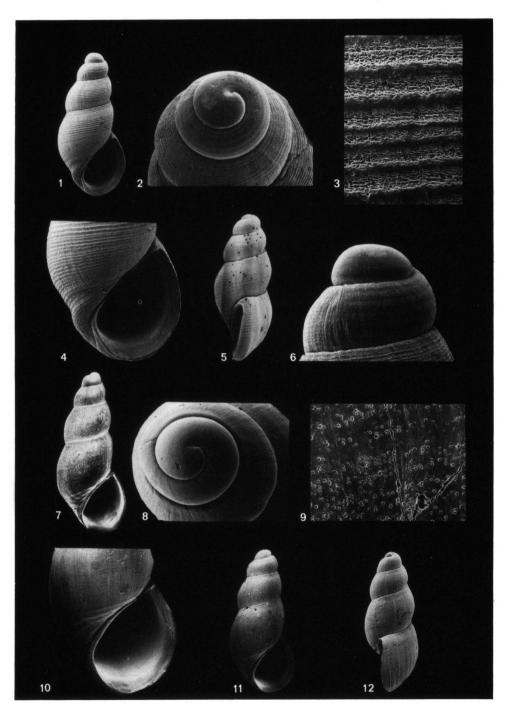
Onoba tarifensis sp. n. (figs. 1-6)

Description of the holotype. — Length 1.55 mm, width 0.76 mm (figs. 1-4, 6). Shell minute, elongate-conic, non-umbilicate, fragile and semitransparent, some gloss on its surface. Protoconch dome-shaped, a little less than $1\frac{1}{2}$ whorls with about 7 smooth spiral cords (fig. 6). Between these cords there is a microsculpture of rows of exceeding-ly minute irregular pits, except for the first $\frac{1}{2}$ whorl which looks smooth. Teleoconch with $2\frac{1}{2}$ whorls, with a very fine spiral sculpture of irregular pits (fig. 3). Penultimate whorl with about 20 spiral cords, body whorl with about 38 spiral cords. Suture deep; whorls concave. On the base a strong spiral columellar twist (fig. 4). Aperture ovate with an opisthocline outer lip and a strong varix (fig. 5), peristome simple; weakly angled and channelled posteriorly, simple and rounded anteriorly. Operculum, periostracum and soft parts of the animal unknown.

Type locality. — Spain, Tarifa, IV.1986, leg. H.J. Hoenselaar and J. Hoenselaar-Van Zoelen.

Variability. — The smallest paratype measures 1.45×0.75 mm, whereas the largest is 1.75×0.82 mm. The number of spiral cords is variable and on the penultimate whorl ranges between 18 and 24. Also the basal twist is individually more or less prominent.

Etymology. — This species is named after the type locality.



Material studied. — Holotype (ZMA Moll. no. 3.87.001), 8 paratypes (ZMA Moll. no. 3.87.002); 15 paratypes (colln. Hoenselaar); 1 paratype, Tarifa, IV.1985 (colln. Hoenselaar); 10 specimens from Spain, Getarès, IV.1986 (ZMA & colln. Hoenselaar).

Discussion. — The shell of O. tarifensis resembles that of O. lincta (Watson, 1873), but the spiral striae in the latter are much finer (about 75 on the penultimate whorl) and of another structure, often crossed by axial growth lines. O. lincta is also more ovate-conic with its sutures more prominent, and its protoconch smooth. Hyala vitrea (Montagu, 1803) is larger, more elongate and has a multispiral protoconch.

The most related species is Onoba guzmani sp. n. For distinctive characters we refer to the description below. If the name "Onoba wareni Templado & Rolan, 1986" is indeed a valid "nomen novum" for a paralectotype of Rissoa affinis Jeffreys, 1884, then the latter differs from O. tarifensis in being more bulbous, having less spiral striae and lacking the strong columellar twist (see Templado & Rolan, 1986, pl. I fig. 6).

Onoba guzmani sp. n. (figs. 7-12)

Description of the holotype. — Length 1.8 mm, width 0.80 mm (fig. 7). Shell minute, elongate-conic, non-umbilicate, fragile, semitransparent with some gloss on its surface. Protoconch dome-shaped, 1¼ whorls, smooth. Teleoconch with 2¾ whorls with microscopical pit-marks more or less forming spirals (fig. 9). Suture deep; whorls concave. On the base 4 shallow spirals (fig. 10). Aperture ovate or drop-shaped, with an opisthocline outer lip, varix small or lacking, peristome simple (figs. 10, 12). Oper-culum, periostracum and soft parts of the animal unknown.

Type locality. — Spain, Tarifa, IV.1986, leg. H.J. Hoenselaar and J. Hoenselaar-Van Zoelen.

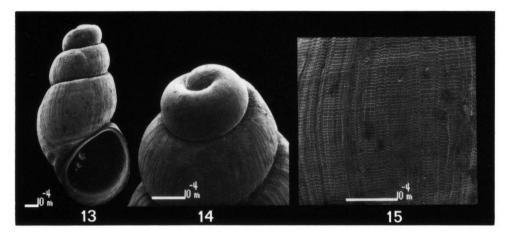
Variability. — The smallest paratype measures 1.4×0.77 mm, whereas the largest is 2.00×0.95 mm. The 4 shallow spirals on the base are individually more or less pronounced, and the same applies to the microscopical pit-marks which may vary from clearly marked, paired spiral rows to nearly invisible spirals.

Etymology. — This species is named after Alonso Pérez de Guzmán, called "El Bueno", commander of the castle of Tarifa. He withstood the long siege of the Barbarians in 1292.

Material studied. — Holotype (ZMA Moll. no. 3.87.003); 10 paratypes (ZMA Moll. no. 3.87.004); 25 paratypes (colln. Hoenselaar); 3 paratypes, Spain, Tarifa, IV.1985 (ZMA Moll. no. 3.87.005); 5 specimens from Spain, Getarès, IV.1986 (ZMA & colln. Hoenselaar).

Discussion. — The shell of O. guzmani resembles that of O. lincta (Watson, 1873), but the structure of the surface-sculpture is different (figs. 13-15). O. lincta is also more ovate-conic and has more prominent sutures. Hyala vitrea is much larger and more

Figs. 1-12. Onoba spp. n., all from Tarifa, Spain, 1-6. O. tarifensis sp. n.; 1-4, 6: holotype, length 1.55 mm (2, apical view of protoconch, × 73; 3, microsculpture teleoconch, × 363; 4, aperture, × 48; 6, side view protoconch, × 96); 5, paratype, side view, × 24. 7-12. O. guzmani sp. n.; 7: holotype, length 1.8 mm; 8-12, paratypes (8, apical view of protoconch, × 75; 9, microsculpture teleoconch, × 363; 10, aperture, × 48; 11, ventral view, length 1.48 mm; 12, side view, length 1.50 mm). All specimens in Zoölogisch Museum, Amsterdam.



Figs. 13-15. Onoba lincta (Watson, 1873), Madeira, possible syntype (13, ventral view, length 1.2; 14, protoconch, highly enlarged; 15, microsculpture teleoconch, highly enlarged). Specimen in British Museum (Natural History), London, Mollusca no. 1911.10.2.6.24322.

elongate and also has a multispiral protoconch. The most closely related species is *Onoba tarifensis* sp. n., which has a different protoconch (with spirals), fewer but more pronounced spirals on the teleoconch, fewer spiral grooves on the base and a well-developed varix on the outer lip.

Acknowledgements. — We want to express our thanks to Dr. J.J. van Aartsen for advice and to Mrs. Jos Hoenselaar-Van Zoelen for sorting out these tiny gastropods and typing the manuscript. Dr. H.E. Coomans and Mr. M. Faber critically read the manuscript. SEM facilities were obtained from the Laboratorium voor Elektronenmikroskopie (Universiteit van Amsterdam). Ms. Kathy Way [British Museum (National History), London] kindly sent syntype material of *Rissoa lincta* Watson, 1873, for comparison.

REFERENCES

- AARTSEN, J.J. VAN, H.P.M.G. MENKHORST & E. GITTENBERGER, 1984. The marine Mollusca of the Bay of Algeciras, Spain, with general notes on Mitrella, Marginellidae and Turridae.
 — Basteria, suppl. 2.: 1-135.
- PONDER, W.F., 1985. A review of the genera of the Rissoidae (Mollusca: Mesogastropoda: Rissoacea). — Rec. Aust. Mus., suppl. 4: 1-221.
- TEMPLADO, J., & E. ROLAN, 1986. El genero Onoba H. & A. Adams, 1854 (Gastropoda, Rissoidea) en las costas Europeas (1). — Iberus 6: 117-124.