

**On the identity of *Onoba moreleti* Dautzenberg, 1889
(Gastropoda: Rissoidae), with the description of *Onoba josae* n. sp.**

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A lectotype is designated for *Onoba moreleti* Dautzenberg. A species from southern Spain, often confused with *O. moreleti*, is described as *O. josae* n. sp.

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

The East Atlantic species of the family Rissoidae still need a lot of research. Recently Ponder (1985) published a revision at the generic level. A study of the type specimens seems necessary to solve the problems at the specific level. So far, most authors have copied their interpretations from others, which at best were based on the original descriptions and/or type figures. Unfortunately, this has resulted in many misidentifications.

Studying the Macaronesian Rissoids, we searched for the type material of *Onoba moreleti*, described by Dautzenberg (1889) from the Azores. Van Aartsen et al. (1984) stated that the type specimen of *O. moreleti* was in the Musée Océanographique, Monaco (MOM). According to Dr. C. Carpine (in litt., 1985) this is not the case. Ponder (1985: 58, 162) examined "possible paratypes" and figured "a paratype" both from the Koninklijk Belgisch Instituut voor Natuurwetenschappen/Institut Royal des Sciences Naturelles de Belgique (IRScNB), Brussels. Templado & Rolán (1986) published a list of the European Onobinae and non-critically copied the opinion of Van Aartsen et al. (1984). In 1985, the first author studied the Dautzenberg collection (in IRScNB) and found the material (11 specimens) on which Dautzenberg had based his taxon. These specimens are different in several conchological characters from shells we know from southern Spain (Van Aartsen et al., 1984: fig. 81). More research has convinced us that the latter species is without a name; it will be described here. First we will give some information on *O. moreleti*, which was dredged during the scientific campaign in 1887 with the yacht "Hirondelle".

Onoba moreleti Dautzenberg, 1889 (figs. 1-5)

Original description. —

Testa 1 3/4^{mm} alta, 7/8^{mm} lata, solida, elongato turrata, apice obtusiusculo. Anfractus 5 convexi liris numerosis undique sculpti. Apertura rotundata, superne subangulata. Columella arcuata, callo tenui, adnato, induta. Labrum arcuatum, margine denticulato. Color pallide lutescens.

Coquille solide, opaque. Spire allongée, turriculée, à sommet obtus, composée de 5 tours convexes séparés par une suture bien marquée. Sculpture uniforme sur toute la surface de la coquille, composée de cordons décourants égaux, séparés par des intervalles étroits. Ces cordons sont au nombre de 8 sur l'avant-dernier tour

et de 16 sur le dernier. Ouverture arrondie, un peu anguleuse au sommet. Columelle arquée, garnie d'une callosité mince, appliquée. Labre arrondi, finement denticulé au bord. On aperçoit dans le fond de l'ouverture des lignes un peu transparentes qui correspondent aux intervalles des cordons. Coloration d'un blanc jaunâtre ou légèrement orangée plus foncée au sommet.

Habitat : Pico, 1287^m (Stn. 112).

Je prie M. Arthur Morelet, le savant explorateur qui a si complètement étudié les Mollusques terrestres des Açores, de vouloir bien accepter la dédicace de cette espèce qui appartient au groupe de l'*O. striata*, mais qui ne peut être confondue avec elle : l'*O. Moreleti* ne possède, en effet, aucune trace de plis longitudinaux et sa forme est beaucoup plus trapue.

Remarks. — None of the 11 syntypes exactly agrees with the measurements in the original description. Therefore we are not able to recognize that particular or the figured specimen with certainty. We herewith designate one of the syntypes as lectotype; measurements length 1.9 mm, width 0.9 mm (figs. 1-3, 5). This specimen is in good condition and agrees with the original description. In contrast to Dautzenberg's description, we could observe, using the scanning electron microscope (SEM), obscure axial riblets on the first postnuclear whorl of some specimens (fig. 2).

We have a strong suspicion that *O. moreleti* is a shallow-water species (see sample Sta. 193 below) and we suppose that the specimens in the deep water samples had washed down.

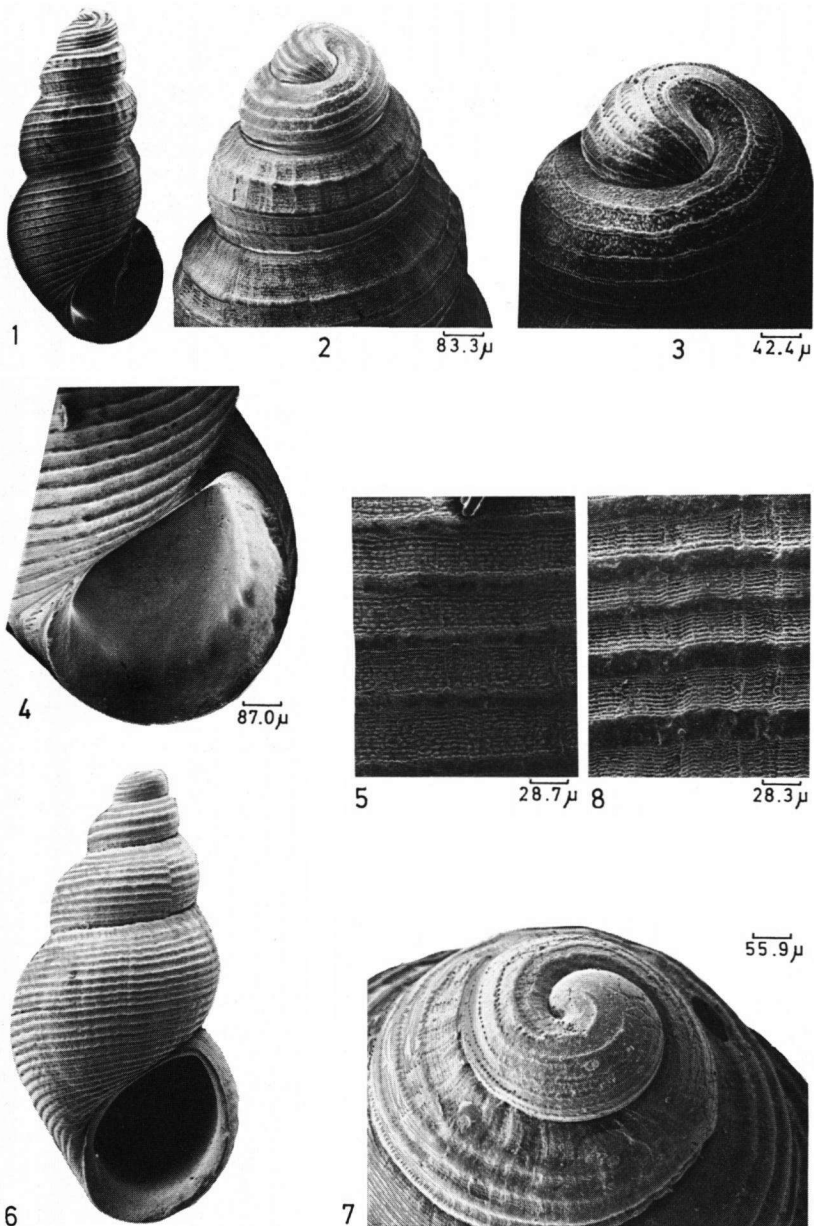
Type locality. — Atlantic, Azores, "Pico, 1287 m (Stn. 112)", 38°34'30"N 30°26'30"E; 1 July 1887.

Etymology. — Named after Mr. Arthur Morelet (1809-1892), a French malacologist, who had published on the land molluscs of the Azores.

Material studied. — 11 syntypes (now lectotype and 10 paralectotypes) in the Dautzenberg collection (IRScNB), see above; Azores, Baia de Horta, 20 m, 22 July 1888, Sta. 193 (MOM, many specimens); Azores, 39°21'20" N 33°26' E, 1360 m, 19 July 1896, Sta. 703 (MOM, 2); Azores, 38°35'30" N 30°26' E, 1250 m, 19 August 1902, Sta. 1349 (MOM, 3); Azores, 37°42'40" N 27°25'30" E, 1385 m, 3 July 1895, Sta. 553 (MOM, 2).

Onoba josae n. sp. (figs. 6-8)

Description of the holotype. — Length 2.5 mm, width 1.3 mm (fig. 6). Shell oval-conical, semitransparent with some gloss on the surface, umbilicus closed. Protoconch dome-shaped, with about 1¼ whorls and with 8 weak and irregular spirals, protruding very little. Teleoconch about 3¼ whorls with smooth spiral cords. The interstices are broader than the spiral cords (ratio 1:2) and are covered with 7-8 very fine, somewhat undulating spiral striae. Penultimate whorl with about 9 spiral cords. The upper half of the penultimate whorl with very weak costae. Body whorl somewhat convex, with about 22-24 spiral cords. Aperture subcircular below and rather angular above (angle about 90°), weakly channeled posteriorly. Peristome simple, sharp and continuous. Outer lip clearly opisthocline. Colour white. Operculum, periostracum and soft parts unknown.



Figs. 1-8. Shells of *Onoba* species. 1-5. *Onoba moreleti* Dtz., Azores, Pico. 1-3,5: lectotype (IRScNB), length 1.9 mm (1, ventral view; 2, protoconch and part of teleoconch; 3, protoconch; 5, microsculpture body whorl). 4. aperture of paralectotype, showing denticles (all material not coated for SEM). 6-8. *Onoba josae* n sp., Spain, Getarès. 6,8. holotype (ZMA Moll. no. 3.87.034), length 2.5 mm (6, ventral view; 8, microsculpture body whorl). 7. protoconch of paratype with part of teleoconch.

Type locality. — Spain, Bay of Algeciras, Getarès; April 1986, leg. H.J. Hoenselaar and J. Hoenselaar-Van Zoelen.

Variation. — The smallest full-grown paratype measures 2.4×1.3 mm, whereas the largest is 3.2×1.5 mm. The number of spiral cords on the penultimate whorls varies from 5-12. Some specimens have clearly visible axial costae on the upper half of the penultimate whorl, which in crossing the spiral cords, give an undulating or reticulate pattern.

Etymology. — The new species is named after Mrs. Jos Hoenselaar-Van Zoelen, who sorted out these and many other samples.

Type material — Holotype (Zoologisch Museum, Amsterdam = ZMA Moll. no. 3.87.034), 40 paratypes (ZMA Moll. no. 3.87.035), 40 paratypes (colln. H.J. Hoenselaar), 1 paratype (Museum National d'Histoire Naturelle, Paris), 1 paratype (IRScNB), all from the type sample; 4 juvenile paratypes Spain, Getarès, 17.5.1984; 3 paratypes Getarès, 16.4.1985; 28 paratypes Getarès, April 1987, all leg./colln. H.J. Hoenselaar; 19 paratypes, Getarès, 14.10.1982, leg. H.P.M.G. Menkhorst (ZMA Moll. no. 3.87.036 and colln. H.P.M.G. Menkhorst).

Other material studied. — 4 specimens Spain, Tarifa, 12.4.1985; 50 specimens Tarifa, 16.4.1986; 25 specimens Tarifa, April 1987, all leg./colln. H.J. Hoenselaar; 9 specimens Spain, Torre de la Peña (10 km north of Tarifa), April 1985, all leg./colln. H.J. Hoenselaar; 15 specimens Spain, Punta Carnera (near Getarès), 26.4.1984, leg. G. Gulden, colln. H.J. Hoenselaar.

Discussion. — *Onoba josae* differs from *O. moreleti* in being more conical and somewhat larger. The interstices between the weak spirals on the protoconch of *Onoba josae* are smooth, while those of *O. moreleti* have irregular granules and the spiral cords are more pronounced. The inside of the anterior part of the outer lip is smooth in *O. josae*, while that of *O. moreleti* has weak knob-like teeth. *Onoba gianninii* (Nordsieck, 1974) differs in being smaller and having a non-opisthocline outer lip. The angle of the posterior side of the aperture is sharper (about 80°). Also *O. gianninii* has a deep umbilical chink. "*O. moreleti*", in Van Aartsen et al. (1984: 20) from the Canary Islands, Graziosa, was recently described by Rolan (1987) as *Onoba manzoniana*. According to Moolenbeek & Faber (1987) this species belongs to the genus *Manzonina* s.s.

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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.
- DAUTZENBERG, P., 1889. Contribution à la faune malacologique des Iles Açores. — *Résult. Camp. scient. Albert I* 1: 1-112.
- MOOLENBEEK, R.G., & M.J. FABER, 1987. The Macaronesian species of the genus *Manzonina* (Gastropoda: Rissoidae), part II. — *Kreukel* 23: 23-31.

- PONDER, W.F., 1985. A review of the genera of the Rissoidae (Mollusca: Mesogastropoda: Rissoacea). — Rec. Aust. Mus., suppl. 4: 1-221.
- ROLAN, E., 1987. Aportaciones al estudio de los Risoaceos de las Islas Canarias: I Descripción de tres especies nuevas. — Publ. Ocas. Soc. Port. Malac. 8: 1-4.
- TEMPLADO, J., & E. ROLAN, 1986. El genero *Onoba* H. & A. Adams, 1854 (Gastropoda, Rissoidea) en las costas Europeas (1). — Iberus 6: 117-124.

SAMENVATTING

De Oostatlantische soorten van de familie Rissoidae zijn slecht bekend. Het niet bestuderen van het type materiaal heeft vaak geleid tot verkeerde determinaties. Deze fouten worden vervolgens door andere auteurs kritiekloos overgenomen. Het typemateriaal van *Onoba moreleti* werd in het Koninklijk Belgisch Instituut voor Natuurwetenschappen te Brussel (collectie Dautzenberg) gevonden. Een lectotype wordt aangewezen en het blijkt dat de soort niet overeenkomt met een *Onoba*-soort uit Zuid Spanje (zie Van Aartsen et al., 1984: fig. 81). Omdat voor deze geen oudere naam bekend is, wordt de soort beschreven als *Onoba josae*.