

**A new marine gastropod species from S. Europe, *Nodulus spiralis* spec. nov.
(Prosobranchia: Rissoacea)**

J. VAN DER LINDEN

Frankenslag 176, NL 2582 HZ Den Haag, The Netherlands

In a sample of nearly three litres of shell grit, collected in September 1984 by Dr. W.M. Wagner in southern France, on the peninsula of Antibes (Department of Alpes-Maritimes), about 2000 fresh looking, partly even living, specimens of *Nodulus* Monterosato, 1878, were found. There proved to be a conspicuous dimorphism among these shells, not only as regards habitus and sculpture, but also as regards height. Apparently, two separate species were represented in the material. This conclusion was supported by a study of material of *Nodulus* from other localities in southern Europe. One of the species is here described as new.

For collections the following abbreviations are used: LH, J. van der Linden, Den Haag; RMNH, Rijksmuseum van Natuurlijke Historie, Leiden; VL, A. Verduin, Leiden; WA, W.M. Wagner, Amsterdam; ZMS, Zeebiologisch Museum, Scheveningen.

***Nodulus spiralis* spec. nov.**

Rissoa contorta var. ex forma *intorta* (Monts), sensu Bucquoy, Dautzenberg & Dollfus, 1884: 312, pl. 37 fig. 17. Non Monterosato, 1877.

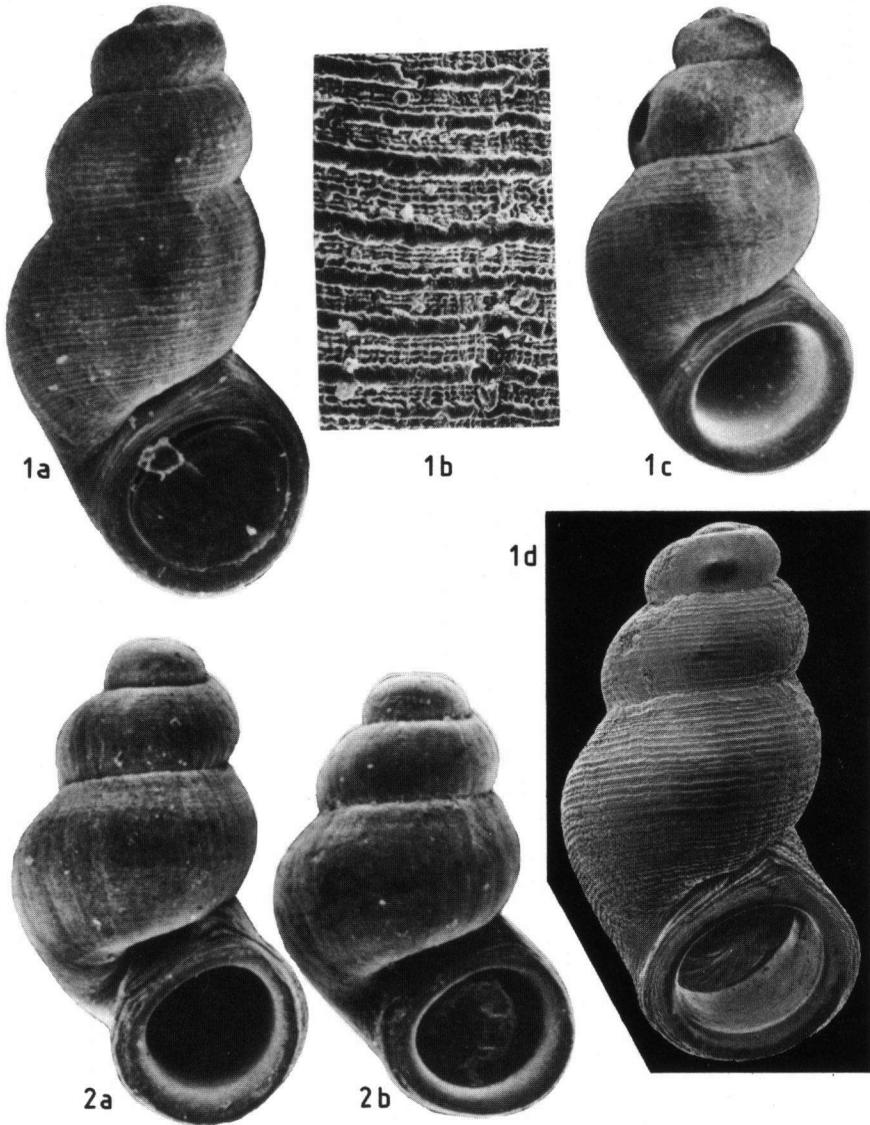
Rissoa contorta var. ex forma *elata* Bucquoy, Dautzenberg & Dollfus, 1884: 312, pl. 37 fig. 18. Not available, because "the work reveals that infrasubspecific rank is meant", whereas, prior to 1986, *elata* has not been adopted "as the name of a species or subspecies or treated as a senior homonym" (ICZN, 3rd ed., Art. 45 (g) (ii) (1)). Non *Rissoa elata* Philippi, 1844.

Nodulus contortus, sensu Van Aartsen, Menkhorst & Gittenberger, 1984: 18 (part.), fig. 68. Non Jeffreys, 1856.

Types. — Holotype: RMNH 55874; France, Alpes-Maritimes, Antibes, E-side peninsula at Pointe de Tire Poil, UTM LP42; W.M. Wagner leg., 24.IX.1984. Paratypes: all other material mentioned below under *N. spiralis*.

Description. — The shell is ovate-conic, slender, and has three moderately inflated whorls with narrowly spaced spiral striae. There is no umbilicus. The aperture is rather circular and detached from the last whorl. The colour is mostly light brown or corneous, but white and dark brown specimens occur as well. Height 1.3-1.7 mm.

Differentiation. — *Nodulus contortus* (Jeffreys, 1856) (fig. 2) has a more depressed shell, with more inflated whorls and a clear umbilicus or, alternatively, a chink. Furthermore, the shell is generally smooth and glossy, sometimes with a very fine spiral sculpture, and cream-white, although brown specimens with two, somewhat darker, bands on the dorsal side of the last whorl, ending at the aperture, also occur. In *N. contortus* the shell is 1.1-1.4 mm high. Of a sample of 97 shells of *N. spiralis*, 89 measure over 1.4 mm.



Figs. 1, 2. *Nodulus* spec.; shells $\times 50$, detail of sculpture $\times 320$. 1, *N. spiralis* spec. nov. a-c, paratypes, Antibes (LH); d, holotype, Antibes (RMNH 55874) [1b shows a detail of 1a]. 2, *N. contortus* (Jeffreys). a, Antibes (LH); b, Getares (VL 0121).

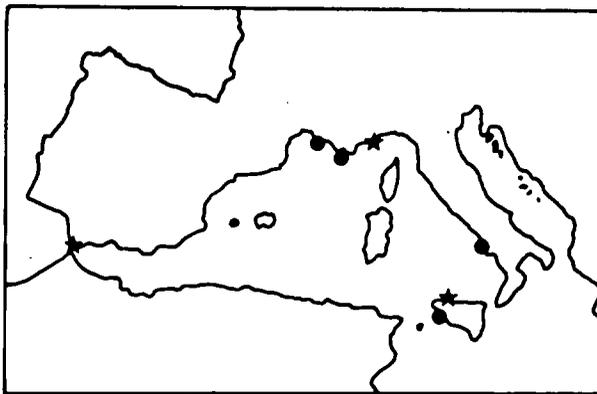


Fig. 3. Records of *Nodulus* spec. Samples containing both *N. spiralis* spec. nov. and *N. contortus* are indicated by stars, those containing only the latter species are indicated by dots.

Distribution (fig. 3). — *N. spiralis* is known from the south coast of France (Alpes-Maritimes), Sicily and the south coast of Spain. These localities hint at a wider distribution in the western Mediterranean.

Material. — France, Alpes-Maritimes, Antibes, E-side peninsula at Pointe de Tire Poil (type locality) (LH, RMNH, WA, ZMS). Spain, Cadiz, Getares (4 km S. of Algeciras) (LH, RMNH, VL, WA, ZMS). Italy, Sicily, Mondello (VL). At all these localities both *N. spiralis* and *N. contortus* are represented, accounting for c. 80% and c. 20%, respectively, of the shells in the samples.

From the following localities *N. contortus* has so far been recorded unaccompanied by its sibling species. France: Bouches-du-Rhône, Sausset-les-Pins (VL); Var, Giens, Port du Niel (VL) and La Capte (S of Hyères) (VL). Italy: Sicily, Sciacca (VL); Gulf of Salerno near Agropoli (VL).

Discussion. — For more than a century it has been known that there are two types of shells among *Nodulus contortus* (Jeffreys, 1856) s.l., smooth ones and striate ones; however, both types have never been separated properly. Therefore, the question arises to which one the name *contortus* applies. The smooth form was named *Rissoa contorta* by Jeffreys (1856: 183), with the explicit remark “anfractibus ... laevibus, nitidis”. Nevertheless, Bucquoy et al. (1884: 312) wrote: “Mais les échantillons envoyés par M. Jeffreys à Deshayes, sous le nom de *R. contorta* et qui se trouvent aujourd’hui dans la collection de l’Ecole des Mines, sont pourvus, comme nous avons pu nous assurer, de nombreux cordons décourants fins, serrés et légèrement ondulés”. Van Aartsen et al. (1984: 18) also mention that the type specimens of Jeffreys are striate. It is possible that Monterosato had a similar opinion, for in 1877 he introduced the name *intorta* for the smooth form (1877: 418). Later on Bucquoy et al. (1884: 311) added to the confusion by venturing the opinion that Monterosato had made a mistake, and that the name *intorta* should refer to the striate form.

Mr. A. Verduin has kindly examined seven syntypes in two samples belonging to the British Museum (Natural History), London, labelled: “*Rissoa contorta* Jeffreys 1856 / syntypes Ann. Mag. Nat. Hist. ser. 2 17: 183 pl. 2 figs. 6-7 / Coast of Piedmont

/ J.G. Jeffreys Colln 2 specs. / B.M. (N.H.) 1856.2.18.13" and "Rissoa contorta Jeffreys / syntypes Ann. Mag. Nat. Hist. ser. 2 17: 183 1856 / Coast of Piedmont / J.G. Jeffreys Colln. 5 specs. / B.M. (N.H.) 1856.5.19.151", respectively. They all belong to the smooth form. Under these conditions I feel that the epithet "*contortus*" should be connected with the smooth form. This makes *R. intortus* Monterosato, 1877 a junior synonym of *N. contortus*, a conclusion which was corroborated by type material examined by Mr. A. Verduin (two samples in the Dautzenberg collection, in the Institut Royal des Sciences Naturelles de Belgique, Brussels, labelled: "Rissoa intorta Monts. (coq. ramassée, non striée) / Trapani / Monts" [four shells], and "Rissoa intorta Monts. / Trapani / Lemoro Monts." [three shells]).

The shell figured by Warén (1980: pl. 4 figs. 8, 9) belongs to *N. contortus*. It was probably dredged by Marquis James Doria (mentioned by Jeffreys, 1870: 65) at Spétse, about 95 km SSW. of Athens, Greece. If so, it does not belong to the type material.

The shell figured by Van Aartsen et al. (1984: fig. 68) belongs to *N. spiralis*.

I am much obliged to Mr. A. Verduin, Leiden, for advice, and the loan of material, and to Mr. J.H.W. Krom, Leiden, and Mr. H.P. Wagner, Leiden, for the photographs.

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.
- BUCQUOY, E., P. DAUTZENBERG & G. DOLLFUS, 1884. Les mollusques marins du Roussillon 1 (8): 299-342. Paris.
- JEFFREYS, J.G., 1856. On the marine Testacea of the Piedmontese coast. — *Ann. Mag. Nat. Hist.* (2) 17: 155-188.
- , 1870. Mediterranean Mollusca. — *Ann. Mag. Nat. Hist.* (4) 6: 65-86.
- MONTEROSATO, T.A. DI, 1877. Notizie sulle conchiglie della rada di Civitavecchia. — *Ann. Mus. civ. Hist. Nat. Genova* 9: 407-428.
- WARÉN, A., 1980. Marine Mollusca described by John Gwyn Jeffreys, with the location of the type material. — *Conch. Soc. Gr. Britain & Ireland*, spec. publ. 1: 1-60.