

**On the taxonomy of some Rissoacean species from Europe,
Madeira and the Canary Islands (Gastropoda Prosobranchia)**

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This paper is a supplement to my 1984 paper on *Cingula* s.l. from Europe, Madeira and the Canary Islands. Three new species from Madeira are introduced: *Setia litya*, *S. miae* and *S. ugesae*. Lectotypes of *Rissoa (Cingula) innominata* Watson, 1897, and *Cingula (Peringiella) eburnea* F. Nordsieck, 1968, and a neotype of *Rissoa micrometrica* Aradas & Benoit, 1876, are designated.

Key words: Gastropoda, Prosobranchia, Barleeidae, Cingulopsidae, Rissoidae, taxonomy, Europe, Madeira, Canary Islands.

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INTRODUCTION

This paper is a supplement to my previous paper (Verduin, 1984) on Recent European *Cingula* s.l. Again, it is my intention to discuss a number of small species which are rather similar conchologically, though their taxonomic status may differ considerably. Species belonging to the Barleeidae, Cingulopsidae and Rissoidae are discussed. Meantime, Ponder's (1985) review of the genera of the Rissoidae has appeared. In this paper, I will follow Ponder's generic nomenclature.

Shells from the following collections were examined: U.S. National Museum, Washington, D.C. (USNM); British Museum (Natural History), London (BM); Ph.

Dautzenberg colln., in the Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels (KBIN-D); Natur-Museum Senckenberg, Frankfurt/Main (SMF); Rijksmuseum van Geologie en Mineralogie, Leiden (RGM); Zoologisch Museum Amsterdam (ZMA); Rijksmuseum van Natuurlijke Historie, Leiden (RMNH); the private collections of Dr. J.J. van Aartsen, Dieren (Aar), Mr. J. van der Linden, Den Haag (Lin), Dr. W.M. Wagner, Amsterdam (Wag), and myself (Vrd).

I am obliged to all those who made their material available or provided me with information. In addition I am obliged to Dr. J.J. van Aartsen and Mr. R.G. Moolenbeek (ZMA), who allowed me to describe a few new species we had discovered about simultaneously. Moreover, Mr. Moolenbeek produced part of the SEM-photographs. The remaining ones are by Mr. J.H.W. Krom (RMNH).

RE MY PREVIOUS PAPER (1984)

In 1985, Ponder's review of the genera of the Rissoidae has appeared, wherein part of the species discussed in my 1984 paper were assigned to a number of different genera. According to Ponder (1985: 33-35), *Cingula pulcherrima*, *C. turriculata*, *C. fusca*, *C. turgida*, *C. perminima* and *C. beniamina* belong to the genus *Setia* H. & A. Adams, 1852. On the advice of Dr. J.J. van Aartsen, Ponder also includes *C. amabilis*, *C. maculata* and *C. depicta* in that genus. The species *C. semistriata* and *C. pseudocingulata* are referred to the genus *Alvania* Risso, 1826 (Ponder, 1985: 44), as is *A. watsoni* (see Ponder, 1985: 42). *A. moniziana*, however, is assigned to the genus *Manzonina* Brusina, 1870 (Ponder, 1985: 48). Finally, Ponder (1985: 68) refers *C. intersecta* to the genus *Obtusella* Cossman, 1921, to which genus in his opinion also *C. macilenta* might possibly belong. Ponder's views as regards the generic position of *C. callosa*, *C. picta* and *C. substriata* are not very clear. He mentions, however, Van Aartsen's suggestion that they are closely allied to *A. semistriata* (see Ponder, 1985: 44).

In addition it should be remarked that Ponder's review contains a number of SEM-photographs of shells, protoconchs and radulae: *S. pulcherrima* (figs. 81E-H and 85G), *A. semistriata* (figs. 96A-E), *A. pseudocingulata* (figs. 102E-F), *S. fusca* (figs. 85A-D), *S. turgida* (figs. 80E-H), *O. intersecta* (figs. 118A-E), *A. watsoni* (figs. 102C-D), *M. moniziana* (figs. 102G-H), and *S. perminima* (figs. 85E-F).

I must admit, however, that I still cannot see any reliable conchological border-lines between the genera involved, and therefore prefer to confine myself to the summary given above, without changing the generic position of the other species discussed by me¹. Possibly it will help if more SEM-photographs of the protoconchs become available.

The Nordsieck collection contains a sample of 33 shells of *S. maculata*, labelled "Setia (Crisilla) punctifera (Watson)/Mittelmeer, Ibiza/33, Senckenberg Museum". The largest shell in the sample measures nearly 2.4 mm, and has about 5.2 whorls, which is more than previously mentioned by me. More important is that some of the shells clearly possess about 11 close set, spiral rows of fine tubercles on the protoconch (fig. 21).

¹ In contrast to Ponder, and without much argument, Oliverio, Amati & Nofroni (1986: 40) referred all forms with spiral sculpture on the teleconch, including *C. beniamina*, but excluding *C. turgida*, to the subgenus *Crisilla* of the genus *Alvania*. This illustrates to what extent the taxonomy of this group of species is still a matter of personal views.

I have examined the 12 syntypes of *C. ochroleuca* in USNM 183098, mentioned in my previous paper, and find these identical with the other "material examined". Judging from the descriptions and figures of a number of species of *Eatonina* s.s. in Ponder & Yoo (1980), in particular that of *E. (E.) heliciiformis*, *C. ochroleuca* most probably belongs to that subgenus.

C. ficaratiensis, also mentioned in my previous paper (1984: 70), has been figured by Brugnone (1877: pl. 1 fig. 6). Brugnone (1877: 39) reports to have compared this species with shells of *R. turgida* which he had received from Jeffreys himself, and found them to be different. According to Brugnone, Jeffreys and Monterosato shared this opinion. I myself still consider *C. ficaratiensis* a nomen dubium until more information becomes available.

Fasulo & Gaglini (1987) proposed the name *Alvania (Crisilla) marioni* (Monterosato, 1878) for *Cingula substriata* (Philippi, 1844) sensu Verduin, 1984. As to this, I have three remarks:

(1) I never stated that the type specimen of *C. substriata* has been lost, though it probably has.

(2) The differences between the fossil shells of *C. substriata* sensu Monterosato and the Recent shells of *A. marioni* seem to be very slight indeed, and not to provide convincing evidence for the thesis that two distinct species are involved instead of e.g. subspecies in the geological sense.

(3) I maintain my opinion, expressed previously (Verduin, 1984: 60), that *A. marioni* (Monterosato, 1878) is a nomen nudum.

Recently, a new Mediterranean species has been published, *Cingula antipolitana* Van der Linden & Wagner, 1987. *Cingula basteriae* Moolenbeek & Faber, 1986, was described from the Canary Islands.

RESULTS

FAMILY BARLEEIDAE

Barleeia seminulum (Monterosato, 1877), figs. 2, 7, 12

Rissoa seminulum Monterosato, 1877: 35, pl. 3 fig. 8 (Sidi Ferruch, Algeria).

Types. — No information available.

Description. — (1) Length up to about 1.9 mm. — (2) Shells almost opaque, yellowish or light brown. The edge of the aperture is of a lighter colour, and in some shells lighter spiral colour bands may be more or less clearly seen, arranged as shown in fig. 7. The apex also is of a lighter colour. — (3) The shells are devoid of ornamental sculpture. — (4) The shells are rather solid. There is no labial rib, nor does the aperture show any other peculiarities (fig. 12). — (5) Large specimens have about 4.0 whorls. — (6) There is no umbilical chink. — (7) The dimensions of the apex vary: $d = 0.15-0.17$ mm, $D = 0.22-0.25$ mm. — (8) Seen from aside in position 1, the nucleus is little prominent and circumscribed by a very shallow suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a low segment of a sphere, circumscribed by a very shallow suture (fig. 12). — (9) At a magnification of $40 \times$, no ornamental sculpture could be seen on the protoconch.

Distribution. — As yet only known from Algeria.

Material examined. — Five shells labelled "Rissoa seminulum Monter./Algiers/Joly/USNM 183214, Jeffreys coll."; two shells labelled "Rissoa seminulum Montero-

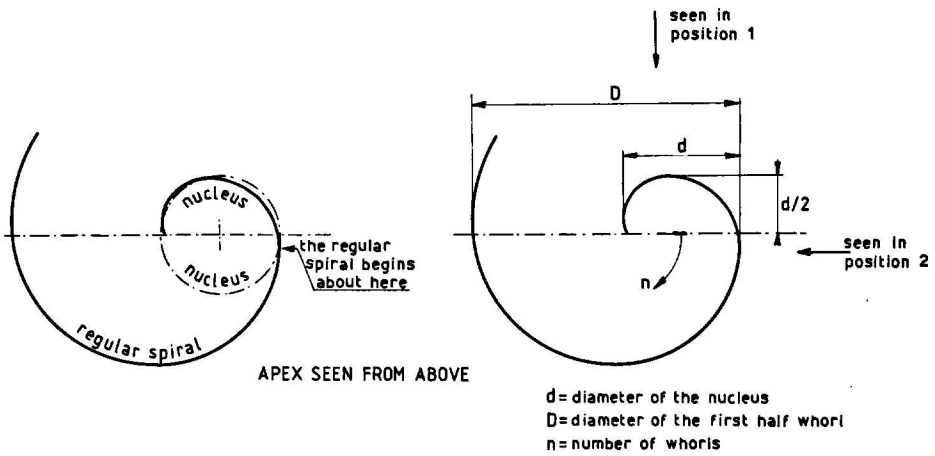


Fig. 1. Definitions of terms.

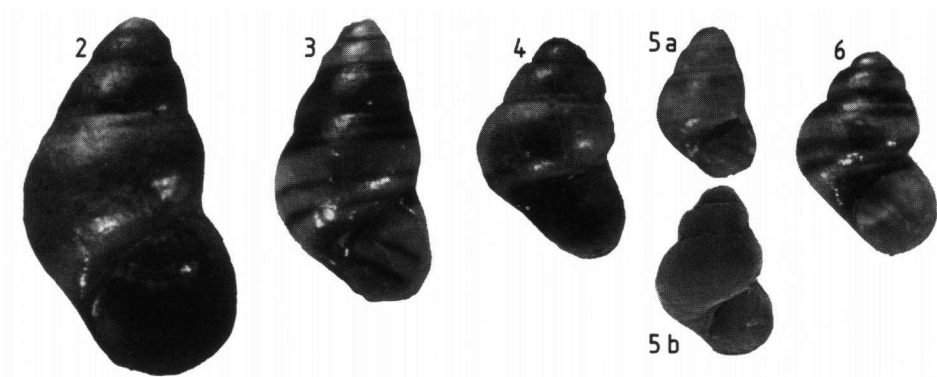
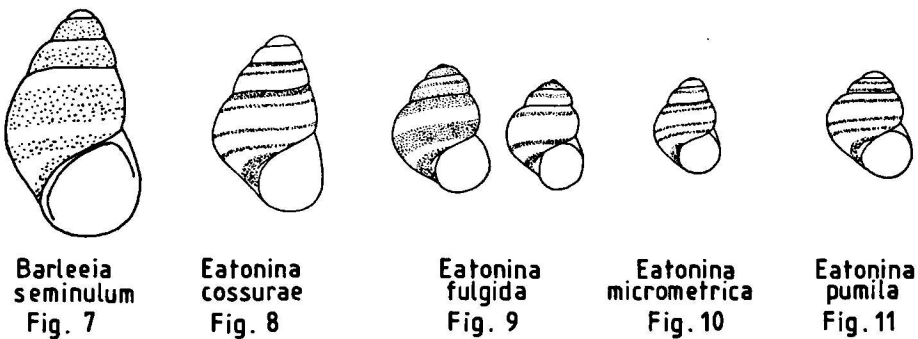


Fig. 2. *Barleeia seminulum*, El Djemila, Algeria. Fig. 3. *Eatonina cossuræ*, Biograd, Jugoslavia. Fig. 4. *E. fulgida*, Agripoli, W. Italy. Fig. 5. *E. micrometrica*; 5a Isola di Giannutri, W. Italy; 5b neotype, harbour of Messina, Sicily (photo SEM J.H.W. Krom). Fig. 6. *E. pumila*, Antibes, S. France. Magnification 28 ×.



Figs. 7-11. Colour patterns of *Barleeia* and *Eatonina* spp. Magnification 17.5 ×

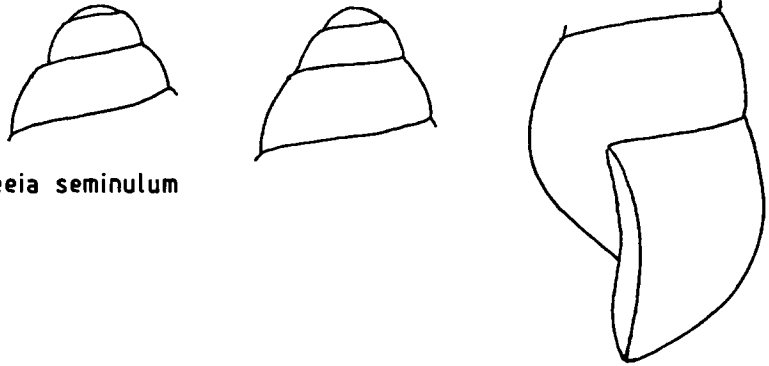


Fig. 12 *Barleeia seminulum*



Fig. 13 *Eatonina cossurae*



Fig. 14 *Eatonina fulgida*



Fig. 15 *Eatonina micrometrica*



Fig. 16 *Eatonina pumila*

seen from aside
in position 1

seen from aside
in position 2

Figs. 12-16. Details of apices and apertures of *Barleeia* and *Eatonina* spp. Magnification 35 x. For positions 1 and 2, see fig. 1.

sato/Algiers/Ancey/USNM 126582''; four shells in RMNH, labelled ''Rissoa (Cingula) seminulum Monter./Port Gueydon, Habilië (Algerië)/Ph. Dautzenberg 1897''; Aar 10545/40 from El Djemila (= La Madrague); Aar 10778/2 from Sidi Fer-ruch.

Discussion. — I consider the material examined and the original diagnosis and figure sufficiently similar for recognizing the species with certainty. Monterosato (1877: 25) wrote that his paper was based on ''Un riche envoi de Coquilles recueillies avec soin, dans la rade d'Alger, par M.P. Joly''. It is interesting that the sample USNM 183214, mentioned above, has also been collected by Joly, who labelled it *R. seminulum* Monter.

Other European species of *Barleeia* have been figured and discussed by Van Aartsen et al. (1984, nos. 66 and 67). Ponder (1983: 242) discussed the genus *Barleeia* and figured a few protoconchs.

FAMILY CINGULOPSIDAE

Eatonina (Coriandria) cossuræ (Calcara, 1841), figs. 3, 8, 13

Rissoa cossuræ Calcara, 1841: 10 (Isola di Pantellaria); Calcara, 1845: 28 no. 131; pl. 4 fig 11.

Types. — No information available.

Description. — (1) The length varies from about 1.0 to 1.6 mm. — (2) The shells are rather transparent with a light brown hue. They are decorated with darker brown spiral bands, arranged as shown in fig. 8. Occasionally, the subsutural band may be missing. There is always a brownish area at the umbilical chink. All colour bands end at some distance from the aperture. There is a whitish spot at the apex. — (3) Ornamental sculpture is completely absent. — (4) The shells are not very solid. There is no labial rib, nor does the aperture show any other peculiarities (fig. 13). — (5) Large specimens have about 4.5 whorls. — (6) There is a weak umbilical chink. — (7) The dimensions of the apex vary: $d = 0.10-0.13$ mm, $D = 0.18-0.20$ mm. — (8) Seen from aside in position 1, the nucleus is little prominent and circumscribed by a shallow suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a rather low segment of a sphere, circumscribed by a shallow suture (fig. 13). — (9) At a magnification of $40\times$, no ornamental sculpture can be seen on the protoconch.

Distribution. — *E. cossuræ* is washed ashore regularly along the entire western Mediterranean, in Sicily and in the Adriatic Sea.

Material examined. — A sample of eight shells in KBIN-D ''Microsetia cossuræ Calc./Palerm/Monterosato 15 85''; Mondello, 10 km NW. of Palermo, Sicily (Vrd 0033/40); Trapani, W. Sicily (Vrd 0109/3); Marzameni, SE. Sicily (Vrd 0047/2); Termini, 45 km SE. of Palermo (Vrd 0016/1); Gandoli, 10 km S. of Tarento, Italy (Vrd 0065/2); Biograd, 25 km SE. of Zadar, Jugoslavia (Vrd 0174/numerous); Punta Mika, a few km NW. of Zadar (Vrd 0078/40). I did not personally examine samples from many western Mediterranean localities in Aar.

Discussion. — The original diagnosis is not very decisive, mainly because of the length mentioned: ''poco meno della metà d'una linea'', i.e. about 1 mm, which also applies to a few similar species discussed here. Later on, Calcara (1845: 29) changed this length into ''circa un linea'', i.e. about 2 mm. Nevertheless, I do not think that there has been much disagreement with regard to the interpretation of the species. Anyway, I have made sure that my interpretation is consistent with that of Montero-

sato and Dautzenberg, which is evident from the sample first mentioned above. According to Tomlin (1930: 38), the Calcara collection has been obtained by Monterosato.

E. cossurae is the type species of *Coriandria* Tomlin, 1917. For a discussion of this matter, see Ponder & Yoo (1980: 29). Head, foot, shell, operculum and radula were figured by Ponder & Yoo (1980: figs. 5j, k and 11k-n).

Eatonina (Coriandria) fulgida (J. Adams, 1797), figs. 4, 9, 14

Helix fulgidus J. Adams, 1797: 254 (Linny. Ubi? Possibly in SW. Wales).

Turbo fulgidus - Montagu, 1803: 332.

Rissoa fulgida - Forbes & Hanley, 1850: 128, pl. 81 figs. 1-2.

Setia fulgida - H. & A. Adams, 1858: 334.

Cingula fulgida - Weinkauff, 1868: 280.

Microsetia fulgida - Monterosato, 1884a: 280.

Pseudosetia fulgida - Winckworth, 1951: 131.

Cingulopsis fulgida - Fretter & Patil, 1958: 114.

Coriandria fulgida - Nordsieck, 1972: 151.

Eatonina fulgida - Ponder & Yoo, 1980: 28.

Types. — No information available.

Description. — (1) The length varies from about 0.7 to 1.1 mm. — (2) The shells are transparent, with a light brownish hue. They are decorated with darker brown colour bands, arranged as shown in fig. 9. Both the intensity and the width of these colour bands are very variable, but otherwise these bands are a constant character. They end at some distance from the aperture. There is a light, often whitish spot at the apex. — (3) Ornamental sculpture is completely absent. — (4) The shells are not very solid. There is no labial rib, nor does the aperture show any other peculiarities (fig. 14). — (5) Large specimens have about 3.6 whorls. — (6) There is a narrow and deep umbilicus. — (7) The dimensions of the apex vary: $d = 0.09-0.12$ mm, $D = 0.16-0.18$ mm. — (8) Seen from aside in position 1, the nucleus is little prominent, and circumscribed by a shallow suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a medium high segment of a sphere, circumscribed by a rather shallow suture (fig. 14). — (9) At a magnification of $40\times$, no ornamental sculpture can be seen on the protoconch.

Distribution. — Washed ashore regularly along the North Sea, along the Atlantic coasts of Europe, and in the entire Mediterranean; Canary Islands.

Material examined. — European Atlantic coasts: Quiberon, Bretagne, France (Vrd 0096/numerous); Santander, N. Spain (Vrd 0056/15); Lagos, S. Portugal (Vrd 0119/numerous). Mediterranean: Benidorm, E. Spain (Vrd 0118/1); Capte, S. of Hyères, S. France (Vrd 0145/3); Agropoli, about 40 km S. of Salerno, W. Italy (Vrd 0010/numerous); Trapani, W. Sicily (Vrd 0144/6); Mondello, 10 km N. of Palermo (Vrd 0019/numerous); Marzamemi, SE. Sicily (Vrd 0042/numerous); Biograd, Yugoslavia (Vrd 0205/3); Punta Miska, a few km NW. of Zadar, Yugoslavia (Vrd 0104/10); Ródhos town, Greece (Vrd 0196/1). Canary Islands, Hierro (RGM 229201/1).

Discussion. — *E. fulgida* is a well known species, recently discussed by e.g. Fretter & Graham (1978: 214). Because this species is a fine example of the confusion the binominal nomenclatural system may bring about in difficult cases, I have listed all generic names which, to my knowledge, have been connected with it. It cannot be

denied, however, that part of these names did really reflect important scientific progress.

Head, foot, shell, operculum and radula were figured by Ponder & Yoo (1980: figs. 51m and 11g-j).

Eatonina (Coriandria) micrometrica (Aradas & Benoit, 1876), figs. 5, 10, 15

Rissoa micrometrica Aradas & Benoit, 1876: 314, pl. 5 fig. 3.

Types. — Neotype, design. nov. (fig. 5b): RMNH 55896 (ex Aar 17238). Harbour of Messina, Sicily, depth 30 m. Length 0.85 mm, 3.7 whorls, $d = 0.09$ mm and $D = 0.14$ mm. No colour bands visible. Three other shells ex Aar 17238 in RMNH 55897.

Description. — (1) The length varies from 0.65 to 0.95 mm. The slenderness is rather variable, so that some shells recall *E. pumila*. — (2) Fresh shells are rather transparent, with a light brownish hue. They are decorated with darker brown spiral bands, arranged as shown in fig. 10. In my experience, these colour bands often are less bright and less clearly visible than in *E. cossurae* or *E. pumila*. They end at some distance before the aperture. There is a whitish spot at the apex. — (3) Ornamental sculpture is completely absent. — (4) The shells are not very solid. There is no labial rib, nor does the aperture show any other peculiarities (fig. 15). — (5) Large specimens have about 3.8 whorls. — (6) There is no, or at best a very weak, umbilical chink. — (7) The dimensions of the apex vary: $d = 0.08-0.09$ mm, $D = 0.13-0.15$ mm. — (8) Seen from aside in position 1, the nucleus is very little prominent and circumscribed by a shallow suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a rather low segment of a sphere, circumscribed by a shallow suture (fig. 15). — (9) At a magnification of $40\times$, no ornamental sculpture can be seen on the protoconch.

Distribution. — So far only known from Messina, NE. Sicily, and Isola di Giannutri, about 90 km SE. of Elba, Italy.

Material examined. — Harbour of Messina, depth 30 m (Aar 17238/numerous) and Isola di Giannutri (Aar 18734/25).

Discussion. — The true identity of *E. micrometrica* has never been settled in a satisfactory way. The original diagnosis and figure may apply as well to *E. pumila*. Monterosato (1884b: 74), who had a vast and sound knowledge of the Sicilian marine malacofauna and who, in my experience, was an excellent observer, however wrote: "*Microsetia micrometrica* Seg. (*Rissoa*) - in Arad, e Ben..... Differisce per le proporzioni dalla *M. cossurae*", and introduced on the same page a new species with the words: "*S. pumila*, Monts. = *R. (Cingula) micrometrica*, (non Seguenza) B., D. e D.-l.c. p. 310, t. 37, f. 10, 11 ottima. (C. di Prov.). Anche di Palermo." This, unfortunately, did not solve all problems because the true *R. micrometrica* still remained an unknown species. Lately, however, a few samples were collected of unknown small shells which rather satisfactory agree with what was known about *R. micrometrica*. One of the samples (Aar 17238, harbour of Messina) was even collected close to the locality mentioned in the original diagnosis, i.e. "Villaggio Pace, poco lungi da Messina". Though the colour bands seems to have faded away in most of the shells of this sample, they still are faintly visible in some of them. Moreover, they are distinctly visible in the shells of an obviously conspecific sample from the Isola di Giannutri (Aar 18734). Both Dr. J.J. van Aartsen and I are convinced that these samples represent the true *R. micrometrica*.

I wrote for possible syntypes of *R. micrometrica* to a number of museums, among which the Jeffreys collections in Washington and London, and the Museo Civico di Storia Naturale in Milano, which holds the Aradas-Priolo collection. The answers were in the negative. Dr. J.J. van Aartsen wrote to me that he did not find any syntypes when he recently visited the Monterosato collection in Roma. I myself did not find any syntypes or specimens ex Monterosato in the Dautzenberg collection in Brussels. Moreover, Dr. M. Michelangeli (Milano) wrote to me that the main part of the Aradas collection had been destroyed at Catania during the war, and that Priolo had had access to that collection when writing his Memoria. Priolo (1953: 54), however, completely ignored Monterosato's opinion, which suggests that he also did not know the true identity of *R. micrometrica*. Under these circumstances I decided to designate a neotype of *R. micrometrica*. Because of the characteristic colour bands I consider it co-subgeneric with *E. cossurae*.

When this paper had been written, I became acquainted with Amati's (1987) publication on the genus *Eatonina* in Europe. I verified that his interpretation of both *E. micrometrica* and *E. pumila* is consistent with mine.

Eatonina (Coriandria) pumila (Monterosato, 1884), figs 6, 11, 16

Rissoa (Cingula) micrometrica (non Aradas & Benoit) Bucquoy, Dautzenberg & Dollfus, 1884: 310, pl. 37 figs. 10-11 (Rousillon).

Microsetia pumila Monterosato, 1884b: 74, nomen novum for *R. micrometrica* sensu Bucquoy et al., 1884.

Types. — Dr. Ph. Bouchet wrote to me that the material of *Rissoa micrometrica* figured by Bucquoy et al. (1884) (= *pumila* Mts.) has been totally destroyed by an acidic glass tube.

Description. — (1) The length varies from 0.65 to 1.0 mm. — (2) The shells are transparent with a light brownish hue. They are decorated with darker brown colour bands arranged as shown in fig. 11. The colour bands end at some distance before the aperture. There is a whitish spot at the apex. — (3) Ornamental sculpture is completely absent. — (4) The shells are not very solid, there is no labial rib, nor does the aperture show any other peculiarities (fig. 16). — (5) Large specimens have about 3.5 whorls. — (6) The umbilical chink is well developed. — (7) The dimensions of the apex vary: $d = 0.9-0.11$ mm, $D = 0.14-0.17$ mm. — (8) Seen from aside in position 1, the nucleus is very little prominent, and circumscribed by a shallow suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a medium high segment of a sphere, circumscribed by a rather shallow suture (fig. 16). — (9) At a magnification of $40\times$, no ornamental sculpture can be seen on the protoconch.

Distribution. — *E. pumila* is washed ashore infrequently, and usually in small numbers, in the entire Mediterranean.

Material examined. — Two shells labelled: "Microsetia pumila Monts./Palerme/Monterosato 15 85" in KBIN-D; Antibes, SE. France (RMNH/numerous, ex Lin and Wag); Mondello, NW. Sicily (Vrd 0010/14); Marzamemi, SE. Sicily (Vrd 0002/1). I did not personally examine samples from many other Mediterranean localities in Aar, among which Naxos and Crete in Greece.

Discussion. — The two shells ex Monterosato in KBIN-D, mentioned above, define the species beyond doubt, notwithstanding the fact that the length of $1\frac{1}{4}$ mm mentioned by Bucquoy et al. (1884) in the original diagnosis is too large.

E. pumila is very similar to *E. fulgida*, with which it may occur together. From the material examined I even got the impression that occasionally in *E. pumila* the two lower colour bands on the body whorl may merge into one wide colour band. Such shells may be distinguished from those of *E. fulgida* by the presence of two narrow colour bands on the previous whorl. In *E. fulgida* this previous whorl is decorated by either one narrow colour band, or a wide colour band which almost covers the entire whorl, or a combination of both, as shown in the left shell of fig. 9. Moreover, *E. pumila* seems to be completely absent along the European Atlantic coasts.

Because of the great similarity as regards ornamentation, I consider *E. pumila* cosubgeneric with *E. cossurae*.

FAMILY RISSOIDAE

Peringiella denticulata Ponder, 1985, figs. 17, 22, 25

Rissoa laevis Monterosato, 1877: 36, pl. 3 fig. 9 (plages de l'Algérie).

Peringiella denticulata Ponder, 1985: 62, fig. 117A, B. Nomen novum.

Types. — No information available.

Description. — (1) The length varies from about 2.7 to 3.2 mm. — (2) The shells examined are semitransparent and whitish or of a very light yellowish colour. The upper whorls are of the same transparency as the lower ones. Most shells have vague brownish spots at the aperture, as shown in fig. 22. — (3) The shells are devoid of ornamental sculpture. — (4) The shells are rather solid, and there is a well developed labial rib. Inside of the outer lip of the aperture with weak denticles. Otherwise, the aperture does not show any peculiarities (fig. 25). — (5) Large specimens have about 5.5 whorls. — (6) There is no umbilical chink. — (7) The dimensions of the apex are about $d = 0.13-0.15$ mm and $D = 0.22-0.25$ mm. — (8) Seen from aside in position 1, the nucleus is little prominent and circumscribed by a shallow suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a rather low segment of a sphere, circumscribed by a medium deep suture (fig. 25). — (9) At a magnification of $40\times$, no ornamental sculpture can be seen on the protoconch.

Distribution. — Algeria. Sicily? Trieste?

Material examined. — Alger (SMF 239522/8 and 239524/4, RMNH/3); Sicily, Trapani (Vrd 0013/1?) and Mondello (Vrd 0042/2?); Trieste (SMF, ex F. Nordsieck/4?).

Discussion. — I do not think that the original diagnosis and figure of *R. laevis* leave any doubt as regards the identity of the specimens examined from Algeria. *P. denticulata* is a replacement name.

In my experience the characteristic denticles at the inside of the outer lip may often be weak or absent, be it by wear or nature. I could not establish their presence with certainty among the material mentioned above from Sicily and Trieste, so that it is by no means certain that the species does occur outside North Africa. Also, the shells from Sicily are somewhat smaller, and more slender.

P. denticulata is the type species of *Peringiella* Monterosato, 1878 (Ponder, 1985: 62).

Peringiella eburnea (Nordsieck, 1968), figs. 18, 26

Cingula (*Peringiella*) *eburnea* F. Nordsieck, 1968: 45 (Sfax).

Types. — Lectotype, design. nov. (fig. 18a): SMF, from among a sample labelled “*Peringiella eburnea* “MTRS” F.N./Mittelmeer, Sfax/Syntypen”. Length 2.6 mm, 4.7 whorls, $d = 0.12$ mm and $D = 0.19$ mm.

Description. — (1) The length of seemingly full-grown shells varies from about 2.5 to 3.9 mm. — (2) The shells are opaque and of a dirty white or ivory-like colour. The top whorls are of the same colour. — (3) Ornamental sculpture is absent. — (4) The shells are somewhat solid. There is no labial rib. The aperture does not show any peculiarities (fig. 26). — (5) Large specimens have about 6.1 whorls. — (6) Some specimens may show a weak umbilical chink, but usually it is absent. — (7) The dimensions of the apex are about $d = 0.12-0.13$ mm and $D = 0.19-0.22$ mm. — (8) Seen from aside in position 1, the nucleus is little prominent and circumscribed by a rather deep suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a low segment of a sphere, circumscribed by a deep suture (fig. 26). — (9) At a magnification of $40\times$, no ornamental sculpture can be seen on the protoconch.

Distribution. — Golfe de Gabès, Sicily, probably also S. France.

Material examined. — Sfax (lectotype plus 38 shells in SMF labelled “*Peringiella eburnea* “MTRS” F.N./Mittelmeer, Sfax/Syntypen”; SMF 193110/20; 4 specimens in KBIN-D labelled “*Leachia eburnea* Monts. mss./Sfax/(de Nerville) Monterosato 1 5 85”; 118 specimens in KBIN-D labelled “*Paludestrina eburnea* Monterosato/Sfax”; 3 specimens in KBIN-D labelled “Sfax, plage Nord/separated from *Rissoa munda*”); Sfax, Djerba (SMF 239521/numerous ex Pallary 1904). Sicily (2 specimens in SMF labelled “*Cingula schlosseriana* Brusina/Sizilien/Slg. Kaltenbach (6566) ex A. Muller”; 10 specimens in KBIN-D labelled “*Peringia eburnea* (Monts.) Pall./Trapani, Sicile/Monterosato ex coll. Brugnone 2 III 17”; 5 specimens in KBIN-D with two labels “*Peringiella Schlosseriana* Brus./Palermo/Marie Monts. 5.12.83” and “*Paludestrina Salinasii* Ar. & Cal./Palermo/Marie Monts. 8.1.84”). S. France (1 specimen in KBIN-D labelled “Salines d’Hyères, drg. “Vergniaud” 27 m/Mottez 1914” and 2 dubious specimens in KBIN-D labelled “*Rissoa*...../St. Raphaël/Claudon leg.”).

There are two other samples ex Nordsieck in SMF which are labelled “*Peringiella eburnea*/syntypes”, from Tarento and Ibiza respectively. The quality of these shells is poor, and I am by no means convinced that all of them are conspecific with the lectotype of *P. eburnea*. Therefore, I leave them out of consideration here.

Discussion. — Judging from the labels of his syntypes, Nordsieck considered himself the author of *P. eburnea*. He was quite correct in doing so, because the species had never been properly described before. It had been mentioned by Pallary (1922: 52) as *Peringiella eburnea* Monterosato and by Pasteur-Humbert (1962: 133) as *Hydrobia eburnea* Monterosato, both times as a nomen nudum. Monterosato, however, seems to have never described the species. *Cingula schlosseriana* Brusina, 1870, almost certainly is a different species because of the words “semiumbilicata”, “vitrea” and “sutura inferne linea subpellucida ornata” in its original diagnosis.

P. eburnea is a rather variable species, as is demonstrated by the more or less extreme shells shown in figs. 18a-c. For this reason, and for the lack of truly specific conchological characters, it is difficult to sharply delimit the species. Most shells show a certain similarity to *P. denticulata* as regards the habitus, but there are no denticles in

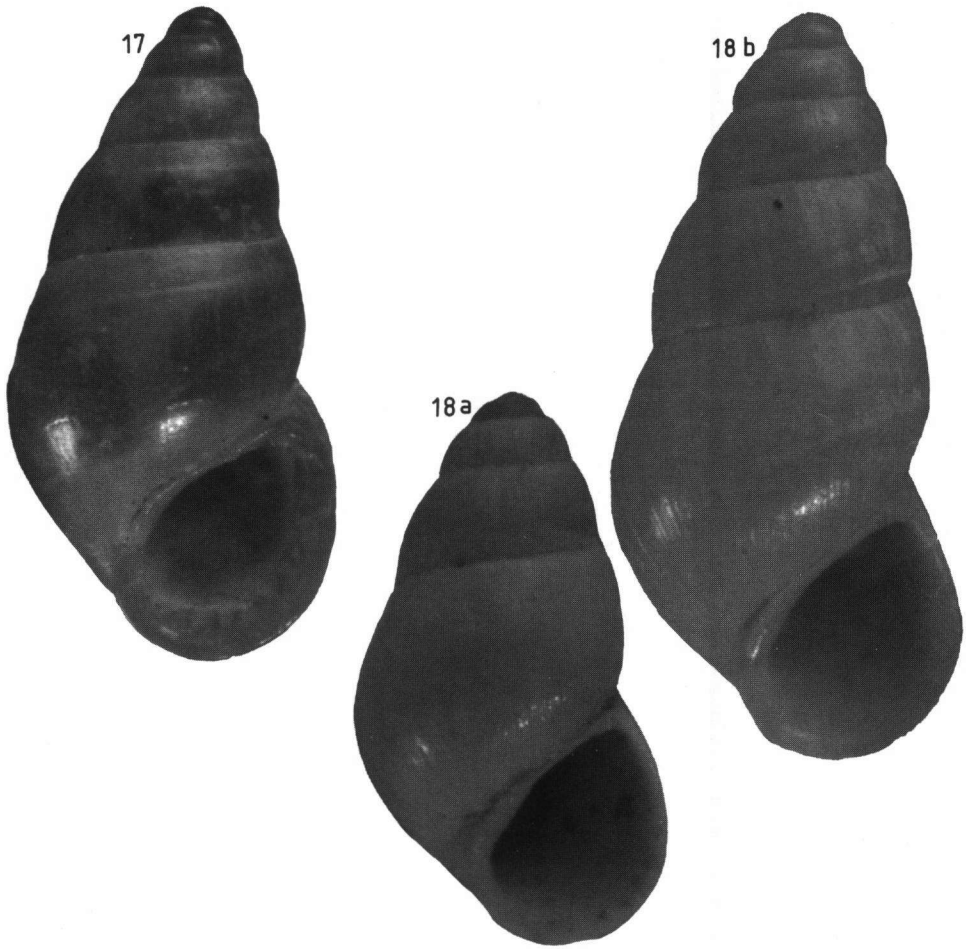
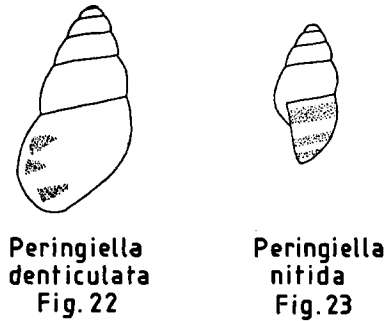


Fig. 17. *Peringiella denticulata*, Alger, Algeria. Fig. 18. *P. eburnea*; 18a lectotype, Sfax, Tunisia; 18b Sfax/Djerba.

the aperture. Other shells, which also seem to belong to *P. eburnea*, show much similarity to certain representatives of the genus *Hydrobia* (fig. 18c). Therefore, it is hardly possible to establish the true generic position of *P. eburnea* on the basis of the shells only.



Fig. 18c. *P. eburnea*, Sfax/Djerba. Fig. 19. *P. nitida*; 19a Trapani, Sicily; 19b forma *elongata*, St. Tropez, S. France. Fig. 20. *P. epidaurica*, Sestri Levante, NW. Italy. Fig. 21. *Setia maculata*, Ibiza, W. Spain. Figs 17-20, magnification 28 ×; fig. 21, magnification 110 × (photo SEM J.H.W. Krom).



Figs. 22-23. Colour patterns of *Peringiella denticulata* and *P. nitida*. Magnification 9 ×

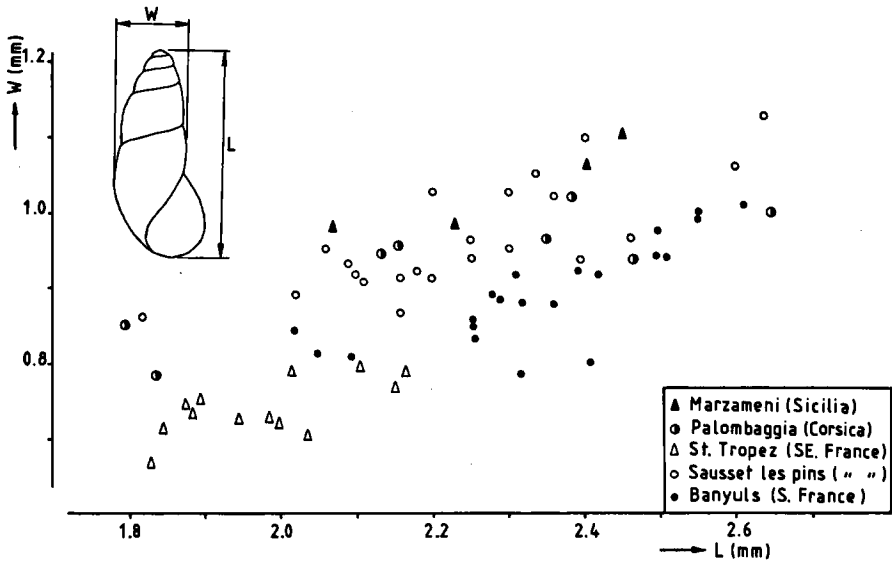


Fig. 24. *Peringiella nitida*, variation in slenderness. Marzamemi, Vrd 0011; Palombaggia, Aar 13472; St. Tropez, Aar 14298; Sausset les pins, Aar 11688 + Vrd 0044; Banyuls, Aar 12901.

Peringiella epidaurica (Brusina, 1866), figs. 20, 27

Cingula epidaurica Brusina, 1866: 29, fig. 10 (sabbia di Ragusa, Dalmatia).

Rissoa (*Cingula*) *balteata* Manzoni, 1868: 167, pl. 10 fig. 7 (Canary Islands).

Types. — Three syntypes from Lacroma near Ragusa in ZMA.

Description. — (1) Length 1.3-1.6 mm in Europe, up to 1.8 mm in the Canary Islands. — (2) Fresh shells are vitreous and colourless; bleached ones are whitish. — (3) The shells are devoid of ornamental sculpture. — (4) The shells are rather fragile

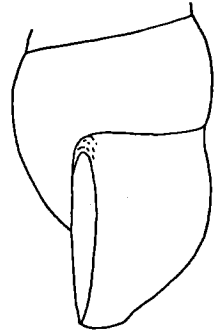


Fig. 25 *Peringiella denticulata*

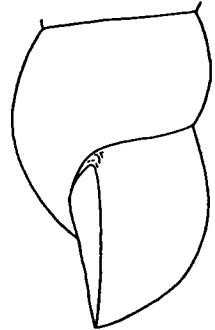


Fig. 26 *Peringiella eburnea*



Fig. 27 *Peringiella epidaurica*



Fig. 28 *Peringiella nitida*

seen from aside
in position 1

seen from aside
in position 2

Figs. 25-28. Details of apices and apertures of *Peringiella* spp. Magnification of apices 35 ×, magnification of apertures 17.5 ×. For positions 1 and 2, see fig. 1.

and there is no labial rib. The outer lip of the aperture is somewhat expanded with something like a sinus at its upper end (fig. 27). — (5) Large specimens have about 4.2 whorls. — (6) There is no umbilical chink. — (7) The dimensions of the apex are about $d = 0.09-0.12$ mm and $D = 0.17-0.20$ mm. — (8) Seen from aside in position 1, the nucleus is little prominent, circumscribed by a rather deep suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a slightly flattened, rather prominent segment of a sphere, circumscribed by a rather deep suture. — (9) At a magnification of $40\times$, no ornamental sculpture can be seen on the protoconch.

Distribution. — Entire Mediterranean; Atlantic coasts of Spain and Portugal; Canary Islands.

Material examined. — Three syntypes in ZMA (see above). Two topotypes in RMNH labelled “*Rissoa* (*Cingula*) *epidaurica*/Ragusa (Dalmatie)/H.C. Fulton 1930”; Lokrum (near Dubrovnik, Vrd 0032/1); Gandoli, 10 km S. of Tarento (Vrd 0130/1); Sicily (Trapani, Vrd 0019/1, and Marzameni, Vrd 0005/1); Ródhos town (Vrd 0194/2); Sestri Levante, 40 km ESE. of Genova (Vrd 0016/1); Getarès, a few km S. of Algeciras (Vrd 0139/1); Ria de Arosa, NW. Spain (RMNH/1); Canary Islands, a great number of shells from different localities in ZMA.

Discussion. — The syntypes mentioned above are labelled “*Peringiella epidaurica* Brusina/Yugoslavia, Dalmatia, Lacroma near Ragusa/don. P. Viglino, ex. coll. J.G.J. Kuiper/Syntypes”.

There can be little doubt that the numerous shells in a number of samples from the Canary Islands in ZMA are topotypes of *Rissoa* (*Cingula*) *balteata*. I carefully compared shells of *P. epidaurica* with material of *R. balteata* in ZMA (among others: 32 shells labelled “Lanzarote, La Santa, La Isleta, in tidal pool/20.VIII.1984/leg. R.M.”; 10 shells “Lanzarote, near Orzola, tidal pool near beach/9.VIII.1984/leg. R.M. & W. v.d. Hijden”; 9 shells “Lanzarote, Punta Pechiguera, in tidal pool/6.VIII.1984/leg. R.M. & W. v.d. Hijden”; 22 shells “Lanzarote, Playa de Montana Bermeja/14.V.1985/leg. J.H. Stock”) and found them very similar indeed. The only differences are that shells from the Canary Islands may grow slightly larger, up to 1.8 mm, that their width over length ratio is more variable, and that the suture of the protoconch is slightly deeper. I do not deem these differences sufficient for considering them to represent distinct species, though they might be considered a subspecies. In my opinion, the differences listed by Manzoni (1868: 243) refer to *P. nitida* rather than to *P. epidaurica*.

The shell figured by Ponder (1985: fig. 118F) measures about 2.2 mm according to the scale. If the scale is correct, this shell is much larger than any shell examined by me.

P. epidaurica has been figured well by Van Aartsen et al (1984: fig. 83). I have some doubt whether the species is really congeneric with *P. denticulata*. See also Ponder (1985: 62) for a discussion on the systematic position of the genus *Peringiella*.

Peringiella nitida (Bucquoy, Dautzenberg & Dollfus, 1884),
figs. 19, 23, 24, 28

Rissoa (*Cingula*) *nitida* Bucquoy, Dautzenberg & Dollfus, 1884: 314, pl. 37 figs. 24-26 (Paulilles, Banyuls).
Cingula elegans Locard, 1892: 177.

Types. — Syntypes in KBIN-D.

Description. — (1) The length varies from about 1.8 to 2.6 mm. — (2) The shells are transparent and whitish, sometimes of a horny colour. The upper whorls are of the

same transparency and colour as the lower ones. In some shells weak brownish colour bands can be seen on the body whorl (fig. 23). — (3) Ornamental sculpture is absent. — (4) The shells are somewhat fragile. There is a labial rib and the outer lip of the aperture is slightly expanded, with something like a sinus at its upper end (fig. 28). — (5) Large specimens may have up to about 5.2 whorls. — (6) There is no umbilical chink. — (7) The dimensions of the apex are about $d = 0.12-0.13$ mm and $D = 0.20-0.25$ mm. — (8) Seen from aside in position 1, the nucleus is little prominent and circumscribed by a rather shallow suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a rather low segment of a sphere, circumscribed by a medium deep suture. — (9) At a magnification of $40\times$, no ornamental sculpture can be seen on the protoconch.

Distribution. — Western part of the Mediterranean, Adriatic Sea, Sicily.

Material examined. — Numerous, often small samples in RMNH, KBIN-D, Aar and Vrd, among which material from the type localities (fig. 24).

Discussion. — As regards the nomenclature I follow Van Aartsen et al. (1984: 20).

In the literature the presence of a slender form of *P. nitida* has been mentioned, i.e. forma *elongata* B.D.D. (1884: 31). I measured the shells in a number of suitably chosen samples (fig. 24), but did not arrive at a definite conclusion with regard to their relative systematic position. It struck me, however, that in many samples all shells belong either to the slender form, or to the other one. Though in some samples both forms do occur, I did not succeed in finding a sample which as a whole is intermediate between both forms. Thus, my general impression is that really something like a demarcation line might exist between both forms.

The shells figured by Van Aartsen et al. (1984: fig. 82) and Ponder (1985: fig. 117C) are slender specimens. Ponder (1985: figs. 117D-G) also figured protoconch, operculum and radula.

I have some doubt whether this species is congeneric with *P. denticulata*.

Setia innominata (Watson, 1897), figs. 29, 33, 37

Rissoa concinna sensu Watson, 1873: 381, pl. 35 fig. 19.

Rissoa (*Cingula*) *innominata* Watson, 1897: 309 (nomen novum).

Types. — Lectotype design. nov. (fig. 29a): BM 198321, Madeira. Length 1.5 mm, 4.1 whorls, protoconch with $1\frac{2}{3}$ whorls, $d = 0.09$ mm, $D = 0.15$ mm. Probable syntypes: BM 1911.10.26.23200-212, 15 shells.

Description. — (1) Length about 1.45-2.25 mm. The slenderness is rather variable. — (2) The shells are somewhat transparent, with a yellowish-gray colour. There is a weak colour pattern of darker yellowish spots on the body whorl, as shown in fig. 33. The top whorls are of the same transparency as the lower ones, but sometimes of a slightly lighter colour. — (3) The ornamental sculpture of the body whorl consists of about 7 medium coarse and somewhat close-set spiral striae on the basis plus about 3 striae just below the suture. The spiral striae below the periphery may be slightly stronger than the other ones. At the periphery sculpture is weak or absent. — (4) The shells are medium solid. There is a broad and flat labial rib. The aperture does not show any other peculiarities (fig. 37). — (5) Large specimens have about 4.7 whorls. — (6) The umbilical chink is weak or absent. — (7) The dimensions of the apex vary: $d = 0.09-0.10$ mm, $D = 0.15-0.18$ mm. — (8) Seen from aside in position 1, the nucleus is somewhat prominent and circumscribed by a medium deep suture. Seen

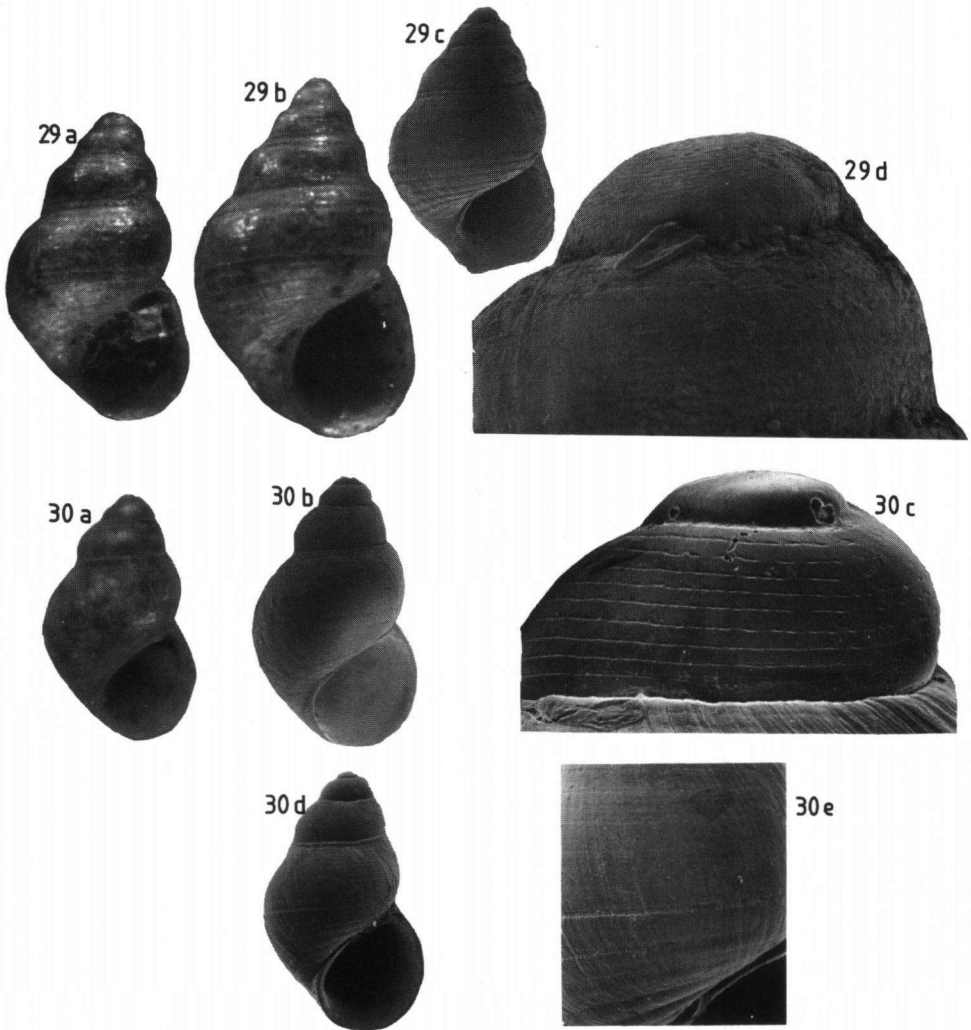


Fig. 29. *Setia innominata*; 29a lectotype, Madeira; 29b Madeira; 29c Madeira, juvenile (photo SEM, J.H.W. Krom). Magnification 28 \times . 29d Madeira. Magnification 225 \times (photo SEM J.H.W. Krom). Fig. 30. *Setia lityae*; 30a Madeira; 30b holotype, Bay of Funchal, Madeira (photo SEM J.H.W. Krom). Magnification 28 \times ; 30c Lido, Madeira (photo SEM R.G. Moolenbeek). Magnification 225 \times ; 30d Canary Islands, Lanzarote Sta. 13. ZMA, magnification 28 \times (photo SEM R.G. Moolenbeek); 30e Canary Islands, Tenerife, Playa Americas, ZMA, magnification 70 \times (photo SEM R.G. Moolenbeek).

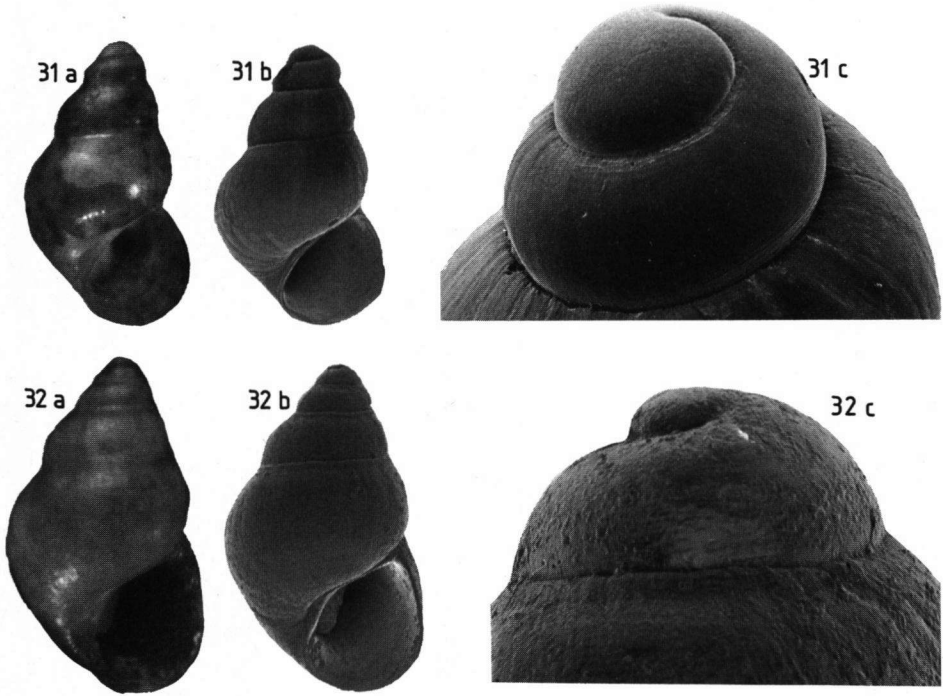
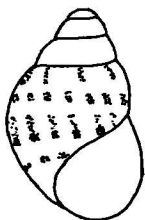
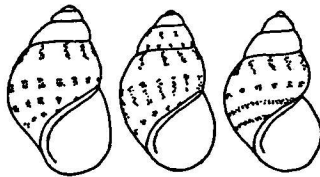


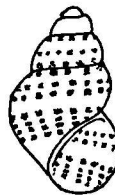
Fig. 31. *Setia miae*; 31a holotype, Las Canteras, Gran Canaria; 31b do. (photo SEM J.H.W. Krom). Magnification 28 ×; 31c Las Canteras, magnification 140 × (photo SEM R.G. Moolenbeek). Fig. 32. *Setia ugesae*, Hierro, Canary Islands, holotype; 32a magnification 28 ×; 32b do. (photo SEM J.H.W. Krom); 32c do. magnification 225 × (photo SEM J.H.W. Krom).



*Setia
innominata*
Fig. 33



*Setia
lidyae*
Fig. 34



*Setia
miae*
Fig. 35



*Setia
ugesae*
Fig. 36

Figs. 33-36. Colour patterns of *Setia* spp. Magnification 17.5 ×.



Fig. 37 *Setia innominata*



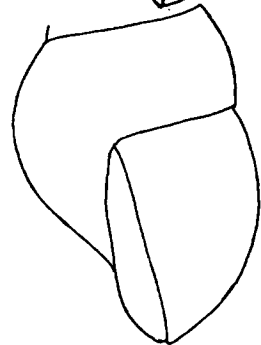
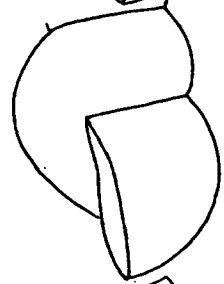
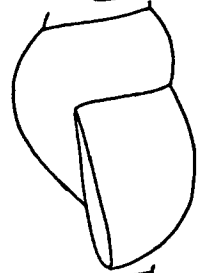
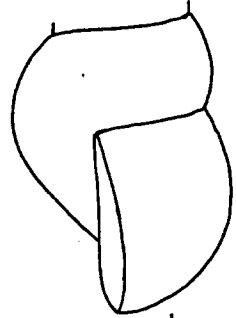
Fig. 38 *Setia lidyae*



Fig. 39 *Setia miae*



Fig. 40 *Setia ugesae*



seen from aside
in position 1

seen from aside
in position 2

Figs. 37-40. Detail of apices and apertures of *Setia* spp. Magnification 35 x . For positions 1 and 2, see fig. 1.

from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a medium high segment of a sphere with a medium deep suture. — (9) At a magnification of 40 \times , the surface of the top whorls is frosted, without manifest ornamental sculpture (fig. 29d).

Distribution. — Madeira and Canary Islands.

Material examined. — Madeira: Lectotype and probable syntypes mentioned above; BM 1911.10.26.23213-232/20 shells; USNM 183126/7 shells separated from *Cingula picta*; KBIN-D/4 shells labelled *Rissoa concinna*; RMNH/5 Cancap 1, sta. 16, 48 and 80; ZMA/3 from Porto Santo, sta. 15. Canary Islands, Hierro: RGM 229202/1.

Discussion. — Watson introduced *R. innominata* as a nomen novum for *R. concinna* sensu Watson, 1873, on the following grounds (Watson, 1897: 310): "... Monterosato rejects my identification of the Madeiran species with his from the Mediterranean. The material for a thorough independent opinion I do not possess, and I am content to accept the judgement of an authority in every way so thrustworthy—compelled, however, in these circumstances to propose for the Madeiran species the new name ..." I myself fully agree with Monterosato's opinion. *S. innominata* differs from *S. beniamina* (Monterosato, 1884) = *C. concinna* Monterosato, 1869, in the somewhat larger dimensions (1.45-2.25 mm versus 1.2-1.7 mm), in the presence of a broad and flat labial rib in adult specimens, in the strong spiral striae on the basis, in the colour pattern, and in being less transparent.

S. innominata has some resemblance to *C. callosa* from the Canary Islands, but the material of both species examined from Hierro completely convinced me that distinct species are involved. The spiral striae are stronger in *C. callosa*, and cover the entire body whorl, inclusive of the protoconch. Also, *S. innominata* is somewhat similar to *Alvania pseudocingulata* from the Mediterranean. Yet I believe that the differences in sculpture, transparency, umbilical chink and labial rib are sufficient to consider them distinct species.

According to Watson (1873: 382), his *R. concinna* contained two marked varieties. After having examined his material, I still do not know what might be the reason of this observation. Possibly, Watson did not distinguish properly between *S. innominata* and *S. lityae*. Anyway, he never mentioned *S. lityae* as a distinct species, unless *R. pulcherrima* sensu Watson, 1873, referred to it. If so, however, I do not understand why Watson (1897: 311) later on suppressed his *R. pulcherrima*, instead of introducing a new name for it. Moreover, his sample BM 1911.10.26.23200-212 contained one shell of the latter species in addition to the 15 shells of *S. innominata* mentioned above as probable syntypes.

The lectotype is labelled: "Puttila "innominata" Watson MS name/Madeira/Watson coll. via Tomlin + Becker colls./Press. Natal Mus. 1980/1 spec. acc. no. 2316/There are 2 further specimens in the Natal Mus. No. H. 9656", with, in the capsule which contains the shell, a small label: "H 9656".

*Setia lityae*² spec. nov., figs. 30, 34, 38

Types. — Holotype (ZMA Moll. No. 388015, fig. 30b) and 8 paratypes (ZMA Moll. No. 388016) from Bay of Funchal, Madeira. Holotype: length 1.33 mm, 3.6

² In honour of Mrs. A.M. van Roosmalen-De Caes, Zeist, who during many years cooperated so pleasantly in producing the Correspondentieblad van de Nederlandse Malacologische Vereniging.

whorls, $d = 0.10$ mm and $D = 0.17$ mm. Further paratypes: all other "material examined".

Description. — (1) The length of seemingly full-grown shells varies from about 1.1-1.4 mm. — (2) Fresh shells are transparent, with a yellowish hue. The top whorls are of the same transparency and colour as the lower ones. There are usually four spiral rows of darker spots on the body whorl, the lower ones of which may be weak and vague. Occasionally, other colour patterns may occur (fig. 34). — (3) There are always about four rather weak, equidistant spiral grooves on the basis of the shell. Moreover, there often are two narrow and weak spiral striae as a continuation of the suture, to the effect that the basis of the shell is covered by about six more or less equidistant spiral striae. These striae seem to be somewhat better developed among material from the Canary Islands (figs. 30d-e) than among Madeiran material (figs. 30a-b). In well preserved shells extremely fine and close set, superficial spiral engraving may be seen just below the suture. — (4) The shells are rather fragile. There is no labial rib. As in *S. perminima* the aperture is relatively large, with the columellar side almost in line with the parietal side (figs. 30a-b). — (5) Large specimens have about 3.7 whorls. — (6) There is no umbilical chink. — (7) The dimensions of the apex vary: $d = 0.09-0.10$ mm; $D = 0.15-0.17$ mm. — (8) Seen from aside in position 1, the nucleus is little prominent, and circumscribed by a rather shallow suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a medium high segment of a sphere with also a somewhat shallow suture. — (9) At a magnification of $40\times$, about 9 very fine, distant and equidistant spiral lines may be seen on the protoconch (fig. 30c).

Distribution. — Madeira and Canary Islands.

Material examined. — Madeira: the types mentioned above in ZMA (388015 and 388016); BM 1911.10.26.23200-212/1, together with 15 shells of *S. innominata*; BM 1911.10.26.23213-232/1, together with 20 shells of *S. innominata* and 3 shells of *S. depicta*; BM 1911.10.26.23236-238/3; BM 1911.10.26.23259-261/3; RMNH Cancap 1, sta. 59/1 and sta. 81/1; Ribeira Brava 2-4 m, 3 VIII 1983, ZMA, leg. R.G. Moolenbeek/2; Porto Santo sta. 15, VIII 1983, ZMA, leg. R.G. Moolenbeek/numerous. Canary Islands: Aar 4925/18 from Las Canteras; Aar 17099A/9 from Tenerife; many samples in ZMA, among which: Las Canteras, 21.3.1985, leg. H. Strack/numerous; Lanzarote, Playa del Pozo sta. 21, 13 VIII 1984, leg. R.G. Moolenbeek/numerous; Lanzarote, Playa del Pozo sta. 22, 13 VIII 1984, leg. R.G. Moolenbeek/numerous; Lanzarote, Playa de Montana Roja, 1-5 m, 6 VIII 1984, leg. R.G. Moolenbeek/numerous.

Discussion. — This species is very similar to *S. perminima*, but constantly differs in the colour: there is no dark colour spot at the basis, the inner lip of the aperture is always colourless or of a light colour, and the spiral row of darker spots below the suture never merges into a spiral colour band. Moreover, the spiral sculpture on the basis of the shells is generally somewhat more developed. These differences are so consistent that I have no doubt that two distinct species are involved.

From *S. innominata* the new species differs in the smaller dimensions, the absence of a labial rib, the more delicate spiral sculpture just below the suture, the ornamentation of the protoconch, and the form of the aperture.

From *S. beniamina* the new species differs in the sculpture and form of the protoconch, and in the presence of spiral striae at the lower end of the basis.

Mr. R.G. Moolenbeek, who also had recognized this species as new, kindly put his material and SEM-photographs at my disposal.

*Setia miae*³ spec. nov., figs. 31, 35, 39

Types. — Holotype (figs. 31a-b): RMNH 55898, ex Aar 4927, Las Canteras (Gran Canaria). Length 1.4 mm, 3.8 whorls, $d = 0.10$ mm, $D = 0.17$ mm. Paratypes: all other "material examined".

Description. — (1) Length up to about 1.7 mm. — (2) The shells are very transparent and glossy, with a light yellowish or brownish hue, and decorated with numerous spiral rows of darker spots, arranged as shown in fig. 35. The upper whorls are of the same colour and transparency as the lower ones, but there is a darker, brownish spot at the apex. — (3) Ornamental sculpture is completely absent. — (4) The shells are very fragile. There is no labial rib, nor does the aperture show any other peculiarities (fig. 39). — (5) Large shells have about 4.4 whorls. — (6) There is an umbilical chink, which often is very weak. — (7) The dimensions of the apex are about $d = 0.10-0.12$ mm and $D = 0.17-0.20$ mm. — (8) Seen from aside in position 1, the nucleus is little prominent, and circumscribed by a shallow suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a medium prominent segment of a sphere, circumscribed by a medium deep suture (fig. 39). — (9) At a magnification of $40\times$, no ornamental sculpture is to be seen on the protoconch (fig. 31c).

Distribution. — As yet only known from the Canary Islands.

Material examined. — Holotype (ex Aar 4927) plus 2 possibly adult shells and 8 fragments or juvenile shells in Aar 4927; three samples in ZMA: "Gran Canaria, Las Canteras/21.III.1985, leg. H. Strack/numerous", "Teneriffe, Playa de las Americas/18.IV.1981, leg. G.J. Gulden/3", "Teneriffe, Los Christianos, Princesa Dacil/23.X.1984, leg. L.F. Dix-Bunck/1".

Discussion. — Differs in colour pattern from any other similar species known to me.

Dr. J.J. Van Aartsen and Mr. R.G. Moolenbeek, who also had recognized this species as new, kindly put their material to my disposal in behalf of this publication.

*Setia ugesae*⁴ spec. nov., figs. 32, 36, 40

Types. — Holotype (figs. 32a-c): RMNH 55899, Canary Islands, Hierro. Length 1.6 mm, 4.2 whorls, $d = 0.10$ mm, $D = 0.17$ mm. Paratypes: five specimens from the same locality, RMNH 55900.

Description. — (1) Length about 1.3 to 1.6 mm. — (2) The shells are transparent and rather glossy, with a light yellowish hue, and decorated with spiral rows of darker spots, as shown in fig. 36. The upper whorls are of the same colour as the lower ones. There is no darker spot at the apex. — (3) Ornamental sculpture is absent, though in some shells traces of very fine and dense spiral striae are to be seen below the periphery. — (4) The shells are medium solid. There is no labial rib, nor does the aperture show any other peculiarities (fig. 40). — (5) Large shells have about 4.2 whorls. — (6) The umbilical chink is about absent. — (7) The dimensions of the apex are about $d = 0.10-0.12$ mm and $D = 0.15-0.17$ mm. — (8) Seen from aside in position 1, the nucleus is medium prominent and surrounded by a deep suture. Seen from aside in position 2, the nucleus and first $\frac{1}{4}$ whorl form a high, somewhat flattened segment of a sphere, circumscribed by a deep suture. — (9) At a magnification of $40\times$, no or-

³ In honour of Mrs. Dr. M.I. Gerhardt, Domburg, with whom I cooperated so pleasantly during many years in producing the *Correspondentieblad van de Nederlandse Malacologische Vereniging*.

⁴ In honour of my dear wife, Mrs. E.H. Uges.

namental sculpture can be seen on the protoconch, except that it has a frosted appearance (fig. 32c).

Distribution. — As yet only known from the type locality, Hierro, Canary Islands.

Material examined. — Holotype and paratypes mentioned above.

Discussion. — Differs from *S. lidyae* in the ornamental sculpture of shell and apex, in the somewhat larger size and more prominent nucleus of the apex, with a deeper suture. Also, the shape of the aperture is somewhat different.

Differs from *S. innominata* in the virtual absence of ornamental sculpture on the teleconch, and in the absence of a labial rib. Nevertheless, the similarity to *S. innominata* is rather striking, but the separate specific identity of *S. ugesae* is supported by the presence of a well-striated specimen of *S. innominata* in the sample which contained the shells of *S. ugesae*. See *S. innominata*, material examined.

Differs from *S. maculata* in the absence of a darker spot at the apex.

NOMINA NUDA, NOMINA DUBIA AND SYNONYMS

Setia globulinus Monterosato, 1884. — I did not examine any type or other material of this nominal species, but Ponder & Yoo (1980: 29) wrote: "Paratypes of the species in the BMNH show it to be virtually inseparable in shell characters from *Eatonina* (*C.*) *fulgida*". In this situation, it seems best to consider *S. globulinus* a nomen dubium.

Rissoa punctifera Watson, 1873. — Though this name has been used in the literature, Watson never really introduced it, but kind of suggested it for *R. depicta* sensu Watson, 1873, in case it would turn out that that species was not conspecific with *R. depicta* Manzoni, 1868. Watson himself, however, never stated that his *R. depicta* was different from Manzoni's, though he considered it probably distinct (1897: 309). Judging from his description of *R. depicta* (1873: 383), which contains the words "the peculiarity of the spiral striations as above (not below) the suture", he might have been right. This description, however, is not supported by his material in BM. I cannot distinguish a sample of four shells, labelled "Rissoa depicta Manzoni/Madeira/figured in: Watson 1873 Proc. zoo. Soc.: 382 pl. 35, f. 20/B.M. (N.H.) 1875.5.27.21" from the "material examined" of *R. depicta* mentioned in my previous paper. Watson's sample just mentioned certainly is conspecific with two other samples from Madeira, i.e. 17 shells labelled "Rissoa depicta Manzoni/Madeira/Probably cited by Watson in: Proc. zool. Soc. Lond. 1873: 382/Norman colln. ex R.B. Watson/B.M.(N.H.) 1911.10.26.23479-495", and 4 shells labelled "Cingula depicta Manzoni/Madeira/A M N 1897/B.M.(N.H.) 1911.10.26.23496-499". In my opinion, it therefore has never been demonstrated that Watson's and Manzoni's species are really distinct. Under these circumstances, we may best look upon *R. punctifera* Watson as a junior synonym of *R. depicta*.

Nordsieck (1972: 165) has reported *R. punctifera* from the Mediterranean. I have examined four samples in his collection (now in SMF). These contain a number of different species, none of which is identical with *R. depicta*.

R. spadix Watson, 1897. — This name was introduced as a nomen novum for *Rissoa perminima* sensu Watson, 1873 (from Madeira), because, solely on the basis of the original diagnosis of *R. perminima* Manzoni, 1868 (from the Canary Islands), Watson considered his species to be distinct. Unfortunately, Watson did not specify the differences between both forms. I examined quite some material from Madeira, including

syntypes of *R. spadix*, and found two differences with Manzoni's diagnosis of *R. perminima*: (a) Manzoni mentioned "une zone médiane blanchâtre", while both the Madeiran material and all material from Selvagem Grande and the Canary Islands known to me have a second lighter coloured zone on the basis of the shell; (b) the majority of the Madeiran shells have 1-5 weak spiral striae on the basis, which were not mentioned by Manzoni, and which do not seem to be present on the shells from Selvagem Grande and the Canary Islands known to me. I do not deem the latter differences sufficient for considering the Madeiran material specifically distinct from that from the Canary Islands, because (1) we know little about the variability of *S. perminima* from the Canary Islands, because specimens are very rare in collections (I myself examined only one adult and two juvenile shells from Selvagem Grande, mentioned in my previous paper, plus one adult shell from Las Canteras, Gran Canaria, separated from Aar 4925; Manzoni wrote "rarissima" and Watson did never see any topotypes), (2) apart from the differences mentioned above, the Madeiran shells are very similar indeed to both Manzoni's diagnosis and figure, and to the shells from Selvagem Grande and Gran Canaria examined by me, and (3) it follows from my investigations that Madeira and the Canary Islands have many rissoid species in common. Under these circumstances it seems best for the time being to consider *R. spadix* a junior synonym of *S. perminima*.

The material from Madeira examined consists of: "Rissoa spadix Watson/Madeira/Syntypes Proc. zool. Soc. Lond. 1897: 311, indicates P.Z.C. 1873: 383, pl. 36 fig. 22/9 specs. R.B. Watson colln./B.M. (N.H.) 1875.5.27.31"; "Rissoa spadix Watson/Madeira/possible syntypes/Proc. zool. Soc. Lond. 1897: 311: indicates P.Z.S. 1873: 383 pl. 36 fig. 22/Norman colln. ex R.B. Watson/11 specs./B.M.(N.H.) 1911.10.26. 24525-535" (one shell of this sample seems to belong to *S. lityae*); "Rissoa spadix Watson/Madeira/possible syntypes Proc. zool. Soc. Lond. 1897: 311: indicates P.Z.S. 1873: 383 pl. 36 fig. 22/J.M. Moniz colln./2 specs. det. R.B. Watson/B.M.(N.H.) 1966201"; 9 shells separated from *S. lityae*, BM 1911.10.26.23239-23258; 4 shells in KBIN-D, "Rissoa perminima Manzoni/Madeira"; 30 shells in KBIN-D, "Setia spadix Watson = *R. perminima* Watson/Madeira/A M N 1897" with a second label "Norman ded. 9.98"; 5 shells in Aar 17451.

It should be remarked here that Watson's drawing of his *perminima* (1873: fig. 22) differs from both Manzoni's diagnosis (one lighter colour band) and from the type material of *R. spadix* (two lighter colour bands), because Watson's drawing clearly shows three lighter colour bands, inclusive of the light basis. As long as no material from Madeira is available which agrees with Watson's drawing, I feel that we should not attach much weight to this difference.

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SAMENVATTING

Over de taxonomie van enkele soorten Rissoacea van Europa, Madeira en Canarische Eilanden

Dit is een aanvulling op mijn *Cingula*-publicatie in Basteria 1984. Enkele soorten der Barleceidae, Cingulopsidae en Rissoidae worden besproken. Drie nieuwe soorten van Madeira worden geïntroduceerd: *Setia lityae*, *S. miae* and *S. ugesae*. Lectotypen van *Rissoa* (*Cingula*) *innominata* Watson, 1897, en *Cingula* (*Peringiella*) *eburnea* F. Nordsieck, 1968, worden aangewezen, evenals een neotype van *Rissoa micrometrica* Aradas & Benoit, 1876.