

Conchological differences between *Crisilla marioni* (Fasulo & Gaglini, 1987) and *Crisilla cristallinula* (Manzoni, 1868) (Gastropoda Prosobranchia: Rissoidae)

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The differences between the rissoids *Crisilla marioni* and *C. cristallinula* are discussed on the basis of S.E.M. photographs. We conclude that these nominal taxa represent two valid species.

Key words: Gastropoda, Prosobranchia, Rissoidae, *Crisilla*, taxonomy. Mediterranean, Canary Islands.

In this paper¹ we follow Bouchet & Warén (1993) and use for the type of shells under discussion the generic name *Crisilla* Monterosato, 1917. In the past some authors discussed the species *C. marioni* (Fasulo & Gaglini, 1987) and *C. cristallinula* (Manzoni, 1868), wondering whether they are conspecific. Verduin (1984) considers both nominal taxa to be synonyms, but regards them as valid on the subspecies level. He prefers to continue doing so as long as so little is known about these taxa. Fasulo & Gaglini (1987) consider the two to be different species, however, without giving details about the protoconch.

Although, also in our opinion, the taxa are closely related, the S.E.M. photographs reveal substantial differences.

The initial part of the pc of *C. cristallinula* (fig. 1) is nearly flat, while that of *C. marioni* is somewhat dome-shaped (fig. 2).

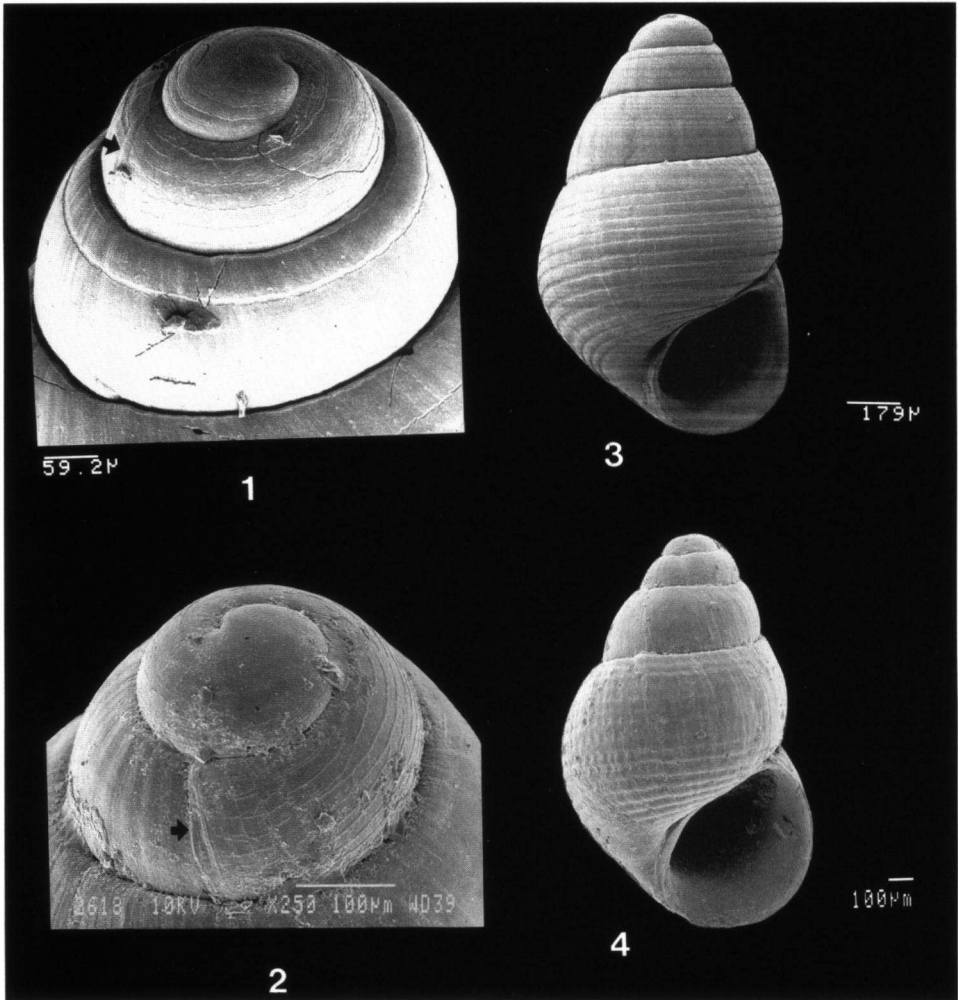
The sculpture on the pc of *C. cristallinula* consists of 5-6 regular spirals already starting on the initial whorl. The sculpture of the pc of *C. marioni* (fig. 2) is somewhat irregular. Some of the spirals (about 8-9) are confluent while others break off and start again after a short interruption. Those spirals only start to appear after the first, smooth part of the pc.

Immediately after the demarcation of pc and tc (figs. 1, 3), there appears one subsutural spiral line in *C. cristallinula*. This spiral is absent in *C. marioni*.

The whorls of the tc of *C. cristallinula* are less bulbous than those of *C. marioni*. The incised spirals on the uw of the former are narrow and sharply delimited and about half as wide as the interstices. The incised spirals on the uw of *C. marioni* are not sharply delimited and about twice as wide as the interstices and even more so below the periphery of the uw.

Moreover, *C. cristallinula* is not a species from the littoral zone, but is found dead between 75 and 830 m (see under material studied), while *C. marioni* normally is a littoral species, although sometimes found at depths of between 200 and 280 m (see Fasulo &

¹ We are using the following abbreviations: NNM = Nationaal Natuurhistorisch Museum, Leiden; pc = protoconch; tc = teleoconch; uw = ultimate whorl (body whorl); ZMA = Zoologisch Museum, Amsterdam.



Figs. 1-4. Shells of the two *Crisilla* species discussed here. 1, 3 - *C. cristallinula*, from Canary Islands, Tenerife, El Socorro, depth 90 m (ZMA); 2, 4 - *C. marioni*, from Italy, Palmaiola Island (Hoenselaar colln.). The black arrows in figs. 1-2 indicate the protoconch/teleconch demarcation.

Gagliani, 1987). Basing ourselves on the preceding facts, we now consider *C. cristallinula* and *C. marioni* different species.

For this study we examined material from the following localities:

Crisilla cristallinula

– NNM (CANCAP expeditions, see Van der Land, 1987) SELVAGENS ARCHIPELAGO (CANCAP III, 1978, all stations enumerated around the Selvagens Islands):

Sta. 3.062 - 30°08'N 15°52'W, depth 99 m (21 shells); Sta. 3.065 - 30°08'N 15°53'W, depth 100 m (12); Sta. 3.070 - 30°07'N 15°54'W, depth 645 m (1); Sta. 3.072 - 30°06'N 15°54'W, depth 830 m (4); Sta. 3.081 - 30°01'N 16°01'W, depth 91 m (16); Sta. 3.087 - 30°01'N 16°01'W, depth 322 m (4); Sta. 3.099 - 30°07'N 15°52'W, depth 585 m (18); (CANCAP IV, 1980, all stations enumerated around the Selvagens Islands) Sta. 4.103 - 30°01'N 16°01'W, depth 425 m (86); Sta. 4.104 - 30°01'N 16°01'W, depth 524 m (26); CANARY ISLANDS (CANCAP IV, 1980): Sta. 4.049 - 28°48'N 13°46'W, depth 313 m (4) (S. of Lanzarote); Sta. 4.110 - 28°27'N 17°51'W, depth 110-180 m (10); Sta. 4.112 - 28°27'N 17°51'W, depth 245-141 m (7); Sta. 4.114 - 28°27'N 17°51'W, depth 200 m (1); Sta. 4.116 - 28°26'N 17°51'W, depth 420 m (4) (all S. of Palma); Sta. 4.138 - 28°39'N 17°58'W, depth 75 m (40); Sta. 4.139 - 28°39'N 17°58'W, depth 100 m (17); Sta. 4.145 - 28°39'N 17°59'W, depth 160 m (4); Sta. 4.157 - 28°39'N 17°59'W, depth 250-200 m (2); Sta. 4.159 - 28°40'N 17°59'W, depth 400 m (10) (all SW. of Palma).
 - ZMA: CANARY ISLANDS, Tenerife, El Socorro, depth 98 m, >200 shells, leg. G.P. Dionis, 6.1989.

Crisilla marioni

Collection of the authors: ITALY, Ventotene; Capraia; Gorgona; Palmaiola; Meloria. FRANCE, Plage Salins; Bonne Terrasse; Les Sablettes; Le Brusca (all dépt. Var); Plage Ste. Croix (dépt. Bouches du Rhône); Bonifacio, Ile Rousse (Corsica). SPAIN, Cadaques (Costa Brava).

All samples of *C. marioni* originate from beach or littoral zone material.

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