

MORE ON *CRIBRARULA CRIBRARIA GASPARDI*

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Abstract: The conchological literature partly confirms the subspecific level of *Cribrarula cribraria gaspardi*. Its main diagnostic shell characteristics are: the narrower shell with extended extremities, and a special form of dorsal lacunae. Yet another shell characteristic is still absent in order to finally recognize the subspecific level of the taxon: the evidence that the shells with the above characters comprise the majority in Kwajalein populations.

Key words: Mollusc, Gastropoda, Cypraeidae, *Cribrarula cribraria gaspardi*, Kwajalein, intraspecific variation.

Cribrarula cribraria gaspardi Biraghi & Nicolay, 1993 was described as a subspecies from Kwajalein Islands. The description was based on only 11 shells having the following shell characters, which in the opinion of the authors separate it from other populations of *C. cribraria* (Linnaeus, 1758):

→"Right side margination always neatly pronounced and expanded so that the extremities are very produced, almost beaked so the shell assumes a shape more elongate than usual, almost like a little canoe".

→The dorsal color and pattern: the background is of a pale, at times almost translucent ochre, the white lacunae are large and less numerous and often irregular.

→In certain specimens the thin dorsal band ...appears absolutely white, without any line or dot."

There is also a table in the description in which the length, width, and a number of labial and columellar teeth of the 11 shells are given. The V-S formula calculated using these data reads 15.54. 18.19; a formula of the Pacific subspecies *C. cribraria orientalis* Schilder & Schilder 1940 reads 22.57.20.19 i.e. shells of *gaspardi* seem to be smaller if compared with the latter taxon, and more narrow but the small number of shells studied is the weak point of the description, especially for a subspecies; so the subspecific rank of this taxon was rejected by certain students of cowries.

For example, Raybaudi (1993) considered that *gaspardi* is only a form of *C. cribraria* and illustrated this idea by 33 excellent pictures. One can learn from the latter work that the shell size varies from 11.2 to 30.8 mm, so the average shell size of the type material was apparently based on mostly small shells not representing all possible options.

But Raybaudi's conchological material confirmed several other diagnostic characters: the extremities of the majority of 33 shells are clearly callused and extended and the dorsal lacunae look very special. The most interesting fact is that the average width to length ratio of the 33 shells is 0.54—exactly as in the type material. A paradox is that this work of Raybaudi (1993) confirms the subspecific shell characteristics of *gaspardi* adding 33 shells to the type material.

C. gaspardi can be separated from *C. cribraria* by at least the following shell characteristics:

- Substantially narrower shell; for this shell characteristic even the difference of 1% is noticeable.
- Distinctly extended extremities well seen in the shells.
- Special form of lacunae, which can be observed in all shells from dwarf to giants.

Still another shell characteristic is absent in order to finally recognize the subspecific level of this taxon: the evidence that the shells with the above characters comprise the majority in Kwajalein populations of *C. cribraria*. Until this is confirmed *C. gaspardi* should be considered a synonym of *C. cribraria*.

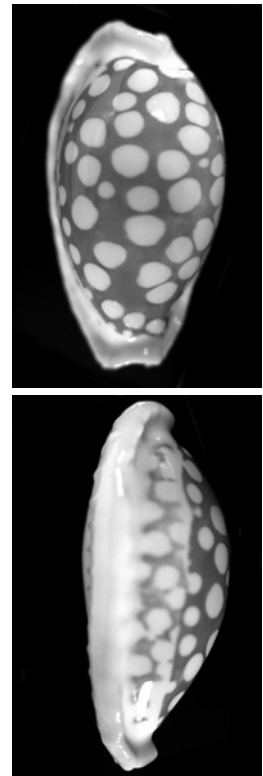
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1-2. *C. cribraria gaspardi*, 22.2 mm