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**ABOUT *EROSARIA CERNICA* (SOWERBY, 1870)**

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**Abstract:** This article is a summary of a conchological study reported in a Supplement 4 to Triton 25. The study was conducted in order to check the taxonomic identity of eight populations of *Erosaria cernica* described in the past as subspecies. These subspecies were described using a limited number of shells. In a conchological test the subspecific level of seven of them is not proven and their subspecific names should be treated as synonyms. *Erosaria cernica leforti* seems to be a subspecies. The taxonomic identity of other populations of *E. cernica* should be re-studied. In order to make such a new study easier in the future, a small visual database of shells from Reunion, Japan, and from the Hawaiian Islands is given in Supplement 4 together with the shell characteristics and other conchological information.

**Key words:** Mollusca, Gastropoda, Cypraeidae, *Erosaria cernica*, intraspecific variation, diagnostic characteristics.

*Erosaria cernica* (Sowerby, 1870) is distributed mostly in peripheral areas of the Indo-Pacific region and its specific level was never questioned. It is known from dredging and divers finds. Hence it was rare in the past and still is uncommon. Occurring far and wide, shells of *E. cernica* may differ to a certain degree in their size and other peculiarities hence it is hardly surprising that eight geographically separated populations of *E. cernica* were described as subspecies. But their original descriptions contain scarce conchological information and do not present the scientific evidence of the subspecific level. An impression can be formed that the authors considered that their geographical separation from other populations of the species is sufficient for their description as subspecies.

In the conchological study reported in Supplement 4 a new (although still limited) conchological information is added to the old descriptions; it did not improve the situation.

The majority of shell characters of the species are rather constant. The morphometric characters and numbers of teeth vary as in all cowry species. The shell shape may be elliptical or oval (two forms). The shell profile may be convex or almost humped (also two forms). In certain populations of the species one of these forms may prevail but did not comprise the majority. A number of teeth of the fossula seem to be size-dependent. The dorsal color varies also and the dorsal line is not always present. A size of the teeth may depend on the maturity of specimens. The average shell size and the width to length ratio seem to be similar in different populations. The labial teeth are more numerous than the columellar teeth in all groups. But all this cannot be used for describing subspecies because conclusions regarding the subspecific level can be drawn only after studying hundreds of shells. This will perhaps be made in the future.

For this purpose, a small visual database (VDB) is given in Heiman (2012). It contains 120 pictures of *E. cernica* from Reunion-Mauritius area, from Japan, and from the Hawaiian Islands and can be used as an additional source of conchological information.

Wilson (1993) treated *E. cernica* as a monotypic species and this make sense until the scientific evidence confirming the subspecific level of at least one of the *cernica* populations will be obtained. In order to evaluate subspecies of *E. cernica* it is good to start from the conchological information regarding the nominotypical subspecies.

It should be mentioned that *E. cernica leforti* (Senders & Martin, 1987) is perhaps the only population of the species, which deserves the subspecific level, as one can conclude from pictures of its shells appearing from time to time on the Internet. But this assumption should also be checked using large batches of shells.

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**Literature**

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