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***EMARGINULA DIVAE* NOV. SPEC., A NEW SPECIES FROM THE
MEDITERRANEAN COAST OF ISRAEL**

KEY WORDS: *Emarginula*, *Emarginulidae*, Gastropoda, Mediterranean, Israel, New species.

Abstract

Emarginula divae n. sp. is based on three empty shells collected from the Mediterranean coast of Israel, a shallow depth. Its biogeographic status (Levantine Mediterranean endemic vs. lessepsian migrant) cannot at present be safely assessed.

Riassunto

L'esame di materiale raccolto presso le coste mediterranee israeliane a una profondità di 30-35 metri ha consentito di isolare tre conchiglie attribuibili al genere *Emarginula*. L'esame morfometrico condotto in confronto alle altre congeneri del Mediterraneo e del Mar Rosso ha convinto gli autori che si tratti di una nuova specie che viene denominata *Emarginula divae* n.sp. Probabilmente futuri ritrovamenti e relativi studi permetteranno di stabilire se si tratti o meno di un endemismo del Mediterraneo orientale.

During our study of mollusca collected along the central part of the Mediterranean coast of Israel, at a depth of 30/35 meters, we came for the first time, across a species of *Emarginula* which we could not identify immediately. It was flatter than most of the known Mediterranean species and only *E. huzardii* Payraudeau, 1826 seemed comparable. That species, however, is not only flatter than our species, the top is also more centrally located and the form is more oval.

Looking through the *Emarginulidae* from the Red Sea and the Persian Gulf we find

E. cuvieri Audouin, 1826

E. incissura A.Adams, 1852

E. thomasi Crosse, 1864

E. harmilensis Sturany, 1903 as well as

E. undulata Melvill & Standen, 1903

E. camilla Melvill & Standen, 1903 and also

E. incisa Dillwyn, 1817.

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It is clear from descriptions and figures that our new species is different from all of them, except for a slight resemblance to two of them viz. *cuvieri* and *incisa*. However, the type-species of *E. cuvieri* has not been found by BOUCHET & DANRIGAL (1982: 12) and the shell which is described and figured for this species by THIELE (1915: 96, pl. 11 figs. 20, 21) is appreciably higher than the figure given by SAVIGNY (1817: pl. 1 fig.9). Therefore we are not sure about the real identity of *E. cuvieri*.

Shells under this name in the McAndrew-collection in Cambridge (2 samples with 3 and 2 specimens) look most like a "very flat kind of *E. huzardii*" in our opinion. COOKE (1885: 271) holds these shells to be identical with *E. clypeus* A. Adams, 1852, a species which is related but different according to THIELE (1915: 97 pl. 11 figs. 24, 25). McAndrew's shells are quite different from our new species in any case.

The same collection contains 3 samples of shells under the name *E. incisa* Dillwyn. This species, based on Martini-Chemnitz part II, p. 185 t. 197 figs. 1925, 1926, is not easily recognized and moreover, it "inhabits the coasts of the Falkland Islands" (Chemnitz) as was already remarked by Smith in COOKE (1885: 271). The shells in McAndrew's collection certainly look more or less like the Mediterranean *E. elongata* Costa O. G., 1829 [= *E. octaviana* Coen, 1939] and therefore differ from our new species. In particular we are not certain about the correct name for McAndrew's shells and conclude that our shells do not belong to any known Mediterranean or Red Sea species and we therefore describe them as

Emarginula divae nov. spec.

Description: Bilaterally symmetrical shell, basal outline eggshaped, the greatest width behind the middle, height/length ratio 0.36-0.37; apex strongly curved, at about 0.74 from the anterior side; both posterior and anterior side slightly convex. The shell is slightly bent and the basal plane is therefore curved. Anal slit relatively short, only 0.14-0.15 of the total length. Lunulae on the slit-band dorsally directed.

The sculpture consists of about 25-27 primary radial ribs with one weaker rib between each pair of stronger ones and concentric ridges, rather widely spaced, forming a relatively open network. Inner margin crenulate.

Holotype: Length: 9.0 mm, in Nationaal Natuurhistorisch Museum Leiden, Netherlands.

Paratype 1: Length 9.0 mm, in collection Van Aartsen

Paratype 2: Length 10.0 mm, in collection Carrozza.

Der. Nom.: Named after the second author's wife.

A further search through the literature revealed that most shells treated by THIELE (1913) in his monograph are either higher, more slender, have the apex more forwards or have a longer slit. This can be seen from table 1, where these differences are quantified.

<i>Species</i>	B/L	T/L	S/L	H/L
<i>dilecta</i> A.Adams, 1852	0.66	0.70	0.18	0.27
<i>paucipunctata</i> Schepman, 1908	0.67	0.66	0.22	0.35
<i>cuvieri</i> sensu Thiele, 1915	0.65	0.65	0.20	0.26
<i>cuvieri</i> sensu Savigny, 1817	0.61	0.67	0.24	0.18
<i>huzardii</i> Payraudeau, 1826	0.70	0.66	0.18	0.28
<i>clypeus</i> A.Adams, 1852	0.65	0.59	0.22	0.29
<i>oppressa</i> Barnard, 1963	0.64	0.76	0.21	0.21
<i>divae</i> nov.spec.	0.70	0.74	0.14	0.37

Tab. 1 - B = breadth, L = length, T = distance between top and slit, S = length of slit, H = height.

Up to now we have only found three specimens of *Emarginula divae* nov.spec. notwithstanding the fact that we have been engaged in the examination of material collected along the Mediterranean coast of Israel for several years.

Also, we are not sure whether the new species is an Indo-Pacific migrant into the Mediterranean or a native of the eastern part of this sea. We hope that more finds of this rather rare species will clarify this point.

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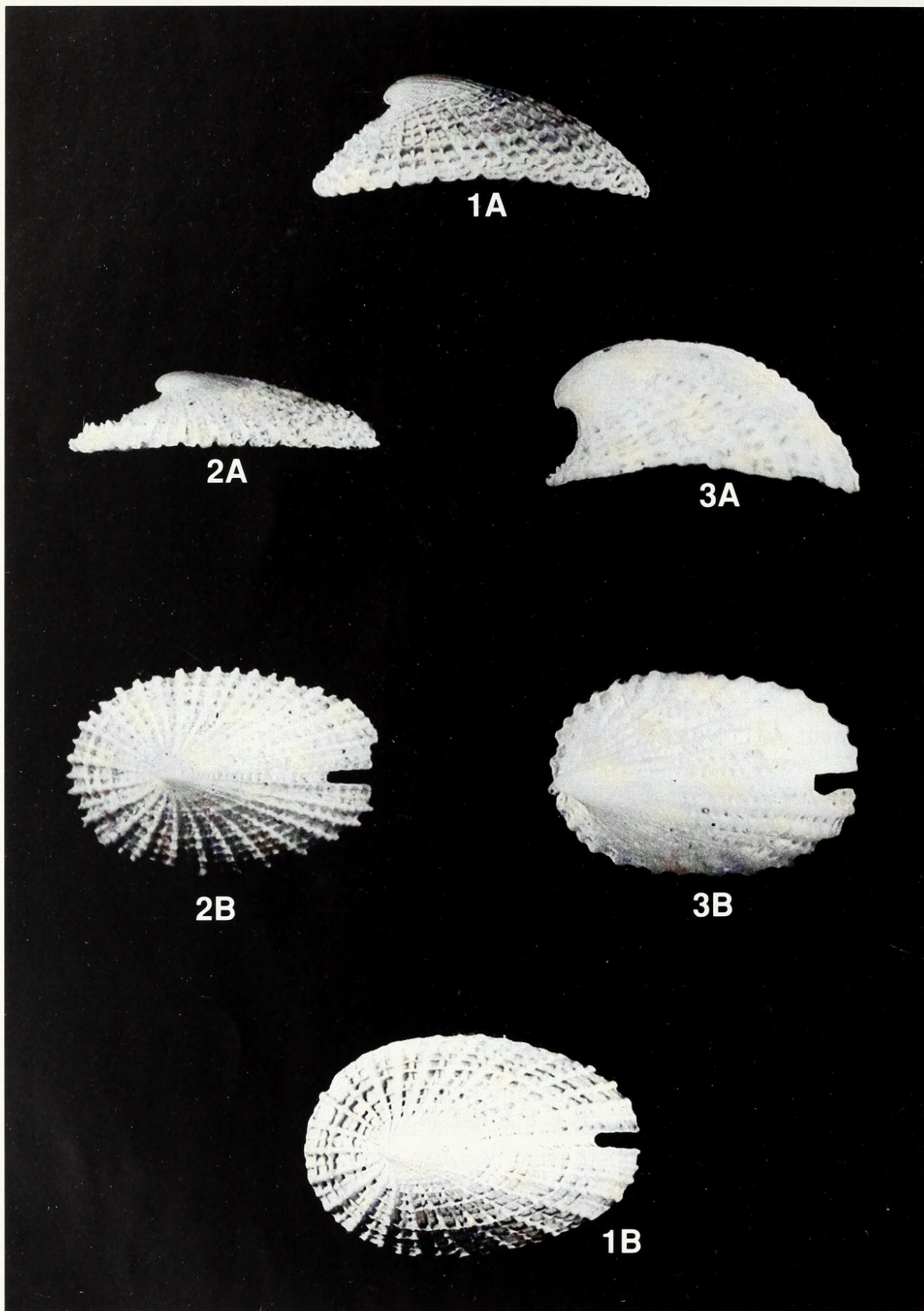


Fig. 1 - A, B. *Emarginula divae* nov.spec., Holotype: 9.0 mm.

Fig. 2 - A, B. *Emarginula huzardii* Payr., 1826: 10 mm, from Kerkennah Islands, Tunisia.

Fig. 3 - A, B. *Emarginula octaviana* Coen, 1939: 9 mm, from Djerba, Tunisia.



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