

Nomenclatural notes, 2<sup>1</sup>.  
The genus *Nuculana* Link, 1807, in the Mediterranean

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Four *Nuculana* species have been reported from the Mediterranean, three of which certainly occur as recent species. *N. minuta* might not be an extant species in the area. *N. fragilis* (Chemnitz, 1784) should be called *N. commutata* (Philippi, 1844).

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The genus *Nuculana* Link, 1807, with its type species *Arca rostrata* Gmelin, 1791, comprises four species in the Mediterranean. These are indicated in the most recent list by Bruschi et al. (1985: 45) as *N. (Ledella) messanensis* (G. Seguenza in Jeffreys, 1870), *N. (Lembulus) pella* (L., 1767), *N. (Saccella) fragilis* (Chemnitz, 1784) and *N. (Saccella) minuta* (Müller, 1776). The third species presents the most intricate nomenclatural problems.

Chemnitz (1784: 199, pl. 55 fig. 546) published a description of "Die zerbrechliche Arche", introduced the name *Arca fragilis* for it and, quite illogically, cited Linné's (1767: 1141, no. 172) description of *Arca pella*, thus suggesting that only a single species is involved. This suggestion is contradicted, however, by the introduction of another epithet, viz. *fragilis* next to *pella*. The Latin diagnosis given by Chemnitz does not add to the recognition of his species, but some remarks in the, more elaborate, German description make it quite clear that the epithets *fragilis* and *pella* apply to different species: "Die dreiseitige eiförmige Schale dieser zerbrechlichen durchsichtigen Muschel, bildet auf der verlängerten Seite gleichsam einen kleinen Schnabel. Ueber die Oberfläche gehen die feinsten concentrischen Queerstreifen hinüber." The rather poor figure also shows that *Arca fragilis* Chemnitz, 1784, is different from *Arca pella* L., 1758 (not 1767 as erroneously cited by Bruschi et al., 1985).

However, as the names given by Chemnitz are not available according to Opinion 183 (1944), another name should be found. The search for such a name is complicated by the alleged synonymy of *Arca pella* and *Arca fragilis*. For example, Gmelin (1791: 3307, no. 5) cited *Arca pella* with Linné's diagnosis, referring to Chemnitz's figure (pl. 55 fig. 546).

Dillwyn (1817: 237, 238), redescribing *Arca pella* L., citing the name and appropriate references from Chemnitz as synonyms, stated explicitly "Chemnitz, although he has

<sup>1</sup> 1: On *Actaeopyramis* as related to *Monoptygma*, *Monotigma* and *Monotygyra*. — *Bol. malac.* 22: 182-184, 1986.

given it another name, considered this to be the Linnean *A. Pella*'. Therefore we conclude that *Arca fragilis* Dillwyn, 1817, should be considered a junior synonym of *Arca pella* L., 1758, in accordance with article 11e and article 50g of the ICZN, and that the former name cannot be used for Chemnitz's species, in contrast to what has been suggested by Jeffreys (1879: 575).

The long list of synonyms for "*Leda fragilis* (Chemnitz)" given by Bucquoy, Dautzenberg & Dollfus (1891: 215) is very useful to solve this nomenclatural puzzle. Taking into account the remarks by Dodge (1952: 147, 148) we note that *Arca minuta* Brocchi, 1814 [not Müller, 1776, not J. Adams, 1797], is applicable, but twice preoccupied. *Lembulus deltoideus* Risso, 1826, which has been used too, is in fact *Nucula deltoidea* Lamarck, 1805, an Eocene fossil. *Lembulus rostratus* Risso, 1826, cannot be used because it would become a secondary homonym of the type species of *Nuculana*, viz. *N. rostrata* (Gmelin, 1791). Besides, both *Lembulus rostratus* Risso, 1826, and *Lembulus sulculatus* Risso, 1826, are only doubtfully considered synonyms of *Arca fragilis* Chemnitz, 1784, by Arnaud (1978: 133, 136), because there is no type material available anymore. We consider both nominal taxa of Risso to be *nomina dubia*.

The next name on the list is *Nucula commutata*, proposed by Philippi (1844: 101) as a *nomen novum* for *Arca minuta* Brocchi, 1814, non Müller, 1776. It is thus concluded that the valid name for the species often cited as *Nuculana fragilis* (Chemnitz) is *Nuculana (Saccella) commutata* (Philippi, 1844). This name has also been frequently used for the same species in the literature, and therefore our conclusion stabilizes one of the best known names for the species in question.

*Nuculana (Saccella) minuta* (Müller, 1776), the fourth *Nuculana* species reported from the Mediterranean, is not mentioned in any of the extensive catalogues by Monterosato and we doubt its occurrence as a Recent species in the Mediterranean. It is an arctic-boreal species which can be expected to occur as a fossil in glacial deposits in the area.

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