

Notas Nomenclaturales / Nomenclatural Notes

On the validity of the name *Potomida littoralis* (Cuvier, 1798) (Bivalvia, Unionidae)

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Assigning valid names to freshwater mussels is an important task for specialists of this animal group, especially if the corresponding species is protected by conservation law. *Potomida littoralis* (Cuvier, 1798) is distributed across North Africa, Western Europe (Spain, Portugal and France), and some areas of Greece, Republic of Armenia, Syria, Israel and Palestine (Haas, 1969). Although this species is not yet protected under European legislation, it has been recently inscribed in the “Libro Rojo de los Invertebrados de España” (Red List of the Invertebrates of Spain) in the category “Vulnerable” (Araujo, 2006).

The present note aims to clarify the nomenclature of *P. littoralis*, since both its genus and species names have been the subject of dispute.

If we consider the genus first, the species was described as *Unio littoralis* by Cuvier in 1798 (see below), but two different genera were subsequently proposed to include the species: 1) *Potomida*, one of the five subgenera into which Swainson (1840) divided the genus *Unio*; and 2), *Psilunio*, described by Stefanescu (1896) and including the fossil *Psilunio craiovensis* as the type species.

To the subgenus *Potomida*, Swainson (1840) assigned three different species: *Unio sinuata* Lamarck, 1819, *Potomida corrugata* Swainson, 1840 and *Unio littoralis* Lamarck, 1801 (see

below). As later demonstrated by Ellis (1946), Swainson (1840) had designated the new species *Potomida corrugata* Swainson as the type of the corresponding genus (p. 281: “The typical species, *P. corrugata*,...”). This was a valid original designation since the author’s terms do not invalidate the designation under provisions of Arts. 67.4 and 67.5 of the Code. Now, since *Potomida corrugata* is a synonym of *Unio semirrugatus* Lamarck (1819) (Ellis, 1946), a name in the synonymy of *Potomida littoralis* (Cuvier, 1798) (see Haas, 1969), the valid genus for *littoralis* is, as Ellis (1946) claimed, *Potomida* Swainson.

The designation of *Unio sinuata* (Lamarck) [= *Margaritifera auricularia* (Spengler, 1793)] by Gray (1847) and Herrmannsen (1849) as the type of *Potomida* is a later, and consequently invalid, designation (Prashad, 1936; Ellis, 1946).

Haas (1940) included the species under the genus *Psilunio* Stefanescu, but in his last book (Haas, 1969) he changed his mind and included all the “varieties” of *P. littoralis* in the genus *Potomida* Swainson.

Also conflictive is the story of the species name *littoralis*. Although commonly attributed to Lamarck (1801) (see Haas, 1969) following Falkner *et al.* (2002), the valid author of the species is Cuvier 1798 (ICZN Opinion 336). However, the story is not so simple. According to Azpeitia (1933), an unnamed specimen of *Unio* (Fig. 1) was illustrated in Table 248, Fig. 2, of the *Tableau encyclopédique et méthodique des trois regnes de la nature*, Paris, by Bruguière (1797). Then, in 1830, the text for this figure citing the name *Unio littoralis* appeared –with no author, although attributed to Lamarck (1801)– on page 580, Vol. II, of the same *encyclopédie*. Lamarck (1801) had given the name of *Unio littoralis* to the figure mentioned although the author of the species was not Lamarck. In effect, the species *Unio littoralis* had been pre-

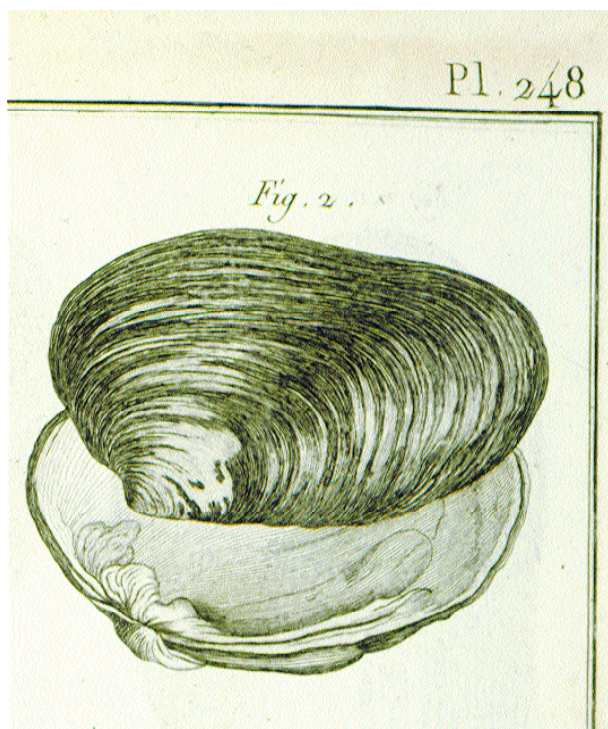


Fig. 1.— First known illustration of *Potomida littoralis*. Figure 2 in Table 248 of the *Tableau encyclopédique et méthodique des trois regnes de la nature*, Paris, by Bruguière (1797). By permission of the British Library.

Fig. 1.— Primera ilustración conocida de *Potomida littoralis*. Figura 2 de la Lámina 248 de la *Tableau encyclopédique et méthodique des trois regnes de la nature*, Paris, by Bruguière (1797). Con permiso de la British Library.

viously described by Cuvier (1798, page 425) (sixth year of the French Republic), who was the first author to make it available, giving a short descriptive text. Curiously, Cuvier himself, later (1830; vol. III, page 138) attributed the species to Lamarck (1801), and authors like Ellis (1946) erroneously cited the year of description as Cuvier (1797). The adscription of the species *Unio littoralis* to Draparnaud by Morelet (1845) was undoubtedly an error (Azpeitia, 1933).

Further species names also come into this story because, as remarked by Azpeitia (1933), the valid name for *Unio littoralis* should be *Unio rhomboideus* (Schröter, 1779), a name used by several authors in the XIXth and XXth Centuries (Moquin-Tandon, 1855; Locard, 1889; Pallary, 1921; Azpeitia, 1933, Perès, 1944) for *Potomida littoralis*. Effectively, Schröter (1779) described, illus-



Fig. 2.— Plate II by Schröter (1779). *Mya rhomboidea* in figure 3 (down right corner) is actually *Unio crassus* Retzius. By permission of the British Library.

Fig. 2.— Lámina II de Schröter (1779). En la figura 3 *Mya rhomboidea* (abajo a la derecha), en realidad *Unio crassus* Retzius. Con permiso de la British Library.

trated and named *Mya rhomboidea* (Fig. 2) but, according to Israel (1913), the specimen examined by Schröter was actually a strange form of *Unio crassus* (Retzius) from a German lake in Thuringia. In any case, Schröter's book is considered not consistently binominal (Sherborn, 1902) and indeed, *Potomida littoralis* cannot be currently found in Germany. According to this we consider *Unio rhomboideus* (Schröter, 1779) not to be a valid name.

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