

**The resurrection of *Clausilia portensis* Luso da Silva, 1872, as a
Macrogastria (Pseudovestia) species (Pulmonata: Clausiliidae)**

E. GITTENBERGER

Nationaal Natuurhistorisch Museum, P.O. Box 9517, NL 2300 RA Leiden, the Netherlands

& Th. E. J. RIPKEN

Houttuinen 16, NL 2611 AJ Delft, the Netherlands

The nominal taxon *Clausilia portensis* rested in synonymy during most of the 20th century. On the basis of samples in the Locard collection in Paris, dating from the 19th century, it is considered here to denote the sister species of *Macrogastria (Pseudovestia) ralphii*. More recently collected material is unknown.

Key words: Gastropoda, Pulmonata, Clausiliidae, *Macrogastria*, Portugal.

Clausilia portensis was described by Luso da Silva (1872), an author who contributed with only a few minor papers to our knowledge of the non-marine Portuguese molluscan fauna (cf. Nobre, 1930). His work was not registered in the Zoological Record. It was dealt with by Locard (1899), however, who accepted *C. portensis* as a valid species of the (p. 144) "Groupe du *Cl. gallica*", i.e. as closely related to *Clausilia dubia* Draparnaud, 1805. Locard (1899), one of the main disciples of the French 19th century 'Nouvelle Ecole' (Dance, 1986: 164), exemplified unnecessary splitting of species taxa in many cases in his magnum opus on Portuguese molluscs. Maybe for that reason, his listing of *Clausilia portensis* has been too easily neglected by malacologists adhering to more modern views in systematics.

Nobre (1930: 145) cited *C. portensis* in the synonymy of '*Clausilia plicata*', usually called *Lacinaria plicata* (Draparnaud, 1801) in the more recent literature.

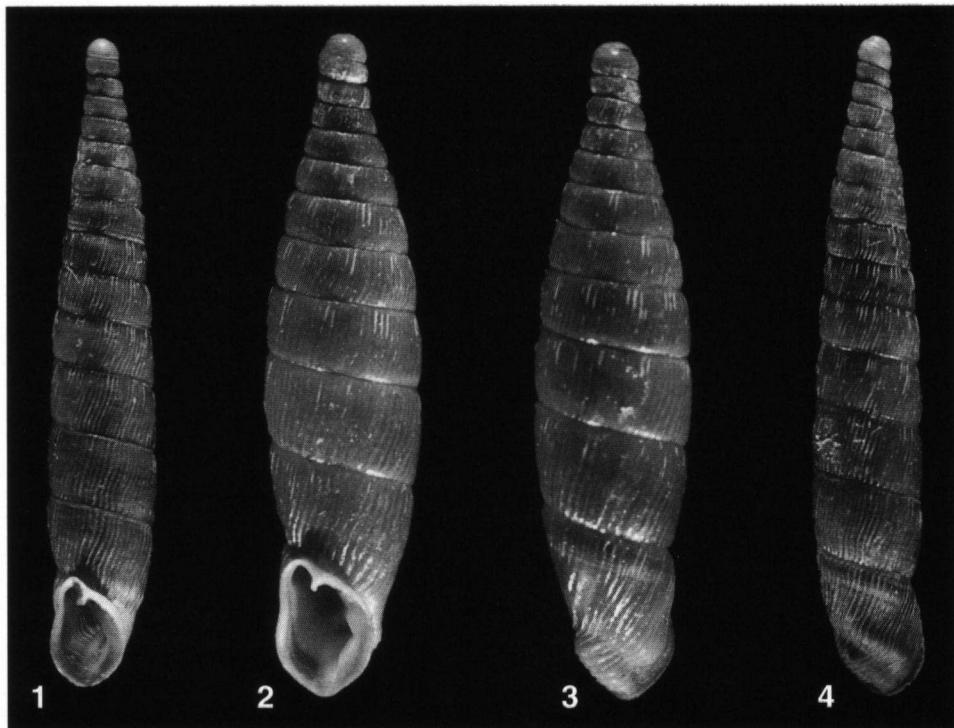
In the Locard collection of Portuguese molluscs, kept in the Museum National d'Histoire Naturelle, in Paris (= MNHN), there are five samples identified with *Clausilia portensis*. This material enabled a study of the deviating views expressed by Locard and Nobre. Both authors turned out to have misinterpreted the nominal taxon in question.

Macrogastria (Pseudovestia) portensis (Luso da Silva, 1872)
(figs. 2, 3)

Clausilia portensis Luso da Silva, 1872: 260. Locard, 1899: 144.

Clausilia plicata; Nobre, 1930: 145, pl. 7A figs. 6, 7, pl. 8 fig. 16. Not *Lacinaria plicata* (Draparnaud, 1801).

Shell. — Shell slender spindle-shaped, with 10.5-13.0 flattened whorls, separated by an indented suture. Teleoconch whorls regularly sculptured with blunt ribs, 9-11 per mm on the penultimate whorl; sculpture slightly more prominent on the basal keel. Basal keel very distinct, running from the apertural lip towards the umbilical region, and separated from



Figs. 1-4. Portuguese clausiliids from "Porto" (MNHN). 1, 4, *Clausilia (C.) bidentata moniziana* Lowe, 1852 [*"Clausilia subuliformis"*], actual height 13.3 mm; 2, 3, *Macrogaster (Pseudovestia) portensis* (Luso da Silva, 1872), actual height 13.1 mm. Photographs by A. 't Hooft (R.U. Leiden).

a dorsal swelling by a prominent groove. Apertural lip moderately reflected and thickened, irregular in outline; basal part angular with nearly straight sides, and palatal part clearly indented below the sinulus. Parietalis and spiralis connected, running c. 3/4 whorl inside. Columellaris hardly protruding into the aperture (in frontal view); forming the characteristic recumbent K-form, with the two anterior branches nearly reaching the apertural lip. With 1-3 interlamellar folds. There is a very distinct, white, palatal callus, running as a broad, thickened band shortly behind the apertural lip, from just below the sinulus area down into the very prominent basal groove; bordering the groove there is sometimes a rib-like extra callus formation, running parallel with the very distinct, nearly straight anterior part of the subcolumellaris. The principals runs from shortly behind the palatal callus about 1/2 whorl deep inside, reaching somewhat further than the moderately prominent lunella, situated more or less dorsally. The lunella has a very short part running indistinctly parallel with the principals, and a much longer part running parallel with the growth-lines and gradually decreasing in prominence. The clausilium has a simple blade.

The shell is yellowish brown, with some white callus thickenings on parts of the ribs, particularly just below the suture. The material studied was collected about a century ago and maybe fresh material has a darker brown colour.

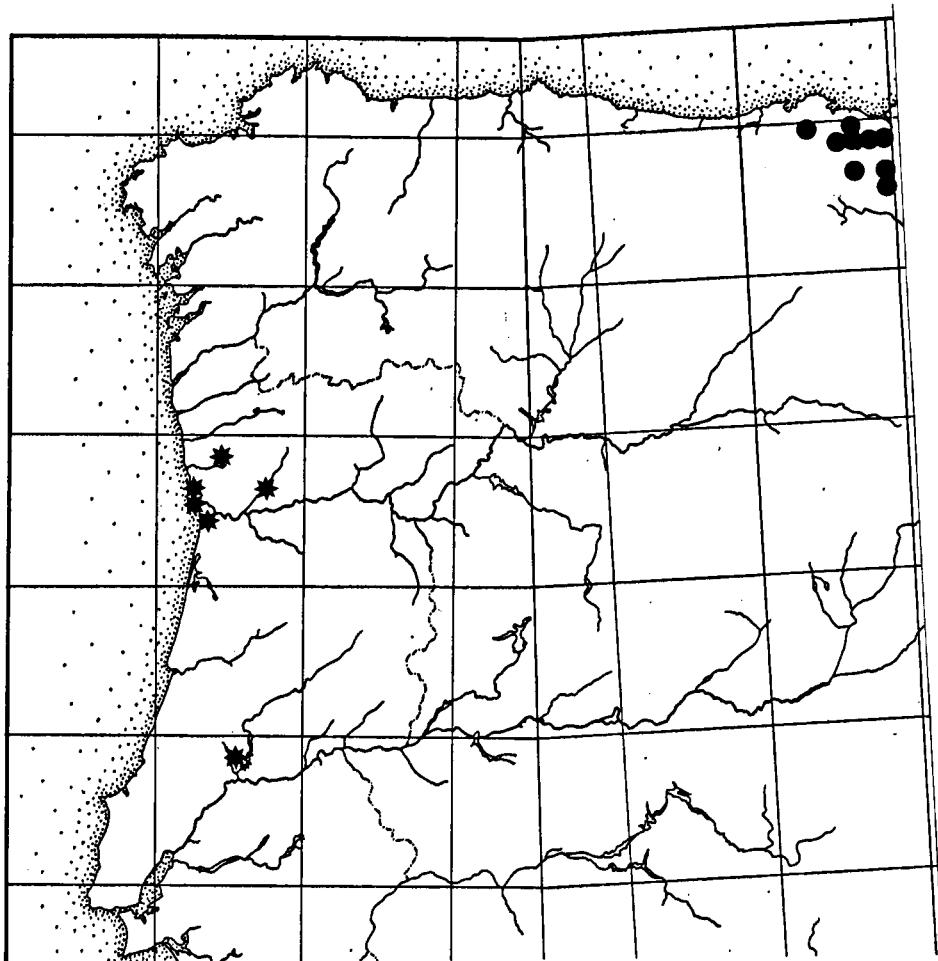


Fig. 5. The distributional gap between the two taxa of *Macrogastria (Pseudovestia)* Nordsieck, 1977: *M. (P.) portensis* (Luso da Silva, 1872) [stars] and *M. (P.) rolfii* (Turton, 1826) [dots: the geographically closest records only, after Altonaga et al., 1994].

Shell 11.5-14.7 mm high and 3.0-3.5 mm broad. Apertural height 2.6-2.9 mm and width 1.9-2.1 mm.

At first sight the shells remind one of very large specimens of *Pseudofusulus varians* (Pfeiffer, 1828) because of the prominently white palatal callus and the light yellowish, greasy gloss of the shell surface. However, both conchologically, in shape, size and structure of the lamellae, and biogeographically, a close relationship with *M. (P.) rolfii* (Turton, 1826) is most likely. In shells of the latter species, a conspicuous, apertural, palatal callus is lacking, the subcolumellaris (frontal view) has a shorter and less conspicuously straight anterior part, the columellaris is more clearly protruding into the

aperture, the basal groove is less prominent and the apertural lip is curved more regularly. Shells of the sympatric *Clausilia (C.) bidentata moniziana* Lowe, 1852 (figs. 1, 4) can be distinguished easily since they may be equally high, but are always much more slender and narrower, with a body whorl differing in shape, internal lamellae and size.

Records [*], after Luso da Silva, 1872; abbreviations: MNHN, Colln. A. Locard (Portugal) in the Museum National d'Histoire Naturelle, Paris; L, after Locard (1899: 144); N, after Nobre (1930: 145).- Tomar, ND58 (N); Porto [c. NF25] (L, N, MNHN); Porto, Lordelo [located between the city of Porto and the sea], NF25 (L, N, MNHN); Leça da Palmeira, 5 km NW of Porto, NF26 (N); *São Félix da Marinha, 13 km S of Porto, NF34 (L, N, MNHN); Praia da Granja, 15 km S of Porto, NF34 (L); Famalicão, 28 km NNE of Porto, NF48 (L); *São Simão de Gouveia near Goiva near Amarante, NF76.

Habitat.- According to the original description, the species is found at dark and humid places, more or less deeply hidden among decaying leaves or even buried below the soil surface. Obviously this concerns a bottom dwelling clausiliid, living in a habitat similar to that of *M. (P.) rolphii*, which is known from moist deciduous woods.

DISCUSSION

We are not aware of any samples of this species collected during the 20th century. Conchologically at least, *M. (P.) portensis* is most similar to *M. (P.) rolphii*. Probably they are allopatric sister species. The two taxa could even be classified as conspecific subspecies. In the absence of anatomical data for the former species, and taking the combined biogeographical and morphological data into account, this remains largely a subjective decision. As far as known at present, there is no contact zone to be searched for intermediate populations, but a distributional gap of c. 400 km in between the ranges of the two taxa (fig. 5). This view is based on Larraz et al. (1981: 83, fig. 6), reporting *M. (P.) rolphii* (as "*Clausilia obtusa*") from the Pyrenees of the northern part of the province of Navarra (UTM: XN26), and in particular on a detailed distribution map of this species, published by Altonaga et al. (1994: 265, map 149).

ACKNOWLEDGEMENTS

We are grateful to Dr. P. Bouchet (MNHN-BIMM, Paris, France) who allowed us to study historical material from the Locard collection, and to Mr. H. Nordsieck (Villingen-Schwenningen, Germany), who kindly gave us his opinion with regard to this forgotten nominal taxon.

REFERENCES

ALTONAGA, K., B. GOMEZ, R. MARTIN, C.E. PRIETO, A.I. PUENTE & A. RALLO, 1994. Estudio faunístico y biogeográfico de los moluscos terrestres del norte de la península Ibérica: 1-503. Vitoria-Gasteiz.

DANCE, S.P., 1986. A history of shell collecting: i-xv, 1-265. Leiden.

LARRAZ, M., M. BECH & A. CAMPOY, 1981. Estudio de algunas especies de moluscos del Macizo de Quinto Real (Navarra). — Munibe, Soc. Cienc. Aranzadi, San Sebastián 33: 79-85.

LOCARD, A., 1899. Conchyliologie Portugaise. Coquilles terrestres, des eaux douces et saumâtres. — Arch. Mus. Hist. nat. Lyon 7: i-iv, 1-303.

LUSO DA SILVA, A., 1872. Molluscos terrestres e fluviaes de Portugal [part.]. — Jornal Sci. math., phys. e nat. 3: 257-261.

NOBRE, A., 1930. Moluscos terrestres, fluviais e das águas salobras de Portugal: 1-259. Porto.

NORDSIECK, H., 1990. Revision der Gattung *Clausilia* Draparnaud, besonders der Arten in SW-Europa (Das *Clausilia rugosa*-Problem) (Gastropoda: Stylommatophora: Clausiliidae). — Arch. Molluskenk. 119: 133-179.