



A NEW LOCALITY OF *MACROGASTRA VENTRICOSA* (DRAPARNAUD, 1801) (GASTROPODA: PULMONATA: CLAUSILIIDAE) IN WIELKOPOLSKA (POLAND)

KRYSTYNA SZYBIAK

Department of General Zoology, Institute of Environmental Biology, Collegium Biologicum,
Adam Mickiewicz University, Umultowska 89, 61-614 Poznań, Poland (e-mail: szybiak@amu.edu.pl)

ABSTRACT: *Macrogastra ventricosa*, previously known only as subfossil in central Poland, was found in an alder forest in the Żerkowsko-Czeszewski Landscape Park.

KEY WORDS: Clausiliidae, *Macrogastra ventricosa*, Wielkopolska, Poland

Macrogastra ventricosa (Draparnaud, 1801) is a Central European species. Its range extends from southern Norway and central Russia to northern Spain and northern Italy. It inhabits the Baltic countries, a part of southern Sweden, Denmark, Germany and the Alps, reaching France, the Dinaric Mts and the northern part of the Carpathians. In the east it reaches the environs of Kostroma. In the mountains of Switzerland it is found up to 1,400 m a.s.l.

M. ventricosa inhabits large parts of Poland, but is absent from some central and eastern regions (URBAŃSKI 1957a, KERNEY et al. 1983, RIEDEL 1988, FALKNER 1990, MANGANELLI et al. 1995, WIKTOR 2004). It is found on the Baltic coast, Pomeranian Lakeland, region of Bydgoszcz (Wielkopolsko-Kujawska Lowland), Białowieża Forest, Małopolska Upland, Lower Silesia, Cracow-Wieluń Upland, Małopolska, Świętokrzyskie Mts, Lubelska Upland, Western and Eastern Sudetes, Nowotarska Valley and the Pieniny Mts (RIEDEL 1988). DOMOKOS & KOVACS (1992) reported it from the Beskid Sądecki Mts. It is sporadically found in the Tatra (DYDUCH-FALNIOWSKA 1988, 1991), but not recorded from the Bieszczady and Beskid Niski Mts (SULIKOWSKA-DROZD 2005).

M. ventricosa lives in shaded, damp forests where it shelters mainly in litter, under pieces of timber and bark. It crawls on tree trunks and moss-covered rocks. According to WIKTOR (2004) the species is becoming extinct in central Poland. Only subfossil localities were known from Wielkopolska till now (URBAŃSKI 1932, 1938, 1947a, b, 1957b, 1964).

In 2007 I found live individuals in Wielkopolska, in an alder forest of the Żerkowsko-Czeszewski Landscape Park (Fig. 1). The Park is located in the Wielkopolskie Lakeland, in the southern part of the Wielkopolska Lowland, on a floodplain of the Warta River and its tributary Lutynia, with numerous oxbows. The locality is situated in the northern part of the Żer-

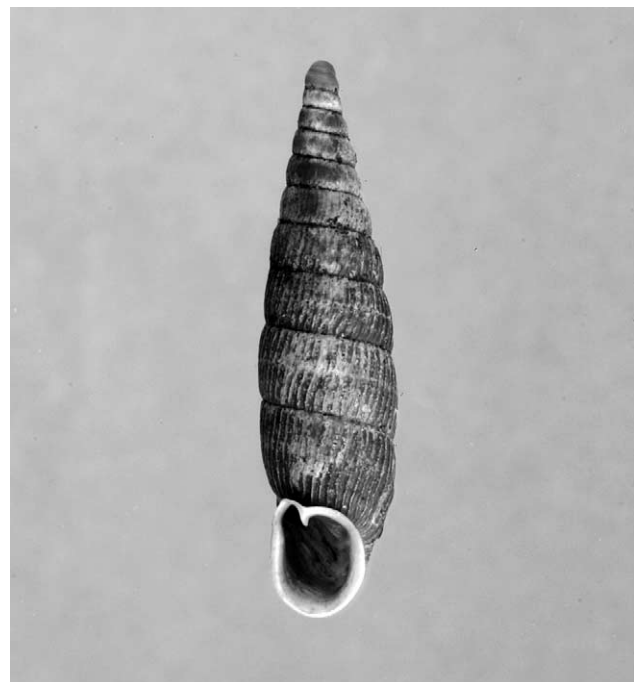


Fig. 1. Shell of *M. ventricosa*

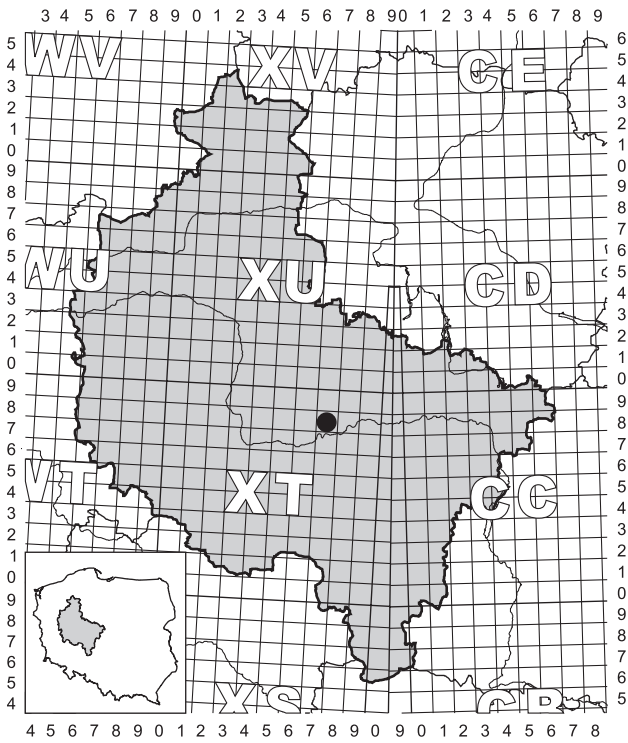


Fig. 2. Locality of *M. ventricosa* in Wielkopolska

kowsko-Czeszewski Landscape Park, on the right bank of the Warta (UTM XT78) (Fig. 2). The area holds numerous springs. The forest is composed of 80% alder aged 30 years, the remaining trees are birch and ash. It is a young, naturally regenerating forest.

During quantitative sampling of the terrestrial malacofauna in July 2007 I found three individuals of *M. ventricosa* in a litter sample from an area of 0.5 m². In October I found the snail during qualitative sampling (visual search) in the same site. *M. ventricosa* is one of the six clausiliids among the 34 terrestrial gastropod species present in the site. Co-occurring clausiliids are *Clausilia bidentata* (Ström, 1765), *Cochlodina laminata* (Montagu, 1803), *Ruthenica filigrana* (Rossmässler, 1836), *Macrogaster plicatula* (Draparnaud, 1801) and *Bulgarica cana* (Held, 1836).

The shells found are dark brown, tumid, spindle-shaped, gently narrowing toward apex, with strongly ribbed surface. The ribs are sparse. The shell height is 16.6–17.6 mm, the width 3.8–4.1 mm. The aperture is nearly rectangular, rounded below. There are no folds between the superior and inferior lamella, and no folds in the palatal part of the aperture (Figs 3, 4). The end of the inferior lamella is forked in the form of a horizontal K (Fig. 3). The superior lamella

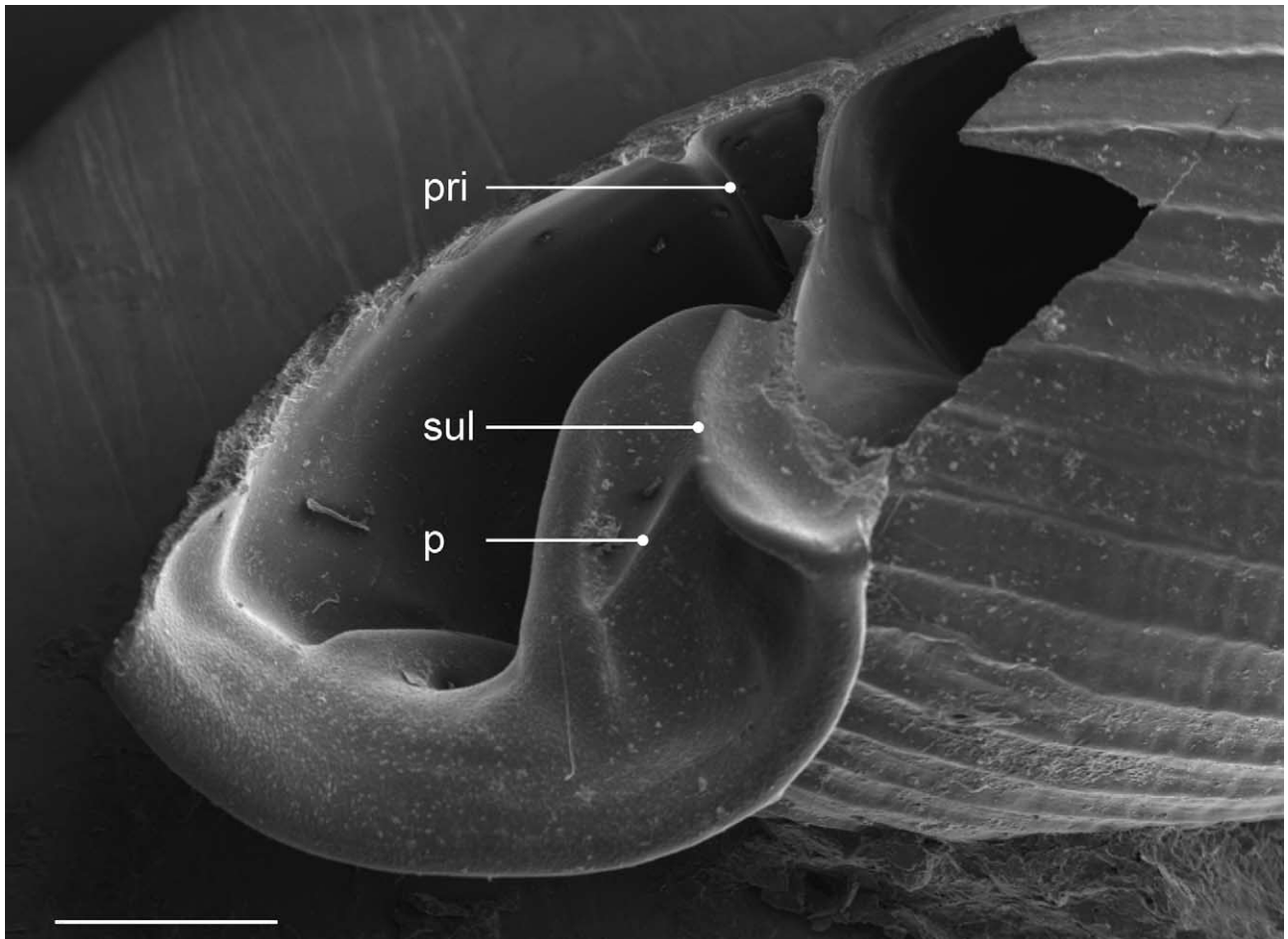


Fig. 3. Closing apparatus of *M. ventricosa*: pri – principal plica, sul – superior lamella, p – plica

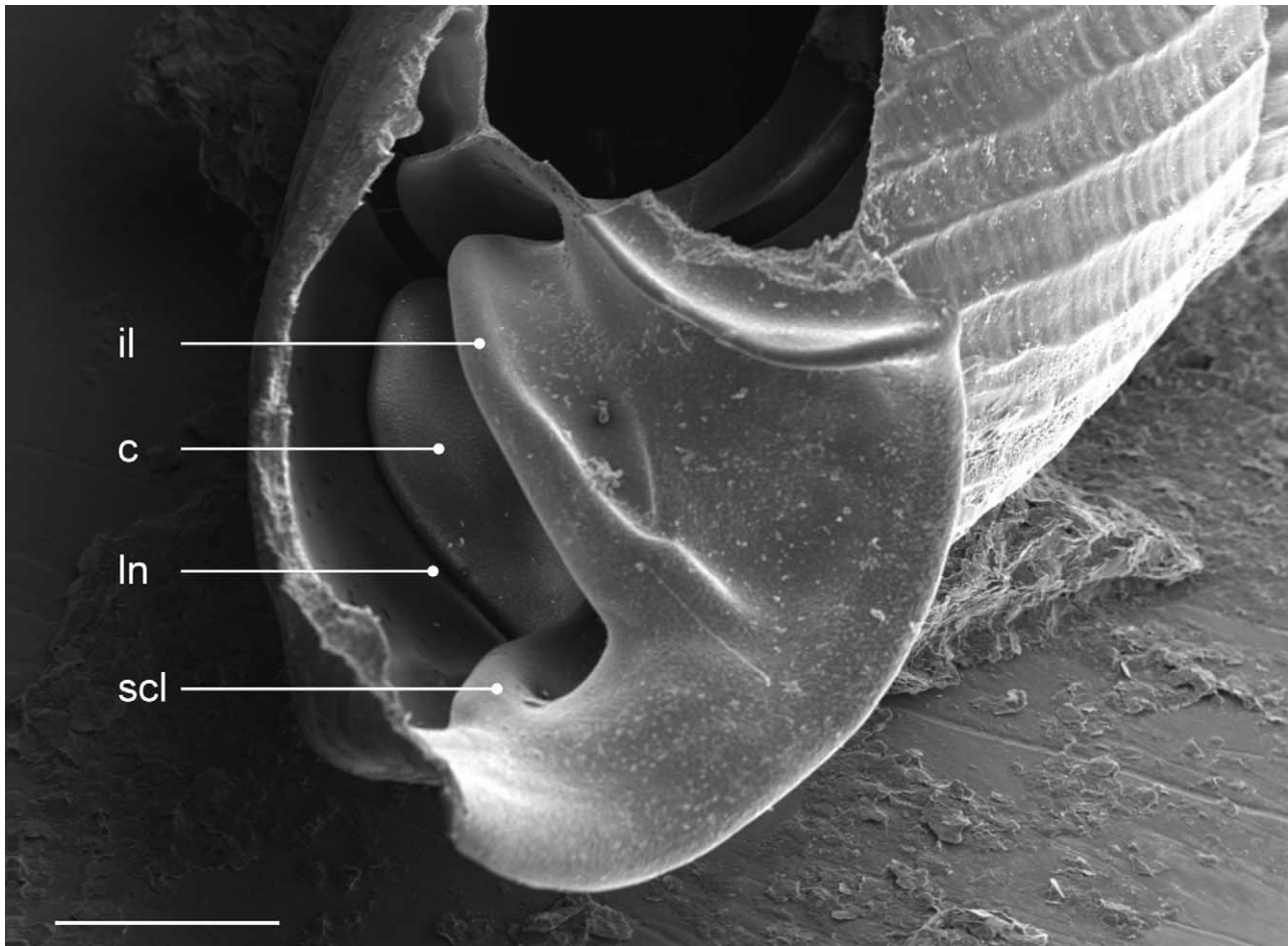


Fig. 4. Closing apparatus of *M. ventricosa*: il – inferior lamella, c – clausilium, ln – lunella, scl – subcolumellar lamella

reaches the aperture margin, in its posterior part it descends and fuses with the spiral lamella. In oblique view of the aperture the subcolumellar lamella is well visible, small, oblique or nearly vertical. The lunella (Fig. 4) is present, with both ends bent. Above it the principal plica is situated. The clausilium plate is

tongue-shaped; its relatively short bottom end is narrowed.

Because of the number of clausiliid species, including *M. ventricosa*, the alder forest locality in the Żerkowsko-Czeszewski Landscape Park is the richest and unique in Wielkopolska, and should be protected.

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