Genus	Vol. 21(1): 149-153	Wrocław, 30 III 2010
Genus	VOI. 21(1). 147 133	W1001aw, 30 111 2010

# Montenegrina dofleini sinosi n. ssp. from north-western Greece (Gastropoda: Pulmonata: Clausiliidae)

# Barna Páll-Gergely

Department of General and Applied Ecology, University of Pécs, Ifjúság útja 6., H-7624 Pécs, Hungary, e-mail: pallgergely2@gmail.com

ABSTRACT. A new member of the rock-dwelling clausiliid genus *Montenegrina* is described from the southern bank of Lake Prespa, north-western Greece. *M. dofleini sinosi* n. ssp. is characterized by a relatively reduced clausilial apparatus and a middle-sized ribbed shell. The subspecies *kastoriae* Nordsieck, 1972 and *prespaensis* Nordsieck, 1988 belong to *M. dofleini* (A. J. Wagner, 1928), because there are no characters which separate *M. kastoriae* on species level.

Key words: malacology, taxonomy, Clausiliidae, Montenegrina, Greece, new subspecies,

## INTRODUCTION

Montenegrina O. Boettger, 1877 is one of the biggest rock-dwelling clausiliid genera in Southern Europe. Nordsieck (2009) reports 87 taxa (including four doubtful subspecies). Our knowledge of the genus increased considerably in the last two decades (Erőss et al. 1999, 2006, Nordsieck 1988, 1996, 2009). The centre of the diversity within the genus is in Albania and the adjacent regions of Greece and Macedonia (FYROM) (Erőss et al. 2006).

During a field trip to north-western Greece organized by the Department of Biology, University of Patras, a new subspecies of *Montenegrina dofleini* (A. J. Wagner in Hesse, 1928) have been collected. This new subspecies is being described here.

# Montenegrina dofleini sinosi n. ssp.

#### TYPE LOCALITY

Northwestern Greece, southern lakeside of Lake Prespa, limestone wall, 850 m a.s.l. GPS:  $40^{\circ}48'39.5"$  N,  $21^{\circ}04'12.4"$  E

#### Material

Holotype and 35 paratype shells were collected from the type locality: 25.05.2009, leg. B. Páll-Gergely.

Holotype and 3 paratypes: Hungarian National History Museum (holotype: HNHM 97145, paratypes: HNHM 97146); 3 paratypes: SMF 333885; other paratypes are deposited in private collections and in the collection of the author.

#### DIFFERENTIAL DIAGNOSIS

Montenegrina dofleini sinosi n. ssp. differs from the nearby occurring M. dofleini prespaensis Nordsieck, 1988 by its smaller, ribbed shell. The ribs of M. dofleini occidentalis Nordsieck, 1977 are denser, and the new subspecies has weaker lunella and, in most cases, its basalis is missing. M. dofleini pinteri Nordsieck, 1974 has more corpulent shell with deeper sutures, and has well-developed clausilial apparatus (stronger lunella and basalis). M. dofleini dofleini (as well as M. dofleini kaiseri Brandt, 1961; see Nordsieck 2009) is smooth, has more strongly built shell and basal plica. M. dofleini kastoriae Nordsieck, 1972 is bigger and very finely, inconspicuously ribbed.

## DESCRIPTION

The shell (Fig. 1.) is rather small, widest at its basin, consists of 9.5-10.75 bulging whorls, separated by an inconspicuous, white suture. The shell is light yellowish brown, a part of the body whorl approximately between the insertation of the palatal aperture lip and the lunella is lighter, in most cases totally colorless. The protoconch consists of 2-2.5 whorls, is smooth, somewhat thickened. Teleconch rather regularly ribbed (3-5 ribs/mm), the neck between the palatal aperture lip and the lunella is much more closely ribbed (6-8 ribs/mm), here sometimes the ribs are not clearly separated. Neck rounded, crests are not recognisable. The aperture is large, rectangular to pear-shaped, its upper margin is fused to the last whorl. The lamella superior is very short and low, does not reach the lamella spiralis. The lamella inferior lies deep in the peristome. Lamella subcolumellaris is bent at an angle (here in touch with the clausilium), its outer end is only barely visible through the aperture. The thick, short lunella is dorsal to dorsolateral. The plica superior is short, rarely an additional, even shorter and much weaker plica is visible. In three out of the 36 shells the second plica was as strongly built as the plica principalis. Only one shell was found with a weak basalis, which was not connected to the lunella. Sometimes the narrow clausilium (Fig. 2.) is visible through the aperture.

**Measurements:** 20 shells was measured. Shell height 13.9-16.3 mm (mean 15.3 mm, S. D. 0.54), shell width 3.4-3.7 mm (mean 3.6 mm, S. D. 0.12), aperture height



1. Holotype of Montenegrina dofleini sinosi n. ssp. (HNHM 97145), 15.0 x 3.5 mm

3.5-4.2 mm (mean 3.7 mm, S. D. 0.18), aperture width 2.8-3.2 mm (mean 3.0 mm, S. D. 0.11).

Genital structure: One specimen was anatomically examined. The genital system is typical of the genus *Montenegrina* (see Nordsieck, 2009). The bursa copulatrix is as long as the diverticulum, the distal pedunculus is shorter than the vagina. Vaginal retractor is present, the penis is shorter and thicker than the vagina. The epiphallus is slightly longer than the penis, the retractor muscle is attached in the middle of the epiphallus.

#### ETYMOLOGY

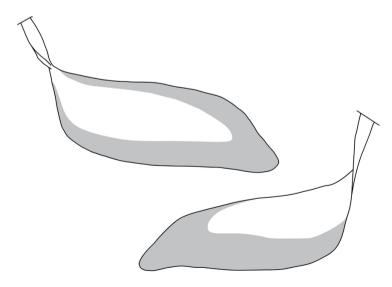
The new subspecies is dedicated to Sinos Giokas (University of Patras, Greece), a much-valued friend and supervisor during my Erasmus scholarship.

#### REMARKS

The new subspecies is classified within the species *Montenegrina dofleini*. There are no characters which separate *M. dofleini kastoriae* and *M. dofleini prespaensis* on species level from the other subspecies of *M. dofleini*. *M. kastoriae* was described as an independent species (Nordsieck, 1972), and was mentioned as species by Nordsieck (2007, 2009) and the subspecies of *M. dofleini* by the same author (Nordsieck 1974, 1988).

## ACKNOWLEDGEMENTS

I am very grateful to Miklós Szekeres (Szeged) for his valuable help and to Zoltán Fehér (Budapest) for his help in using the collection of the Natural History Museum at his care.



2. Clausilium of M. dofleini sinosi n. ssp.

#### REFERENCES

- ERÖSS, Z. P., FEHÉR, Z., SZEKERES, M., 1999. Seven new taxa of the subfamily Alopiinae (Gastropoda: Pulmonata: Clausiliidae) from the Balkans. Ann. Naturhist. Mus. Wien, 101B: 445452.
- —, 2006. New taxa of Montenegrina O. Boettger, 1877 (Gastropoda: Pulmonata: Clausiliidae) from Albania and the neighbouring regions. Ann. Naturhist. Mus. Wien, 107В: 181-208.
- Nordsieck, H., 1972. Zur Anatomie und Systematik der Clausilien, XI. Neue Formen und taxonomische Revision einiger Gruppen der Alopiinae. Arch. Molluskenkunde, **102** (1/3): 1-51.
- —, 1974. Zur Anatomie und Systematik der Clausilien, XV. Neue Clausilien der Balkan-Halbinsel (mit taxonomischer Revision einiger Gruppen der Alopiinae und Baleinae). Arch. Molluskenkunde, 104 (4/6): 123-170.
- —, 1996. Neue Clausilien-Taxa aus Albanien (Gastropoda: Clausiliidae). Schriften zur Malakozoologie, 9: 7-16.
- —, 1988. Neue Clausilien aus NW-Griechenland. Ann. Naturhist. Mus. Wien, 90B: 197-201.
- —, 2007. Worldwide door snails (Clausiliidae), recent and fossil. 214 pp., Hackenheim (ConchBooks).
- —, 2009. Revisory notes on the genus *Montenegrina* O. Boettger 1877 and description of new taxa (Gastropoda: Stylommatophora: Clausiliidae). Arch. Molluskenkunde, **138** (1): 71-87.