



**FIRST RECORD OF *BATRACOBDELLOIDES MOOGI* (HIRUDINEA:  
GLOSSIPHONIIDAE) IN THE BALKANS**

**C. GROSSER<sup>1</sup> and V. PEŠIĆ<sup>2</sup>**

**Synopsis**

*Batracobdelloides moogi* Nesemann & Csányi, 1995 was collected in a pool near Danilovgrad. This finding is the first one of this rare leech in Montenegro and in the Balkans.

**Key words:** *Batracobdelloides*, Glossiphoniidae, Hirudinea, leeches, the Balkans, Montenegro, first record

**Sinopsis**

**PRVI NALAZ *BATRACOBDELLOIDES MOOGI* (HIRUDINEA: GLOSSIPHONIIDAE)  
NA BALKANU**

*Batracobdelloides moogi* Nesemann & Csányi, 1995 je naden u jednoj lokvi pored Danilovgrada. Ovo je prvi nalaz ove rijetke pijavice u Crnoj Gori kao i na Balkanu.

**Ključne riječi:** *Batracobdelloides*, Glossiphoniidae, Hirudinea, pijavice, Balkan, Crna Gora, prvi nalaz.

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<sup>1</sup> Lipsiusstraße 35, 04317 Leipzig, Germany, [hirudinea@web.de](mailto:hirudinea@web.de);

<sup>2</sup> Faculty of Sciences, Department of Biology, University of Montenegro, Cetinjski put bb., CG-81000 Podgorica, Montenegro, Serbia and Montenegro, [pesicv@cg.yu](mailto:pesicv@cg.yu)

## INTRODUCTION

*Batracobdelloides moogi* is a rare species and only known from a few places in Europe. Until now, this leech was found in Austria, Hungary, Slovakia (Nesemann & Neubert 1999), Poland (Bielecki et al. 1999, Bielecki 2004), Italy (Bielecki, oral communication) and Lithuania (coll. M. Zettler, University of Rostock/Germany; det. C. Grosser).

The species was confused with *Glossiphonia paludosa* (Carena, 1824) or *Glossiphonia slovaca* (Košel, 1973) and *Batracobdella algira* (Moquin-Tandon, 1846) in the past and was separated from the other species only ten years ago (Nesemann & Csányi 1995). So, a lot of records of these species in the literature could refer to *B. moogi*. Therefore, the distribution of the four aforementioned species is still unclarified and every record is important to the faunistics. This first finding of *B. moogi* in Montenegro is also the first in the Balkans (south of the Save-Danube-line with the countries: Croatia, Bosnia and Herzegovina, Serbia and Montenegro, Macedonia, Greece, Albania, Bulgaria and the European part of Turkey).

## MATERIAL AND METHODS

The leeches were looked for under hard substratum (stones, wood) in water and shore as well as on submerged plants. The collected leeches were first killed in 10 % ethanol, then the mucus was washed off in 75 % ethanol preserved.

## RESULTS

**Material:** Montenegro, Danilovgrad, village Lazine, pool; 04.04.2005; 2 specimens, under the bark of a bough in the water; leg.: C. Grosser et V. Pešić; Coll. C. Grosser.

**Place:** The place is a shallow pool with permanent water and rich submerged vegetation. Woods shade the water. High grass lines the long pool. The pool has a high biodiversity. The following leech-species could be found: *Hirudo verbana* Carena, 1822 (2 specimens), *Dina lineata dinarica* Sket, 1968 (18), *Placobdella costata* (Fr. Müller, 1846) (4) and *Glossiphonia* cf. *concolor* (Apathy, 1888) (1). *Planorbarius corneus* (Linnaeus, 1758) and *Stratiotes aloides* Linnaeus were not found. These snail and plant, respectively, are characteristic for *B. moogi*-habitats (Nesemann, oral communication).

**Description:** The living specimens had a very soft body and reminded of *Theromyzon tessulatum* (O. F. Müller, 1774). But already in the field *Theromyzon* could be ruled out, because one specimen had cocoons under the ventral body. *Theromyzon* attaches the cocoons to the substratum and breeding specimens are clearly bigger than the leeches found here. Unfortunately, the cocoons fell off from the ventral surface during the preservation. The preserved specimens have a length of 15 mm and a maximum body width of 5 mm and 14 mm x 3,5 mm respectively. Papillae are absent on the smooth dorsal surface. The colour of the preserved specimens is typical. The dorsal surface shows a light brownish head region without a pigmentation on the upper lip and around the second pair of eyes. Yellow spots are particularly clear on the preclitellar region of the bigger specimen. Both leeches have radially arranged stripes on the caudal sucker. Two distinct pairs of eyes are present. Only the discripted ventrally median and marginal deep folds (Nesemann & Csányi, 1995) are

absent. But this difference between the original description and the specimens found in Montenegro is too unimportant for an independent taxonomical status of Montenegrin population. Perhaps it is only a consequence of several methods of preservation. It needs more material from Central and East Europe on the one hand and on the other from the Balkans for a final taxonomical clarification.

### DISCUSSION

In the recent publication about the Hirudinea fauna of Montenegro (Šapkar ev 1984) neither *B. moogi* or *G. paludosa* were mentioned. Sk et (1968) gave a records of *G. paludosa* (syn. *Batracobdella paludosa*) and *Batracobdella* cf. *algira* (Moquin-Tandon, 1846) from the territory of former Yugoslavia: near Lake Ohrid (Macedonia) for *G. paludosa*, and Belgrade (Serbia) for *B. cf. algira*. At the moment it is unknown, if perhaps one of these two species is *B. moogi*. Currently, the distributions of the rare and often confused species: *G. paludosa*, *G. slovacica*, *B. algira* and *B. moogi* is unknown. Only one sure record of *G. slovacica* from Slowenia (Trontelj 2000) and this record of *B. moogi* from Montenegro, are known for South-East Europe. Sure records of *G. paludosa* are known from Italy. The differentiation of *B. moogi*, *B. algira* and *G. paludosa*/*G. slovacica* will be easier in the future on the basis of new, good literature of determination (e.g. Nese mann & Neubert 1999). In this way, there will be more records of this taxa in Europe. But a sure differentiation between *G. paludosa* and *G. slovacica* is still difficult, because unambiguous morphological and anatomical characteristics are not given, only a genetic separation (Trontelj 1997).

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