## NEW EVIDENCE INDICATING THE PRESENCE OF THE GENUS *BRANCHIPUS* SCHAEFFER, 1766 (CRUSTACEA, BRANCHIOPODA) IN THE EASTERN BALKANS. Dragana Cvetković-Miličić, Brigita Petrov, and I. Z Petrov. *Institute of Zoology*, *Faculty of Biology*, *University of Belgrade*,

11000 Belgrade, Serbia and Montenegro.

UDC 595.3(479.11)

Widely distributed in Europe, the genus *Branchipus* is found only at several localities in the Balkans (Petrov and Marinček, 1991; Petrov and Petrov, 1997; Petkovski, 1997). One locality in Western Macedonia is inhabited by *B. intermedius* (the only known locality of this species known other than the type locality in Romania), the others by *B. schaefferi* (Fig. 1).



Fig. 1. Distribution of Branchipus species on the Balkan Peninsula.

*Branchipus schaefferi* is mainly restricted to the northern part of the Balkans. It is recorded from the westernmost part of the Peninsula, along the right bank of the Sava River, along the right bank of the lower course of the Danube, from the lowland near Lake Skadar, from the rice fields of Eastern Macedonia and from Central Bulgaria.

During our investigations from April to June in 2000 and 2004 at the foot of the Stara Planina Mountains in Eastern Serbia, numerous ephemeral ponds situated along the Nišava River were explored. Specimens belonging to the genus *Branchipus* were discovered in several ponds (Fig. 2). This is the first record of the presence of *Branchipus* in Eastern Serbia and the second one in the limnological area of the East Balkans.

Specimens of *Branchipus* were found in small, turbid, shallow, rainfilled ponds several centimeters in depth with a muddy bottom and without vegetation at an elevation of about 400 m above sea level. The ponds were situated on an unpaved road between the left bank of the Nišava and fields near the villages Poljska Ržana ( $43^{\circ}$  07.760'N and  $22^{\circ}$  38.111'E), Trnjana ( $43^{\circ}$  07.403'N and  $22^{\circ}$  40.148'E) and Gradište ( $43^{\circ}$  03.614'N and  $22^{\circ}$  41.731'E). At the moment of collection, water temperatures were between 18 and 30°C, and pH varied between 7 and 8 (the highest pH was in ponds Nos. 5 and 10, where nearby garbage dumps or cess-pits were situated. In ponds Nos. 6 and 9, *Branchipus* appeared in very large populations. Usually, it was the only branchiopod in the habitat, but in two ponds (Nos. 4 and 6) it occurred together with *Leptestheria*. Frequently, the ponds were inhabited by Cladocera, Ostracoda, Rotatoria, and Insecta (larvae and adults). Sometimes Anuras were also present.

Morphological analysis of the specimens found revealed some interesting features. In some ponds (Nos. 1, 2, 3, and 8), all specimens showed characteristics of the species *B. schaefferi*. In others, males having modified second antennae as in the *visnyai* form (on one or both sides), specimens resembling in some respects the species *B. laevicornis* and *B. intermedius*, and even ones with unique characteristics were also present (Fig. 3).



Fig. 2. Distribution of ponds with Branchipus



Fig. 1. Variability in the appearance of the head in males

In order to clarify the possible taxonomic status of the populations found, a detailed morphological analysis and comparison with known species are needed.

Acknowledgments. The National Scientific Research Fund of Serbia (grant No. 1533) has supported publishing of this paper. We thank Mr.

Đorđe Miličić for helping in field investigations and Mrs. Pavelka Čirić for her help writing in the English version of the paper.

*References*: - Petkovski, S. (1997). *Hydrobiologia* **359**, 37-44. - Petrov, B and M. Marinček (1991). *Hydrobiologia* **212**, 267-272. - Petrov, B., I. Petrov (1997). *Hydrobiologia* **359**, 29-35.