



Southernmost finding in Europe of *Aphelocheirus aestivalis* (Fabricius, 1794) (Hemiptera: Heteroptera: Aphelocheiridae)

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Abstract

During hydrobiological investigations of the Southern Morava basin (southeastern Serbia) from 1998. to 2004, the southernmost discovery of *Aphelocheirus aestivalis* (F.) in Europe was recorded in 13 rivers. Over the seven-year period of our investigations 398 individuals (from larva to imago stages) of this species were collected. Of all samples gathered, 85.71% were males and 14.29% were females. In the investigated rivers, *A. aestivalis* overwinters in all stages. It was found in the rivers up to 500 m above sea level, most of them located 100 to 200 m above sea level. It prefers rapid and deep rivers, and eurythermal water suits *A. aestivalis* better than cold water. The species was not found in waters in which the saprobity index exceeded 2.0.

Key words: *Aphelocheirus aestivalis*, southernmost finding, distribution, Southern Morava basin, Serbia

Introduction

Aphelocheirus aestivalis (Fabricius, 1794) is distributed in Europe; only two reports are from Asia: in Turkey and in Georgia (Kanyukova 1995). The range of this species for the most part encompasses Northern and Central Europe (Aukema & Rieger 1995, <http://www.faunaeur.org>), while it is very rare or absent from Southern and Southeast Europe.

Therefore it has been found only in the northwestern part of the Balkan Peninsula—in Slovenia, in the rivers Krka, Vipava, Ledava, Mirna, and Bloščica (Gogala & Gogala 1986, 1989; Gogala 2003). According to available data (<http://www.faunaeur.org>; Aukema & Rieger 1995), *A. aestivalis* is absent from the rest of the Balkan peninsula, and has not been recorded to date from Bosnia and Herzegovina, Serbia, Montenegro, Former Yugoslav Republic of Macedonia, Greece, and the European part of Turkey; whereas in Croatia it has been recorded only at one locality (Zagorje-Pregrada) north of the river Sava (Central Europe) (Horváth 1897); and in Bulgaria only from the Danube (Josifov 1960). In the rest of Europe *A. aestivalis* has not been recorded to date from Austria, Portugal, Spain, or Russia (<http://www.faunaeur.org>; Aukema & Rieger 1995).

Therefore, during hydrobiological research on the rivers of the Southern Morava watershed (southeastern Serbia), special attention was dedicated to collecting *A. aestivalis*. Here we report the first discovery of *A. aestivalis*, and of the family Aphelocheiridae, in Serbia, and this represents the southernmost boundary of this species in Europe.