

**BAGOUS PUNCTICOLLIS Boheman, 1845 – NEW WEEVIL SPECIES
(COLEOPTERA, CURCULIONIDAE) FOR
THE FAUNA OF SERBIA**

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ABSTRACT. The first data about finding of an interesting hygrophilous weevil species, *Bagous puncticollis* Boheman, 1845, on the territory of Serbia are given. Four exemplars of this species are collected on the territory of Reserve of Nature “Zasavica”.

Key words: weevil, *Bagous puncticollis*, Serbia, Reserve of Nature «Zasavica».

INTRODUCTION

Reserves of Nature are interesting complexes of ecosystems, particularly when they are with a lot of water sources. Such territories usually possess very rich weevils communities, but they are still partly unknown. The reason lies in difficult collecting of this beetles. (CALDARA & O'BRIEN, 1995)

Weevil's fauna from this areas started to be studied a few years ago in Serbia (PEŠIĆ, 2000, 2002, 2004, 2006).

From the 1997 year Zasavica is one of the Serbian Special Reserves of Nature. Protected area occupies 1825ha, placed on the territory of South Vojvodina and North Mačva, south from the Sava River, and comprises territories east of the Drina River to Sremska Mitrovica town (by geographical coordinates it is between 44°52'56" and 44°58'04"N, and 19°24'07" and 19°36'31"E) (Fig. 1). In the mosaic of wetlands, aquatic ecosystems and fragments of woods, flatland river Zasavica takes central and dominant position. It is 33.1km long, and has got open connection with Sava River, but in the same time it is underground connected with Drina River. The Reserve of Nature “Zasavica” belongs to the wetlands protected according to the Ramsar Convention. Exactly it is

Habitat and Species Management Area from IV category. Since 2002, the Reserve of Nature “Zasavica” is a member of The Federation of National Parks of Europe. (STANKOVIĆ, 2006)



Fig. 1. Geographical position of Reserve of Nature “Zasavica” in Serbia

One of higo- and hydrophilous weevils' genera is *Bagous* Germar, 1817. Earlier it was separated into four subgenera (АНГЕЛОВ, 1979; FREUDE *et al.*, 1983). *Bagous puncticollis* belonged to *Abagous* Sharp, 1916. But, after the newest revisions (ALONSO-ZARAZAGA & LYAL, 1999; ALONSO-ZARAZAGA, 2005), there is only a genus, without subgenera. Recently this genus is in focus of interesting of entomologists around the world (ANGELOV, 1989; BENNETT & BUCKINGHAM, 1991; O'BRIEN & ASKEVOLD, 1992, 1995; HOLECOVÁ, 1993; CALDARA & O'BRIEN, 1994, 1997; O'BRIEN, *et al.* 1994, 1994b, 1995; CUPPEN & HEIJERMAN, 1995; SPRICK, 2000, 2001).

Actual (ALONSO-ZARAZAGA, 2005) taxonomical position of this genus is:

- ordo Coleoptera
- subordo Polyphaga
- infraordo Cucujiformia
- superfamily Curculionoidea Latreille, 1802
- family Curculionidae Latreille, 1802
- subfamily Bagoinae C.G. Thomson, 1859
- tribus Bagoini C.G. Thomson, 1859

Bagous puncticollis (3.2-4.3mm) (Fig. 2) is one of 63 European *Bagous* species. It is connected biologically with the aquatic plants from genera *Elodea* (Fig. 3), *Hydrocharis* and *Stratiodes*. From the similar species it morphologically distinguishes by the possessing of a V-like depression in the basal third of elytra. Activity of adults is registered from May to July. (АНГЕЛОВ, 1979; FREUDE *et al.*, 1983; CALDARA & O'BRIEN, 1997).



Fig. 2. *Bagous puncticollis*
(from SPRICK, 2001)



Fig. 3. Host-plant *Elodea Canadensis*
(from SPRICK, 2001)

MATERIAL AND METHODS

Adult weevils were collected on wet habitats, by using of entomological net.

For species identification a few keys were used: SMRECZYŃSKI, 1972; АНГЕЛОВ, 1979; FREUDE *et al.*, 1983; CALDARA & O'BRIEN, 1997.

The sex was determined for each specimen.

RESULTS AND DISCUSSION

Totally three males and one female were collected.

One male exemplar of *B. puncticollis* was found in the reed- (*Phragmites communis* Trin.) habitat on the locality of Sadžak – Salaš Noćajski, in June 18th 2006.

Two males and one female of *B. puncticollis* were collected on the locality Zasavica II – Valjevac, in the floodplain area, in June 30th 2006. The *Hydrocharis morsus-ranae* L. was present among the other aquatic plants there. This plant is signed as one of host-plants for the *B. puncticollis*.

For the difference of earlier entomologists' opinion, that *B. puncticollis* is polyphagous, SPRICK (2001) affirmed it is oligophagous species on Hydrocharitaceae: *Stratiotes aloides*, *Elodea canadensis* (Fig. 3) and *Hydrocharis morsus-ranae* (Fig. 4, 5). This weevil definitely refused to eat *Alisma plantago-aquatica* and *Elodea nuttallii*. Furthermore this author gave us assertion the larval development of this species is

unknown, but probably larvae live as endophagous submerse, inside of host plant, because nobody has observed it until now.

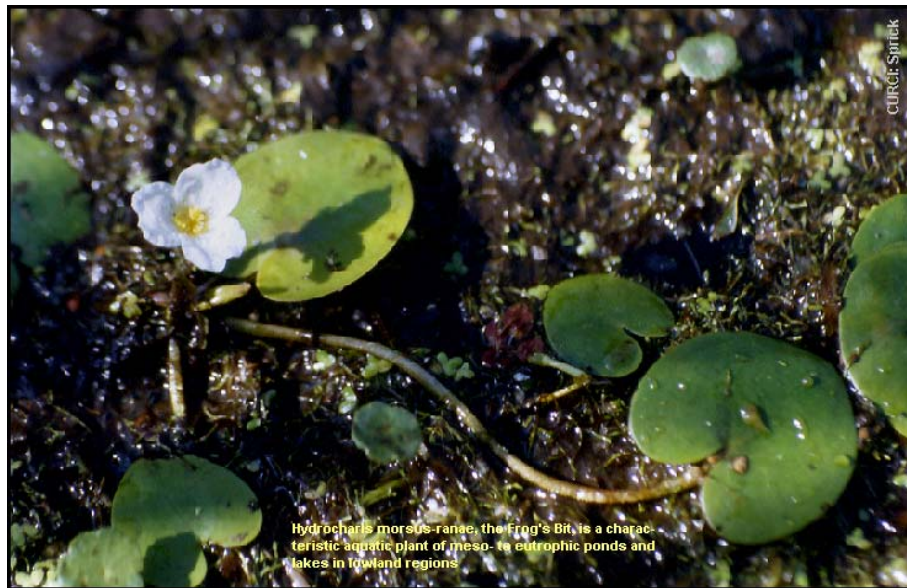


Fig. 4. Host-plant *Hydrocharis morsus-ranae* (from SPRICK, 2001)

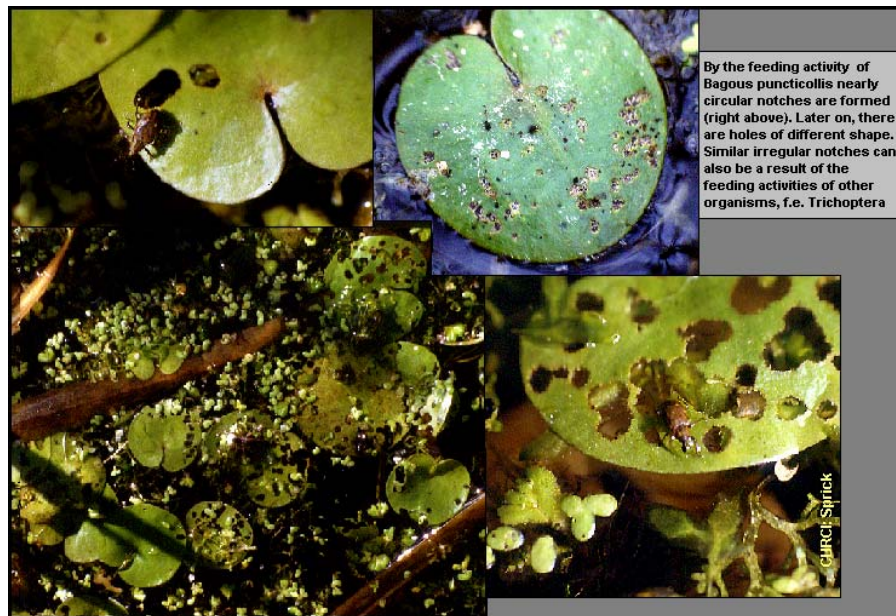


Fig. 5. Host-plant *Hydrocharis morsus-ranae* with *Bagous puncticollis* and its feeding tracks (from SPRICK, 2001)

Our findings of this weevil species are the first for the territory of Serbia. That fact confirms once again importance of Reserve of Nature Zasavica.

B. puncticollis is rare species in Toscana, as well as two other *Bagous* species registered there. (http://sira.arpat.toscana.it/sira/MedWet/MDW_IT51274401.htm)

B. puncticollis has European distribution: South part of Great Britain, Sweden, Finland, Denmark, France, Belgium, The Netherlands, Germany, Poland, Czech Republic, Slovakia, Switzerland, Austria (Salzburg), Italy, Bosnia-Herzegovina, Hungary, Romania, Russia (Moscow) (SPRICK, 2001; ALONSO-ZARAZAGA, 2005).

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