

ODONATA COLLECTED AT PETNICA NEAR VALJEVO, SERBIA

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Records are presented of 17 Odonata species collected by the author at Petnica near Valjevo, Serbia during the second half of July 1994. Twelve of the species, including *Cordulegaster heros*, have not been previously reported from the country surrounding Valjevo.

KEY WORDS: Odonata, Serbia.

INTRODUCTION

Until now 8 species of Odonata have been known from the town of Valjevo and Valjevska Podgorina – a hilly area located S, SW and SE of the town. ADAMOVIĆ (1949) recorded *Calopteryx virgo*, *Pyrrhosoma nymphula*, *Coenagrion ornatum*, *C. puella* from Valjevo, and *Sympetrum striolatum* from Divčibare – a plateau situated about 20 km SE of Valjevo. Three more species, namely *Platycnemis pennipes*, *Onychogomphus forcipatus* and *Somatochlora meridionalis*, were reported from Divčibare by ANDJUS (1985).

The present report is based on the dragonfly specimens taken by the author at the village of Petnica near Valjevo in the second half of July 1994.

LOCALITIES VISITED

The area of Valjevo and Valjevska Podgorina consists of the Mesozoic, particularly Triassic limestones, and the Neogene deposits. Alluvium is found in the river Kolubara valley. Valjevska Podgorina is primary an area of deciduous forests. The area experiences a moderate continental climate. Average temperature in July is 20.8°C, mean rainfall in the same month is 437.7 mm, and RH 72.06 %.

Odonata were collected in the country surrounding Petnica, a village situated about 7 km ESE from the town of Valjevo (19°53' E, 44°16' N). "Petnica Science Center (PSC)" – an experimental centre for the extracurricular science education – was opened in the village, in 1982. In addition to its educational program, PSC conducts scientific research. The author took part in an entomological summer seminar of PSC in 1994, and collected material for the present notice.

Odonata were taken and observed at the following five sites:

- (1) Izvor Reke Banje – the headstream of the river Banja, flowing from the cave called Petnička Pećina. The stream is partly lined with trees and bushes.
- (2) Izvor Reke Gradac – the headstream of the river Gradac in a limestone area, S of Valjevo. The stream of clean and cold water has a rocky bottom.
- (3) Petničko Jezero – a man-made reservoir fed by the brook Pocibrava, and lined with marshy vegetation.
- (4) Rogljević Bara – a permanent pond with open water enclosed by marshy vegetation.
- (5) Ponor – a deciduous forests consisting predominantly of oak-trees, which grow on a hill near the village of Petnica. Sunny paths in the forests are an interesting minor habitat.

MATERIAL AND METHODS

A total of 47 specimens, pertaining to 17 Odonata species, was collected by the author in five above listed sites, from 18th till 29th of July, 1994. Dragonflies were observed and netted always on sunny days from 9 a.m. till 3 p.m. A preliminary identification of species was made in PSC, using a field guide book (MÓCZÁR, 1969). The final identification of species was completed in Beograd, using the well known book (SCHMIDT, 1929).

The material is now located in the collection of the Petnica Science Center.

RESULTS AND COMMENTS

In the annotated list, the briefly described sites are marked with bracketed figures after the name of species.

Calopterygidae. – *Calopteryx virgo* (Linnaeus, 1758): (1) 18-VII, 4♂ (2 of them teneral) 6♀ (4 of them teneral); (5) 18-VII, 1♂ 1♀. – *Calopteryx splendens* (Harris, 1782): (1) 18-VII, 2♂.

Lestidae. – *Lestes barbarus* (Fabricius, 1798): (4) 22-VII, 1♂. – *Lestes dryas* Kirby, 1890: (4) 22-VII, 3♂.

Platycnemidae. – *Platycnemis pennipes* (Pallas, 1771): (3) 19-VII, 1♂; 21-VII, 1♂; (4) 25-VII, 1♂.

Coenagrionidae. – *Ischnura elegans* (Vander Linden, 1840): (3) 19-VII, 1♂; (4) 21-VII, 1♂; 25-VII, 1♂. – *Enallagma cyathigerum* (Charpentier, 1840): (3) 19-VII, 1♂ 1♀. – *Coenagrion puella* (Linnaeus, 1758): (3) 19-VII, 2♂ 1♀ (a pair in copula); 25-VII, 1♂; (4) 22-VII, 2♂.

Gomphidae. – *Gomphus vulgatissimus* (Linnaeus, 1758): (1) 18-VII, 1♂. – *Onychogomphus forcipatus* (Linnaeus, 1758): (2) 27-VII, 1♂.

Aeshnidae. – *Anax imperator* Leach, 1815: (3) 19-VII, 2♂.

Cordulegastridae. – *Cordulegaster heros* Theischinger, 1979: (1) 1♀.

Libellulidae. – *Platetrum depressum* (Linnaeus, 1758): (3) 1♂. – *Orthetrum albistylum* Sélys, 1848: (3) 19-VII, 3♂. – *Crocothemis erythraea* (Brullé, 1832): (3) 19-VII, 1♂. – *Sympetrum sanguineum* (Müller, 1764): (3) 19-VII, 1♂; 25-VII, 1♂ 1♀. – *Sympetrum striolatum* (Charpentier, 1840): (5) 18-VII, 1♂.

Odonata inhabiting Valjevo and Valjevska Podgorina were and still are, unsatisfactorily examined. Twelve (70.6%) of 17 species collected at Petnica are new for the Odonata fauna of the area.

Altogether, 8 species previously found and 12 species recorded in the present paper make 20 species known in Valjevo and Valjevska Podgorina, or 33.9% out of 59 Odonata species found in Serbia so far.

The biogeographical distribution of *Cordulegaster heros* in Serbia and Macedonia has been recently described and discussed (ADAMOVIĆ *et al.*, 1992). The finding of *C. heros* at Petnica near Valjevo is the first record of the species in that part of W Serbia.

Habitat distribution of the Odonata species was not examined in detail at Petnica, during the present investigation. Anyhow, *Calopteryx virgo*, *C. splendens*, *Gomphus vulgatissimus*, *Onychogomphus forcipatus* and *Cordulegaster heros* were obviously confined to streams of clean and cold water, while almost all other species were found at stagnant water.

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ODONATA SAKUPLJENE U PETNICI KOD VAĽEVA, SRBIJA

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Извод

У раду су изнесени подаци о 17 врста Odonata што их је ауторка сакупила у околини села Петнице код Ваљева у другој половини јула 1994. године. Од ових врста, њих 12 (70,6 %) су нове за фауну Odonata Ваљева и Ваљевске Подгорине. То оправдава објављивање постигнутих резултата и указује на потребу наставка испитивања.

Одрасли инсекти су посматрани и прикупљани на 5 различитих станишта у околини Петнице. Врсте *Calopteryx virgo*, *C. splendens*, *Gomphus vulgatissimus*, *Onychogomphus forcipatus* и *Cordulegaster heros* биле су везане за текуће воде изворишних делова Градца и реке Бање, док су скоро све друге врсте налажене око стајаћих вода Петничког језера и Рогљевића баре.

Недавно је описано биоеографско распрострањење врсте *Cordulegaster heros* у Србији и Македонији (ADAMOVIĆ *et al.*, 1992). Налаз врсте *C. heros* у околини Петнице први је податак о њој у овом делу западне Србије.

Пре ових испитивања било је познато 8 врста Odonata са овог подручја (ADAMOVIĆ, 1949; ANDJUS, 1985). Са 12, овога пута, установљених врста, укупан број Odonata нађених у Ваљевоу и Ваљевској Подгорини попео се на 20 врста, што чини 33,9 % од 59 врста Odonata, колико их је до сада познато у Србији.

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