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OF YUGOSLAVIA**

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(Albarda, 1878), DVIJE VRSTE NOVE ZA FAUNU
EPHEMEROPTERA JUGOSLAVIJE**

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For a long time the status of the species *Caenis robusta* was not clear. Only recently, when Müller-Liebenau (1958) described again the larvae and imagin of *Caenis robusta*, the status of this species was finally acknowledged. In the same paper, Müller-Liebenau states that this species is widely spread in the whole of the middle and eastern Europa, and that Šamal has also found it in Yugoslavia. Müller-Liebenau has got the information on its occurrence in Yugoslavia from Degrange. Puthz (1980) states that in the Balkans *Caenis robusta* is known to be present in Bulgaria and Greece. There are no other data on the occurrent of this species in the Balkans.

The *Caenis robusta* species was established among the larvae of ephemeroptera, gathered in June, 1980 in a pond near Bosanski Šamac. On June 13th, 1980 the larvae of this species were found in the pond Velika Tišina, along the road leading to Orašje. In this locality, the larvae were collected from qualitative samples taken by Surber's net in the littoral zone. Numerous larvae of the species *Cloeon dipterum* (Linne) have also been found in these samples. On the coastal plants we have not found any imago of Ephemeroptera, but we have collected imagines of the caddis-fly *Leptocerus tineiformis* (Curtis) that Professor Mara Marinković-Gospodnetić has determined.

Al these find indicate that in the pond Velika Tišina, *Caenis robusta* lives in the community with *Cloeon dipterum* and the caddis-fly *Leptocerus tineiformis*, what was also established in France by Degrange (1957a).

The species *Baetopus tenellus* has been known up to recently only in northern and eastern Europe. Lately it has been discovered in Bulgaria (Jacob, 1972) and in the Polish part of the Carpathian Mts (Sowa, 1975). According to Puthz (1978), in the Balkans, this species is restricted only to Bulgaria, i.e. to the region 7, while it does not occur in other Balkanic regions.

Two larvae of the species *Baetopus tenellus* have been found in the river Bosna above Modriča near the village Garavac. The samples were taken by Surber's net on August 31st, 1978. It is interesting to note, that samples were taken four times at this locality during 1978 and 1979, but larvae of this species were found only once. It is probable that population density of this species is very low at this locality. According to Kazlauskas and Sanwajtite (1962) and Sowa (1975) the density of population of *Baetopus tenellus* is extremely low.

With these finds, the area of *Caenis robusta* and the area of *Baetopus tenellus* have been spread to the western part of the Balkans. The species *Baetopus tenellus* has been found up to now only in the regions 7 and 5 of the Balkans (Bulgaria and the Dinarides).

REZIME

Vrsta *Caenis robusta* Eaton, poznata do sada na Balkanskom poluostrvu iz Bugarske i Grčke, konstatovana je u jednoj bari u okolini Bosanskog Šamca. Larve ove vrste su nađene u bari Velika Tišina, 13. 6. 1980.

Vrsta *Baetopus tenellus* (Albarda), koja je do sada na Balkanskem poluostrvu bila poznata samo iz Bugarske, nađena je na jednom lokalitetu u Bosni i to, dvije larve u rijeci Bosni iznad Modriča kod sela Garavac, 31. 8. 1978. godine.

Ovim nalazima je areal *Caenis robusta* i areal *Baetopus tenellus* proširen na zapadni dio Balkanskog poluostrva, odnosno na regiju 5.

LITERATURA

- Bjelčić, Ž. 1954. Flora i vegetacija bare Velika Tišina kod Bosanskog Šamca. — Godišnjak Biol. instit. Univ. Sarajevo, 7 (1—2): 181—207.
Degrange, Ch. 1957. Note de synonymie: *Caenis incus* Bengtsson, 1912 = *Caenis robusta* Eaton, 1884 (Ephemeroptera) Trav. Lab. Hydrobiol. Pisc. Grenoble 48—49: 33—36.

- 1957a. Deux Caenis nouveaux pour la faune française: *C. robusta* Eaton et *C. rivulorum* Eaton. (Ephem.). Bull. Soc. Ent. France 62: 75—77.
- Jacob, U. 1972. Beitrag zur autochthonen Epehemeropterenfauna in der Deutschen Demokratischen Republik. Dissertation A, Fakultät für Mathematik und Naturwissenschaften des Wissenschaftlichen Rates der Karl Marx — Universität, Leipzig: 1—158.
- Kazlauskas, R. and Sanawajtite, R. 1962. Ephemeropteren — Larven aus dem Flusse Gauja. — Latvijas Entomologs 6: 35—43 (Riga).
- Müller-Liebenau, I. 1958. *Caenis robusta* Eaton, eine für Deutschland neue Ephemeropteren — Art. — Gewässer und Abwässer, 22: 59—65.
- 1978. *Raptobaetopus*, eine neue carnivore Ephemeropteren — Gattung aus Malaysia (Insecta, Ephemeroptera: Baetidae). — Arch. f. Hydrobiol. 82: 465—481.
- Puth, V. 1978. Ephemeroptera. In Illies J. (Hrsg) Limnofauna Europaea: 257—263, Stuttgart.
- 1980. Ergebnisse der Albanien — Expedition 1961 des Deutschen Entomologischen Institutes. 94. Beitrag — Ephemeroptera. — Beitr. Ent., Berlin 30 (2): 343—355.
- Sowa, R. 1975. Ecology and biogeography of mayflies (Ephemeroptera) of running waters in the Polish part of the Carpathians. I. Distribution and quantitative analysis. — Acta Hydrobiol. 17 (3): 233—297.