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New representatives of the order Ephemeroptera (Insecta) for the fauna of Bulgaria

[Neue Vertreter der Ephemeroptera (Insecta) aus Bulgarien]

Boris Russev and Yanka Vidinova

With 3 figures

Schlagwörter: Oligoneuriella, Rhithrogena, Ephemeroptera, Insecta, Bulgarien, Faunistik

The larvae of three species of mayflies (*Oligoneuriella polonica*, *Rhithrogena carpatoalpina* and *R. savoiensis*) are reported, which are new for the fauna of Bulgaria.

In the generalizing work of RUSSEV (1993) 102 taxa of Ephemeroptera are reported, known till now for Bulgaria, 27 of them as larva and imago, 12 as imago and 64 as larva; 99 are classified to species, 2 to variety and 1 to genus. Subject of this report are the larvae of three species, recently ascertained in Bulgaria, identified by the keys of STUDEMANN & al. (1992) and other special publications.

Oligoneuriella polonica **MOL 1984**
Syn. *Oligoneuriella pallida* SOWA 1973 (nec HAGEN 1855)
The species were ascertained in Poland, Hungary and the Netherland. In Bulgaria it was found in the Danube river near the village of Krivina (Danube-km 536) on 05.06.1960; in right affluents of the Danube: Vit river at 10 km above Pleven and in Yantra river above Veliko Tarnovo, at the villageof Karantsi and Byala. After 1965 the species has not been recorded. Typical features of our nymphs (Fig. 1) correspond to those described by SOWA (1973).

Rhithrogena carpatoalpina **KLONOWSKA, OLECHOWSKA, SARTORI & WEICHSELBAUMER 1987**
By the authors the species was found in Poland, Switzerland and Austria. In Bulgaria it was found on 15.06.1972 in the Balkan Mountains in Malak Iskar river below the springs (Fig. 2).

Rhithrogena savoiensis **ALBA-TERCEDOR & SOWA 1987**
The authors mention the spreading of the species in France and Poland. In Bulgaria it was found in Lom river below the village of Byalo pole, in Bebresh river (left affluent of Malak Iskar river) upstream the confluence with Stara river, Iskar river above Samokov, Gradevska river below Predela, Luda Kamchia river after joining Kotlenska river and Veleka river below the village of Gramatikovo. Larvae resemble those of *R. thracica* SOWA, SOLDAN & BRAASCH 1988,

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however the lacinia of our specimens have 5-6 minute teeth (Fig. 3), not 8-9 as *R. thracica* (specimens of that species also at our disposal).

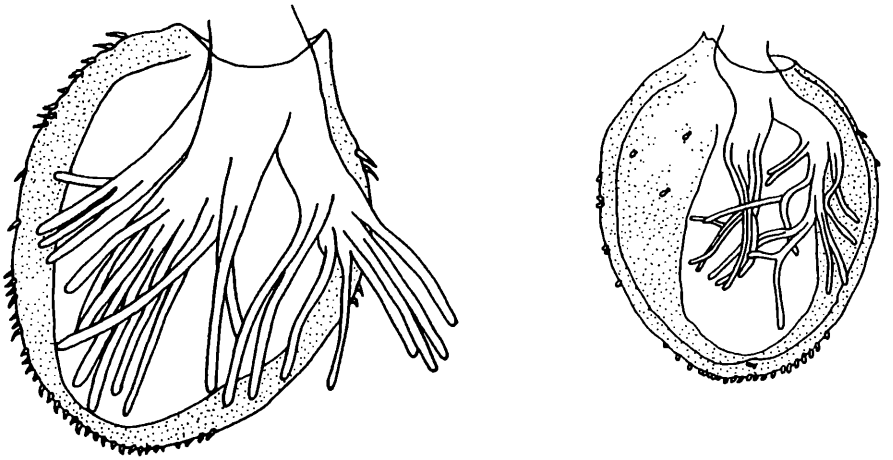

Fig. 1: *Oligoneuriella polonica*. a = lamella of 1st gill, b = lamella of 7th gill

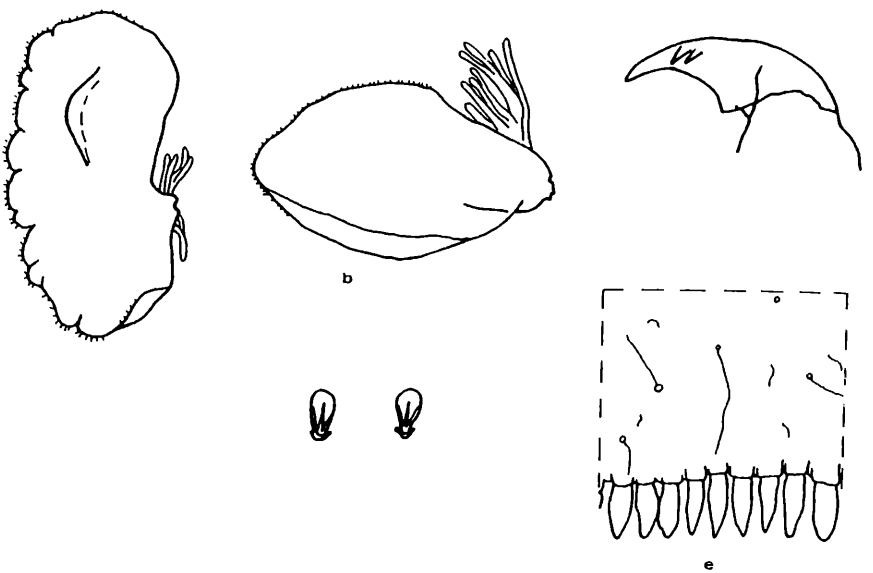

Fig. 2: *Rhithrogena carpatoalpina*. a and b = 1st and 7th gill, c = spines from dorsal surface hind femora, d = tarsal claw, e = fragment of abdominal tergite

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Fig. 3: *Rhithrogena savoiensis*. a = 1st gill, b = 7th gill, c = fragment of caudal filament, d = labrum, e = 5th comb-shaped bristle from maxillary lacinia

References

KLONOWSKA, M., M. OLECHOWSKA, M. SARTORI & P. WEICHSELBAUMER (1987): Rhithrogena carpatoalpina sp. n., du groupe semicolorata (Ephemeroptera, Heptageniidae) d'Europe centrale.- Bull. Soc. Vaud. Sc. Nat. **78**: 445-454.

MOL, A. (1984): Oligoneuriella polonica n. sp., and a note on O. pallida (Hagen, 1855) (Ephemeroptera: Oligoneuriidae).- Entom. Ber. **44**: 126-128.

RUSSEV, B. (1993): Review of literature and established mayfly species (Ephemeroptera,Insecta) from Bulgaria.- Lauterbornia **14**: 71-77, Dinkelscherben.

SOWA, R. (1973): Contribution a l'etude des Oligoneuriella Ulm. europeennes (Ephemeroptera, Oligoneuriidae).- Bull. Acad. Pol. Sci. **II,21,10**: 657-665, Warszawa.

STUDEMANN, D., P. LANDOLT, M. SARTORI, D. HEFTI & I. TOMKA (1992): Ephemeroptera.- In: Insecta helvetica **9**, 174 S., Fribourg.

Anschrift der Verfasser: Prof. Dr. B. Russev & Y. Vidinova, Bulgarian Academy of Sciences, Institute of Zoology, boul. Zar Osvoboditel 1, BG-1000 Sofia, Bulgaria

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