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## New *Rhithrogena*-Species (Ephemeroptera: Heptageniidae) for the fauna of Macedonia

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With 1 figure

**Schlagwörter:** *Rhithrogena*, Ephemeroptera, Insecta, Vardar, Makedonien, Fließgewässer, Faunistik

The larvae of 7 *Rhithrogena*-species (*R. braaschi*, *R. diaphana*, *R. goeldlini*, *R. savoiensis*, *R. degrangei*, *R. gratianopolitana* and *R. hercynia*) are reported as new for the Macedonian fauna.

Special investigations on the genus *Rhithrogena* in Macedonia have not been done yet, therefore there is little knowledge about the species. *R. semicolorata* CURTIS, *R. aurantiaca* BURMEISTER (now *R. diaphana* NAVAS pro parte) and *R. gorganica* KLAFALEK have been reported by SAMAL (1935, 1935a) and the first two species by IKONOMOV (1951, 1953, 1960, 1964, 1969).

In the general work upon the Balkan peninsula by PUTHZ (1980) the species reported above are registered again. However *R. gorganica* is considered as an endemic for the Carpathian Mountains and it could not be found anywhere else (PUTHZ 1978).

The subject of this report are 7 *Rhithrogena*-species, which are new for the Macedonian fauna. The material was collected at different stations of the river Tetovska and in two of tributary brooks in the Shar Mountains in May, June, July, August and November 1996 and in June 1997 (leg. A. Memeti, Tetovo, Macedonia). The larvae were determined according to the original descriptions as well as the general work on European *Rhithrogena*-species by TOMKA & RASCH (1993).

### I. *R. semicolorata*-group

#### 1. *Rhithrogena braaschi* JACOB 1974

Localities: Tetovska river below Tetovo, 16.11.1996 (1 la); at Veshala, 14.06.1997 (1 la); left tributary of Tetovska river, Leshnitsa place, 10.08.1996 (1 la).

### II. *R. diaphana*-group

#### 2. *Rhithrogena diaphana* NAVAS 1917

Locality: Right tributary of Tetovska river, Leshnitsa place, 20.07.1996 (1 la).

#### 3. *Rhithrogena goeldlini* SARTORI & SOWA 1988

Localities: Left and right tributaries of Tetovska river, Leshnitsa place, 20.07.96 (3 la); 27.07.96 (10 la); 10.08.96 (14 nymphs).

4. *Rhithrogena savoienensis* ALBA-TERCEDOR & SOWA 1987

Localities: Tetovska river, Veshala, 14.06.1997 (1 la); right tributary at Leshnitsa place, 10.08.1996 (2 la).

III. *R. hybrida*-group

5. *Rhithrogena degrangei* SOWA 1969

Locality: Tetovska river, Brodets, 26.05.1996 (1 la).

Distribution: According to PUTHZ (1978) the species is an endemic one for the Alps. In confirmation of its record in the Shar Mountains line drawings of characteristic taxonomic features are given (Fig. 1).

6. *Rhithrogena gratianopolitana* SOWA, DEGRANGE & SARTORI 1986

Localities: Tetovska river, Banya place, 26.05.1996 (4 la); below Veshala, 26.05.1996 (5 la).

7. *Rhithrogena hercynia* LANDA 1969

Locality: Tetovska river, below Tetovo, 16.11.1996 (1 la).

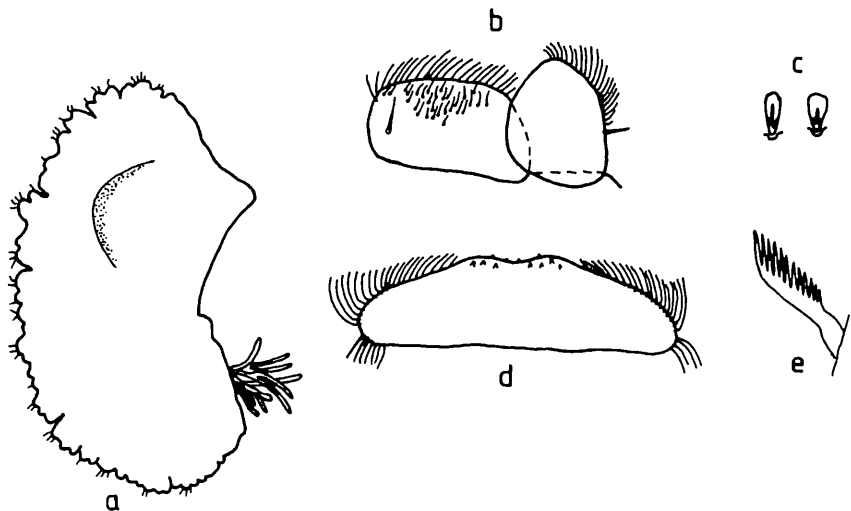


Fig. 1: *Rhithrogena degrangei*. a = 1st gill, b = labium, c = spines from the upper surface of hind femur, d = labrum, e = a comb-shaped bristle from maxillary lacinia

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