# New records of the family Hydroptilidae for the caddisfly (Insecta: Trichoptera) fauna of Slovenia

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**Abstract.** A list of fourteen new Hydroptilidae records for the Slovenian caddisfly fauna is given. Genera *Agraylea* and *Stactobia* were recorded for the first time in Slovenia. *Hydroptila rheni* Ris 1903 has been previously known only from a type locality in Switzerland. The number of recorded Slovenian caddisfly species has thus increased to 238.

Keywords: Trichoptera, caddisflies, Hydroptilidae, fauna, new records, Slovenia

Izvleček. NOVI PODATKI IZ DRUŽINE HYDROPTILIDAE V FAVNI MLADOLETNIC (TRICHOPTERA) SLOVENIJE - Naveden je seznam štirinajstih novih vrst družine Hydroptilidae v favni Slovenije. Rodova *Agraylea* in *Stactobia* sta bila ugotovljena v Sloveniji prvič. Vrsta *Hydroptila rheni* Ris 1903 je bila pred tem najdena samo na tipski lokaliteti v Švici. Število vrst mladoletnic, najdenih v Sloveniji, je naraslo na 238.

Ključne besede: mladoletnice, Hydroptilidae, favna, novi podatki, Slovenija

### Introduction

The family Hydroptilidae includes the smallest caddisflies. They are often called microcaddisflies. Their forewings are usually only few millimetres long. Because of their smallness, they are often overlooked. In the preliminary list of Slovenian caddisflies, 11 Hydroptilidae species were included (Krušnik & Urbanič 2002). More than half of them belonged to the most diverse genus *Hydroptila*, despite 6 represented genera. However, in species lists of the neighbouring countries, many more Hydroptilidae species can be found (e. g. Malicky 1999, Cianficconi 2002), mostly of the genus *Hydroptila*.

During the past years, a systematic work on caddisflies has been conducted. A number of adult caddisfly specimens collected all over the Slovenia have been determined, many of them belonging to the family Hydroptilidae. New records for the fauna of Slovenia are listed here.

# **Results and discussion**

Fourteen new species for the fauna of Slovenia have been collected, 8 of them belonging to the genus Hydroptila. H. rheni had been previously known only from the type locality in the middle course of the Rhine River in Switzerland. Botosaneanu & Malicky (1978) marked the species as characteristic of large rivers. The Trebuščica River, where the specimen was collected, is in fact a stream of the third order. However, the species could also occur in the Idrijca River, or even only in it. It is well known that caddisflies can fly relatively far away from the places where they emerged (Malicky 1987, Urbanič 2003). As H. rheni also H. taurica is a species characteristic mainly of large rivers, but occurs in lowlands of south-east Europe. In Slovenia, H. taurica was found in the Dravinja River (E Slovenia). H. brissaga is a species, which was described according to the specimens from Lake Maggiore (Malicky 1996), but has also been recorded in Sicily and Greece. In Slovenia, two specimens have been caught by light-trap at the karst spring Divje jezero together with some other Hydroptila species (e. q. H. martini, H. ivisa). All of them have been collected in Slovenia only at karst springs. Hydroptila cognata is known only from few localities, but all of them are from the Mediterranean region (Malicky 1998). Few years ago, Malicky (1998) published that the species had also been found in the Dragonja river valley, but the information was overlooked while the list of Slovenian caddisflies was being prepared (Krušnik & Urbanič 2002). The new record confirmed the occurrence of the species in the Dragonja River, as mature pupae were also found. All other Hydroptila species (H. angulata, H. martini, H. valesiaca) presented as new to the fauna of Slovenia are widespread in Europe, the same as are Oxyethira flavicornis and both Orthotrichia species (O. costalis and O. tragetti), which have been found in lowland waters in eastern Slovenia. On the other hand, species of the genus Stactobia (S. mosely and S. eatoniella), which is a new genus for the Slovenian fauna, are restricted to Central Europe and parts of the West Mediterranean (Malicky & Botosaneanu 1978). In Slovenia, both species have been collected at hygropetric sites in the Alpine region. Besides Stactobia, the genus Agraylea is also new for the Slovenian fauna. A. sexmaculata was caught by light-trap at the Ščavnica River in northeastern Slovenia. According to Botosaneanu & Malicky (1978), the species lives in standing waters of different types and is widespread in Europe.

#### List of new records

1. Stactobia eatoniella McLachlan, 1880

Distribution: Central Europe and West Mediterranean

Krnica, 25.07.1984, 1♂, 1♀, leg. C. Krušnik

2. Stactobia moselyi Kimmins 1949

Distribution: Central Europe and Italy

Vrh Zale, 26.06.1992, 38, leg. B. Horvat & I. Sivec

3. Orthotrichia costalis (Curtis, 1834)

Distribution: widespread in Europe

Reservoir Gajševci, 02.07.2001, 1♂, 1♀, leg. G. Urbanič

4. Orthotrichia tragetti Mosely 1930

Distribution: widespread in Europe

Kostanjevica na Krki (light-trap), 25.5. 1994, 1♂; 21.8.1994, 1♀, all leg. S. Gomboc.

5. *Oxyethira flavicornis* (Pictet, 1834) Distribution: widespread in Europe

Kobiljski potok stream, Mostje, 22.06.2000, 13, leg. B. Rotar

6. Hydroptila angulata Mosely 1922

Distribution: widespread in Europe

Dragonja River, Podkaštel, 27.08.2002, 13, leg. B. Rotar

7. Hydroptila brissaga Malicky 1996

Distribution: South Switzerland, Italy and Greece

Podroteja (light-trap), 19.09.2002, 1∂, 1♀ leg. G. Urbanič

8. Hydroptila cognata Mosely 1930

Distribution: Mediterranean

Dragonja River, Škrline, VL03, 23.05.1987, 23, leg. I. Tratnik

9. Hydroptila ivisa Malicky 1972

Distribution: the Alps and the Balkans

Rižana River (spring), 02.06.2003, 3♂; Podroteja (light-trap), 19.09. 2002, 1♂, 2♀, all leg. G. Urbanič

10. Hydroptila martini Marshall 1977

Distribution: widespread in Europe

Unica River, Hasberg, 09.07.2001, 23, leg. B. Rotar

11. Hydroptila rheni Ris 1903

Distribution: middle Rhine River

Trebuščica River, Gorenja Trebuša, 30.05. 1990, 13, leg. I. Sivec & B. Horvat

12. Hydroptila taurica Martynov 1934

Distribution: Southeastern Europe

Dravinja River, 12.07.1984, 1♂, leg. C. Krušnik

13. Hydroptila valesiaca Schmid 1947

Distribution: widespread in Europe

Mostnica River, Voje, 30.06.1983, 13, leg. M. Štangelj

14. Agraylea sexmaculata Curtis 1834

Distribution: Central Europe and West Mediterranean

Zgornja Ščavnica (light-trap) 18.09.2002, 13, leg. G. Urbanič

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