

## *Oxyethira falcata* Morton, 1893 new to Belgium (Trichoptera: Hydroptilidae)

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### Abstract

On 1.VIII.2014, *Oxyethira falcata* Morton, 1893 was found for the first time in Belgium. One female was captured with a light trap along the stream Zwart Beek in Hechtel (province Limburg).

**Keywords:** Hydroptilidae, *Oxyethira falcata*, Zwarte Beek.

### Samenvatting

Op 1.VIII.2014 werd *Oxyethira falcata* Morton, 1893 voor het eerst in België waargenomen. Eén vrouwtje werd met een lichtval gevangen langs de Zwarte Beek in Hechtel (provincie Limburg).

### Résumé

Le 1.VIII.2014, *Oxyethira falcata* Morton, 1893 a été observé pour la première fois en Belgique. Une femelle a été capturée le long du ruisseau Zwarte Beek à Hechtel (province Limbourg).

### Introduction

Hydroptilidae are the smallest Trichoptera and can easily be confused with Microlepidoptera. With the exception of the two species of *Agraylea*, larvae can only be identified up to genus level. Just like most other Trichoptera, adult Hydroptilidae rarely fly far from the aquatic habitat of their larvae. Therefore, adults are usually only captured with light traps that are standing close to the water border of suitable habitats. For all those reasons, the knowledge about Hydroptilidae is relatively sparse. Recently, already *Hydroptila occulta* (Eaton, 1873) (LOCK & GOETHALS, 2012), *Hydroptila tineoides* Dalman, 1819 and *Oxyethira simplex* Ris, 1897 (LOCK *et al.*, 2013) were added to the Belgian fauna. Now, also *Oxyethira falcata* Morton, 1893 has been discovered in Belgium.

### Material and methods

On 1.VIII.2014, Trichoptera were sampled with a light trap along the stream Zwarte Beek in Hechtel (province Limburg, UTM: 31UFS6663, 65m asl). Identification was performed with the key developed by MARSHALL (1978).

### Results

One female of *Oxyethira facata* Morton, 1893 (Fig. 1) was sampled with a light trap along the stream Zwarte Beek. The species closely resembles other species of the genus *Oxyethira* and identification is only possible after studying the genitalia. Other species encountered that night were: *Ecnomus tenellus* (Rambur, 1842)



Fig. 1. Female *Oxyethira falcata* Morton, 1893 (Photograph: Koen Lock).

(Ecnomidae), *Athripsodes aterrimus* (Stephens, 1836), *Leptocerus tineiformis* Curtis, 1834, *Mystacides longicornis* (Linnaeus, 1758), *Mystacides niger* (Linnaeus, 1758) (Leptoceridae), *Glyphotaelius pellucidus* (Retzius, 1783) (Limnephilidae), *Plectrocnemia conspersa* (Curtis, 1834) (Polycentropodidae) and *Psychomyia pusilla* (Fabricius, 1781).

### Discussion

*Oxyethira falcata* was expected to occur in Belgium (LOCK & GOETHALS, 2012). The species was already observed in the Netherlands close to the Belgian border (HIGLER, 2008; TEMPELMAN pers. comm.) and in Northern France in the department Ardennes (COPPA, 2014). Until present, 18 species of Hydroptilidae have been recorded for Belgium. *Hydroptila angulata* Mosely, 1922 and *Hydroptila simulans* Mosely, 1920 were also reported for Belgium (RICCIARDONE & STROOT, 1991), however, these records could not yet be confirmed. In the Netherlands, *Hydroptila dampfi* Ulmer, 1929, *Orthotrichia angustella* (McLachlan, 1865), *Orthotrichia tragetti* Mosely, 1930, *Oxyethira sagittifera* Ris, 1897 and *Oxyethira tristella* Klapalek, 1895 (HIGLER, 2008) have also been observed, which all were not found in Belgium yet. In addition, *Oxyethira frici* Klapalek, 1891 was reported in the department Ardennes in Northern France (COPPA, 2014) and the German federal states bordering Belgium: Rheinland-Pfalz and Nordrhein-Westfalen (ROBERT, 2001). It can therefore be expected that several additional species will be found in Belgium.

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