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Orthotrichia tragetti Mosely, 1930 new to the Belgian fauna (Trichoptera: Hydroptilidae)

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Abstract

On 15.IX.2014, *Orthotrichia tragetti* Mosely, 1930 was observed for the first time in Belgium. Three females were captured with a light trap along one of the ponds in the nature reserve Vloethemveld in Snellegem (province West-Vlaanderen).

Keywords: Hydroptilidae, *Orthotrichia tragetti*, Vloethemveld.

Samenvatting

Op 15.IX.2014 werd *Orthotrichia tragetti* Mosely, 1930 voor het eerst in België waargenomen. Drie vrouwtjes werden met een lichtval gevangen langs één van de vijvers in het natuurreservaat Vloethemveld in Snellegem (provincie West-Vlaanderen).

Résumé

Le 15.IX.2014, *Orthotrichia tragetti* Mosely, 1930 a été observé pour la première fois en Belgique. Trois femelles ont été capturées le long d'un des étangs de la réserve naturelle Vloethemveld à Snellegem (province West-Vlaanderen).

Introduction

As already explained elsewhere in this issue (LOCK, 2014), Hydroptilidae are the smallest and least investigated family of Trichoptera. Here, yet another species is reported for the first time in Belgium: *Orthotrichia tragetti* Mosely, 1930.

Material and methods

On 15.IX.2014, Trichoptera were sampled with two light traps near some ponds in the nature reserve Vloethemveld in Zedelgem-Jabbeke (province West-Vlaanderen, UTM: 31UES0766, 10m asl).
Vloethemveld is a former military domain of 171 hectare. The domain is famous for its heath vegetations, species-rich *Nardus* grasslands and mesotrophic ponds. Eleven habitats of the habitat directive 92/43/EEG can be recognized, several of which are situated in the ponds. Relevant habitats for the animal group considered here are: 3110 oligotrophic waters containing very few minerals of sandy plains (*Littorelletea uniflorae*), 3130 oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or the *Isoëto-Nanojuncetea* and 3150 natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation. The investigated ponds belong to the 3110 and 3130 habitats. The water is slightly acid to neutral, with a pH of 5-7. The pond containing *Orthotrichia tragetti* was created in 1986. This pond was managed by mowing the heath vegetation in the surroundings. The water vegetation of the pond (with *Pilularia globulifera, Potamogeton polygonifolius, Myriophyllum alterniflorum*, …) was kept unmanaged until now. The vegetation of the pond bank (*Phragmites australis, Salix repens, Erica tetralix, Juncus acutiflorus, Ranunculus*

Fig. 1. Female *Orthotrichia tragetti* Mosely, 1930 (Photograph: Koen Lock).

Fig. 2. Female *Orthotrichia costalis* (Curtis, 1834) (Photograph: Koen Lock).

flammula, …) was mown annually, together with the heath vegetation as far as the bank was accessible for the mowing machines. More details on abiotic factors, nature management and monitoring of the Vloethemveld can be obtained in ZWAENEPOEL *et al.* (2013a;b).
Identification was performed with the key developed by MARSHALL (1978).

Results

Three females of *Orthotrichia tragetti* Mosely, 1930 (Fig. 1) were sampled with a light trap along a pond in the nature reserve Vloethemveld. The species closely resembles the common species *Orthotrichia costalis* (Curtis, 1834) (Fig. 2). Although these species are usually identified based on the genitalia, also some characteristics were observed that could make it possible to recognise them on the basis of photographs. In *O. costalis*, three black bands are present on the antennae, which are absent in *O. tragetti* and in *O. costalis*, the fringe is markedly paler from the middle to three quarters of the front margin of the fore wing (in rest on the underside), which is not the case in *O. tragetti*.
Other species encountered that night were: *Ecnomus tenellus* (Rambur, 1842) (Ecnomidae), *Agraylea sexmaculata* Curtis, 1834, *Oxyethira flavicornis* Pictet, 1834 (Hydroptilidae), *Mystacides longicornis* (Linnaeus, 1758), *Mystacides azureus* (Linnaeus, 1761), *Oecetis ochracea* (Curtis, 1825) (Leptoceridae), *Limnephilus flavicornis* (Fabricius, 1787), *Limnephilus lunatus* Curtis, 1834, *Limnephilus marmoratus* Curtis, 1834 (Limnephilidae), *Agrypnia varia* (Fabricius, 1793) (Phryganeidae) and *Tinodes waeneri* (Linnaeus, 1758) (Psychomyiidae), which are all common species in stagnant waters.

Discussion

Orthotrichia tragetti was expected to occur in Belgium (LOCK & GOETHALS, 2012). The species was already observed once in the Netherlands on 27.VI.2003, when one specimen was found next to a fen near Ootmarsum in the province Overijssel (VAN KLEEF & ESSELINK, 2004). The species is also known from Northern France, among others from two departments bordering Belgium: Ardennes and Meuse (COPPA, 2014).

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