

First record of *Hydroptila sparsa* Curtis, 1834 (Trichoptera, Hydroptilidae) from Norway

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Hydroptila sparsa Curtis, 1834 (Trichoptera, Hydroptilidae) is recorded for the first time in Norway. Seven specimens, both males and females, were caught in a malaise trap set at Forus, Sola, Rogaland in 2021. The species is common in other parts of NW Europe and has probably been overlooked in Norway in the past.

Key words: Trichoptera, Hydroptilidae, *Hydroptila sparsa*, Norway, Rogaland, new record.

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Introduction

Several specimens of *Hydroptila sparsa* Curtis, 1834, both males and females, were discovered in malaise trap samples from Forus, Sola, Rogaland in 2021. These records represent the first and so far, only records from Norway. *Hydroptilidae* is a family of small to very small species with narrow hind wings, where the longest fringes are longer than the width of the wing. It is a quite species-rich family with around 100 species known from Europe (Barnard & Ross 2012). In Norway, nine species have been recorded including this last addition. *Hydroptila sparsa* is common in the UK, where the species is bivoltine with a flight period from April–October (Barnard & Ross 2012). It has also been recorded on numerous locations in Denmark, Sweden and Finland (GBIF Secretariat 2021). The lack of records in Norway therefore suggests that it has been overlooked rather than being a new immigrant.

Material and methods

Forus is an industrial site on the border between Stavanger, Sola and Sandnes in Rogaland County. Originally, Forus was a wetland, most of which was covered by the very shallow lake Stokkavatnet. Between 1908 and 1913 Stokkavatnet was drained and converted into agricultural land (Røyneberg 2020). Today, Forus Næringspark is maintaining more than 100.000 m² of lawn and other types of greenery. Along some of the channels running through the area as a part of the old drainage system, some of this greenery is set aside as «grassland». In 2021, Forus Næringspark and Museum Stavanger initialized a small malaise trap project, to study the effects of insect-friendly management of green-structure. Three «Bugdorm» malaise traps were set in different types of green structure, of which one was placed on grassland along a channel at Røynebergsletta in the NW part of Forus (Figure 1). In 2021 this grassland-habitat was cut twice, once around 20 July and then again around 20



FIGURE 1. The concrete-encased channel at Røynebergsletta, June 2021. On the right-hand side a strip of «grassland» and the malaise trap in the distance. A second trap is visible to the left, on the lawn. Photo: Alf Tore Mjøs.

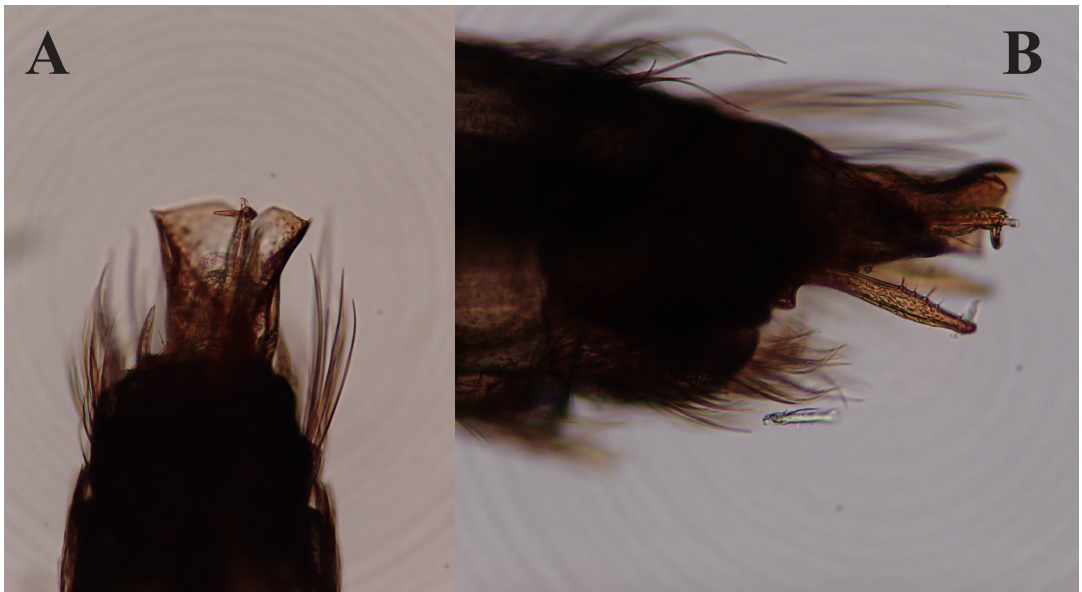


FIGURE 2. *Hydroptila sparsa* from Røynebergsletta, Sola, Rogaland in 2021. The tip of a male abdomen, dorsal (A) and lateral (B) view. Photo: Kjell Magne Olsen.

September. The traps were emptied twice a month, and samples conserved in 75% alcohol. All insects were weighed (weight of wet sample), sorted to family or order, and selected species groups were sent to experts for identification. A number of insect orders, including *Trichoptera*, was sent to Kjell Magne Olsen (Biofokus) for identification to species level. Identification of *Hydroptilidae* in this study is based on Marshall (1978) and Malicky (1983).

The records

Hydroptila sparsa Curtis, 1834 (Figure 2)

Material: RY, Sola, Røynebergsletta (58.90017°N, 5.68956 °E), malaise trap, 2♂♂ 15–29 June, 1♂1♀ 29 June–16 July, 1♂1♀ 31 July–15 August, 1♀ 15 September–1 October 2021, leg. Alf Tore Mjøs, det. Kjell Magne Olsen, coll. K.M. Olsen and Natural History Museum in Oslo.

Three malaise traps were operated at Forus in 2021. Very few *Trichoptera* were recorded in total, other *Hydroptilidae* included *Hydroptila tineoides* and *Oxyethira simplex*. The latter is also a new record for Rogaland County. *Hydroptilidae* were only caught in the trap closest to the concrete-encased channel running through the area. The likely origin for these specimens must be this old drainage channel, despite the fact that the water quality here is «questionable», at best. These channels now divert overflow from the industrial site as well as heavy car traffic on E39 and other roads traversing the area, and the water is quite contaminated with cadmium, copper, chrome and zink, benzo(ghi)perylene and oil. The pollution is unevenly distributed however, and the channel at Røynebergsletta is probably not among the worst affected (Rogaland Fylkeskommune 2014).

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