

**Tracking disappeared species I. Occurrence of *Coleophora juncicolella*
Stainton, 1851 in Hungary (Lepidoptera: Coleophoridae)**

Attila TAKÁCS^{1*} & Csaba SZABÓKY²

¹H-1172 Budapest, Jászivány utca 64, Hungary. E-mail: molyirto@gmail.com

²H-1034 Budapest, Bécsi út 88, Hungary. E-mail: bothv@t-online.hu

Abstract – Although the collection of the Hungarian Natural History Museum (Budapest) does not house any specimens of *Coleophora juncicolella* Stainton, 1851 from Hungary, several works have treated this species as resident since its first report in 1952. We found this species at three new localities in 2017 and 2018. The case is illustrated and a map of distribution in Hungary is given. With 2 figures.

Key words – Microlepidoptera, faunistics, new records, *Calluna vulgaris*

INTRODUCTION

Calluna vulgaris (L.) (Ericaceae), the common heather, is a local species in Hungary (SIMON 1992), which hosts a special fauna including interesting moth species regarded as rare, e.g. *Pleurota bicostella* (Clerck, 1759) (Oecophoridae), *Aristotelia ericinella* (Zeller, 1839) (Gelechiidae), *Pachynemias hippocastanaria* (Hübner, 1799) (Geometridae) or *Anarta myrtilli* (Linnaeus, 1761) (Noctuidae); the latter is legally protected in Hungary. The plant occurs in the North Hungarian Mountains, in the Torna Karst, in the Bakony and Mecsek Mountains as well as in several localities near the western borders of the country.

The family Coleophoridae is represented in Hungary by 220 species assigned to four genera (*Augasma* Herrich-Schäffer, 1853; *Metriotes* Herrich-Schäffer, 1853; *Goniodoma* Zeller, 1849 and *Coleophora* Hübner, 1822) (PASTORÁLIS *et al.* 2016).

Larvae of *Coleophora* species are case-bearing leaf-miners. Most species are monophagous, some are polyphagous, although their cases are essential in identification so it is important to determine the host plant.

* Corresponding author.

Coleophora juncicolella is widely distributed in Europe except for the Mediterranean area due to the lack of its host plant (*Calluna vulgaris* is replaced there by *Erica* spp.).

The Hungarian voucher specimens of *C. juncicolella* could not be located in the collection of the Hungarian Natural History Museum (HNHM). László Gozmány visited the heather population near Uzsa (“Öserdő”) several times and supposedly collected this tiny species; however the specimens may have easily been lost due to their small size. He reported the species in his works (GOZMÁNY 1952, 1956, 1968) from Uzsa, as well as SZABÓKY (1982).

In the last few years Ignác Richter, while revising the *Coleophora* species of Hungary, prepared several thousand genitalia slides but did not find a Hungarian specimen of *C. juncicolella* in HNHM (BUSCHMANN & RICHTER 2016).

MATERIAL AND METHODS

We searched the cases of the species at first in the largest heather population of Hungary known to us, between Ábrahámhegy and Salföld (Balaton Uplands) on 11 November 2017.

The significant heather population of the Harka hill (“Harkai-kúp” at Harka, Sopron Mountains) was driven to our attention by András Ambrus and was examined during the IVth National Meeting of Lepidopterists, on 13 April 2018.

Cases were searched also 2 km north from the collecting site of László Gozmány in Uzsa (Bakony Mountains), in a gravel pit close to Sümeg, on 2 May 2018.

Localities in Őrség (Apátistvánfalva, Hegyhátszentjakab, Kétvölgy, Orfalu) were studied on 28 April 2018.

In the Zemplén Mountains the vicinities of Nagyhuta and Somoska were visited, on 14 May 2018.

RESULTS AND DISCUSSION

Successful searches, with the number of cases found in parentheses, are as follows: Salföld (6); Harka (8); Sümeg (1). Cases were not found either in Őrség or in the Zemplén Mountains.

The cases (Fig. 1) were collected to rear adults. Seven moths emerged from the Harka material and one from Salföld (Fig. 2).

Observing the motion of the cases in the Salföld material lead us to the conclusion that larvae feed until the beginning of permanent frost, and they pupate only in the spring. Hibernation takes place close to the shoots of the host plant, which suffer the most extensive damages due to overgrazing by red deer and roe deer. We suspect that the failure of finding any *C. juncicolella* in Őrség and in the

Zemplén Mountains may have caused by overgrazing, which left obvious traces on the heather populations.

After publication of this paper two specimens of *C. juncicolella* will be deposited in the HNHM.

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Acknowledgements – We are grateful to Balázs Tóth (HNHM) for the English translation. We are indebted to those who helped us in searching cases: Veronika Both, †Vilmos Polonyi, Péter Sulyán and Balázs Tóth. Our thanks are due to Zsolt Szegedi and Péter Tóth for guidance to the heather population in the Zemplén Mountains as well as to András Ambrus for similar help in Harka.



Fig. 1. Case of *Coleophora juncicolella* Stainton, 1851 (photo by Cs. Szabóky)

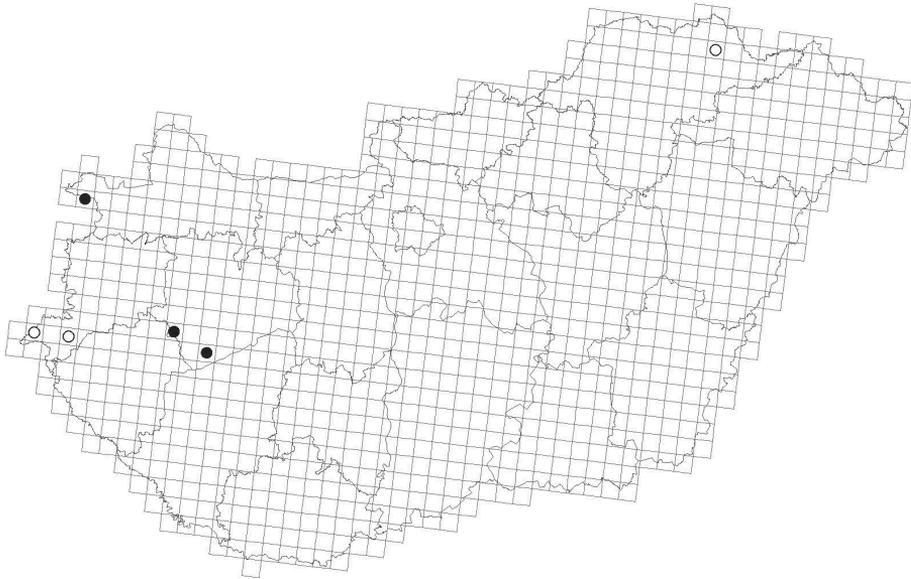


Fig. 2. Distribution of *Coleophora juncicolella* Stainton, 1851 in Hungary. Full dots: the species is present; empty dots: the species was not found but its host plant, *Calluna vulgaris*, is present

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