

FIVE CASE-BEARING MOTHS (LEPIDOPTERA: COLEOPHORIDAE) NEW TO SLOVAKIA

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Abstract: Five species of case-bearing moths (Lepidoptera: Coleophoridae) – *Coleophora occatella* Staudinger, 1880; *Coleophora hackmani* (Toll, 1953); *Coleophora fringillella* Zeller, 1839; *Coleophora bornicensis* Fuchs, 1886 and *Coleophora mareki* Tabell et Baldizzone, 2014 were recorded for the first time from Slovakia. Besides detailed faunistic data, illustrations of imagines and genitalia are given.

Key words: Coleophoridae, *Coleophora occatella*, *Coleophora hackmani*, *Coleophora fringillella*, *Coleophora bornicensis*, *Coleophora mareki*, first records, Lepidoptera, Slovakia.

INTRODUCTION

The case-bearing moths (Lepidoptera: Coleophoridae) are considered as one of the most numerous Lepidopteran families, with more than 1342 described species worldwide (BALDIZZONE et al. 2006). In Slovakia, the Coleophoridae family comprises 198 species (PASTORÁLIS et al. 2013). Recent entomofaunistic surveys executed on various study sites in the country revealed five new Coleophoridae species for Lepidopteran fauna of Slovakia. Here we provide faunistic data about the recorded species in the following order; country, orographic unit, city or village nearby the collection site, number of the faunistic code of the Central European mapping grid system (EHRENDORFER & HAMANN 1965), altitude in meters above sea level (m a.s.l.), date of collection, quantity of the specimen(s) collected and its sex (male (s) = ♂ (♂♂), female(s) = ♀ (♀♀)), collector (leg.), determinator (det.), collection (coll.), number of genital preparation in the collection of Ignác Richter (GP 00000 IgR). Genitalia from all moth specimens were dissected and preparates were used for reliable identification of a specific

taxon. For taxa identification we used the following literature sources: TOLL (1944) – *C. occatella*; RAZOWSKI (1990) – *C. hackmani*; NEL (2001) – *C. fringillella*; SCHREURS et al. (2013), BALDIZZONE (1991) – *C. bornicensis* and TABELL & BALDIZZONE (2014) – *C. mareki*. Short notes about the collection site, collection methods, food plants of larvae and current distribution status were provided, if known. This article contains photographs of imagines and genitalia prepares of subjected species.

RESULTS AND DISCUSSION

Coleophora occatella Staudinger, 1880

Slovakia, Borská nížina, Moravský Svätý Ján, [7467], 148 m a.s.l., 1. 7. 2011, 1 ♀, leg. Štefanovič Roland, det. Zhakov Alexandr, coll. Richter Ignác, GP 18375 IgR. A single specimen was caught on light trap. According to our knowledge its food plant is not known. Distribution: Bulgaria, Romania, South Russia, Ukraine (ANIKIN 1998; BALDIZZONE & PATZAK 1991; BALDIZZONE et al. 2006; BALDIZZONE & VAN DER WOLF 2013). Figures 1 – 2.



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***Coleophora hackmani* (Toll, 1953)**

Slovakia, Borská nížina, Lakšárska Nová Ves, [7469], 226 m a. s. l., 26. 7. 2013, 1 ♀, leg. Richter Ivan, det. Richter Ignác, coll. Richter Ivan, GP 20446 IgR. One specimen was caught on light trap. Larvae feed on *Silene nutans*. Distribution: Mongolia, Altay, Denmark, Latvia, Spain, Portugal, Estonia, Romania, Sweden, Finland, Norway (BALDIZZONE et al. 2006; BALDIZZONE & VAN DER WOLF 2013). Figures 3 – 4.

***Coleophora fringillella* Zeller, 1839**

Slovakia, Podunajská rovina, Nové Zámky, [8074], 113 m a. s. l., 17. 5. 2005, 1 ♂, leg. Šima Peter, det. & coll. Richter Ignác., GP 21259 IgR. One specimen caught on light trap in a garden ("Kvitnúci ostrov" gardening colony situated in alluvium of the Nitra river). Food plant is not known. Distribution: Austria, France, Hungary, Italy, Romania (BALDIZZONE et al. 2006; BALDIZZONE & VAN DER WOLF 2013). Figures 5 – 6.

***Coleophora bornicensis* Fuchs, 1886**

Slovakia, Podunajská pahorkatina, Šurany, [7975], 125 m a. s. l., 2. 6. 2014, 4 ♂♂, 5 ♀♀ (ex larvae), leg., det. & coll. Richter Ignác., GP 21499 IgR, GP 21500 IgR. Nine imagines reared from larvae collected on *Tanacetum vulgare*. Field margin in the alluvium of the Nitra river. Distribution: Germany, The Netherlands, Ukraine (Crimean peninsula) (BALDIZZONE



Figure 1. *Coleophora occatella*, adult, wingspan 15 mm (Photograph: Ignác Richter).

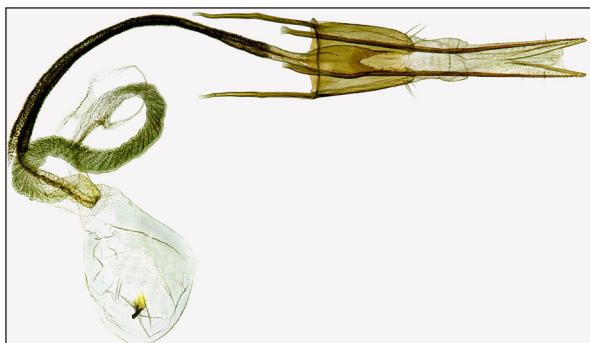


Figure 2. *Coleophora occatella*, female genitalia GP 18375 IgR (Photograph: Ignác Richter).



Figure 3. *Coleophora hackmani*, adult, wingspan 16 mm (Photograph: Ignác Richter).

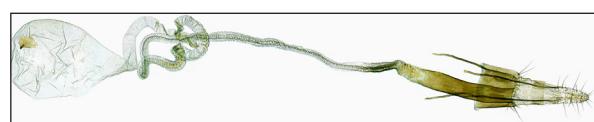


Figure 4. *Coleophora hackmani*, female genitalia GP 20446 IgR (Photograph: Ignác Richter).



Figure 5. *Coleophora fringillella*, adult, wingspan 19 mm (Photograph: Ignác Richter).



Figure 6. *Coleophora fringillella*, male genitalia GP 21259 IgR (Photograph: Ignác Richter).

et al. 2006; BALDIZZONE & VAN DER WOLF 2013; BUDASHKIN pers. comm.; SCHREURS et al. 2013). Figures 7 – 9.

Coleophora mareki Tabell & Baldizzone, 2014

Slovakia, Slovenský kras, Vidová, [7488], 360 m a.s.l., 5. 8. 2000, >10 ♂♂, >10 ♀♀, leg., det. & coll. Richter Ignác; Slovakia, Čierna hora, Veľká Lodina, [7192], 290 m a.s.l., 1. – 3. 8. 2013, >10 ♂♂, >10 ♀♀,

leg., det. & coll. Richter Ignác, GP 21961 IgR; Slovakia, Strážovské vrchy, Šípkov, [7175], 370 m a.s.l., 31. 7. 2004, >10 ♂♂, >10 ♀♀, leg., det. & coll. Richter Ignác; Slovakia, Strážovské vrchy, Dolné Vestenice, [7276], 320 m a.s.l., 15. 6. 2012, >10 ♂♂, >10 ♀♀, leg., det. & coll. Richter Ignác, GP 18547 IgR; Slovakia, Tribeč, Kostoľany pod Tribečom, [7575], 350 m a.s.l., 28. 6. 2014, 1 ♂, leg. Šima Peter, det. & coll. Richter Ignác. All above mentioned specimens were caught on light trap placed in xerothermic localities. *Coleophora mareki* is a recently described taxon from the *Coleophora serpylletorum* species group. Monophagous on *Teucrium chamaedrys*. Distribution: Iraq, Turkey, Bulgaria, Greece, Macedonia, Croatia, Italy (including Sardinia), France, Czech Republic, Austria, Hungary, Ukraine (TABELL & BALDIZZONE 2014). Figures 10 – 12.



Figure 7. *Coleophora bornicensis*, adult, wingspan 12 mm (Photograph: Ignác Richter).

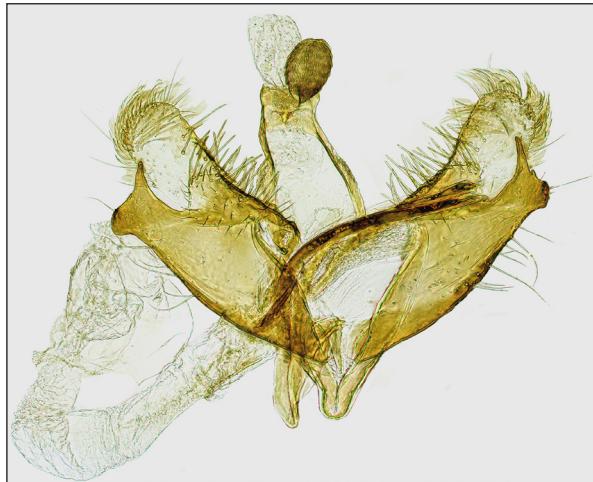


Figure 8. *Coleophora bornicensis*, male genitalia, GP 21499 IgR (Photograph: Ignác Richter).

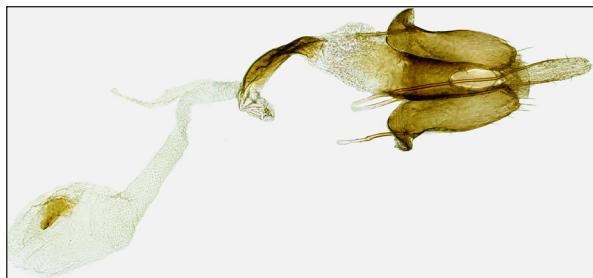


Figure 9. *Coleophora bornicensis*, female genitalia, GP 21500 IgR (Photograph: Ignác Richter).



Figure 10. *Coleophora mareki*, adult, wingspan 16 mm (Photograph: Ignác Richter).

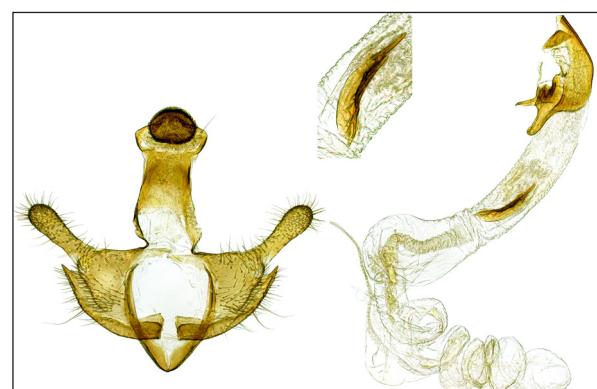


Figure 11. *Coleophora mareki*, male genitalia, GP 18547 IgR (Photograph: Ignác Richter).



Figure 12. *Coleophora mareki*, female genitalia, GP 21961 IgR (Photograph: Ignác Richter).

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