

Studies on the Coleophoridae (Lepidoptera) of Poland.
IV. *Coleophora chrysanthemi* HOFMANN, 1869
– a new species to the Polish fauna

Badania nad fauną Coleophoridae (Lepidoptera) Polski.
IV. *Coleophora chrysanthemi* HOFMANN, 1869
– gatunek nowy dla fauny Polski

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ABSTRACT: *Coleophora chrysanthemi* HOFMANN has been recorded for the first time from Poland. The data on its biology and diagnostic features enabling its identification are presented.

KEY WORDS: Lepidoptera, Coleophoridae, *Coleophora chrysanthemi*, faunistics, new record, Poland

Introduction

During investigations of the leaf-mining moths of the Biedrusko military area in western part of the country, *Coleophora chrysanthemi* HOFMANN, 1869 – a species new to Polish fauna has been collected. Therefore, the amount of Coleophoridae evidenced in Poland (RYNARZEWSKI 2000, FUGLEWICZ & FUGLEWICZ 2002, RYNARZEWSKI et al. 2007, STÜBNER 2007, BARAN & RYNARZEWSKI 2008) increased to 150 species. Because none of the published monographs on North and Central European Coleophoridae include the information about this species, we decided to attach a short re-description and illustrations of its genitalia.

Adult

Coleophora chrysanthemi is a rather small representative of the family. The wingspan varies between 7.5 and 10 mm. The head and thorax are greyish-yellow for males and whitish-yellow in females. The antenna with scape of the same colour as the head and flagellum entirely chequered black and white. The ground colour of forewing ochreous- or greyish-yellow with whitish longitudinal lines. In male, the forewing darker than in female. Hindwing dark grey in males, somewhat lighter in female. In female genitalia (Fig. 1–3) the most characteristic feature is the occurrence of the second spiny signum. In male genitalia (Figs. 4–5) two rod-like sclerites of phallosome and sacculus with finger-like process, which has two spines at the base.

Bionomy

In Finland this species occurs on xerothermic meadows (KYRKI et al. 1984). In Poland it has been collected in a complex of dry meadows and thickets. Larvae mine the leaves of *Tanacetum corymbosum* (L.) SCH.BIP. and *Tanacetum vulgare* L. (FALKOVITSH 2006). KYRKI et al. (1984) assume that it can also live on *Leucantemum vulgare* Lam. or less probably on *Achillea millefolium* L. Fully grown larvae construct an almost straight, trivalved, tubular case 7 mm long. The case is yellowish brown and longitudinally darkly striped (HOFMANN 1869). In Finland the adults have been caught from mid-May until the end of June (KYRKI et al. 1984). Caterpillars feed from July to the beginning of August (HOFMANN 1869).

Distribution

The species has been recorded from several European countries: Austria, the Czech Republic, Germany, Hungary, Slovakia, Italy and Finland (BALDIZZONE & VAN DER WOLF 2011).

Remarks

C. chrysanthemi may be discovered in other localities in Poland as *T. vulgare* is common throughout the whole area of the country. The distribution of the second host plant, *T. corymbosum*, is restricted to the southern part of Poland (RUTKOWSKI 2004). It should be noted that common tansy is also a host plant of other leaf-mining casebearers: *C. caelebipennella* Z., *C. expressella* KLEM., *C. partitella* Z. and *C. trochilella* (DUP.), but their larval cases are distinctly different. FALKOVITSH (2006) also incorrectly mentioned *C. follicularis* (VALLOT), which actually mine the leaves of *Eupatorium cannabinum* L. (RYNARZEWSKI et al. 2007).

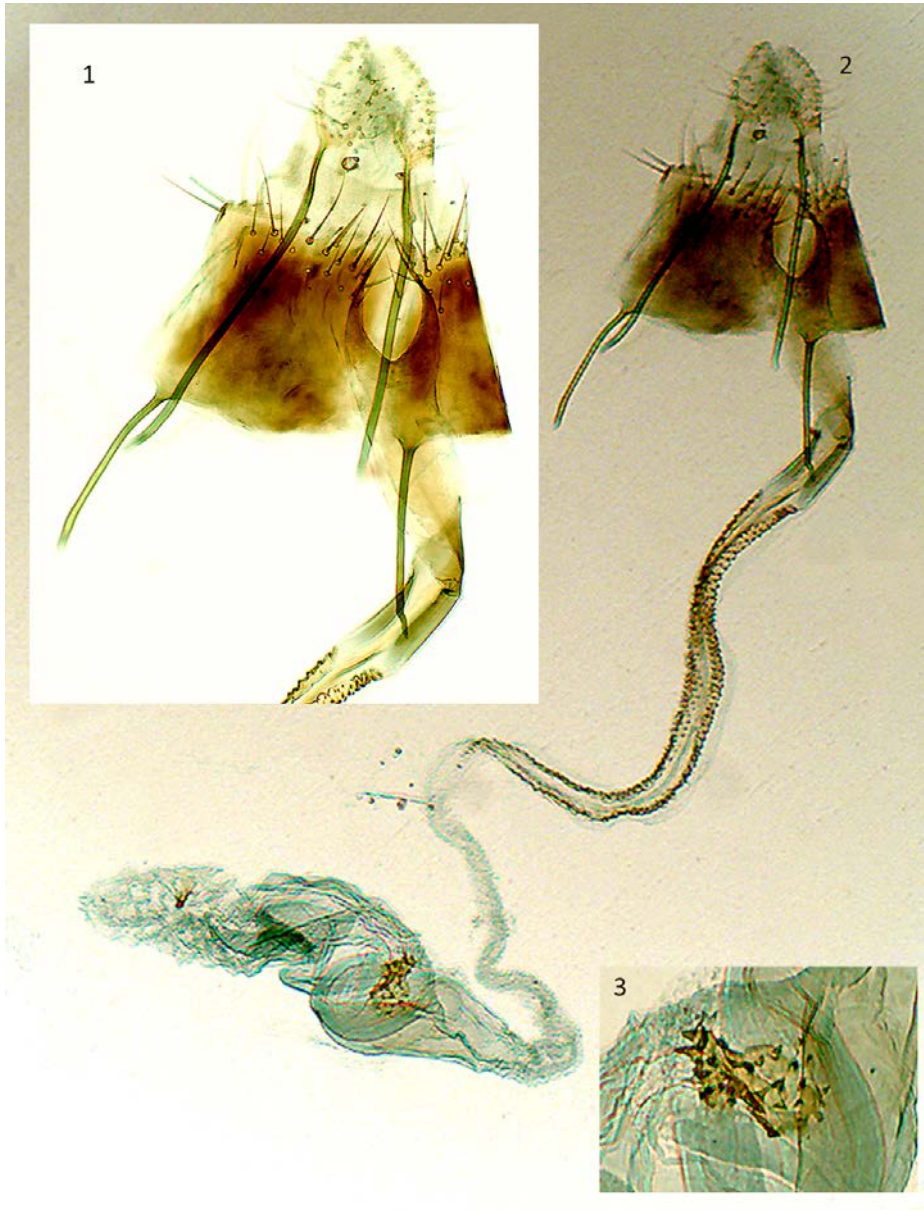


Fig. 1–3. Female genitalia of *Coleophora chrysanthemii* HOFMANN (phot. T. RYNARZEWSKI). 1 – ovipositor, sterigma and colliculum enlarged. 2 – ventral aspect. 3 – spiny signum enlarged.

Ryc. 1–3. Genitalia samicy *Coleophora chrysanthemii* HOFMANN (fot. T. RYNARZEWSKI). 1 – pokładełko, sterygma i kolikulum w powiększeniu. 2 – widok od strony brzusznej. 3 – kolczaste znamię w powiększeniu.

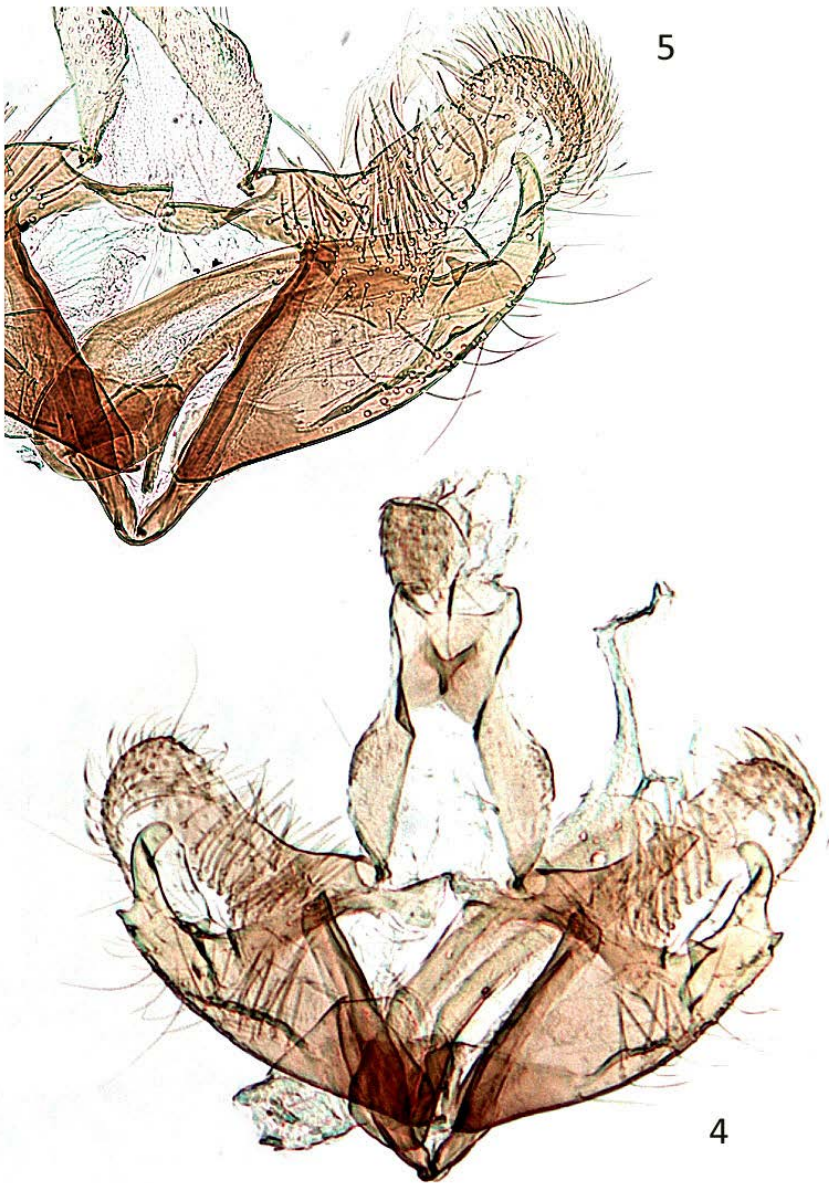


Fig. 4–5. *Coleophora chrysanthemii* HOFMANN (phot. R. SILOAHO).
4 – male genitalia. 5 – sacculus and phallosome enlarged.

Ryc. 4–5. *Coleophora chrysanthemii* HOFMANN (fot. R. SILOAHO).
4 – aparat kopulacyjny samca. 5 – sakulus i falloteka w powiększeniu.

Material examined:

– Biedrusko military area (XU22), 4 VII 2006, 3 ♀♀, collected at dusk.

Acknowledgements

We are grateful to Mr. J. TABELL (Hartola, Finland) for photographs of the male genitalia taken by R. SILOAHO. We are also indebted to Prof. J. BUSZKO (Toruń, Poland) for critical comments on the draft. U. WALCZAK thanks Land Forces Training Centre (Poznań, Poland) for permission to carry out field studies in the military area.

STRESZCZENIE

W pracy przedstawiono pierwsze stwierdzenie *Coleophora chrysanthemi* HOFMANN, 1869 na terenie Polski: poligon wojskowy Biedrusko (UTM: XU22), 4 VII 2006, 3 ♀♀. *Coleophora chrysanthemi* występuje na suchych murawach. Gatunek ten wykazany został dotychczas z Austrii, Czech, Niemiec, Węgier, Słowacji, Włoch i Finlandii.

REFERENCES

- BALDIZZONE G., VAN DER WOLF H. 2011: Fauna Europaea: Coleophoridae. [In:] KARSHOLT, O. & NIEUKERKEN, E.J. van (eds.) Fauna Europaea: Lepidoptera, Moths. Fauna Europaea version 2.4. <http://www.faunaeur.org>.
- BARAN T., RYNARZEWSKI T. 2008: First record of *Coleophora amellivora* BALDIZZONE, 1979 (Lepidoptera: Coleophoridae) from Poland. Polish Journal of Entomology, **77**: 125-131.
- FALKOVITSH M.I. 2006: Host-plant relationships of the casebearers (Lepidoptera, Coleophoridae): Communication III. Entomological Review, **86**: 264-286.
- FUGLEWICZ E., FUGLEWICZ S. 2002: *Coleophora hydrolapathella* M. HERING, 1921 (Lepidoptera: Coleophoridae) – gatunek nowy dla fauny Polski. Wiadomości Entomologiczne, **21**: 163-166.
- HOFMANN O. 1869: Beiträge zur Naturgeschichte der Coleophoren. Entomologische Zeitung, **30**: 107-122.
- KYRKI J., PELTONEN O., VON SCHANZ M. 1984: *Coleophora chrysanthemi* HOFMANN in Finland (Lepidoptera, Coleophoridae). Notulae Entomologicae, **64**: 81-83.
- RUTKOWSKI L. 2004. Klucz do oznaczania roślin naczyniowych Polski niżowej. Wydawnictwo PWN, Warszawa, 812 pp.
- RYNARZEWSKI T. 2000: Coleophoridae. (pp. 38-42). [In:] BUSZKO J., NOWACKI J. (eds), The Lepidoptera of Poland. A Distributional Checklist. Polish Entomological Monographs, **1**.

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- RYNARZEWSKI T., FUGLEWICZ E., FUGLEWICZ S., WALCZAK U. 2007: Badania nad fauną Coleophoridae (Lepidoptera) Polski. III. Uwagi o *Coleophora follicularis* VALOT. Wiadomości Entomologiczne, **26**: 15-17.
- STÜBNER A. 2007: Taxonomische Revision der *Coleophora frishella* – Artengruppe (Coleophoridae). Nota Lepidopterologica, **30**: 121-172.