

Two new to the Polish fauna species of Lepidoptera from Wigry National Park

<http://doi.org/10.5281/zenodo.1422387>

JAROSŁAW BUSZKO¹, EWA JURKIEWICZ², ANNA KRZYSZTOFIAK³

^{1,2} Katedra Ekologii i Biogeografii, Uniwersytet Mikołaja Kopernika, ul. Lwowska 1, 87-100 Toruń

³ Wigierski Park Narodowy, Krzywe 82, 16-402 Suwałki

e-mail: ¹ buszko@umk.pl, ² ejurk@umk.pl, ³ krzysztofiak.anna@gmail.com

ABSTRACT. Two new to the Polish fauna species of Lepidoptera from Wigry National Park.

Faunistic inventory of Lepidoptera conducted in Wigry National Park resulted in discovery of *Denisia luticiliella* (Oecophoridae) and *Lepteucosma huebneriana* (Tortricidae). Both species are new to the Polish fauna. Their habitat preference and distribution are discussed.

KEY WORDS: *Denisia luticiliella*, *Lepteucosma huebneriana*, Oecophoridae, Tortricidae, faunistics, new records, Wigry National Park.

INTRODUCTION

The Wigry National Park, situated in north-east corner of Poland is one of most valuable nature areas in the region. A great variety of landscape forms, with large areas of lakes and forests make home for great diversity of plants and animals. Since 2013 several projects on butterflies and moths have been carried out in the Park. Besides evaluation of size of open mid-forest areas on butterfly diversity, and general inventory of lepidopteran fauna, the structure of domination of moths in principal forest types was studied. This study provided a long list of species, among them two were for the first time recorded in Poland. It seems that they are newcomer in the Polish fauna, and they are the subject of this paper.

The project was financially supported by Forest Fund following the contract no. EZ.0290.1.6.2016 of 29.08.2016.

MATERIAL AND METHODS

Moths were collected when attracted to the screen illuminated by mercury vapour light or by the use of light traps with UV tubes. To state the identity of species, which were worn in some cases, genital slides were made following commonly applied procedures. Moths and genital slides are stored in authors' collections.

RESULTS

Oecophoridae BRUAND, 1851

Denisia luticiliella (ERSCHOFF, 1877) (Fig. 1)

1♂, [FE39] Stary Folwark, indoor, 12.06.2016, J. Buszko leg.

1♀, [FE48] Wigry National Park, Bańka (near Czerwony Krzyż), coniferous mixed forest, 5.07.2018, A. Krzysztofiak leg.



Fig. 1. *Denisia luticiliella* (ERSCH.) – adult (photo J. Buszko).

Ryc. 1. *Denisia luticiliella* (ERSCH.) – motyl (fot. J. Buszko).

Tortricidae LATREILLE, 1802

Lepteucosma huebneriana KOÇAK, 1980 (Fig. 2, 3)

3♂, [FE39] Wigry National Park, at Kamionka River (near Huta), mixed forest, 4.07.2015, A. Krzysztofiak leg.

1♂, [FE39] Wigry National Park, at Kamionka River (near Huta), mixed forest, 20.07.2017, J. Buszko leg.

1♂, [FE39] Wigry National Park, Walik (near Sobolewo), deciduous forest, 29.06.2016, J. Buszko leg.

1♂, [FE39] Wigry National Park, Walik (near Sobolewo), deciduous forest, 14.07.2017, A. Krzysztofiak leg.

1♂, [FE48] Wigry National Park, Suche Bagno (near Czerwony Krzyż), coniferous mixed forest, 7.07.2015, J. Buszko leg.



Fig. 2. *Leptucosma huebneriana* KOÇAK – adult (photo J. Buszko).

Ryc. 2. *Leptucosma huebneriana* KOÇAK – motyl (fot. J. Buszko).

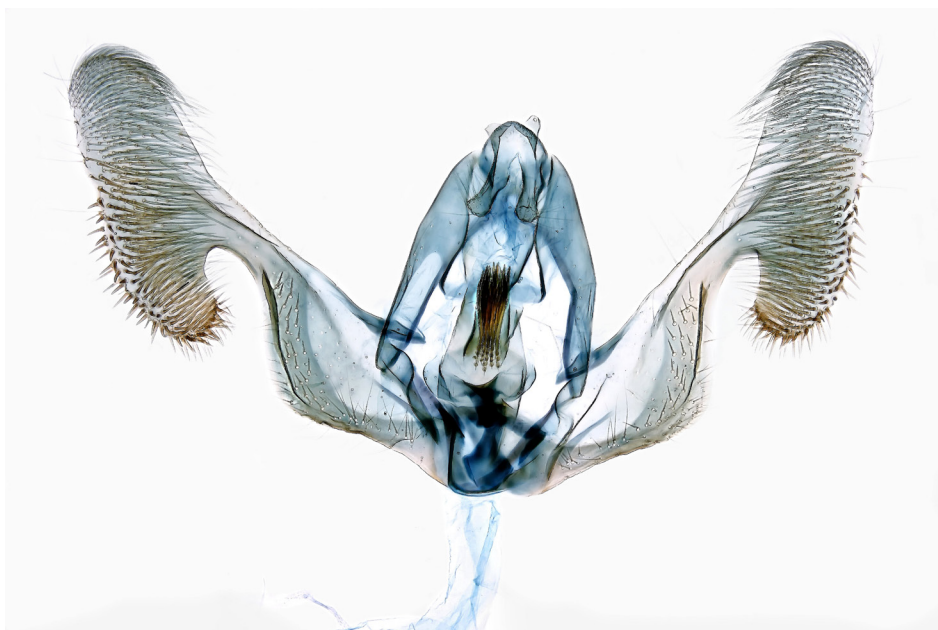


Fig. 3. *Leptucosma huebneriana* KOÇAK – male genitalia (photo G. Banasiak).

Ryc. 3. *Leptucosma huebneriana* KOÇAK – aparat kopolacyjny samca (fot. G. Banasiak).

FAUNISTIC COMMENTS

Denisia luticiliella represents a very specific disjunctive pattern of the distribution. Until 1981 it was known only from Caucasus (LVOVSKY 1981). From 1988 its presence was stated in Lithuania and Latvia (IVINSKIS 2004, LVOVSKY 2001, 2013, TOKÁR *et al.* 2005). Discovery of this species in Poland supports the idea of extending its distribution range westwards. IVINSKIS (2004) mentions about finding adults on trunks of *Salix fragilis*. In Wigry National Park breeding sites and larval food are not known. In surveyed forest habitats one specimen was collected by light trap in mixed spruce-pine forest.

Lepteucosma huebneriana is widely distributed in southern and locally central Europe, and its eastern part or distribution range extends until Far East of Russia. It is known also from Lithuania and Latvia (AARVIK 2013). As host plants are reported various species of *Rubus*, and larvae used to feed in spun leaves on top shoots (SCHÜTZE 1931, RAZOWSKI 2003). In Poland the species spreads from the south along eastern areas, while in the west its expansion is restrained by the Carpathians.

REFERENCES

- AARVIK L.E. 2013. Fauna Europaea: Tortricidae, In: KARSHOLT O., NIEUKERKEN E.J. van, Fauna Europaea: Lepidoptera, Moths. Fauna Europaea version 2.6. <http://www.fauna-eu.org>.
- IVINSKIS P. 2004. Lepidoptera of Lithuania, Annotated catalogue, Vilnius, 380 pp.
- LVOVSKY A. 1981. Oecophoridae, In: Keys for identification Insects of European part of USSR 4(2): 560–638.
- LVOVSKY A. 2001. New and little known species of flat and winged moths (Lepidoptera, Depressariidae, Oecophoridae) in the fauna of Russia and adjacent countries. *Zoologicheskij zhurnal* 80(12): 1459–1467.
- LVOVSKY A. 2013. Fauna Europaea: Oecophoridae, In: KARSHOLT O., NIEUKERKEN E.J. van (2013) Fauna Europaea: Lepidoptera, Moths. Fauna Europaea version 2.6. <http://www.fauna-eu.org>.
- RAZOWSKI J. 2003. Tortricidae of Europe, Vol. 2, Olethreutinae, Bratislava, 301 pp.
- SCHÜTZE K.T. 1931. Die Biologie der Kleinschmetterlinge unter besonderer Berücksichtigung ihrer Nährpflanzen und Erscheinungszeiten, Frankfurt am Main, 235 pp.
- TOKÁR Z., LVOVSKY A., HUEMER P. 2005. Die Oecophoridae s.l. (Lepidoptera) Mitteleuropas. Bestimmung – Verbreitung – Habitat – Bionomie. Bratislava, 120 pp.

STRESZCZENIE

Dwa nowe dla fauny Polski gatunki motyli (Lepidoptera) z Wigierskiego Parku Narodowego

Praca zawiera informacje o dwóch nowych dla fauny Polski gatunkach znalezionych w Wigierskim Parku Narodowym. *Denisia luticiliella* (Oecophoridae) znany był wcześniej z Kaukazu, a od 1988 roku z republik nadbałtyckich. Jego pojawienie się w Polsce należy interpretować jako ekspansję zasięgu w północnej części arealu. *Lepteucosma huebneriana* (Tortricidae) jest gatunkiem o szerokim zasięgu obejmującym obszar od Francji po wschodnie krańce Azji. Gatunek ten znany jest z południowej części Europy Środkowej, ale także z Litwy i Łotwy. Pojawienie się tego gatunku w Polsce może być zarówno wynikiem jego ekspansji na północ tzw. „ścianą wschodnią” kraju jak i zwiększania zasięgu w kierunku zachodnim od strony wymienionych krajów bałtyckich.

Accepted: 3 September 2018; published: 20 September 2018

Licensed under a Creative Commons Attribution License <http://creativecommons.org/licenses/by/4.0/>