

***Phyllocnistis valentinensis* HERING, 1936 (Lepidoptera:
Gracillariidae) in Poland**

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ABSTRACT. *Phyllocnistis valentinensis* HERING, 1936 (Lepidoptera: Gracillariidae) in Poland.

Phyllocnistis valentinensis HERING, 1936 has recently been discovered in Poland. Tenanted mines were found in Toruń on *Salix alba* and its hybrids in the riverside willow carrs on the Vistula River. The species is new to the Polish fauna.

KEY WORDS: *Phyllocnistis valentinensis*, Gracillariidae, leafminers, *Salix alba*, new record, range expansion, Poland.

INTRODUCTION

When searching for *Phyllonorycter* mines on willows in riverside willow-poplar carrs on Vistula River, to my surprise, I encountered mines of *Phyllocnistis valentinensis* HERING. This is the first record of this species in Poland. The present occurrence of species is limited to a small area within the city of Toruń (UTM: CD37, CD47). The mines were detected at several closely located spots. Exploration of many more distant locations turned out to be unsuccessful.

The species is distributed generally in southern Europe and western Asia from Spain to Kazakhstan and Iran. It appeared in Central Europe relatively recently and is apparently expanding its range northwards. The first record comes from Austria in 1995 (DESCHKA 2014). Later the species was discovered in Czech Republic and Slovakia in 2012 (PASTORÁLIS *et al.* 2013) as well as in Belgium in 2013 and finally in Germany and the Netherlands in 2017 (NIEUKERKEN & WULLAERT 2018). Recently it was also found in Slovenia (GOMBOC & KIRICHENKO 2022).

MATERIAL AND METHODS

Tenanted mines were collected from September 10 to October 1, 2024. The mines were much more common than those of *Phyllocnistis saligna* (ZELLER, 1839) on the same host plant. Yellowish mines were present only on the lower side of the leaf. Sometimes there were two or more mines on one leaf (Figs. 1.1, 1.2). For rearing, leaves with mines were kept in plastic containers until the moths hatched. Out of over 300 collected mines, only 27 adults appeared between September 12 and October 5. A high share of parasitoids from the superfamily Chalcidoidea was noticed. Older mines belonging to the summer generation were not found. The larva is yellow with widened thoracic segments and yellowish-brown head (Fig. 1.3). Pupa slender, yellowish-brown to dark brown with

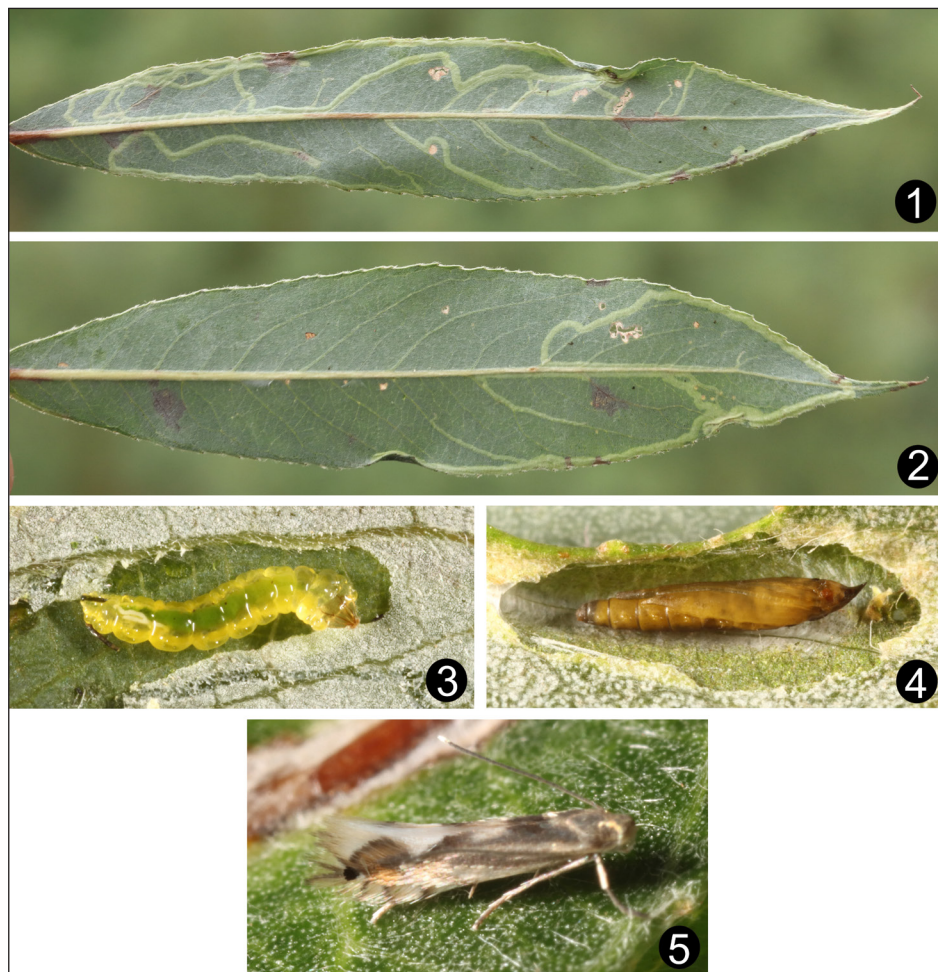


Fig 1. *Phyllocnistis valentinensis* M. HERING: 1, 2 – mines in the leaves of *Salix alba* L., 3 – larva, 4 – pupa, 5 – adult. (photo J. Buszko).

Ryc. 1. *Phyllocnistis valentinensis* M. HERING: 1, 2 – miny w liściach *Salix alba* L., 3 gąsienica, 4 – poczwarka, 5 – imago (fot. J. Buszko).

prominent frontal hook (Fig. 1.4). Adult with variably developed darker fields on the forewing (Fig. 1.5). Mines were found on the following willow species: *Salix alba* ssp. *alba* L., *Salix* × *pendulina* WENDER and *Salix* × *fragilis* L. Most preferred were two first species. On *Salix* × *fragilis* mines appeared only occasionally.

FAUNISTIC COMMENTS

The occurrence of large population in Toruń is surprising and difficult to explain, considering the large distance from known sites. Accidental dispersion as well as unintentional introduction may be taken into account. Host plants are common everywhere

and therefore rapid expansion of this species is expected in the coming years. It is likely that it will follow a similar pattern to the expansion in Poland of *Phyllocnistis xenia* HERING, 1936 which took place at the beginning of this century.

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Streszczenie

***Phyllocnistis valentinensis* HERING, 1936 (Lepidoptera: Gracillariidae) w Polsce.**

W trakcie jesiennych poszukiwań motyli minujących, znaleziono nowy dla fauny Polski gatunek – *Phyllocnistis valentinensis* HERING. Obecność gatunku stwierdzono w środowisku łęgów wierzbowo-topolowych nad Wisłą w Toruniu. Poszukiwania w innych miejscowościach nie przyniosły pozytywnych wyników. Miny występowały na wąskolistnych wierzbach – *Salix alba*, *S. × pendulina* i *S. × fragilis* i były bardzo liczne. Czasami na jednym liściu znajdowały się dwie lub nawet trzy miny. Z ponad 300 zebranych liści wyhodowano zaledwie 27 okazów imago, większość larw motyli była spasożytowana przez błonkówki z nadrodziny Chalcidoidea. Należy spodziewać się ekspansji gatunku w nadchodzących latach, podobnie jak to ma miejsce w krajach zachodniej Europy.

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