

***Protarchanara brevilinea* FENN, 1864 – a moth species new to Poland
(Lepidoptera: Noctuidae)**

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ABSTRACT. This is the first record of *Protarchanara brevilinea* (Lepidoptera, Noctuidae) from Poland. It was found in Western Pomerania, NW Poland.

KEY WORDS: Lepidoptera: Noctuidae, *Protarchanara brevilinea*, new record, Poland.

INTRODUCTION

For a long time *Protarchanara brevilinea* FENN, 1864, which belongs to the Apameini tribe, was classified in the genus *Photedes* LEDERER, 1857 (POOLE 1989). Owing to the significant differences between the male and female reproductive organs of *P. brevilinea* and the other representatives of *Photedes* sp., however, a new genus *Protarchanara* BECK, 1999, was set up for the single species of *P. brevilinea*. Subsequently, *Protarchanara abrupta* (EVERSMANN, 1854), a Middle-Palaeartic species, was also incorporated into the genus (ZILLI et al. 2005).

Protarchanara brevilinea is a species with a Euro-Siberian range. In Europe it has a disjunct distribution, occurring in two widely separated areas: a north-western one, demonstrating a typical Atlantic range, and a south-eastern area, extending from Crimea across the steppes of southern Russia to the Caspian Sea coast (SINEV et al. 2008). In the Atlantic region *P. brevilinea* occurs at an isolated site in western France and along North Sea coasts in England, Holland, Denmark and Germany. It is also found along the Baltic coasts of Denmark, Germany and southern Sweden, and in the east in southern Finland,

Russia, Estonia, Latvia and Lithuania (Fig. 1) (KARSHOLT & NIELSEN 1998, SAVENKOV et al. 1996, SINEV et al. 2008, SKOU 1991, VIIDALEPP 1995).

In central Europe the species has so far been reported only from northern Germany and Lithuania, where it is mostly local and scarce (NOWACKI 1998). Hence, its range along the Baltic coast (Fig. 1) was discontinuous given the lack of reports of this species from Poland (BUSZKO, NOWACKI 2000), which, despite many attempts to find it had not been confirmed earlier (NOWACKI 1994). Outside Europe *P. brevilinea* has a very local range in a narrow strip from the northern Caucasus through western Siberia, from the shores of Lake Baikal to the Amur valley and in the Primorsky and Khabarovsk Regions, where it reaches the Pacific coast (KONONENKO 2005). It has also been reported from Japan (INOUE et al. 1982).

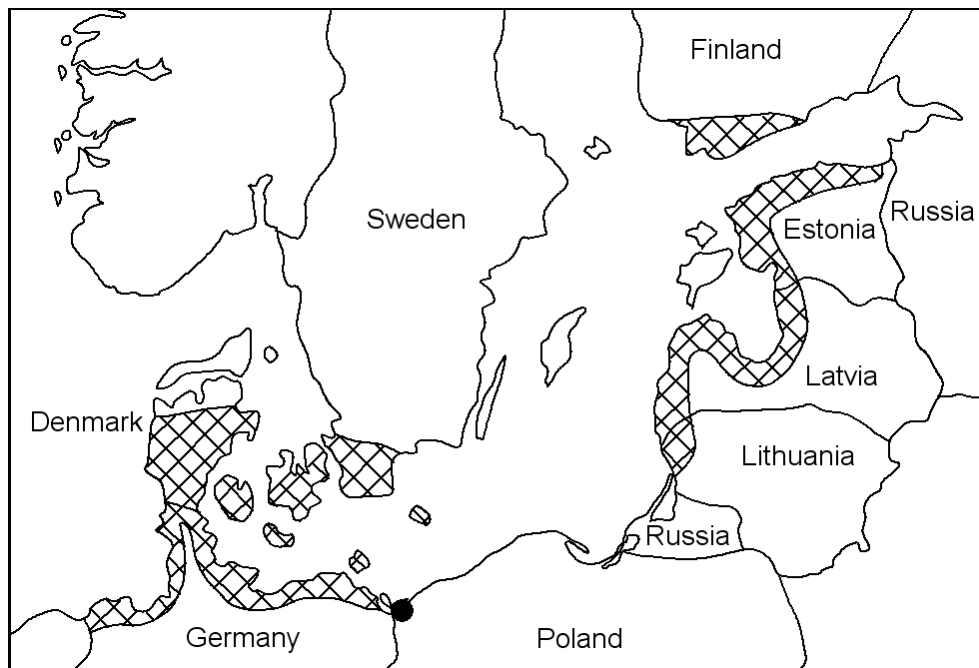


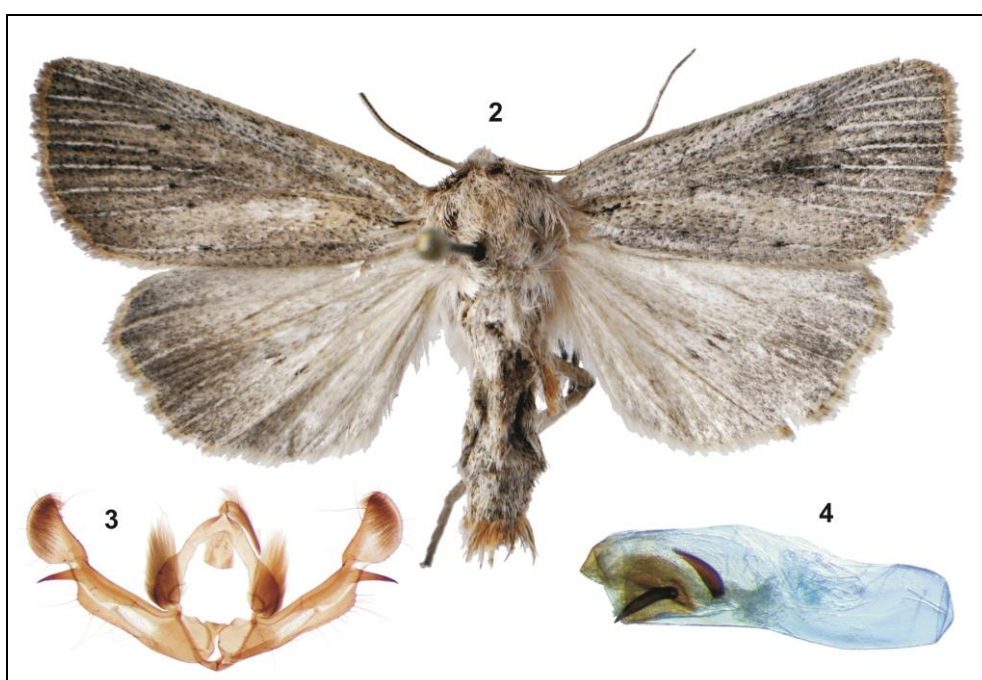
Fig. 1. Distribution of *Protarchanara brevilinea* in the Baltic Region.

MATERIAL AND METHODS

Based on the range of *P. brevilinea* known so far along the Baltic coast, it was hypothesised that the species should also occur in Poland. For many years light and bait traps were set up in habitats potentially suitable for the species.

RESULTS

As part of a study of moths in north-western Poland, i.e. the province of Western Pomerania, *Protarchanara brevilinea* was caught in a light trap at one site: Świnoujście-Karsibór 28 VII 2013, 2 VIII 2014, UTM: VV56, 2exx. R. WAŚALA leg. (Figs 2-4). The study site is shown on the Fig. 5.



Figs 2-4. *Protarchanara brevilinea* – Poland, Świnoujście-Karsibór, 28 VII 2013, leg. R. WAŚALA: 2 – imago; 3 – male genitalia; 4 – aedeagus.

DISCUSSION

The Polish specimen of *P. brevilinea* was caught in a *Phragmitetum australis* reed bed. This corroborates previous information that the species is found in this type of reed bed, where Common Reed *Phragmites australis* (CAVANILLES) TRINIUS ex STEUDEL, 1841 occurs mainly on the sandy shores of coastal lagoons beyond the range of the water for the most of the year (AHOLA & SILVONEN 2008, SKOU 1991). Adult moths appear in one



Fig. 5. The site of catch of *Protarchanara brevilinea* in Świnoujście-Karsibór (Poland).

generation from mid-July to mid-August. Females lay eggs which overwinter on Common Reed. The larvae grow from spring until the end of the June, seeking food within the common reed and while seeking food they are frequently seeking the host plant. Pupation occurs on the ground, near the food plant and the pupa is protected within a delicate case (AHOLA & SILVONEN 2008).

The finding of *P. brevilinea* in Poland is a very important discovery, as it confirms the continuity of the species' range along the southern coast of the Baltic. Moreover, taking into consideration the ecological nature of the Polish Baltic coast, one can assume that the species will be reported from other sites there in the future.

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