

THE LEAF-MINER FLY *AGROMYZA BROMI* NEW TO THE NETHERLANDS

(DIPTERA: AGROMYZIDAE)

Barry Warrington

The agromyzid flies form a rather species-rich family. In the Netherlands about 200 species are known, but the group is clearly under-recorded. The larvae are miners in plants, usually making distinctive feeding patterns in the leaves. *Agromyza bromi* was found in 2016 in Malaise trap material collected at three localities at the Dutch coast. This is the first record of the species in the Netherlands.

INTRODUCTION

In 2016 Joop Prijs collected flies with Malaise traps along the Dutch coast. The traps were placed at three sites, Egmond-Binnen (AC 105.00 510.65) (fig. 2), Heemskerk (AC 103.06 503.25) (fig. 3) and Meneersche Plaat (AC 071.80 421.44) (fig. 4). The first two localities are dunes, the third borders the Haringvliet (fig. 5). In all samples *Agromyza bromi* Spencer, 1966 was found: two males from Egmond-Binnen, one male from Heemskerk and one male from Meneersche Plaat.

The specimens were sent to the author, organiser of the National Agromyzidae Recording Scheme in Great Britain, who could confirm the identification by genitalia dissection. These are the first records for the Netherlands. The four specimens were returned to Ruud van der Weele, who intends to deposit at least one specimen in the collection of Naturalis Biodiversity Center in Leiden.

BIOLOGY

Agromyza bromi is known to utilise *Bromus* species as a host plant, which is no doubt present at the collecting sites.

MORPHOLOGY

The adult fly is a medium sized and black, with a brown frons which does not significantly project above the eye in profile. The wing length is approximately 2.6 mm, with the costal vein C extending to vein R4+5. There are usually two upper orbital bristles with the upper slightly stronger and two or three lower orbital bristles. Its legs are largely black with only the fore-knees narrowly yellowish. The males possess a peculiar hook-like appendage on the coxa/trochanter of the fore-leg. The male's phallus is distinctive (fig. 1).

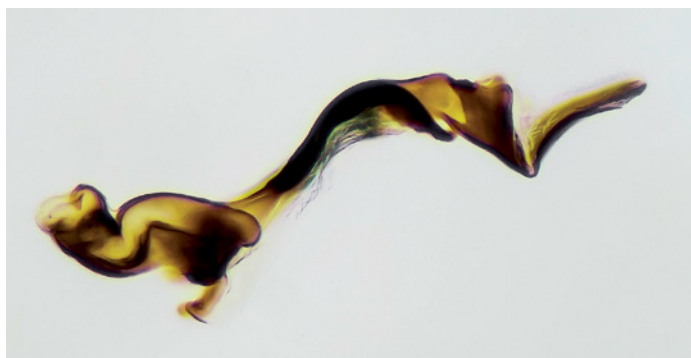


Figure 1. Aedeagus of *Agromyza bromi* in lateral view. Photo Barry Warrington.

Figuur 1. Aedeagus van *Agromyza bromi* in zij aanzicht. Photo Barry Warrington.



Figure 2. Malaise trap at Egmond-Binnen. Photo Joop Prijs.

Figuur 2. Malaiseval bij Egmond-Binnen. Foto Joop Prijs.



Figure 3. Malaise trap at Heemskerk. Photo Joop Prijs.

Figuur 3. Malaiseval bij Heemskerk. Foto Joop Prijs.



Figure 4. Malaise trap at Meneersche Plaat. Photo Joop Prijs.

Figuur 4. Malaiseval op Meneersche Plaat. Foto Joop Prijs.



Figure 5. Records of *Agromyza bromi* in the Netherlands.

Figuur 5. Vindplaatsen van *Agromyza bromi* in Nederland.

DISTRIBUTION

This species is widespread in Europe, including Belgium, Czech Republic, Denmark, England, France, Germany, Hungary, Lithuania, Poland, Slovakia and Switzerland (Papp & Černý 2015).

DISCUSSION

Due to the host plant genus, *A. bromi* is likely to occur elsewhere within the Netherlands.

The Meneersche Plaat, a swampy area at the Haringvliet, seems to be a rich habitat, as also a new species of Hemiptera to the Netherlands, *Ochetostethus nanus*, was found there (Aukema 2017).

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images of the trap sites and Michael von Tschirnhaus (University of Bielefeld, Germany) for confirming the determination based on images sent to him.

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SAMENVATTING

De mineervlieg *Agromyza bromi* nieuw voor Nederland (Diptera: Agromyzidae)

De mineervlieg *Agromyza bromi* wordt nieuw voor Nederland gemeld op basis van vier mannetjes verzameld in Malaisevallen in Egmond-Binnen (Noord-Holland), Heemskerk (Noord-Holland) en Meneersche Plaat (Zuid-Holland). De soort is wijdverspreid in Europa.

B.P. Warrington
Hessle (United Kingdom)
agromyzidaers@gmail.com

