

Agdistis hulli spec. nov. from the Greek island of Lesbos (Lepidoptera: Pterophoridae)

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Abstract: Examination of material collected on the island of Lesbos revealed a species of the genus *Agdistis* with characters resembling both *Agdistis frankeniae* Zeller and *A. halodelta* Meyrick. The differences with these two species showed to be constant and of sufficient value for the species to be considered new to science. It is named after its collector, Dr. Michael Hull: *Agdistis hulli* spec. nov.

Samenvatting: Bij het onderzoeken van vedermotten verzameld op het Griekse eiland Lesbos werd een soort aangetroffen welke gelijkenis vertoont met *Agdistis frankeniae* Zeller en *A. halodelta* Meyrick. De verschillen met deze twee soorten blijken echter constant te zijn en van voldoende gewicht om de soort als nieuw voor de wetenschap te kunnen beschouwen. De soort wordt genoemd naar haar verzamelaar Dr. Michael Hull: *Agdistis hulli* spec. nov.

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Introduction

The Greek Islands are the frontier between the Ponto-Asian and the Southeast European fauna elements. For this reason many entomologists show an interest in these islands. Recently Michael Hull (MH) has worked on a number of islands in the Aegean Sea to find elements of both faunas in the field of micro-lepidoptera. The author (CG) had the pleasure to examine the results of his field work on the plume moths (Pterophoridae).

In September 1993, a number of specimens were collected on the island of Lesbos at a site called Skala Kallonis. The area is a large salt marsh bordering the large Kalloni Bay. In the south-west this bay is connected to the sea and on the other sides it is surrounded by a horse-shoe like chain of mountains, ranging up to 800 metres. In this way the area is sheltered but for south-western winds.

Among the species collected were *Agdistis tamaricis* Zeller, a species rather common in the Mediterranean area, *Stenoptilodes taprobanes* Felder & Rogenhofer and a species resembling *Agdistis frankeniae* Zeller. Some doubt about the identity of the latter species arose due to differences in the genital structure. However, the small number of specimens

made it impossible to draw more definite conclusions about its identity.

As Dr Hull had planned more trips to the area, he decided to collect more extensively on Lesbos and to pay special attention to this plume moth. The area was visited in May 1995 and July 1997, and the efforts paid off. The results in May 1995 were poor, but the results in July 1997 gave the opportunity to study the variation in the species involved and compare it to related species. It turned out that the differences with *Agdistis frankeniae* were constant and that an undescribed species was involved.

Agdistis hulli spec. nov.

Type material

Holotype: ♂, Greece, Lesbos, Skala Kallonis, 39° 12' 23"N 26° 12' 58"E, 9.vii.1997, MH (coll. MH no. 26667). Paratypes: 8♂, 4♀, same locality, 10, 11, 12, 14, 18 and 22.ix.1993, MH (coll. MH, gent 2908 (♀), 3098 (♂) and 3099 (♂); coll. CG, gent 2668 (♂), 3545 (♂), 3910 (♀) and 3913 (♀)); 2♂, same locality, 39° 12' 24"N 26° 12' 48"E, 19.v.1995, 26.v.1995, MH (coll. MH, gent MH 3232); 5♂, 4♀, same data as holotype; 21♂, 9♀, 1 specimen without abdomen, same locality, 39° 12' 22"N 26° 12' 58"E, 3, 4, 5, 7, 11, 12, 13, and 15.vii.1997, MH (coll. MH; coll. CG, gent. CG 3910 (♀)).

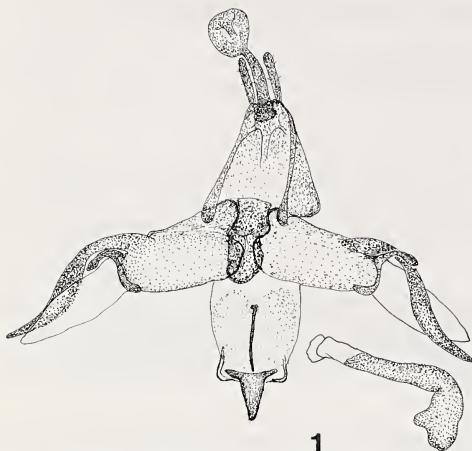


Fig. 1. *Agdistis hulli* spec. nov., male genitalia: Greece, Lesbos, Skala Kallonis, 19.v.1995, MH (coll. MH, gent MH 3232).

Description

Male, female. Wingspan 17-24 mm. Most specimens 18-21 mm. External characteristics as in *Agdistis frankeniae* Zeller, not to be distinguished.

Male genitalia (fig. 1). Valvae symmetrical. Cucular process slightly longer than combined valve and valvula, slender. Valve marginated by a continuous saccular ridge crossing over the valve and progressing into a cucular process of 2/3rd the width of the valve. Tegumen rather slender. Uncus rounded, on a stalk of one and one half times the uncus diameter. Socii nearly as long as the uncus stalk. The 8th sternite with a stout saccus, gradually narrowing towards the top. Aedeagus stout and hooked.

Female genitalia (fig. 2). Ostium centrally excavated, marginated by a regular rim. Antrum left-central positioned, one and one half times longer than wide, with a narrowing at 2/3rd. Ductus bursae curved upwards. Bursa copulatrix vesicular. Ductus seminalis longer than bursa copulatrix, gradually narrowing. Apophyses posteriores and anteriores as long as papillae anales. Lamina postvaginalis bilobate.

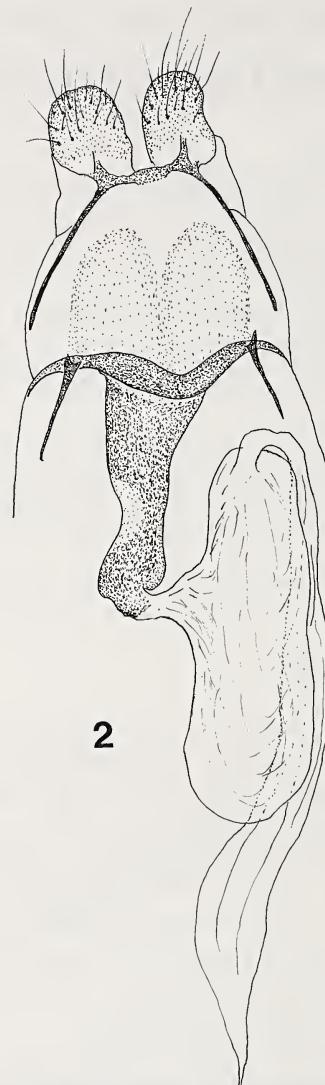


Fig. 2. *Agdistis hulli* spec. nov., female genitalia: Greece, Lesbos, Skala Kallonis, 14.ix.1993, MH (coll. MH, gent CG 3913).

Ecology

The moth flies in May, July and September among halophyte vegetation. The hostplant is unknown, but is most probably found in the group of halophyte plant genera, like *Limonium*, *Frankenia* or *Limoniastrum*.

Distribution

Thusfar only known from the type locality on the Greek island of Lesbos.

Etymology

The species is named after its collector Dr Michael Hull.

Remarks

The present species is difficult to distinguish from *Agdistis frankeniae* Zeller. This is only possible with the characteristics of the genital structures in male and female. The genital structures of *A. frankeniae* and the other species of the genus *Agdistis* in the region are well illustrated by Arenberger (1995) and Gielis (1996).

Acknowledgements

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References

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