

# *Stenoptilia meyeri* spec. nov., a new endemic species of the Azores (Lepidoptera: Pterophoridae)

C. GIELIS

GIELIS, C., 1997. *STENOPTILIA MEYERI* SPEC. NOV., A NEW ENDEMIC SPECIES FROM THE AZORES (LEPIDOPTERA: PTEROPHORIDAE). – *ENT. BER., AMST.* 57 (5): 79-81.

**Abstract:** The species *Stenoptilia meyeri* spec. nov. is described from the Azores archipelago. A short discussion on related species is given.

**Keywords:** Lepidoptera, Pterophoridae, new species, Palaearctic fauna.

Mr. Haafkensstraat 36, 4128 CJ Lexmond, The Netherlands.

## Introduction

Among material collected by Mr Marc Meyer (Luxembourg Museum) on the Azores archipelago, a small series of specimens belonging to the genus *Stenoptilia* was found. These specimens show characteristic markings, not seen in any European representative (Gielis, 1996) of this genus. However, in my revision of the neotropical fauna (Gielis, 1995), it was shown that species in this region have this type of marking. For this reason I primarily checked whether the present specimens matched a species known from South and Central America. However, the characteristics are, of such a nature, that obviously an undescribed species, only known from these islands, is involved.

## *Stenoptilia meyeri* spec. nov.

(figs 1-3)

### Material

Holotype: ♂, Portugal, Açores, São Miguel, SW Nordeste, Serra da Tronqueira, 600 m, 29.vii.1990 (M. Meyer) (Mus. Luxembourg). Paratypes: 4♂, 3♀, same locality and date, gent CG 3767 (♂), 3768 (♀) (Museum Luxembourg, CG).

### Diagnosis

The species is characterised by a heavy longitudinal line in the dorsal half of the first forewing lobe.

### Description

Male, female. Wingspan 16-19 mm.

Head appressedly scaled, brown-grey, with

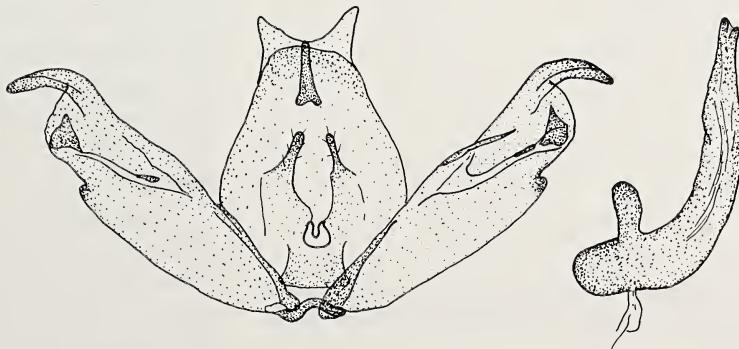


Fig. 1. *Stenoptilia meyeri* spec. nov. Male genitalia. Portugal, Açores, São Miguel, SW Nordeste, Serra da Tronqueira, 600 m, 29.vii.1990 (M. Meyer), prep CG 3767 (Museum Luxembourg).



Fig. 2. *Stenoptilia meyeri* spec. nov. Female genitalia. Same data as fig. 1, prep CG 3768 (Museum Luxembourg).

small frontal conus less than half eye-diameter. Frontal conus dorsally brown-grey, ventrally, below upper margin of eye, grey-ferruginous. Palps  $1\frac{1}{2}$  times eye-diameter, second segment distally strongly widened, pronounced scales almost covering third segment, third segment short. Palps in ventral and lateral aspect grey-ferruginous, third segment and dorsal aspect greyish.

Thorax and tegulae brown-grey. Mesothorax and first abdominal segments greyish-white, gradually turning grey-brown towards terminal segments. Legs grey-brown; tibiae of hindlegs longitudinally grey-white and brown. Forewings cleft from 7/10th, grey-brown, markings dark brown. Markings: a small discal spot, a small spot dorsally before the base of the cleft, and a heavy longitudinal spot in dorsal half of the first lobe, and two ill-defined longitudinal lines in second lobe. Fringes costally dark brown, at apex of first lobe white, at terminal and dorsal margin basally white with a dark terminal part, and in cleft white. Some brown scales in anal region of first lobe. Underside ferruginous-brown, gradually turning whitish towards termen of both lobes. Hindwings dark grey-brown. Fringes grey-brown. Underside brown, first lobe mixed with white scales. Venous scales in double row, ferruginous, costal row longer than dorsal row and extending into second lobe.

Male genitalia (fig. 1). Valvae symmetrical. Top with shape of bird-head. Sacculus bilobated, terminal part complex just less than  $\frac{1}{4}$ th of valve length, basal part simple with small but distinct extension of valve margin. Tegumen with two large membranous terminal extensions. Uncus ending at tegumen margin,  $\frac{1}{4}$ th of tegumenal length. Anellus arms half tegumenal length. Saccus small and simple. Aedeagus as long as valve, stout, gradually narrowing towards tip, caulus wide, coecum rather small. No cornutus, ductus seminalis distinct.

Female genitalia (fig. 2). Ostium oval, progressing into funnel-shaped wide antrum, terminal margin with triangular cover. Antrum short,  $1\frac{1}{2}$  times longer than wide, gradually narrowing. Ductus bursae short, as long as an-

trum, with large sclerite covering half the length. Bursa copulatrix with pair of horn-like signa. Lamina ante-vaginalis in shape of a flattened "M". Lamina post-vaginalis and apophyses anteriores absent. Apophyses posteriores three times papillae anales.

### Ecology

The moth flies in July. The hostplant is unknown.

### Distribution

Thusfar the species is only known from the island São Miguel of the Azores archipelago.

### Etymology

The species is named after its collector, Mr Marc Meijer, who is very active in the investigation of the fauna of the islands in the Atlantic Ocean.

### Remarks

According to the external markings and the male and female genital structures, the species

is closely related to the neotropical *Stenoptilia* species (Gielis, 1995). The distinct line in the first lobe of the forewing, the small extension of the margin of the valve in the male genitalia and the small process at the distal end of the ostium in the female genitalia, distinguish it from all other species of the genus. In the European and North-African fauna (Gielis, 1996), the only species with resembling genital characteristics is the cosmopolitan *Stenoptilia zophodactyla* Duponchel, differing as mentioned above.

### Acknowledgements

I wish to thank Mr Marc Meijer for the opportunity to study the material collected on the Azores archipelago and Mr Hugo van der Wolf for his help preparing this manuscript.

### References

- GIELIS, C., 1995. Neotropical Pterophoridae 11: The genus *Stenoptilia*. – *SHILAP, Madrid* 23: 141-152.  
GIELIS, C., 1996. Pterophoridae. In : *Microlepidoptera of Europe* (P. Huemer, O. Karsholt and L. Lyneborg, eds) 1: 1-222. Apollo Books, Stenstrup.

Accepted 31.i.1997.