

Neotropical Pterophoridae 7: *Cnaemidophorus smithi* n. sp. from Colombia (Lepidoptera)

C. GIELIS

GIELIS, C., 1992. NEOTROPICAL PTEROPHORIDAE 7: *CNAEMIDOPHORUS SMITHI* N. SP. FROM COLOMBIA (LEPIDOPTERA). – *ENT. BER., AMST.* 52 (7): 98-100.

Abstract: The plume moth *Cnaemidophorus smithi* is described from Colombia. The species is the first representative from the genus *Cnaemidophorus* in the Neotropical fauna.

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

Introduction

Cnaemidophorus rhododactyla (Denis & Schiffermüller) has a holarctic distribution (Barnes & Lindsey, 1921; Yano, 1963; Hanne-
mann, 1977). Up to now it was the only known species of the genus, which is characterized by the distally placed, large scale-tooth on the third lobe of the hind wing. In the female genitalia the double, spiculated, plate-like signum is diagnostic (Hannemann, 1977; Buszko, 1979).

It was a great surprise to find in the collection of the Natural History Museum (London) a female specimen with the large scale-tooth distally at the third lobe of the hind wing from

Colombia. Examination of the genitalia showed a similar signum structure as in the genus *Cnaemidophorus*.

The species is not only the second species belonging to this genus, but also the first species of the genus discovered in the Neotropical fauna.

Cnaemidophorus smithi n. sp.
(figs. 1-2)

Type material

Holotype ♀: Colombia, Minca, 2000 ft, vi.1899 (*H. H. Smith*), genitalia slide BM 18468 (BMNH).

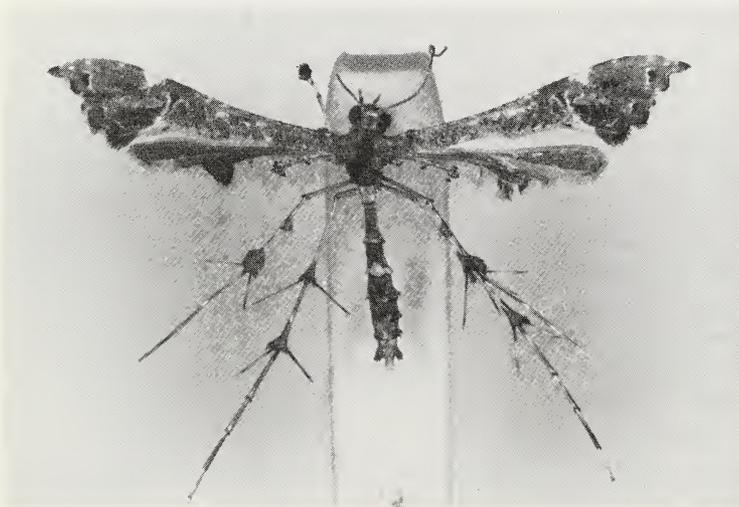


Fig. 1. *Cnaemidophorus smithi* n. sp., female, holotype.

Diagnosis

The species is characterized by its delicate, complex wing pattern, compared to the dull orange and white fields in *C. rhododactyla*.

Description

Female (fig. 1): Wingspan 18 mm. Head appressedly scaled, pale brown mixed grey-white. Some erect scales at the collar and above the eye. Palpae slender, slightly curved up, one and a half times eye-diameter, brown and white ringed. Antennae grey-brown with grey-white scales, shortly ciliated.

Thorax, tegulae and mesothorax brown. Hind- and middle legs with two, fore legs with one scale brush around the bases of the spurs; colour ochreous-white and brown ringed, the spurs are ringed too; hind legs with two pairs of long spurs, of equal length. Fore wings cleft from $2/3$. The basal field, up to the base of the cleft, white and grey-brown mottled. Before the base of the cleft, a white rectangular line to the dorsum. First lobe ochreous-brown with a white costal triangle beyond the base of the cleft and an incomplete white subterminal line which progresses into the second lobe. In both lobes these line parts terminally margined dark-brown. A small dark-brown spot in the centre of the first lobe. Two small white costal spots, and a white spot centrally before the dark brown apex. The second lobe with a dark brown field, basally margined by the rectangular white line. Fringes grey-white, along the termen basally with an almost complete row of grey-black scales. At the wingdorsum some pronounced scales in colour of the wing. Underside brown, with pale yellow-white markings as above. Hind wings in lobes one and two brown, lobe three mixed brown and grey-white. Fringes grey. Around the apex of lobe one a dark basal fringe line. At the anal angle of lobe two a pronounced black scale-tooth and a small one at the dorsum at $3/4$. At the dorsum of lobe three, small scale-teeth at $1/10$, $1/2$ and subterminally, and at the costa subterminally, and between this scale-tooth and the base of the lobe isolated pronounced scales.

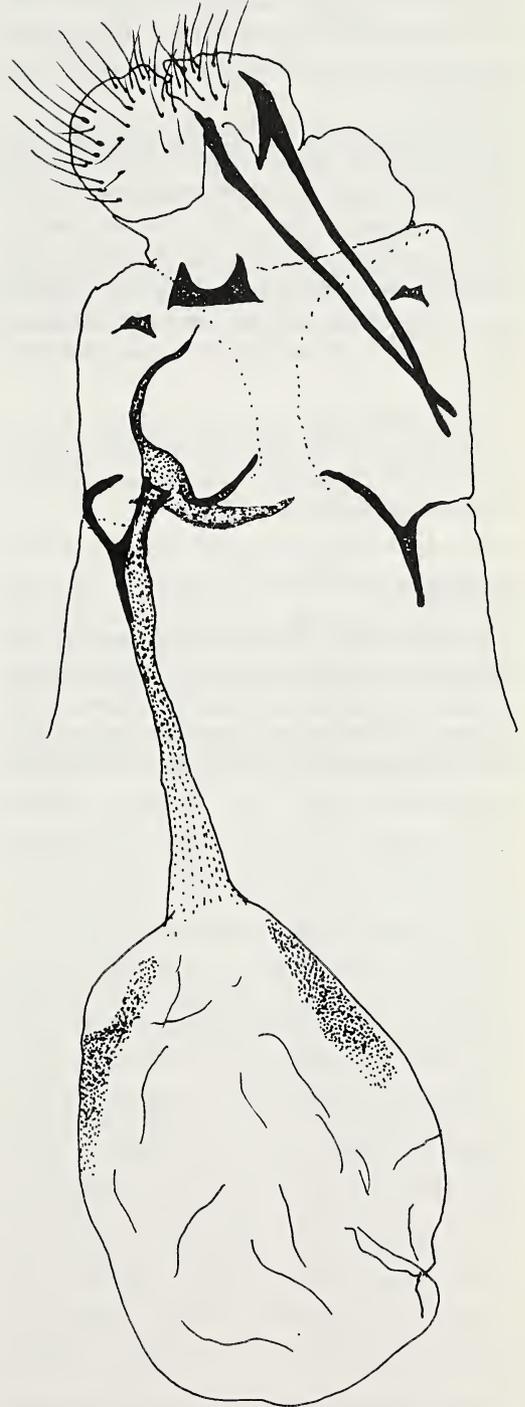


Fig. 2. *Cnaemidophorus smithi* n. sp., female genitalia.

Underside brown. Androconial scales ferruginous-brown in a double row.

Abdomen grey-brown, except the first segment and the distal margin of segments two and three which are grey-white at the dorsum and segments one to four which are grey-white ventrally.

Genitalia (fig. 2): Antrum as a large rectangular margined funnel. Ductus bursae stout, rather short and straight. Bursa copulatrix vesicular, signum in shape of a double plate of minute spiculae. Lamina post-vaginalis with broad forked central part. Apophyses anteriores longer than papillae anales. Apophyses posteriores two times longer than papillae anales.

Male: unknown.

Etymology: The species is named after its collector, H. H. Smith. He collected insects in Central and South America.

Discussion

The shape of the signum in the female genital structure resembles the signum of the palaeartic genus *Cnaemidophorus*. The shape of the antrum and lamina post-vaginalis is more alike those in the genus *Xyroptila* and in some species

of the genus *Postplatyptilia*. In *Xyroptila*, however, the scale tooth on the third lobe of the hind wing is hardly developed, and this genus is presently only known from the old world tropics. In *Postplatyptilia* the scale tooth is often double, but always small, and in most species not distally placed. The shape of the antrum and lamina post-vaginalis is more or less similar to those of the genus *Postplatyptilia* Gielis (Gielis, 1991), but this genus has a double horn-like signum.

References

- BARNES, W. & LINDSEY, A. W., 1921. The Pterophoridae of America, north of Mexico. – *Contr. nat. Hist. Lepidoptera N. Am.* 4: 280-483.
- BUSZKO, J., 1979. Pterophoridae. – *Klucze oznaczania owadów Polski* 27: 9-140.
- GIELIS, C., 1991. A taxonomic review of the Pterophoridae from Argentina and Chile. – *Zool. Verh. Leiden* 269: 1-164.
- HANNEMANN, H. J., 1977. Kleinschmetterlinge oder Microlepidoptera, III. Federmotten (Pterophoridae), Gespinstmotten (Yponomeutidae), Echte Motten (Tineidae). – *Tierw. Dil.* 63: 1-274.
- YANO, K., 1963. Taxonomic and biological studies of Pterophoridae of Japan. – *Pacif. Insects* 5: 65-209.

Accepted 15.ii.1992.