FOLIA HISTORICO-NATURALIA MUSEI MATRAENSIS
2025 49: 73–76
ISSN 0134-1243 (Print) ISSN 2062-7602 (Online)
Published: 30 December 2025

A new *Helicoconis* Enderlein, 1905 species from Madagascar (Neuroptera: Coniopterygidae)

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Abstract: *Helicoconis lehotzkii* sp. n. is described from the coniopterygid material collected in the framework of the Madagascar Project of the California Academy of Sciences. The new species is the first Madagascan representative not only of the genus *Helicoconis* Enderlein, 1905, but even of the subfamily Aleuropteryginae.

Introduction

Near to the end of the last century only three coniopterygid species were known from Madagascar (Meinander 1990). In course of the working up (Sziráki 2015, 2020, 2021, 2023, 2024) the enormously large dusty lacewing material collected in the framework of the Madagascar Project of the California Academy of Sciences (CAS) this number elevated to 29. All of these 29 species belongs to the subfamily Coniopteryginae. As a result of the continued study, description of a new *Helicoconis* Enderlein, 1905 species is given, which is the first (really) known representative of the subfamily Aleuropteryginae in Madagascar. *Spiloconis nebulosa* Fraser, 1957 (Coniopterygidae: Aleuropteryginae) was mentioned earlier from Madagascar (Meinander 1972), but erraneously (Meinander 1983).

Taxonomic part

Helicoconis lehotzkii sp. n. (Figs 1–6)

Type material – Holotype: male, Madagascar, Antsiranana Province, Sakalava Beach, 12°15’46” S, 49°23’51” E, 10 m a.s.l., dwarf littoral forest, Malaise trap, without time data (code number: MA-01-04B-18), leg. R. Harin ’Hala. The presumable collecting time may be within the second half of August, 2001, as data of an earlier sample (MA-01-04B-13) from the same locality is 25.VI–6.VII.2001 (Sziráki 2024). Deposited in the collection of CAS. Paratypes: 1 male, same data as holotype; 1 male, same locality and collector, and without time data as well, but as code number of the sample MA-01-04B-19, its presumable collecting time may be within September, 2001. One of the paratypes is deposited in the collection of CAS, while the other in the collection of Hungarian Natural History Museum, Hungarian National Museum Public Collection Centre (HNHM).

Description – Length of body 1.7–2.2 mm, head capsule pale ochreous or light brown, palpi pale ochreous. Antennae pale ochreous, 1.0–1.2 mm, 26–27 segmented. Scape 1.2–1.3 times, pedeicel 1.3–1.5 times longer than broad. Most of flagellar segments about as long as broad.

DOI: https://doi.org/10.69595/FoliaNatMatra.2025.49.05

Majority of ordinary hairs situated in two very irregular whorls on flagellar segments, but some of theese hairs dispersed between the whorls. Setae (which were not discussed earlier in this genus) present, but only slightly longer than the ordinary hairs, and not detectable on every flagellar segment. Eyes large, black.

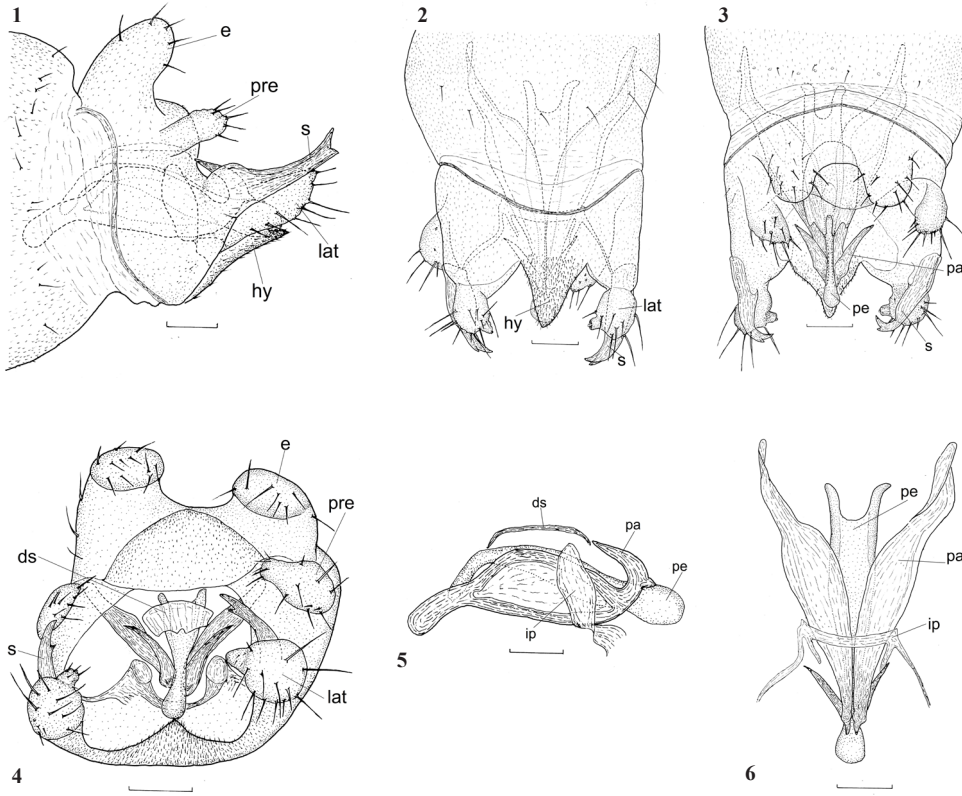
Prothorax pale ochreous, meso and metahorax light or medium brown. Thoracal sutures and apodemes medium or dark brown. The rather indistinct shoulder spots medium brown, with light, oblique cross line on holotype specimen. Legs pale ochreous or light brown. Length of fore wing 1.9–2.1 mm, of hind wing 1.5–1.6 mm. Wing membrane and veins light yellowish brown. Bases of two setae on vein M without significant thickenings. Pregenital parts of abdomen pale ochreous.

Male terminalia (Figs 1–6) moderately sclerotized, apart from well-sclerotized styli and caudal parts of parameres. Anterior apodeme of ninth segment narrow but complete, and wide hyaline belt situated before it. Hypandrium rather long, acute triangular. Inner projection of hypandrium connected membraneously also to lateral parts of ninth sternite, and supports internal genitalia ventrally and laterally. Its ventral scection forming narrow belt, while lateral parts twisted, somewhat widened lobes. Appendage of ninth sternite well-developed, with inwardly directed protrusion with minute knob. Ectoproct protruding dorso-caudally. Ventral process of ectoproct moderately large and slightly stalked in dorsal view. Styli strong, simple, curved inwards caudally, with lightly bifurcate endings. Parameres stout, their middle part strongly widened, distal part hooked, with small ventro-caudal tooth. Rods of penis sclerite fused almost for their full length, while caudal ending of this sclerite distinctly clubbed. Above penis and parameres an oval dorsal sclerite, with crenate caudal edge.

Differential diagnosis – Because of the well-developed hypandrium (in Kimmins (1950) „tenth sternite") of considerable length, the simple stucture of styli, the stout, hooked parameres with small ventro-caudal tooth, the laterally widened inner projection of hypandrium (in Kimmins (1950) and Meinander (1972) „hypandrium") *Helicoconis lehotzkii* is allied with *Helicoconis salti* Kimmins, 1950 from Uganda in spite of the short-winged body structure of the latter species.

The main distinctive features of *H. lehotzkii* in comparison with *H. salti* are: the acute triangular shape of hypandrium; the well-developed appendage of ninth sternite, with inwards directed protrusion; the lightly bifurcate endings of styli; the clubbed ending of penis; the presence of a dorsal sclerite above the internal genitalia; the completely developed wings.

Etymology – I dedicate the new species to Dr. Csaba Ferenc Lehotzki, exceedingly furthersome and conscientious surgeon of Surgical Clinic, Semmelweis University, Budapest.



Figs 1–**6.** *Helicoconis lehotzkii* sp. n. **Fig. 1.** = male terminalia, lateral view, **Fig. 2.** = male terminalia, ventral view, **Fig. 3.** = male terminalia, dorsal view (without inner projection of hypandrium), **Fig. 4.** = male terminalia, caudal view, **Fig. 5.** = male internal genitalia, lateral view, **Fig. 6.** = male internal genitalia, ventral view. Abbreviations: ds = dorsal sclerite, e = ectoproct, hy = hypandrium, ip = inner projection of hypandrium, lat = lateral appendage of ninth sternite, pa = paramere, pe = penis, pre = ventral process of ectoproct, s = stylus. Scale bar: 0.04 mm

Acknowledgements: I am grateful to the late Dr. Norman D. Penny (CAS) for the possibility to examine the extremely interesting Madagascan coniopterygid material of CAS and to Aranka Grabant (HNHM) for digitalization of drawings.

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