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New species of *Aethalopteryx* Schoorl, 1990 (Lepidoptera, Cossidae, Zeuzerinae) from Federal Democratic Republic of Ethiopia

ROMAN V. YAKOVLEV

Altai State University, Lenina pr. 61, Barnaul, 656049, Russia.

Tomsk State University, Laboratory of Biodiversity and Ecology, Lenina pr. 36, 634050 Tomsk, Russia

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Abstract

The article describes a new species, *Aethalopteryx strohlei* Yakovlev sp. nov. (Lepidoptera, Cossidae, Zeuzerinae) from the Debub Omo Zone of the Southern Nations, Nationalities and People's Region of the Federal Democratic Republic of Ethiopia. The article has 5 illustrations.

Key words: Biodiversity, Africa, taxonomy, new species, *Aethalopteryx*, fauna, Carpenter-Moths, Lepidoptera, Cossidae.

Introduction

Aethalopteryx Schoorl, 1990 (Lepidoptera, Cossidae) (Type species (by original designation): *Phragmatocia atrireta* Hampson, 1910) was described for the species group Zeuzerinae widely spread in Africa. Originally, Schoorl (1990: 175–176) included 8 species into the genus: *Phragmatocia atrireta* Hampson, 1910 (type locality: Bechuanaland, Lake N'gami [Botswana]), *Duomitus steniptera* Hampson, 1916 (type locality: Somaliland, Mandera, 47 miles SW of Berbera [Somalia]), *Duomitus pindarus* Fawcett, 1916 (type locality: Kenya, Kedai), *Duomitus simillima* Hampson, 1916 (type locality: Somalia, 47 miles SW of Berbera), *Xyleutes grandiplaga* Gaede, 1930 (type locality: Chad, Oubangui, Chari, Bangui [Central African Rep.]), *Hyleutes* (sic!) *tristis* Gaede, 1915 (type locality: Nama-Land [Namibia]), *Duomitus mesosticta* Hampson, 1916 (type locality: Somalia, Mandera), *Duomitus squameus* Distant, 1902 (type locality: Transvaal, Pretoria), and attributed to the genus several non-described forms from various regions of Africa (on the materials from Natural History Museum, London). The author of this work (partially, in co-authorship) described the species: *Aethalopteryx diksami* Yakovlev & Saldaitis, 2010 (type locality: Yemen, C. Sokotra Island, Highier Mts., Dicksam loc.), *A. nilotica* Yakovlev, 2011 (type locality: Sudan, Blue Nile Prov., Wadi Medani), *A. anikini* Yakovlev, 2011 (type locality: S. Africa, Free State, 15 km S Bloemhof, Sandveld N.R.), *A. masai* Yakovlev, 2011 (type locality: Kenya, Kibwezi), *A. elf* Yakovlev, 2011 (type locality: Somalia m., Kisimayo), *A. politzari* Yakovlev, 2011 (type locality: Somalia m., Caanole Fluss), *A. gazelle* Yakovlev, 2011 (type locality: Kenya, South Coast, Marenche forest), *A. rudloffi* Yakovlev, 2011 (type locality: Swaziland, Ndzevane area, Matala near Nsogo), *A. kisangani* Yakovlev, 2011 (type locality: Rep. Congo

(Zaire), 17 km N Kisangani, Masako Field Stat.), *A. sulaki* Yakovlev, 2011 (type locality: Kenya, Eastern Province, Umg. Meru, 2 km NE Isiolo), *A. wiltshirei* Yakovlev, 2009 (type locality: Saudi Arabia, Azir, Al Foqa, Olea-Dodonea Zone), *A. schoorli* Yakovlev, 2020 (type locality: Sierra Leone), *A. spurrelli* Yakovlev, 2020 (type locality: Gold Coast [Ghana], Bibianaha) (Yakovlev 2009, 2011, 2020; Yakovlev & Saldaitis 2010). Additionally, the following species were attributed to the genus *Aethalopteryx* with the establishment of new combinations (Yakovlev 2011): *Kyleutes* (sic!) *dictyotephra* Clench, 1959 (type locality: SW Africa, Okahandja [Namibia]), *Xyleutes forsteri* Clench, 1959 (type locality: SW Africa, Okahandja [Namibia]), *Xyleutes gyldenstolpei* Aurivillius, 1925 (type locality: Ituri [Congo, Ituri prov.]), *Xyleutes obscurascens* (type locality: Maraquo, Centr. Abyss. [Central Ethiopia]), *Xyleutes obscurascens obsoleta* Gaede, 1930 (type locality: White Nile [Central Sudan]).

Thus, after the initial revision, it was found that representatives of the genus, in addition to being widely spread in Africa, also live on the Arabian Peninsula and in Socotra isle (Borth *et al.* 2011; Yakovlev & Dubatolov 2013).

Examining the specimens stored in the rich private collection of Manfred Ströhle (later – MSW) (Weiden, Germany) we found a new species from Ethiopia, its description is provided below.

Material and methods

Male genitalia were mounted in euparal on slides following Lafontaine and Mikkola (Lafontaine & Mikkola 1987; Lafontaine 2004). The adults were photographed using digital camera of iPhone 7. The genitalia preparations were photographed using an Olympus DP74 camera attached to an Olympus SZX16 stereomicroscope.

Taxonomical part

Aethalopteryx strohlei Yakovlev **sp. nov.**

Figs 1-4

Type material: Holotype (male), “Süd-Ethiopia, Turmi, Mango Lodge, 920 m, 04°58'32"N / 036°30'54"E, 9–13.x.2015, leg. M. Ströhle” (MSW, slide MSW 2015/41 Coss). Paratypes: 1 male, 1 female, same locality (MSW).

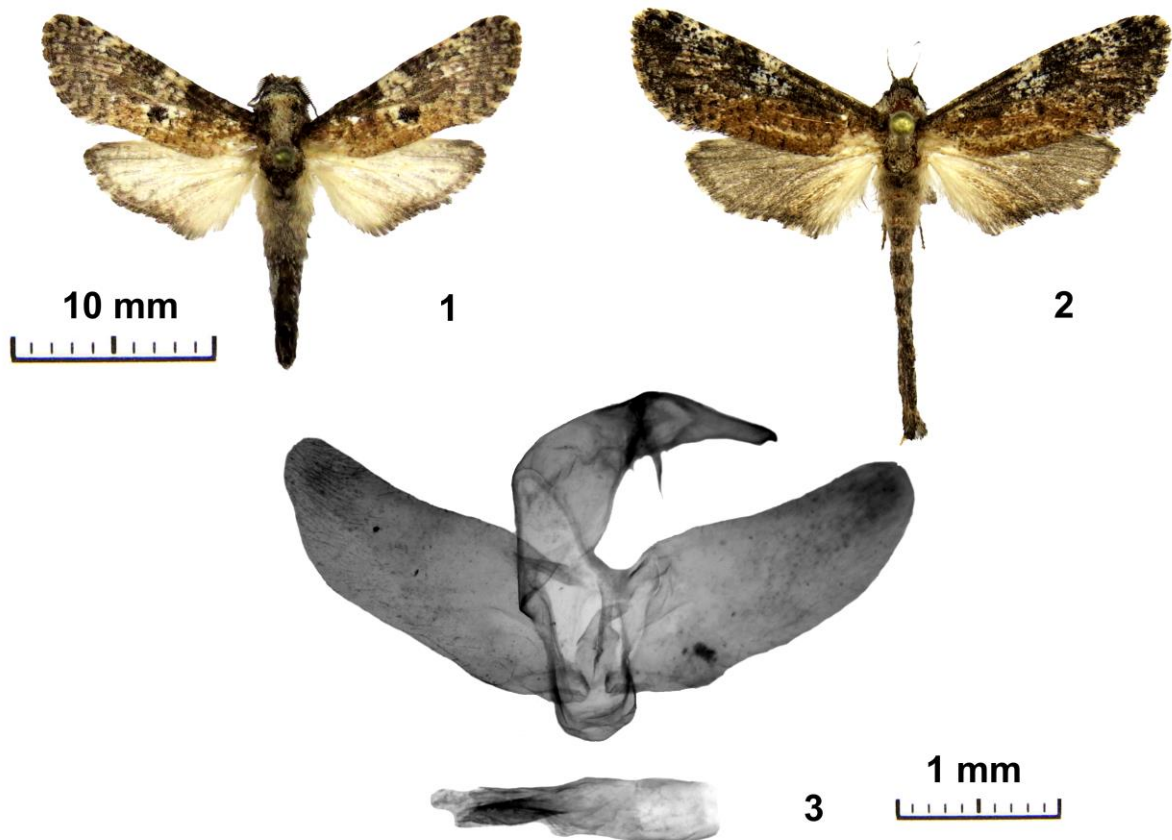
Description. Male. Length of fore wing 11 mm. Antenna bipectinate from base to middle of length (crest processes 2.5–3 times longer than antenna rod diameter); distal end of antenna bipectinate with very short crest processes (about 0.7 of antenna rod diameter). Fore wing elongated, brown; wide dark-brown stroke along costal edge (from root to border of discal and postdiscal areas); wide light-brown portion cubitally (from root to border of postdiscal and submarginal areas); round black spot between veins CuA₂ and CuP (postdiscally); wide blurred transverse light-yellow bands postdiscally and submarginally; marginal area brown; fringe mottled (brown at veins, yellow between veins). Hind wing yellow with sputtering of grey scales between veins, fringe brown.

Male genitalia. Uncus long, thin, with uncinately bent apex; gnathos arms short, thin, narrowing from base to apex; valve simple, costal and abdominal edge slightly curved, caudal end rounded; juxta scaphoid with wide long lateral processes; saccus semicircular, of medium size; phallus robust, short (slightly shorter than valve) with big spindle-like cornutus.

Female. Length of fore wing 13 mm. Antenna bipectinate from base to apex, crest processes very short (about 0.7 of antenna rod diameter). Colored darker than male: no black round spot on fore wing between veins CuA₂ and CuP (postdiscally); transverse yellow bands on fore wing significantly more narrow; hind wing with dense sputtering of grey scales on all wing.

Diagnosis. It is necessary to note that the representatives of the genus *Aethalopteryx* have very simple genitalia, so it is not possible to make diagnostic distinctions basing on the male genital morphology. However, the species of the genus have significant external features: the size and color of the wings. The new species clearly differs from most species of the genus in the small size, and in this characteristic it is

close to the East-African species group distributed in Somali and Kenia: *A. steniptera* (Hampson, 1916), *A. simillima* (Hampson, 1916), *A. elf* Yakovlev, 2011, and *A. sulaki* Yakovlev, 2011. But the dark, contrast color of the wings and the big round spot between veins CuA_2 and CuP (postdiscally) are its clear distinction from the close small East-African species.



Figures 1–4. Adult specimens, male genitalia and habitat of *Aethalopteryx strohleii* Yakovlev sp. nov.: 1. Male, holotype; 2. Female, paratype; 3. Male genitalia (slide MSW 2015/41 Coss) 4. Habitat (photo by M. Ströhle).

Distribution. Known only from South-Western Ethiopia (Debub Omo Zone of the Southern Nations, Nationalities, and People's Region).

Etymology. The new species is named after my colleague and friend Mr. Manfred Ströhle (Weiden), a remarkable connoisseur of the Palearctic and African Lepidoptera, the collector of the type series of the new species.



Figure 5. Mr. Manfred Ströhle (from Ethiopia, Dorze Lodge).

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