

## New species of many-plumed moth (Lepidoptera: Alucitidae) from the Democratic Republic of Congo

### Новые виды веерокрылок (Lepidoptera: Alucitidae) из Демократической Республики Конго

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КЛЮЧЕВЫЕ СЛОВА: Alucitidae, Веерокрылки, Демократическая Республика Конго, Катанга, новые виды, новые данные.

ABSTRACT. Two species of Alucitidae, new to science, *Alucita romieuxi* Ustjuzhanin et Kovtunovich **sp.n.** and *Alucita katanga* Ustjuzhanin et Kovtunovich **sp.n.**, are described from the Democratic Republic of Congo; three species, *Alucita compsoxantha* (Meyrick, 1924), *A. ectomesa* (Hering, 1917) and *A. tesserata* (Meyrick, 1918) are reported as new to the fauna of the country.

РЕЗЮМЕ. Из Демократической Республики Конго, описываются два новых вида веерокрылок: *Alucita romieuxi* Ustjuzhanin et Kovtunovich **sp.n.** и *Alucita katanga* Ustjuzhanin et Kovtunovich **sp.n.**, и три вида: *Alucita compsoxantha* (Meyrick, 1924), *A. tesserata* (Meyrick, 1918) и *A. ectomesa* (Hering, 1917) приводятся как новые для фауны данной страны.

species [De Prins, De Prins, 2020] the species *Alucita phanerarcha* (Meyrick, 1924) was reported for the Democratic Republic of Congo. Among the materials provided for our research by Dr. Bernard Landry from Muséum d'histoire naturelle de Genève (MHNG) we indicated two species new to science: *Alucita romieuxi* Ustjuzhanin et Kovtunovich **sp.n.** and *Alucita katanga* Ustjuzhanin et Kovtunovich **sp.n.**, and two species, *Alucita compsoxantha* (Meyrick, 1924) and *Alucita tesserata* (Meyrick, 1918) were indicated for the fauna of the Democratic Republic of Congo for the first time.

Abbreviations: CUK — The collection by P. Ustjuzhanin and V. Kovtunovich (Novosibirsk and Moscow, Russia); MHNG — Muséum d'histoire naturelle de Genève, Switzerland.

#### Introduction

Many-plumed moths of the Democratic Republic of Congo are extremely poorly studied. The first information on them appeared after the release of catalogue of Lepidoptera of Belgian Congo [Ghesquière, 1940]. This publication described a new species, *Orneodes fletcheriana* Ghesquière, 1940, *Alucita huebneri* Wallengren, 1859 was reported, and three indefinite species were indicated as *Orneodes* sp. In the online database of Afrotropical moths

#### Taxonomy

##### *Alucita compsoxantha* (Meyrick, 1924)

*Orneodes compsoxantha* Meyrick, 1924: 95. (Type locality: Mazoe [Zimbabwe], S. Rhodesia).

MATERIAL EXAMINED. Ht Katanga, Tshinkolobwe, 1 ♂, 27.XI.[19]30, 1 ♂, 10. XII.[19]30, J. Romieux leg. (MHNG gen.pr. 202001, 202002).

DISTRIBUTION: Zimbabwe, Malawi [Ustjuzhanin, Kovtunovich, 2016], Democratic Republic of Congo.

NOTE. New to the Democratic Republic of Congo.

***Alucita ectomesa* (Hering, 1917)**

*Orneodes ectomesa* Hering, 1917: 190. (Type locality: N. Nyasa, Tanzania).

*Orneodes myriodesma* Meyrick, 1929: 533. (Type locality: Makulane, [Mozambique]).

MATERIAL EXAMINED. Ht Katanga, Tshinkolobwe, 1 ♀, 24.IX. [19]31, 1♀, 09.X. [19]31, J. Romieux leg. (MHNG gen.pr. 202003, 202004).

DISTRIBUTION: Tanzania [Hering, 1917]; Malawi, Mozambique [De Prins, De Prins, 2020], Rep. S. Africa [Ustjuzhanin, Kovtunovich, 2017], Democratic Republic of Congo.

NOTE. New to the Democratic Republic of Congo.

***Alucita tesserata* (Meyrick, 1918)**

*Orneodes tesserata* Meyrick, 1918: 34. (Type locality: Pretoria, Republic of South Africa).

*Orneodes brachyzona* Meyrick, 1920: 293. (Type locality: Abraham's Kraal, Free State, Rep. S. Africa).

MATERIAL EXAMINED. Ht Katanga, Tshinkolobwe, 2 ex, 16–23.XII. [19]30, J. Romieux leg.

DISTRIBUTION: Republic of South Africa, Zimbabwe, Malawi [De Prins, De Prins 2020], Democratic Republic of Congo.

NOTE. New to the Democratic Republic of Congo.



Figs 1–2. *Alucita romieuxi*, sp.n.: 1 — adult, male, holotype; 2 — male genitalia, holotype (MHNG gen.pr. 202005).

Рис. 1–2. *Alucita romieuxi*, sp.n.: 1 — имаго, самец, голотип; 2 — гениталии самца, голотип (MHNG gen.pr. 202005).



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Figs 3–4. *Alucita katanga*, sp.n.: 3 — adult, male, holotype; 4 — male genitalia, holotype (MHNG gen.pr. 202006).

Рис. 3–4. *Alucita katanga*, sp.n.: 3 — имаго, самец, голотип; 4 — Гениталии самца, голотип (MHNG gen.pr. 202006).

***Alucita romieuxi* Ustjuzhanin et Kovtunovich, sp.n.**  
Figs 1–2.

TYPE MATERIAL. Holotype, ♂, (MHNG gen.pr. 202005), Democratic Republic of Congo, Ht Katanga, Tshinkolobwe, 25.I. [19]31, J. Romieux leg.

DESCRIPTION: External characters (Fig. 1). Head, thorax and tegula white. Antenna light grey. Labial palpus white, twice longer than longitudinal eye diameter, directed forward and slightly up, second segment interspersed with grey scales. Wingspan 10 mm. Wings snow-white, longitudinal light brown portions of scales along lobes of all wings. These portions longer and more contrast on fore wing, shorter and less contrast on hind wing. Fringe of white hairs. Hind leg white.

Male genitalia (Fig. 2). Uncus evenly wide, apically flat. Gnathos short, thin, apically uncinately curved. Valve narrow, membranous. Anellus arms short, wide. Saccus arched. Aedeagus robust, slightly longer than all genital structure, with two large spiky cornuti.

Female unknown.

DIAGNOSIS. In the white colour of the wings and in the longitudinal brown portions of scales on the lobes, the new species resembles to *Alucita snezhinka* Ustjuzhanin & Kovtunovich, 2018, but differs in the less contrast light brown portions of scales which are short on the hind wings. In the male genital structure, the new species is close to *Alucita crococyma* (Meyrick, 1937) in the similar shape of the uncus. In the large aedeagus exceeding all the genital apparatus, the new species is similar to *A. snezhinka*, but differs in the uncus and gnathos structure, and in the anellus arms.

FLIGHT PERIOD: January.

ETYMOLOGY. The species is named after the Swiss entomologist Jean Romieux (1893–1951), who collected its specimens.

***Alucita katanga* Ustjuzhanin et Kovtunovich, sp.n.**  
Figs 3–4.

TYPE MATERIAL. Holotype, ♂, (MHNG gen.pr. 202006), Democratic Republic of Congo, Ht Katanga, Panda, 11.XI. [19]29, J. Romieux leg.

DESCRIPTION: External characters (Fig. 3). Head, thorax and tegula yellow-brown. Labial palpus yellow-brown, twice longer than longitudinal eye diameter, directed forward and up, third segment apically sharp. Wingspan 12 mm. Wings yellow, with transverse, poorly noticeable white bands. Dark brown spots and strokes on costal edge of first lobe of fore wing. All lobes apically ending with small brown spot. Hind wings lighter than fore wings, with less expressed brown apical spots of lobes. Fringe on wings with alternating light brown and white portions. Antenna yellow-brown.

Male genitalia (Fig. 4). Uncus narrow, rhomboid, apically flat. Gnathos narrow, long, distally tapered. Valves narrow, membranous. Saccus wide, arched. Aedeagus robust, equal to all genital structure in length, with three large spiky cornuti, aedeagus apically serrated.

Female unknown.

DIAGNOSIS. In the wings colour, similar to *Alucita aarviki* Ustjuzhanin et Kovtunovich, 2016, but differs in the brown spots on the lobes apically and in the dark brown strokes and spots along the costal edge of the first lobe on the fore wing. Concerning the male genitalia, there are no similar species among the African many-plumed moths.

FLIGHT PERIOD: November.

ETYMOLOGY. Toponymic name.

Only two species were previously known for the fauna of Congo; our research has added five more species, two of which proved to be new to science. Undoubtedly, for one of the biggest African countries, the Democratic Republic of Congo, with its richness and diversity of natural landscapes, the fauna of many-plumed moths must counter up to 30 species.

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