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RESEARCH ARTICLE

A new species of the genus Casignetella (Lepidoptera: Coleophoridae) from Madagascar

Новый вид рода Casignetella (Lepidoptera: Coleophoridae) с Мадагаскара

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Abstract. A new species of casebearer moths, Casignetella lastukhini sp. nov., is described from Mada-

Резюме. Новый вид молей-чехлоносок, Casignetella lastukhini sp. nov., описывается с острова Мадагаскар.

Key words: casebearer moths, taxonomy, Madagascar, Lepidoptera, Coleophoridae, Casignetella, new species

Ключевые слова: моли-чехлоноски, таксономия, Мадагаскар, Lepidoptera, Coleophoridae, Casignetella, новый вид

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Introduction

The Afrotropical fauna of the family Coleophoridae remained poorly known till the end of 20th century. Only very recently a number of species increased up to 57 owing to the publications by G. Baldizzone with co-authors (Baldizzone & van der Wolf, 2004, 2005, 2011, 2015; Baldizzone et al., 2011). From Madagascar, only one species Coleophora leucobela (Meyrick, 1934) described by a single female in the genus Enscepastra Meyrick, 1920 was known (Meyrick, 1934). The latter genus (type species E. plagiopa Meyrick, 1920), originally placed in Coleophoridae, was later transferred to Batrachedridae (Sinev, 2004), but without "E. leucobela" which appeared to be a true coleophorid (Baldizzone, 1981). Our study of the holotype of this species, which is stored in the collection of the Naturhistorisches Museum in Wien (Austria), supports its placement to Coleophoridae. In the present paper, we are describing the second Madagascan representative of the family.

Results

Casignetella lastukhini Anikin, sp. nov. (Figs 1-4)

Holotype. Male, Madagascar, Fianarantsoa, 20 km E of Fianarantsoa, Sahambavy Lake, h=1100 m, 21.4607°S, 47.211°E, at light, 10–11.V.2013, leg. A Lastukhin (ZIN - Zoological Institute, Russian Academy of Science, St Petersburg).

Paratypes. 3 females, same data as for holotype (ZIN; Saratov State University, Russia).

Diagnosis. According to the shape of labial palps, abdominal tergites and the structure of genitalia, the new species should be placed in the genus Casignetella Strand, 1828. It is closely related to "Coleophora" ordinaria Meyrick, 1913 de-



Fig. 1. Casignetella lastukhini sp. nov., holotype, male.



Fig. 2. Casignetella lastukhini sp. nov., holotype, labels.

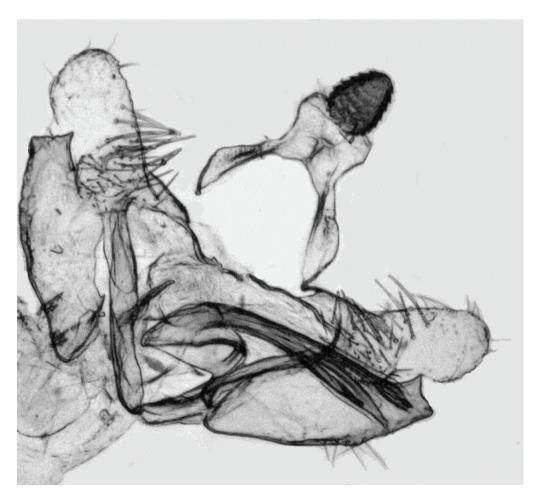


Fig. 3. Casignetella lastukhini **sp. nov.**, male genitalia, holotype.

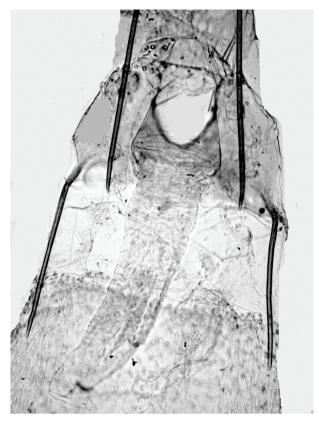


Fig. 4. Casignetella lastukhini sp. nov., female genitalia, paratype.

scribed from South Africa, but male genitalia of *Casignetella lastukhini* **sp. nov.** have rectangular apex of sacculus without tooth, while in Meyrick's

species, the sacculus bears long straight tooth apically. Female genitalia of *C. ordinaria* have widely rounded papillae anales and very long antrum with goblet posterior part, whereas *C. lastukhini* has papillae anales narrow, and antrum twice shorter and with rounded posterior part.

Description. Wingspan 9-11 mm. Head hazel-coloured with light grey scales around eyes. Labial palp: second segment about 1.5 times as long as third segment. Antenna with short light grey hairs at base of scape; flagellum ringed beige and light ochre. Thorax concolorous with head. Fore wing hazel-coloured with light grey streaks along veins; costal fringe hazel-coloured; dorsal fringe grey. Hind wing and its fringe dark cream. Abdomen hazel-coloured. Male abdominal tergites with spiny plates three times as long as wide; first abdominal tergite bristled by 10-12 spinelets on each plate; following tergites bristled by 18-20 spinelets. Female abdominal tergites with spiny plates about 1.9 times as long as wide; first abdominal tergite bristled by 12-19 spinelets on each plate; following tergites bristled by 40-45 spinelets.

Male genitalia (Fig. 3). Gnathos knob oval, slightly tapering upward. Distal part of tegumen narrow, broadening into square pedunculus. Transtilla small, curved beak-shaped, pointed. Valvula well developed. Cucullus large, ear-shaped. Sac-



Fig. 5. Type locality of Casignetella lastukhini sp. nov., surroundings of Sahambavy Lake, Madagascar (Photo A. Lastukhin).

culus short, its dorsocaudal angle slightly pointed, ventrocaudal one almost rectangular, without tooth. Phallotheca long, consisting of two rods: one with sclerotized rounded apex; both with two small triangular teeth at different distance from apex. Cornuti as one bundle of five spines.

Female genitalia (Fig. 4). Papillae anales narrow, acute. Apophyses posteriores about 1.8 times longer than apophyses anteriores. Subgenital plate triangular, twice as wide as long. Mediocaudal margin oval and not overlapping ostium bursae. Ostium bursae oval. Antrum elongated, slightly widening to ostium. Ductus bursae rather long, weakly sclerotized in middle part. Corpus bursae small, sack-shaped, with one small hardly visible signa.

Bionomy. Unknown. Moths have been collected at light in savanna landscapes around the Sahambavy Lake (Fig. 5).

Distribution. Madagascar.

Etymology. The new species is dedicated to Dr. Albert A. Lastukhin, Russian entomologist who collected the type material during the expedition to Madagascar in 2013.

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rial on Microlepidoptera collected in Madagascar and photo of type locality of new species for this article.

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