

**POLITZARIELLA FONTAINEI – NEW COSSIDAE (LEPIDOPTERA) SPECIES FROM CONGO**

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We give the first description of the species *Politzariella fontainei* Yakovlev & Witt, sp. nov. (Lepidoptera, Cossidae) from Congo, which is new for the science. The holotype habitus and male genital structure is illustrated; a detailed diagnosis is provided. The distribution area of the genus *Politzariella* Yakovlev, 2011 is mapped. The discovery of the new species *Politzariella fontainei* Yakovlev et Witt, sp. nov. has significantly enlarged our understanding of the distribution of this genus, which was previously considered an endemic of western Africa. Thus, the subfamily Politzariellinae Yakovlev, 2011 now includes four species of three genera, inhabiting the equatorial belt of Africa. We should also note that the distribution of Cossidae on the territory of Africa is still studied rather superficially, which is caused by a lack or absence of material from several countries.

**Keywords:** Cossidae, *Politzariella fontainei*, *Politzariella*, new species, Congo.

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**INTRODUCTION**

The Cossidae of Africa are poorly studied. There are full lists only on the fauna of Malawi (Yakovlev & Murphey, 2013), Zimbabwe (Yakovlev & Lenz, 2013), Swaziland (Yakovlev & Witt, 2016), South Africa (Mey, 2015, 2016). The monotype genus *Politzariella* Yakovlev, 2011 was proposed for *Politzariella pantherina* Yakovlev, 2011, described on one male from the collection of Heinz Politzar from Burkina Faso (Ober Volta, Bobo Dioulasso) (Yakovlev, 2011: 47).

The genera *Politzariella* Yakovlev, 2011 and the monotype genus *Holcocerooides* Strand, [1913] (type species – *Holcocerooides ferrugineotincta* Strand, [1913]) were treated under one subfamily, Politzariellinae Yakovlev, 2011 having the following synapomorphies: the modified costal process on the valve with the tendency to the fusion with the transtilla, the tendency to the reduced gnathos, the reduced membranous part of the valve and the presence of upward and forward directed processes of the juxta.

Later, one more monotype genus, *Geraldocossus* Yakovlev et Sáfián, 2016 with the type species *G. durrelli*, described from the slopes of the volcano Cameroon (Yakovlev & Sáfián, 2016) was assigned to this subfamily. During our work in the Museum Royal of Central Africa (MRAC, Tervuren, Belgium) we have discovered one more male of the genus *Politzariella* belonging to a species new for the science.

**MATERIAL AND METHODS**

The study is based on the examination of Cossidae specimens from Kongo, deposited in the Museum Royal of Central Africa (MRAC, Tervuren, Belgium). Male genitalia were mounted in euparal on slides following Lafontaine (2004) and examined with a Zeiss Stemi 2000 C microscope. Images were taken with the Olympus XC 50 camera.

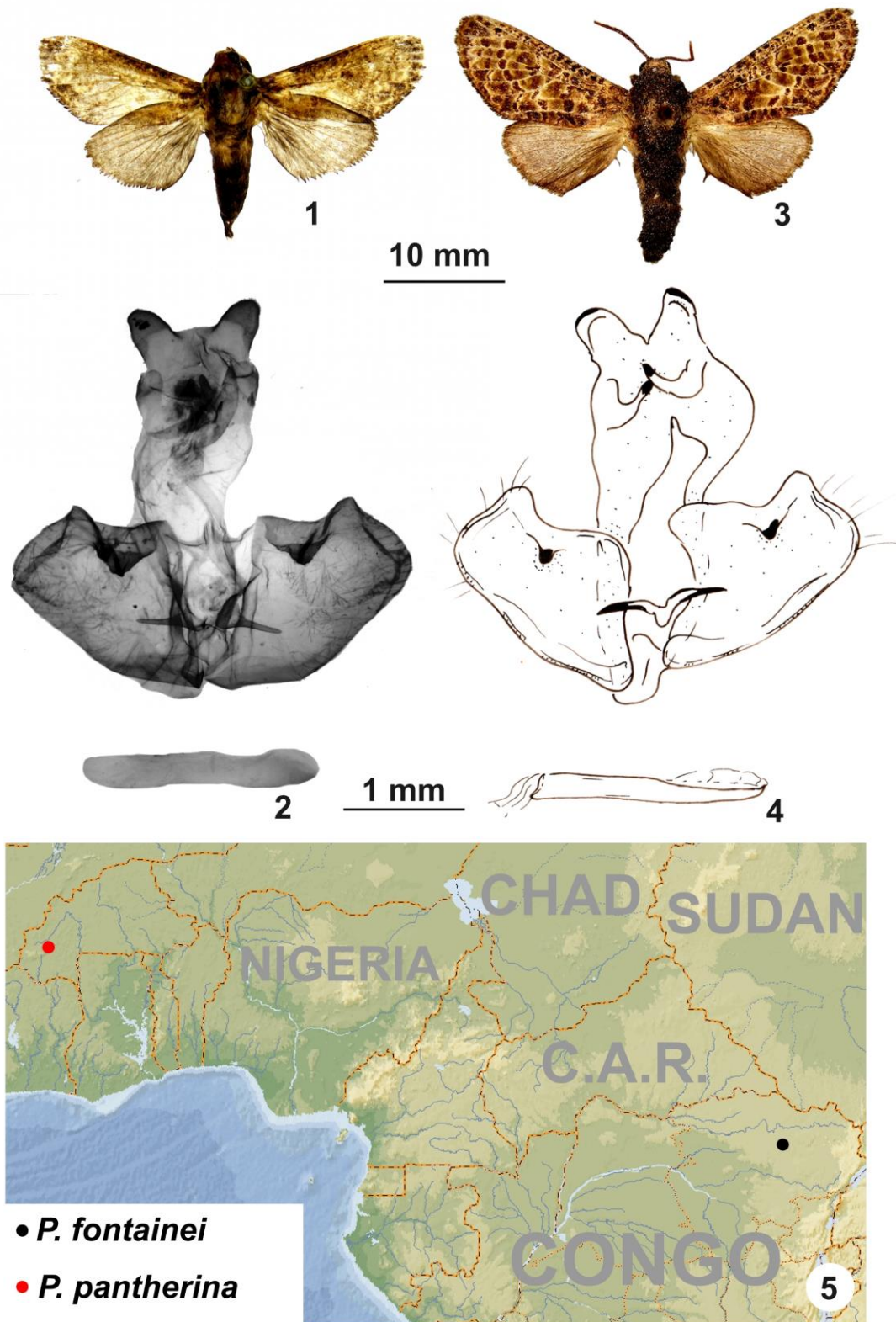


Fig. 1. *Poltzariella fontainei* Yakovlev et Witt, **sp. nov.**, holotype (MRAC).

Fig. 2. Male genitalia of *Poltzariella fontainei* Yakovlev et Witt, **sp. nov.** (GenPr MRAC/Coss-14/2015).

Fig. 3. *Poltzariella pantherina* Yakovlev, 2011, holotype (Zoologische Sammlung der Bayerischen Staates, Munich, Germany).

Fig. 4. Male genitalia of *Poltzariella pantherina* Yakovlev, 2011.

Fig. 5. Distributional map of Genus *Poltzariella* Yakovlev, 2011.

## RESULTS

*Politzariella fontainei* Yakovlev et Witt, sp. nov. (Figs 1–2)

**Type material:** holotype (Fig. 1), male, [Congo] Uele, Paulis [Isiro], [2°46'00" N/27°37'00" E] 9.IV.1957, Dr. M. Fontaine (MRAC, GenPr MRAC/Coss-14/2015).

**Diagnosis.** The new species differs well from *P. pantherina* (Figs 3–4) by the following features:

- absence of the striped pattern on the fore wing,
- uncus lobes widely moved apart,
- expressed nipple-like subuncuses,
- more developed harpe.

**Description.** Length of fore wing 12 mm. Antenna simple, not pectinate. Fore wing brown with poorly expressed undulated pattern, fringe mottled, pale between veins, dark at veins. Hind wing grey without pattern, fringe grey.

Male genitalia (GenPr MRAC/Coss-14/2015) (Fig. 2). Uncus forked, in the form of two wide lobes with semicircular apices diverging at an angle of 75°; subuncuses nipple-like, large; tegumen small; vinculum very elongated; gnathos arms very short, strongly sclerotized; valve shot with pyramidal harpe (directed abdominally) in middle third of costal edge and with tooth-like process (directed dorsally) in distal third of costal edge, abdominal edge of valve obliquely cut, apex semicircular, flat; juxta with two needle-like lateral processes, diverging at an angle of 180°; saccus small, positioned backward; phallus slightly shorter than valve, apex obliquely cut, vesica aperture in dorso-apical position, vesica without cornuti.

**Etymology.** The new species is named after its collector, famous Belgian entomologist, medical doctor and composer Dr. Maurice Fontaine (1913–1994), whose huge Congolese collections are deposited in MRAC.

## DISCUSSION

The discovery of the new species *Politzariella fontainei* Yakovlev et Witt, sp. nov. has significantly enlarged our understanding of the distribution of this genus (Fig. 5), which was previously considered an endemic of western Africa (Yakovlev, 2015). Thus, the subfamily Politzariellinae Yakovlev, 2011 now includes four species of three genera, inhabiting the equatorial belt of Africa. We should also note that the distribution of Cossidae on the territory of Africa is still studied rather superficially, which is caused by a lack or absence of material from several countries.

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## REFERENCES

- Mey, W. (2015). Revision of the genus *Arctiocossus* Felder, 1874 and allied genera (Lepidoptera: Cossidae: Cossinae). *Annals of the Ditsong National Museum of Natural History*, 5, 28–55.
- Mey, W. (2016). A taxonomic and faunistic study of the Cossidae of southwestern Africa (Lepidoptera: Cossidae). *Annals of the Ditsong National Museum of Natural History*, 6, 146–198.
- Yakovlev, R.V. (2015). Patterns of Geographical Distribution of Carpenter Moths (Lepidoptera: Cossidae) in the Old World. *Contemp Probl Ecol*, 8(1), 36–50.
- Yakovlev, R.V., Lenz, J. (2013). On the Fauna of Cossidae (Lepidoptera) of Zimbabwe with description of a new species. *Zootaxa*, 3718(4), 387–397.
- Yakovlev, R.V., Murphy, R.J. (2013). The Cossidae (Lepidoptera) of Malawi with descriptions of two new species. *Zootaxa*, 3709(4), 371–393.
- Yakovlev, R.V., Sáfián, Sz. (2016). *Geraldocossus* gen. nov. (Lepidoptera, Cossidae) from Mount Cameroon (West Africa). *Zootaxa*, 4114(5), 595–599.
- Yakovlev, R.V., Witt, Th.J. (2016). Carpenter-Moths (Lepidoptera: Cossidae) of Swaziland, South Africa. *Fare East Entomologist*, 311, 9–12.