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Phloiocopus bimaculatus sp. n., a new apterous species from Somalia (Coleoptera, Cleridae, Clerinae)

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bimaculatus; Somalia.
aptery;

Abstract. – *Phloiocopus bimaculatus* sp. n., a new apterous species of checkered beetles (Cleridae) from Somalia is described and figured.

Gerstmeier R., 2024. – *Phloiocopus bimaculatus* sp. n., a new apterous species from Somalia (Coleoptera, Cleridae, Clerinae). *Faunitaxys*, 12(17): 1 – 3.

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Introduction

Among the scarce examples of aptery among the Cleridae, the phenomenon appears to be most common in the Clerinae of the African region (Gerstmeier 1999, Gerstmeier & Eberle 2011). Aptery, at least in the Coleoptera, is often correlated with special ecological conditions such as isolation on islands or mountain tops (Darlington 1943), the latter being the case for the new species reported here, which was collected from Daallo Forest, Somalia, at about 2.180 m. The Daallo Escarpment is an important centre of endemism and supports a unique combination of plant species, linking to the Afromontane, Mediterranean and Micronesian regions, with much of it remaining scientifically underexplored (from Bradt Guides 2024). Daallo is the wettest part of Somaliland, receiving a mean annual rainfall of around 750 mm, and therefore contains the densest and perhaps the richest fauna of the Somali region (from Bradt Guides 2024).

Material and methods

The description of the new species is based on morphological examination, including preparation of male genitalia, pygidium and sixth abdominal ventrite. For this purpose the male specimen was hydrated in hot distilled water and the genitalia removed with fine forceps through small incisions made along the sides of the terminal abdominal segments. The aedeagus was cleaned of soft tissue in 10% KOH, cleared in 70% ethyl alcohol and submerged in glycerine, then stored in a genital vial pinned below the specimen.

Measurements were made under a stereo microscope using an ocular micrometer. Total body length is the distance measured from the apical clypeal margin to the elytral apices. Elytral length was measured alongside the elytral suture and pronotal length was taken from the dorsal middle line. Head (including eyes), pronotal and elytral widths were measured at their broadest extremes. Antennomere is abbreviated to 'A', Tarsomere to 'T'.

Specimens are deposited in the following insect collections:

- **LDCB**: Lars Dobberstein Collection, Berlin, Germany
- **RGCM**: Roland Gerstmeier Collection, Munich, Germany (deposited in Bavarian State Collection of Zoology, ZSM, Munich)
- **ZSM**: Zoologische Staatssammlung Munich, Germany.

Taxonomic description

Phloiocopus bimaculatus sp. n.

(Fig. 1-9)

ZooBank: <https://zoobank.org/FA865A8B-7FC8-4775-820B-40970EAC4413>

Holotype, ♂. – Somaliland, 22-23.viii.2018, Daallo forest - base camp, 10°45'36" N - 47°18'12" E, ca. 2180 m, P. Kabátek lgt. (RGCM).

Paratypes, 1 ♀ – same label data (LDCB).

Description

Length. – 9.0 (♂) -10.3 mm (♀) (2 specimens measured).

Head. – Large, parallel, very slightly wider than pronotal anterior margin, red brown, glossy, coarsely and deeply wrinkled. – **Eyes** protruding, coarsely faceted, eye emargination in the middle, broad, roundish, first antennomere (A1) in a distinct distance from inner part of eye emargination; margined, margin connected with antennal ridge, this antennal ridge is connected with the upper and inner eye margin; eye width 0.56-0.60 mm, eye distance 1.20-1.36 mm. – **Labrum** small, deeply bilobed. – Posterior part of **clypeus** long, transverse, smooth, with fine, diffuse punctuation, very slightly and broadly emarginate; anterior part of clypeus small, slightly covering labrum. – Terminal **labial** and **maxillary palpomeres** securiform. – **Mandibles** stout, apical dens short, stout, medial dens stout, roundish. – **Antennae** red brown, long, reaching middle of pronotum when extended backwards, antennal groove long, wide, slightly curved; A1 strongly curved inwards, A2 – A7 cylindrical, more or less thick, A3 slightly longer than A2, A4 shorter than A3, becoming shorter until A8, A9 regularly dilated, A10 more dilated towards inner side, A11 very slightly curved, slender, in female longer than A10+A9, in male more or less as long as A7 – A10 together; A1 with long, pale setae, the rest of antennomeres only with short, pale setae.

Reviewer:

Justin S. Bartlett (Biosecurity Queensland, Department of Agriculture and Fisheries, Brisbane, Australia)

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Pronotum. – More-or-less goblet-shaped (cupuliform), as long as wide, apical and basal margin straight, very slightly dilated anteriorly, constricted basally ($l = 2.48\text{--}2.80$ mm, $w = 2.28\text{--}2.72$ mm, length to width index 1:1.056), pronotal collar narrow; anterior transverse depression not really visible; anteriorly with scarce but conspicuous punctation, with a smooth spot on both sides of the middle, then coarsely and deeply wrinkled.

Scutellum. – Small, transversely oval, dark red-brown, with coarse punctation.

Elytra. – Short, stout, twice as long as wide ($l = 5.17\text{--}6.33$ mm, $w = 2.52\text{--}3.36$ mm, width to length index 1: 1.965), broadly dilated towards apex, elytral base narrow, more narrow than mid-pronotal width. – *Apices* broadly rounded. – *Basal third* red brown, in the middle with a slightly narrower, black, transverse fascia, then dark brown, behind the black transverse fascia with a large, white, transversely-oval spot, reaching the side margin, but not the suture. – *Elytral* base not margined, the inner rows of punctation (near suture) more or less regular, then towards side margins increasingly irregular, conspicuous and deep; in basal part rasp-like; diameter of punctation mostly larger than interstices, intervals with microsculpture. – *Punctation* becoming more flat towards the white transversely-oval spot, apex almost smooth; with long, erect (mostly slightly directed backwards) setae. Without hind wings.

Legs. – Large, stout, especially profemora; red brown, with long, pale, dense, erect setae; tibiae slightly curved, with carina. Tarsal sole formula 3-3-3, from T2 – T4 increasingly deeply incised, T1 very slender, but also with very fine setae. – *Tibial* spur formula 1-2-2. Claws simple, stout, between with a single-setose empodium.

Lower surface. – *Gula* apically convergent, base broadly rounded, not very conspicuously margined, with small, separated pads in the middle. – *Lacinia* with a small, but distinct laterolacinia. – *Prosternal length* much smaller than diameter of coxa. – *Prosternal process* short, stout, dilated distally. – *Hypomeron* short, pointed, coxal cavities broadly open. – *Anterior mesoventral process* lip-shaped, apically sinuate, open in the middle.

Genitalia. – See Fig. 3-9.

Distribution. – Somalia.

Etymology. – The specific epithet, *bimaculatus*, a Latin adjective, refers to the white maculae on the elytra.

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Fig. 1-2. *Phloiocopus bimaculatus* sp. n. 1. Male. 2. Female.

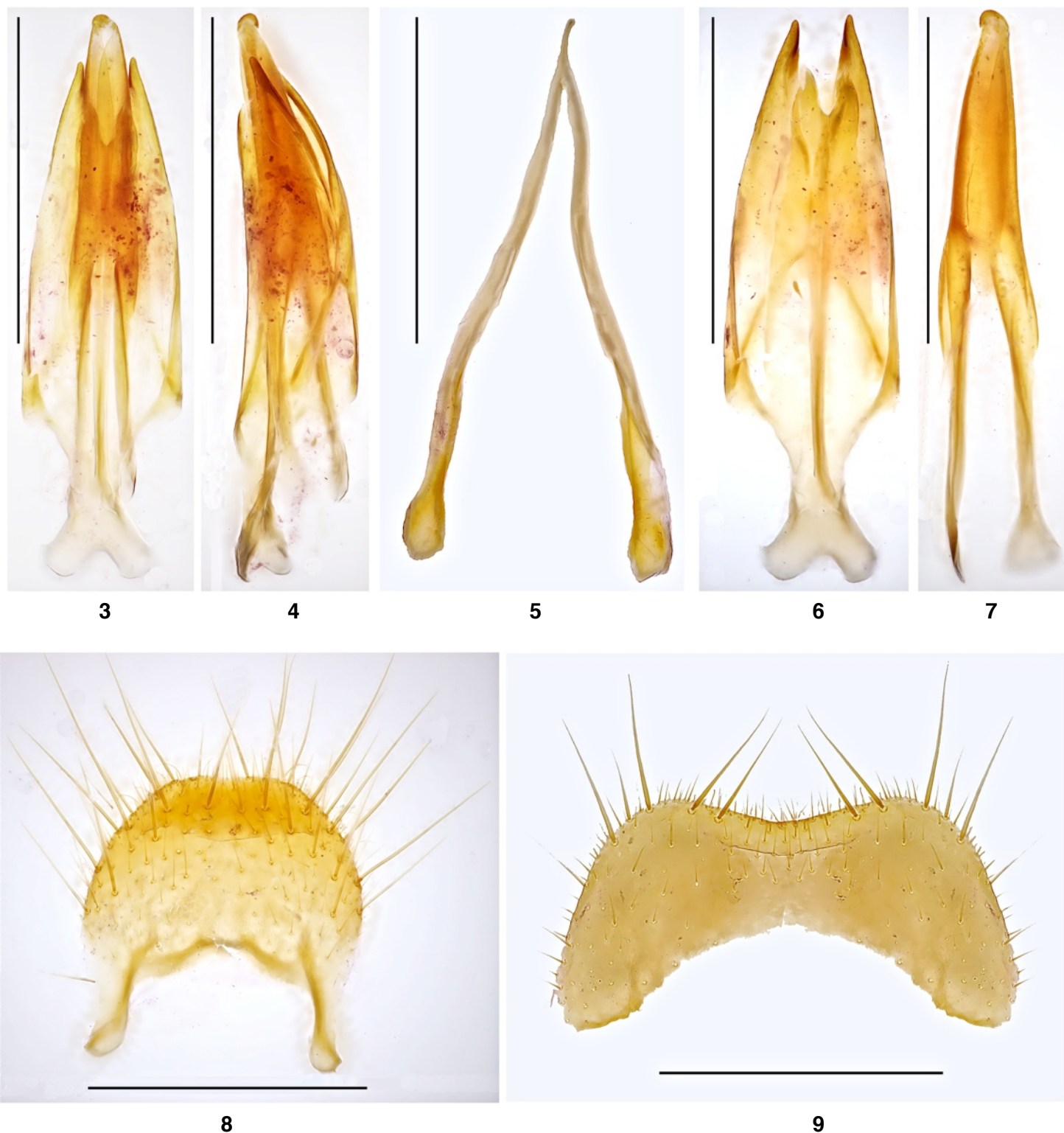


Fig. 3-9. *Phloiocopus bimaculatus* **sp. n.** Genitalia (Scale: 0.5 mm).

3. Aedeagus, ventral view. 4. Aedeagus, lateral view. 5. Spicular Fork. 6. Tegmen, ventral view. 7. Phallus, ventral view. 8. Pygidium. 9. Ventrite 6.

Résumé

Gerstmeier R., 2024. – *Phloiocopus bimaculatus* **sp. n.**, nouvelle espèce aptère de Somalie (Coleoptera, Cleridae, Clerinae). *Faunitaxys*, 12(17): 1 – 3.

Un nouveau cléron aptère (Cleridae) est décrit de Somalie : *Phloiocopus bimaculatus* **sp. n.**

Mots-clés. – Coleoptera, Cleridae, Clerinae, *Phloiocopus*, *bimaculatus*, aptère, clérons, taxonomie, description, espèce nouvelle, Somalie.

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Illustration de la couverture :

Phloiocopus bimaculatus **sp. n.** Male holotype (left) & Female paratype (right).

Crédits:

Xavier Gouverneur : Fig. 1-9 & couverture.