Additions to the knowledge of Dermestidae (Coleoptera) from the Afrotropical Region III

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Abstract. Orphinus (Orphinus) saotomei sp. nov. from São Tomé and Thaumaglossa bambariensis sp. nov. from Central African Republic are described, illustrated and compared with similar species. The new species differs from similar species by the structure of antennae and colour fasciae. The following species are newly recorded: Evorinea iota (Arrow, 1915) (Seychelles Is.); Trinodes congoanus Háva, 2019 (D. R. Congo); Trogoderma angustum (Solier, 1849) (D. R. Congo); Thaumaglossa escalerai Herrmann & Háva, 2013 (D. R. Congo, Republic of Congo); Phradonoma distinctum Kalik, 1954 (D. R. Congo).

INTRODUCTION

The family Dermestidae (Coleoptera: Bostrichoidea) comprises about 1904 valid species and subspecies worldwide (Háva 2015, 2023). This article is a continuation of the study of Dermestidae from Musée Royal de l'Afrique Centrale, Tervuren, Belgium and Natural History Museum (formerly British Museum, Natural History), London, United Kingdom (Háva & Matsumoto 2020, 2021a-e, 2022a,b).

MATERIALS AND METHODS

The specimens were examined by relaxing in warm water, dissecting the abdomen and its inner contents. Genitalia are mounted on a card pinned under the specimen. Habitus photographs were taken with a Canon DSLR camera, Laowa 25mm macro lens. All photographs were processed through focus stacking software, and were later edited using GIMP. The beginning and end of label text are indicated using double quotes (""); a double slash (//) separates the data on different labels.

The following acronyms of morphological characters were used: AS - Antennal segment(s) (preceded by number increasing from antennal insertion to the tip of the last antennomere), BL - body length (pronotum length and elytral length), EL - elytral length, EW - maximum elytral width, PL - pronotal length, PW - maximum pronotal width.

Specimens from the following institutions were used in this study:

BMNH Natural History Museum (formerly British Museum, Natural History), London, United Kingdom;

JHAC Jiří Háva, Private Entomological Laboratory and Collection, Prague-west, Czech Republic.

MRAC Musée Royal de l'Afrique Centrale, Tervuren, Belgium.

RESULS

Subfamily Trinodinae

Evorinea iota (Arrow, 1915) (Fig. 1)

Material examined: 2 ex., MRAC, "Iles Séchelles - Mahé Sud : Bougainville 26 31.VIII.1972 // Coll. Mus. Tervuren Miss. Zool. Belge aux Séchelles-PLG Benoit et J. J. Van Mol", J. Háva det.

Distribution. Species known from Kenya, Reunion, Bali, Java, Sulawesi, Sumatra, Cambodia, Japan, Malaysia Pahang, Sarawak, Myanmar, Philippines, Sri Lanka, Taiwan, Thailand, Vietnam, Australia, Caroline Is., Cook Is., Gilbert Is., Mariana Is., Palau, Papua New Guinea, Ponape, Tanimbar Is., Tonga, Truk, West Papua. New to Seychelles.

Trinodes congoanus Háva, 2019 (Fig. 2)

Material examined: 1 ex., MRAC, "MUSEE DU CONGO HAUT UELE Watsa, XI-1919 L. Burgeon.", J. Háva det

Distribution. Species known from Republic of the Congo. New to Democratic Republic of the Congo.



Figs. 1-2. Dorsal habitus of Afrotropical Trinodinae: 1- *Evorinea iota* (Arrow, 1915); 2- *Trinodes congoanus* Háva, 2019.

Subfamily Megatominae

Orphinus (Orphinus) saotomei sp. nov. (Fig. 3)

Type material. Holotype (♀): "COLL. MUS. TERVUREN, Il S. Tomé: env. Ville S. Tomé, 800 m. G. Schmitz X.73", (MRAC) / Holotype *Orphinus* (*O.*) *saotomei* sp.nov., J. Háva & K. Matsumoto det. 2024

Description. Female. Body oval, dorsum convex. BL: 1.95 mm, PL: 0.56 mm, PW: 1.02 mm, EL: 1.39 mm, EW: 1.21 mm.

Head, pronotum and scutellum black (Fig. 3A). Elytra with semicircular orange band at anterior half of the elytra on lateral margin and posterior half on elytral suture (Fig. 3A). Ventral surface black to dark brown. Head finely punctate, with short, recumbent, light brown setation. Palpi brown; setation on mentum denser. Eyes very large, with light brown microsetae. Ocellus on frons present. Antennae light brown with brown setae, with 11 antennomeres, antennal club formed of two antennomeres, 1st to 9th AS smooth, 1st AS rounded, 2nd oval and smaller than 1st AS, 3rd to 9th AS short and narrow, 10th AS trapezoid and short, terminal antennomere large and nearly circular (Fig. 3B). Pronotum on the disc punctate like head, relatively consistent density of punctures, with relatively long, recumbent, yellow setation. Scutellum triangular, anterior end nearly straight, without setation. Elytra finely punctate, with relatively long, recumbent setae, yellow setation occurs across all surfaces (Fig. 3A). Legs light brown, with light brown setation. Abdominal visible

ventrites finely punctate, with relatively long, recumbent, light brown setation, apical end of 5th ventrite nearly fla.

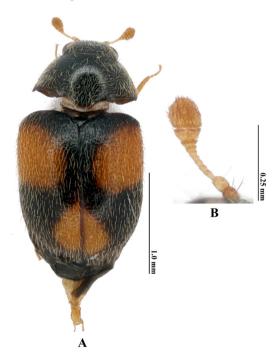
Male. Unknown.

Differential diagnosis. The new species differs from all other Afrotropical species by the characteristic colour of the elytral fasciae, and by the structure of antennae.

Etymology. This species is named after the type locality.

Distribution. This species is known only from the type locality.

Fig. 3. Orphinus (Orphinus) saotomei sp. nov.: A-Dorsal habitus; B- antenna.



Phradonoma distinctum Kalík, 1954 (Fig. 4)

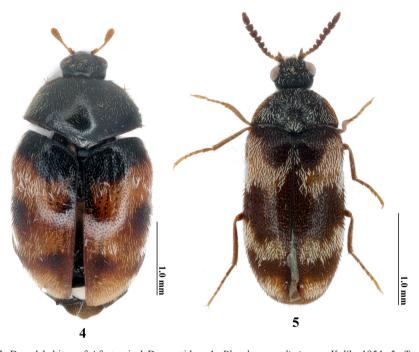
Material examined: 1 ex., MRAC, "COLL. MUS. CONGO Elisabethville (á la lumière) I-1956/I15957 Ch. Seydel", J. Háva det.

Distribution. Species known from Namibia and South Africa. New to Democratic Republic of the Congo.

Trogoderma angustum (Solier, 1849) (Fig. 5)

Material examined: 3 ex., BMNH, "D.R.CONGO: Kinshasa v.2012 4°26'30.95"S 15°15'58.66"E 436m Emerged from mask A. Polaszek BMNH(E) 2012-88".

Distribution. Species known from Palearctic, Nearctic, Neotropical, Indomalayan, Australasian and Afrotropical regions. New to Democratic Republic of the Congo.



Figs. 4-5. Dorsal habitus of Afrotropical Dermestidae: 4- *Phradonoma distinctum* Kalik, 1954; 5- *Trogoderma angustum* (Solier, 1849).

Thaumaglossa bambariensis sp. nov.

(Fig. 6)

Type material. Holotype (♂): "Coll.Mus.Tervuren Rép.Centrafricains Bambari,U.V. G. Pierrard II.1964", (BMNH). Paratype: (1 ♀): "Rép. Centrafricaine, Bambari U.V., II.1964, G. Pierrard", (JHAC). Type labels: Holotype [or Paratype] *Thaumaglossa bambariensis* sp. nov., J. Háva & K. Matsumoto det. 2024

Description. Male. Body oval, dorsum convex. BL: 2.60 mm, PL: 0.84 mm, PW: 1.71 mm, EL: 1.69 mm, EW: 1.84 mm.

Head, pronotum, scutellum, elytra brown (Fig. 6A). Ventral surface black to dark brown. Head finely punctate, with short, recumbent, light brown setation. Palpi brown; setation on mentum denser. Eyes very large, with very few light brown microsetae. Ocellus on frons present. Antennae light brown with brown setae, with 11 antennomeres, antennal club formed of three antennomeres and elongated (Fig. 6B). Pronotum on the disc punctate like head, relatively consistent density of punctures, with relatively long, recumbent, yellow setation. Scutellum triangular, anterior end nearly straight, without setation. Elytra finely punctate, with relatively long, recumbent setae, yellow setation occurs along all surfaces (Fig. 6A). Legs brown, with light brown setation. Abdominal visible ventrites finely punctate, with relatively long, recumbent, light brown setation, apical end of 5th ventrite nearly flat. Male genitalia as in Fig. 6C.

Female. Externally similar to male, but differs from it by the very small, circular terminal antennomere.

Differential diagnosis. The new species differs from all other Afrotropical species by the characteristic elytral colour, and the structure of the antennae.

Etymology. This species is named after the type locality.

Distribution. This species is known only from the type locality.

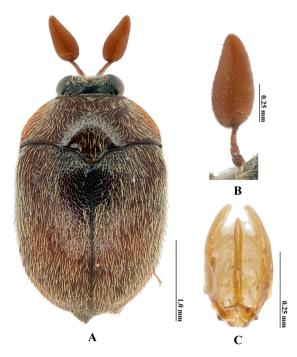


Fig. 6. *Thaumaglossa bambariensis* sp. nov.: A-Dorsal habitus; B- antenna; C- genitalia.

Thaumaglossa ghana Háva, 2002

Material examined: 1 ♂, BMNH, "GABON 10m Nyonié. Lowland forest 0°2′22″S, 9°20′25″E 23-28.viii.2019. // MV light trap Albert,J-L.,Aristophanous,M., Bie Mba, J., Dérozier, V., Moretto, P. BMNH(E) 2020-19 // NHMUK014660393″.

Distribution. Species known from Cameroon, Gabon, Ghana, Ivory Coast, Nigeria, Sierra Leone.

Thaumaglossa escalerai Herrmann & Háva, 2013

Material examined: 3 ♀♀, BMNH, "MUSÉE DU CONGO Equateur : Bokuma 210 XI-1936 R. P. Hustaert", "MUSÉE DU CONGO Lusambo : Sangale XI-1934 Mme Gillardin", "MUSÉE DU CONGO Eala 431 -IV-1935 J. Ghesquière // dans Oellique de Mantide // Congo belge Eala IV.1935 J. Ghesquière", "MUSÉE DU CONGO Haut-Uelé : Moto -IV-V-1923 L. Burgeon"; 1 ♂, BMNH, "Rep. Of the Congo, 341m Ekolongouma, N1.20279,E17.88032, 12-19.ii.2022, // Gen. Coll., Hackforth,C.N. & Tsoumou,A., BMNH(E) 2022-153 // NHMUK015525334".

Distribution. Species known from Ghana, Equatorial Guinea, Liberia, Sierra Leone, Zambia. New to Democratic Republic of the Congo and Republic of the Congo.

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