

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

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Abstract. *Anthrenus (Anthrenops) aristophanousi* sp. nov. from Gabon and Angola and *Orphinus (Orphinus) lydiae* sp. nov. from Senegal are described, illustrated and compared with similar species. The new species differs from similar species by the structure of antennae, male genitalia and colour fasciae. The following new country records are provided: *Anthrenus (Anthrenops) endroedyi* Háva, 2004 (Gabon), *Ctesias (Tiresiomorpha) gambiensis* Háva, 2022 (Senegal), *Thaumaglossa rufiventris* Pic, 1927 (Gabon), *Volvicornis rufescens* (Pic, 1927) (Gabon).

INTRODUCTION

The family Dermestidae (Coleoptera: Bostrichoidea) comprises about 1760 valid species and subspecies worldwide (Háva 2015, 2022). This article is a continuation of the study of Dermestidae from Natural History Museum (formerly British Museum, Natural History), London, United Kingdom (Háva & Matsumoto 2020, 2021a-d, 2022). Two new species belonging to the genera *Anthrenus* Geoffroy, 1762 and *Orphinus* Motschulsky 1858 are described, and new records are provided for five species belonging to the genera *Anthrenus* Geoffroy, 1762, *Ctesias* Stephens, 1830, *Thaumaglossa* Redtenbacher, 1867 and *Volvicornis* Háva & Kalík, 2004.

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.

Type material is deposited in:

BMNH - Natural History Museum (formerly British Museum, Natural History), London, United Kingdom; JHAC - Jiří Háva, Private Entomological Laboratory and Collection, Únětice, Praha-západ, Czech Republic.

RESULTS

Anthrenus (Anthrenops) aristophanousi sp. nov.

(Figs. 1A-1E)

Type material. Holotype (♂): “GABON 430 m Mikongo (Rougier), Monts de Cristal. Secondary forest 0°29'47"N, 11°10'42"E // 28.vii-12.viii.2019. On flowers Albert,J-L.,Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P. BMNH(E) 2020-19 // NHMUK014660378”, (BMNH). Additional label on red paper added: “*Anthrenus (Anthrenops) aristophanousi* sp. nov. Háva & Matsumoto det. 2022, HOLOTYPE”. Paratype (1 ♀): “Angola, Dundo, gig 17, vii. 1948, A. de Barros Machado [lgt.]”, (JHAC). Additional label on red paper added: “*Anthrenus (Anthrenops) aristophanousi* sp. nov. Háva & Matsumoto det. 2022, PARATYPE”

Description. Male. Body oval, dorsum convex. BL: 2.10 mm, PL: 0.57 mm, PW: 1.08 mm, EL: 1.41 mm, EW: 1.46 mm.

Dorsal surface covered with subtriangular scales. Dorsal and ventral surfaces black to dark brown (Figs. 1A, 1B). Head deeply punctate, with mixture of yellow and brown short scales. Palpi brown, short setation on mentum sparsely spread. Eyes very large. Ocellus on frons present. Antennae brown, with 9 antennomeres, antennal club formed of two antennomeres; 1st AS round; 2nd AS rectangular; 3rd to 8th AS narrow and short; 9th AS suboval with apical end flat, posterior end flat, anterior end obtusely angled (Fig. 1D). Pronotum covered with mixture of yellow and brown short scales, yellow scales localised on posterior-lateral end. Scutellum triangular, without scales. Elytra covered with yellow and brown scales. Three horizontal band of yellow setae. Apical end obtuse (Fig. 1A). Legs brown, with light brown setation. Ventral habitus covered with yellow scales; number of brown scales increases towards the lateral end. Abdomen covered with yellow scales; brown scales present on anterior-lateral end of 2nd to 5th ventrites; apical end of 5th ventrite modified (Fig. 1C).

Genitalia as in Fig. 1E.

Female. Externally similar to male, but terminal antennomere is smallest.

Differential diagnosis. The new species very similar to *Anthrenus (Anthrenops) endroedyi* Háva, 2004 but differs from it by the structure of scales, antennae and male genitalia.

Etymology. The epithet is a patronym honouring Marios Aristophanous, who collected this holotype specimen.

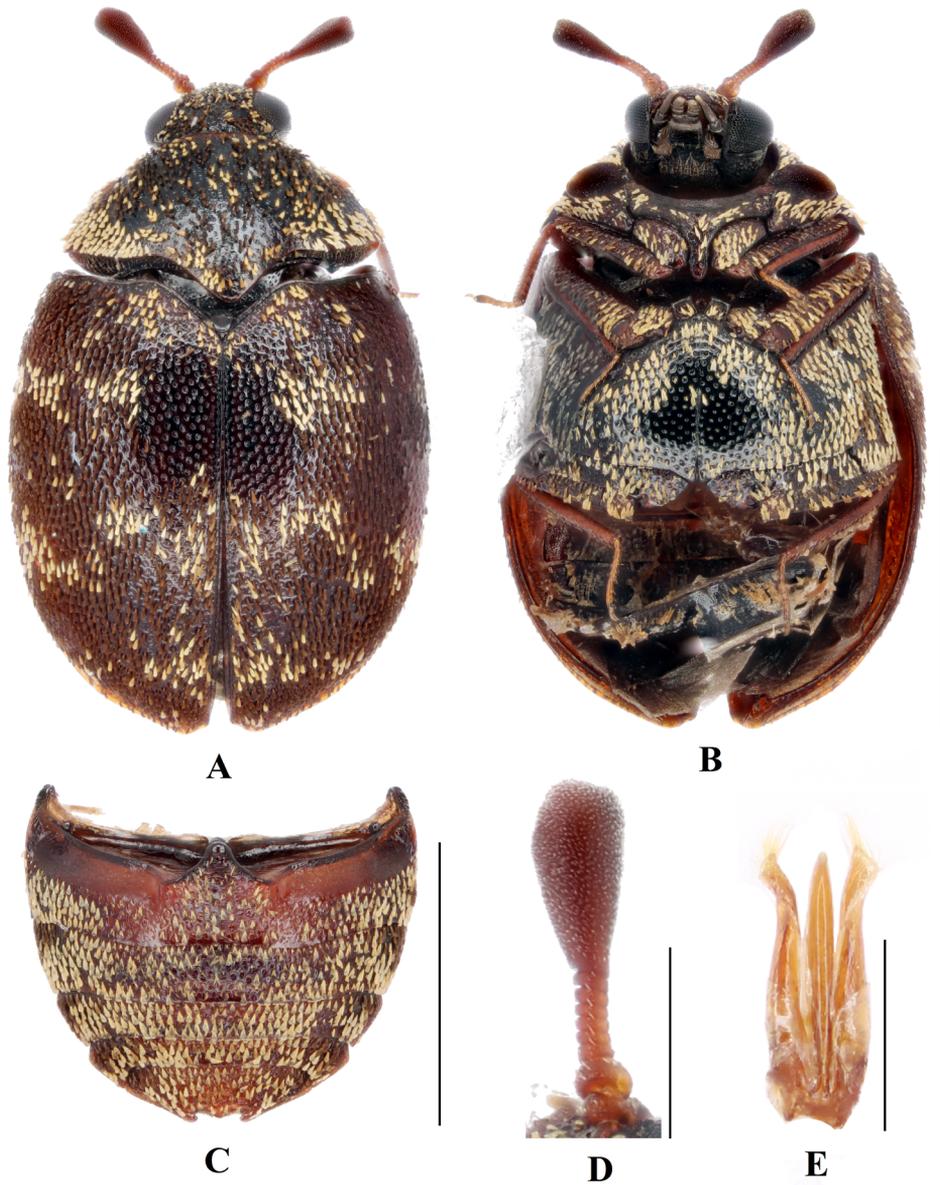


Fig. 1. *Anthrenus (Anthrenops) aristophanousi* sp. nov.: A- Dorsal habitus; B- ventral habitus; C- abdomen; D- right antennae; E- genitalia, ventral view. Scale bars: A-C = 1.00 mm, D-E = 0.25 mm.

Anthrenus (Anthrenops) endroedyi Háva, 2004

(Fig. 2)

Material examined: (1 ♂, 4 ex.): “GABON 430 m Mikongo (Rougier), Monts de Cristal. Secondary forest 0°29'47"N, 11°10'42"E // 28.vii-12.viii.2019. On flowers Albert,J-L.,Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P. BMNH(E) 2020-19” with additional unique identification numbers “NHMUK014660380”, “NHMUK014660381”, “NHMUK014660382”, “NHMUK014660383” and “NHMUK014660385”, (BMNH).

Distribution. A species known from Cameroon, Congo and Ghana, new to Gabon.

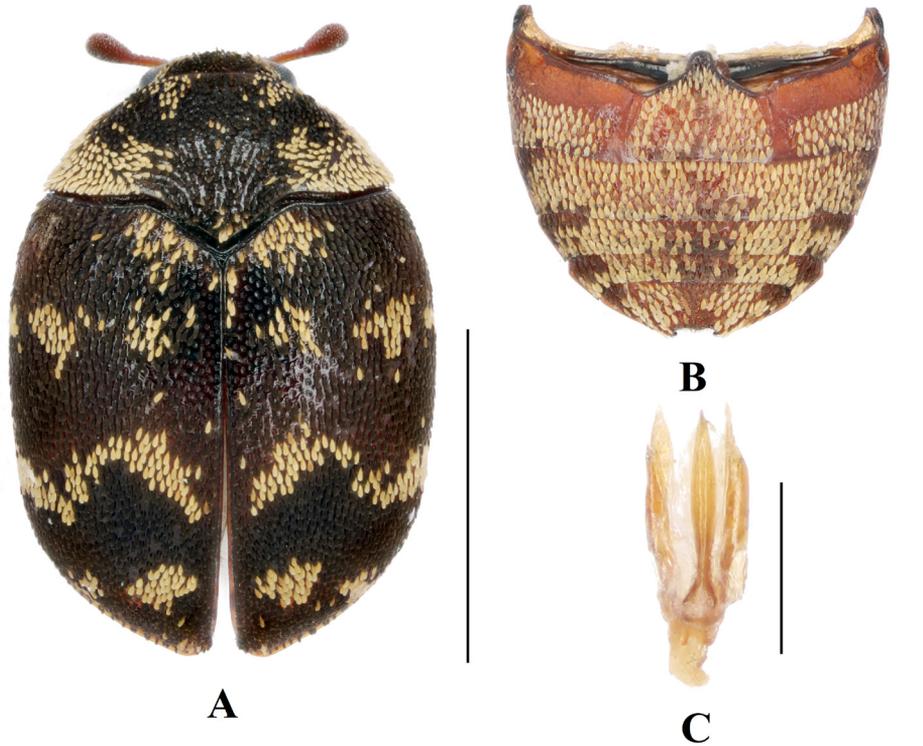


Fig. 2. *Anthrenus (Anthrenops) endroedyi* Háva 2004. A- Dorsal habitus; B- abdomen; C- genitalia, ventral view. Scale bars: A-B = 1.00 mm, C = 0.25 mm.

Volvicornis rufescens (Pic, 1927)

(Fig. 3)

Material examined: (1 ♂): “GABON 430 m Mikongo (Rougier), Monts de Cristal. Secondary forest 0°29'47"N, 11°10'42"E // 28.vii-12.viii.2019. On flowers Albert,J-L.,Aristophanous, M., Bie Mba, J., Dérozier, V., Moretto, P. BMNH(E) 2020-19 // NHMUK014660379”, (BMNH).

Distribution. A species known from Cameroon, Congo and Ghana, new to Gabon.

***Thaumaglossa rufiventris* Pic, 1927**

(Fig. 4)

Material examined: (1 ♂): “GABON 10 m 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 // NHMUK014660392”, (BMNH).

Distribution. A species known from Benin, Cameroon, Congo, Ghana, Equatorial Guinea, Ivory Coast and Togo, new to Gabon.

***Thaumaglossa ghana* Háva, 2002**

(Fig. 5)

Material examined: (1 ♂): “GABON 10 m 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”, (BMNH).

Distribution. A species known from Cameroon, Gabon, Ghana, Ivory Coast, Nigeria, Sierra Leone, new locality data from Gabon.

***Ctesias (Tiresiomorpha) gambiensis* Háva, 2022**

(Fig. 6)

Material examined: (5 spec.): “SENEGAL 30m Simenti, Niokolo-Koba NP 13°1'33”N, 13°17'4”W 3-16.vi.2019 MV Light Trap // Aristophanous, M.,Moretto,P., Mulvaney, L., leg. ANHRT:2019.14, BMNH(E) 2022-15” with additional unique identification numbers “NHMUK014660386”, “NHMUK014660387”, “NHMUK014660388”, “NHMUK014660389” and “NHMUK014660394”, (4 BMNH, 1 JHAC).

Distribution. This species is described from Gambia; new to Senegal.

***Orphinus (Orphinus) lydiae* sp. nov.**

(Fig. 7)

Type material. Holotype (♂): “SENEGAL 30 m Simenti, Niokolo-Koba NP 13°1'33”N, 13°17'4”W 3-16.vi.2019 MV LightTrap // Aristophanous,M.,Moretto,P., Mulvaney, L., leg. ANHRT:2019.14, BMNH(E) 2022-15 // NHMUK014660390”, (BMNH). Additional label on red paper added: “*Orphinus (Orphinus) lydiae* sp. nov. Háva & Matsumoto det. 2022, HOLOTYPE”. Paratypes (2 ♂): with same locality labels as holotype with additional unique identification number “NHMUK014660391” and “NHMUK014536321”, (1 BMNH, 1 JHAC). Additional label on red paper added: “*Orphinus (Orphinus) lydiae* sp. nov. Háva & Matsumoto det. 2022, PARATYPE”.

Description. Male. Body oval, dorsum convex. BL: 1.90 mm, PL: 0.59 mm, PW: 1.10 mm, EL: 1.30 mm, EW: 1.26 mm.

Head, pronotum and scutellum black (Fig. 7A). Elytra with orange band at the middle and at the end (Fig. 7A). Ventral surface black to dark brown (Fig. 7B). 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



3



4



5



6

Figs. 3-6. Dorsal habitus: 3- *Volvicornis rufescens* (Pic, 1927); 4- *Thaumaglossa rufiventris* Pic, 1927; 5- *Thaumaglossa ghana* Háva, 2002; 6- *Ctesias (Tiresiomorpha) gambiensis* Háva, 2022. Scale bar: 1.0 mm.

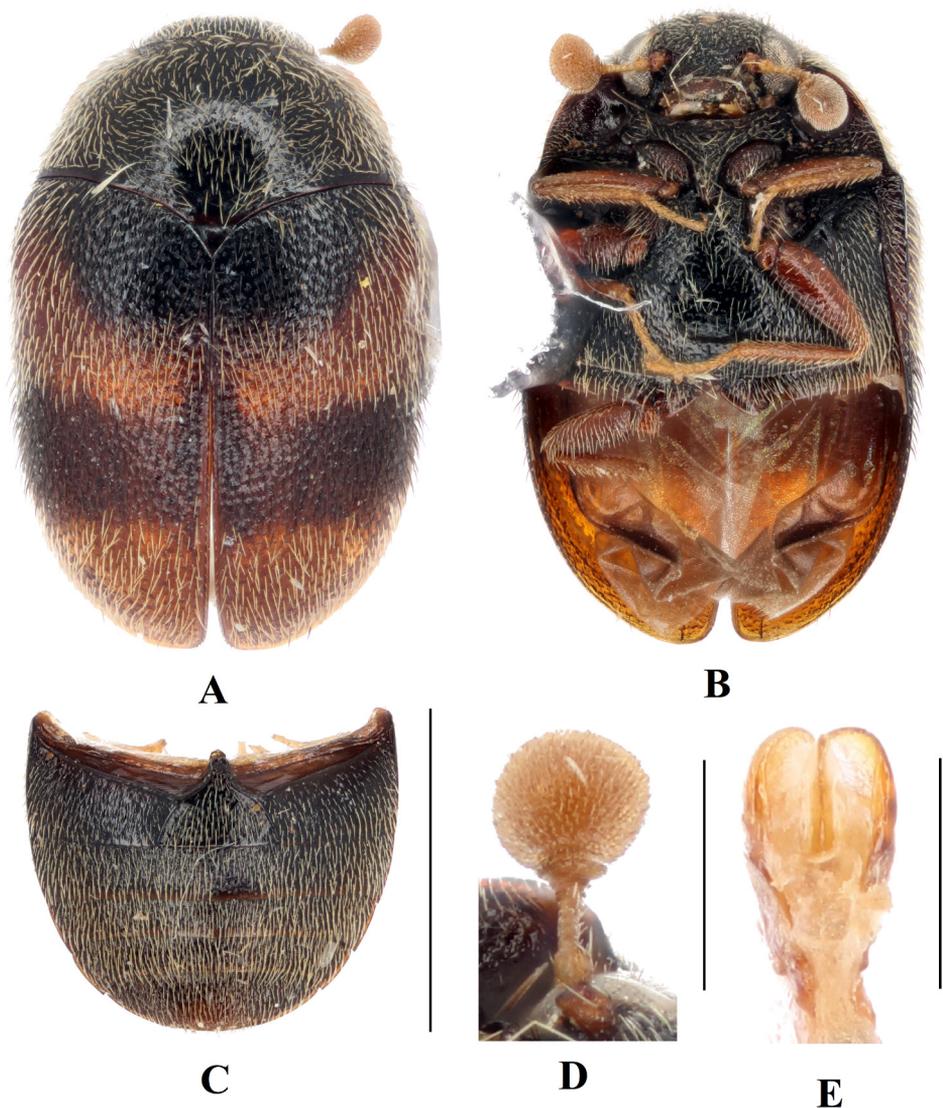


Fig. 7. *Orphinus (Orphinus) lydiae* sp. nov.: A- Dorsal habitus; B- ventral habitus; C- abdomen; D- antennae; E- genitalia, ventral view. Scale bars: A-C = 1.00 mm, D-E = 0.25 mm.

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. 7D). 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 the orange bands, black setation on black surfaces (Fig. 7A). 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 (Fig. 7C).

Genitalia as in Fig. 7E

Female. Unknown.

Differential diagnosis. The new species belongs to the nominotypical subgenus due to the structure of the terminal antennomere (Háva 2020). The new species is similar to *O. (O.) angolensis* Háva, 2020 and *O. (O.) mulanjensis* Háva, 2020, but differs from them by the arrangement of elytral spots and structure of antennae.

Etymology. The epithet is a patronym honouring Lydia Mulvaney, who collected this species.

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