

Descriptions of three new *Attageninae* species from the Afrotropical Region (Coleoptera: Dermestidae)

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Abstract. The following species are described, illustrated and compared with similar species: *Attagenus chadensis* sp. nov. (Chad), *Attagenus merkli* sp. nov. (Kenya), *Attagenus otjiwarongo* sp. nov. (Namibia). The species *Attagenus kibwezianus* Háva, 2017 is newly transferred to the genus *Telopes* and newly recorded from Ethiopia.

INTRODUCTION

The family Dermestidae currently consists of about 1830 species worldwide (Háva 2015, 2022). The genus *Attagenus* Latreille, 1802 is one of the most numerous genera within the Dermestidae family and currently grouped in more than 264 species, most of them found in Palearctic, Ethiopian or Nearctic Regions (Háva 2015, 2020, 2022a). The genus includes the species defined by the following set of features: first segment of hind tarsi almost half as long as the second, free mouthparts, three-jointed antennal club and lack of distinct antennal cavity on the hypomeron. The most characteristic feature of the larvae is an extremely long caudal brush and elongated, cylindrical, strongly sclerotized body. The genus *Attagenus* is currently split into three subgenera *Aethriostoma* Motschulsky, 1858, *Telopes* Redtenbacher in Russegger, 1843 and *Attagenus* s. str., but Zhou et al. (2022) newly stated the subgenera *Telopes* and *Aethriostoma* as genera. Since 2015 few new species of *Attagenus* have been described from the Afrotropical Region (Háva 2016a,b, 2017a,b, 2020, 2022; Herrmann & Háva 2016, 2020a,b; Herrmann, Háva & Kadej 2016, 2017, Herrmann, Kadej & Háva 2015). In the present article are described new species collected in Kenya, Chad and Namibia.

MATERIAL AND METHODS

The following measurements were made:

total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.

elytral width (EW) - maximum linear transverse distance.

Type material deposited in the following collection:

JHAC Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-west, Czech Republic.

Type specimens were provided with red labels: "HOLOTYPE [or PARATYPE] *name of species* sp. nov. Jiří Háva det. 2023".

RESULTS

Genus *Attagenus* Latreille, 1802

***Attagenus* “*A. madoni* species group”**

Key to species

- 1 (4) body black
- 2 (3) terminal antennomere brown and very small and oval, other antennomeres brown; median lobe of aedeagus narrow (Gambia, Senegal) *Attagenus madoni* Pic, 1942
- 3 (2) terminal antennomere dark brown, triangular, antennomeres III-V brown, I-II and VI-XI dark brown; median lobe of aedeagus broad (Namibia) *Attagenus prepsli* Háva, 2022
- 4 (1) body brown
- 5 (6) body entirely dark brown; terminal antennomere small and triangular antennae entirely brown; median lobe of aedeagus broad (Burkina Faso) *Attagenus voltae* Háva, 2016
- 6 (5) head and pronotum dark brown, elytra light brown;
- 7 (8) terminal antennomere small and slightly oval; median lobe of aedeagus narrow (South Africa) *Attagenus heres* Háva, 2022
- 8 (7) terminal antennomere long (Fig. 2); median lobe of aedeagus broad (Chad)
..... *Attagenus chadensis* sp. nov.

***Attagenus chadensis* sp. nov.**

(Figs. 1-3)

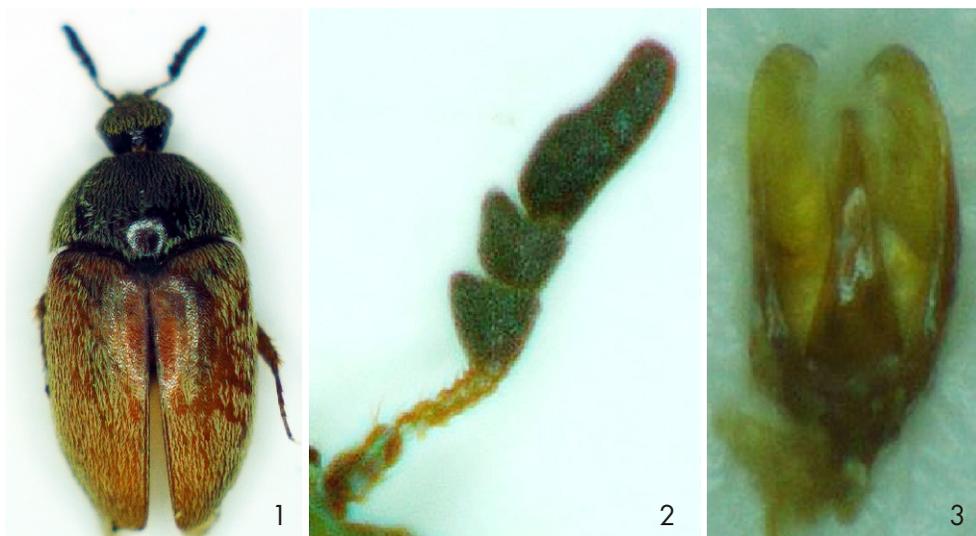
Type material. Holotype (♂): „Tchad: N’Gougmi, près du lac Tchad, iii-1985, P. Renaud”, (JHAC). Paratype (1 ♂): the same data as holotype, (JHAC).

Description. Male. Body measurements (in mm): TL 2.8 mm, EW 1.5 mm; oblong-oval (Fig. 1), slightly convex; dorsally dark and light brown, ventrally unicolorously dark brown, matt; dorsum covered with short and erected, white setation; thoracic underside with comparatively long and recumbent, white setation; visible abdominal ventrites with recumbent, white setation, sparser than that on thoracic surface. Head finely punctated. Palpi dark brown. Frontal median ocellus present. Antennae dark brown, with short, white setation, composed with 11 antennomeres, antennal club compact with 3 antennomeres, terminal antennomere long (Fig. 3). Pronotum dark brown, finely punctate on the disc, coarsely punctate on lateral margins, covered by white setation. Hypomeron matt with very small punctures. Scutellum broad, small and triangular, matt, with rounded apex, without setation. Elytra light brown, coarsely punctate on humeri and with one small humeral bump, other parts finely punctate, covered by white setation without fasciae or spots. Epipleuron brown, very short, with short white setae. Prosternum without “collar”, mouthparts free. Prosternal process very long and narrow. Meta- and mesosternum finely punctate discally, laterally coarsely punctate, with white, recumbent setation. Abdomen dark brown, with five visible abdominal ventrites, each ventrite laterally with very small depressions, covered by recumbent, white setation. Legs brown, covered with comparatively short and thick, white setation and with short, brown thorns. Tarsi moderately short. Male genitalia as in (Fig. 3).

Female. Unknown.

Differential diagnosis. The new species belongs to the “*A. madoni* species group” and differs from known species by the characters in the key to species.

Etymology. Toponymic, named after the type locality, country of Chad.



Figs. 1-3. *Attagenus chadensis* sp. nov.: 1-habitus, dorsal aspect; 2-antenna of male; 3- male genitalia.

***Attagenus* "A. aeneus species group"**

***Attagenus merkli* sp. nov.**

(Figs. 4-8)

Type material. Holotype (♂): „Kenya, Mt. Elgon Nat. P. near Chepnyalil Cave, dry evergreen montane forest, 1500 m” / „singled & swept from the vegetation, 24-28.i.1992, O. Merkl & G. Várkonyi”, (JHAC). Paratype (1 ♀): the same data as holotype, (JHAC).

Description. Male. Body measurements (in mm): TL 3.2 mm, EW 1.7 mm; oblong-oval (Fig. 4-5), slightly convex; dorsally and ventrally unicolorously blackish-brown, matt; dorsum covered with short and erected, brown and yellow setation; thoracic underside with comparatively long and recumbent, yellow setation; visible abdominal ventrites with recumbent, yellow setation, sparser than that on thoracic surface. Head finely punctured. Palpi brown. Frontal median ocellus present. Antennomeres I, VII-XI dark brown, II-VI light brown, with short, yellow setation, composed with 11 antennomeres, antennal club compact with 3 antennomeres (Fig. 6). Pronotum (Fig. 2) finely punctate on the disc, coarsely punctate on lateral margins, covered by yellow setation. Hypomeron matt with very small punctures. Scutellum broad, small and triangular, matt, with rounded apex, without setation. Elytra coarsely punctate on humeri and with one small humeral bump, other parts finely punctate, covered with yellow setation near humeri other parts covered by brown setation intermixed yellow setation medially. Epipleuron blackish-brown, very short, with short yellow setae. Prosternum without “collar”, mouthparts free. Prosternal process very short and narrow. Meta- and mesosternum finely punctate discally, laterally coarsely punctate, with yellow, recumbent setation. Abdomen blackish-brown, with five visible abdominal ventrites, each ventrite laterally with small depressions, covered by recumbent, yellow setation. Legs dark brown, covered with comparatively short and thick, yellow setation and with short, brown thorns. Tarsi light brown, moderately short. Male genitalia as in (Fig. 8).

Female. Externally similar to male, antenna as Fig. 7. Body measurements (in mm): TL 3.8 mm, EW 2.1 mm.

Differential diagnosis. The new species similar to *Attagenus conradsi* Pic, 1951 and *Attagenus samei* Háva, 2016 but differs by the following characters:

Attagenus conradsi Pic, 1951: cuticula dark brownish-black; pronotum and elytra covered by yellow and black setation; anterior elytral fascia divided into spots; antennae brown with dark three antennomered antennal club.

Attagenus samei Háva, 2016: cuticula brown; pronotum and elytra covered by grey and brown setation; anterior elytral fascia not divided into spots; antennae brown except terminal dark antennomere.

Attagenus merkli sp. nov.: cuticula black; pronotum covered by yellow setation; elytra with yellow setation near humeri other parts covered by brown setation intermixed yellow setation medially; antennomeres I, VII-XI dark brown, II-VI light brown.



Figs. 4-8. *Attagenus merkli* sp. nov.: 4- habitus, dorsal aspect; 5- habitus, lateral aspect; 6- antenna of male; 7- antenna of female; 8- male genitalia.

Etymology. Patronymic, dedicated in memoriam to my very good friend †Ottó Merkl, donating me these specimens.

***Attagenus* “*A. holmi* species group”**

Key to species

- 1 (2) each elytron with one anterior, yellow fasciae from humeri to suture (Angola, Namibia) *Attagenus havai* Kadej, 2006
- 2 (1) each elytron with two or three fasciae and spots
- 3 (6) each elytron with two transverse orange fasciae and apical spot
- 4 (5) each elytron with two transverse fasciae and apical isolated spot; terminal antennomere very long (Mozambique, South Africa) *Attagenus holmi* Kalík & Háva, 2005
- 5 (4) each elytron with two transverse fasciae and large apical spot reaching to suture; terminal antennomere short (South Africa) *Attagenus snizeki* Háva, 2022
- 6 (3) each elytron with two fasciae
- 7 (8) each elytron with two isolated fasciae (Fig. 12) (Zambia) ... *Attagenus kapiirii* Háva, 2022
- 8 (7) each elytron with one light-brown anterior fascia and light-brown apical third (Figs. 9-10) *Attagenus otjiwarongo* sp. nov.

***Attagenus otjiwarongo* sp. nov.**

(Figs. 9-11)

Type material. Holotype (♀): „Namibia, Otjiwarongo env., 10.ix.2012, S. Aznarov lgt.“, (JHAC).

Description. Female. Body measurements (in mm): TL 3.4 mm, EW 1.8 mm; oblong-oval (Fig. 9), slightly convex; dorsally and ventrally brown, shiny; dorsum covered with short and erected, brown and yellow setation; thoracic underside with comparatively long and recumbent, yellow setation; visible abdominal ventrites with recumbent, yellow setation, sparser than that on thoracic surface. Head coarsely punctured. Palpi light brown. Frontal median ocellus present. Antennae light brown, with short, yellow setation, composed with 11 antennomeres, antennal club compact with 3 antennomeres (Fig. 11). Pronotum finely punctate on the disc, coarsely punctate on lateral margins, covered by long yellow setation. Hypomeron matt with very small punctures. Scutellum broad, small and triangular, shiny, with rounded apex, with yellow setation. Elytra coarsely punctate on humeri and with one small humeral bump, other parts finely punctate, each elytron with one light-brown anterior fascia and light-brown apical third (Figs. 9-10) covered by yellow setation, other part covered by brown setation. Epipleuron brown, very short, with short yellow setae. Prosternum without “collar”, mouthparts free. Prosternal process very short and broad. Meta- and mesosternum finely punctate discally, laterally coarsely punctate, with yellow, recumbent setation. Abdomen brown, with five visible abdominal ventrites, each ventrite laterally with small depressions, covered by recumbent, yellow setation. Legs brown, covered with comparatively short and thick, yellow setation and with short, brown thorns. Tarsi moderately short.

Male. Unknown.

Differential diagnosis. The new species belongs to “*A. holmi* species group” and differs from known species by the characters in key of group.

Etymology. Toponymic, named after the type locality, city Otjiwarongo.



Figs. 9-12. *Attagenus otjiwarongo* sp. nov.: 9- habitus, dorsal aspect; 10- habitus, lateral aspect; 11- antenna of female; *Attagenus kapiirii* Háva, 2022: 12- habitus, dorsal aspect.

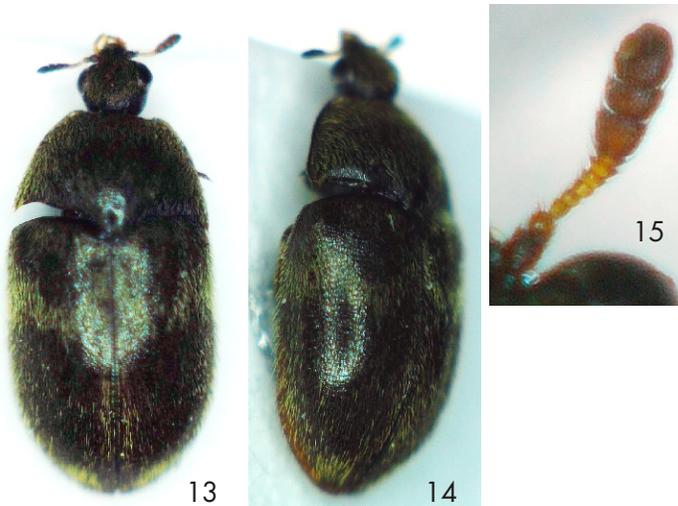
Genus *Telopes* Redtenbacher in Russeger, 1843

Telopes kibweziianus (Háva, 2017) comb. nov.

(Figs. 13-15)

Attagenus kibweziianus Háva, 2017a: 1.

..



Figs. 13-15. *Telopes kibweziianus* (Háva, 2017): 13- habitus, dorsal aspect; 14- habitus, lateral aspect; 15- antenna of female.

Material examined: „E Ethiopia (South), GPS 60 km SSW Negele (Goba vill.) 24-25.5.2015, N 04°52'E 039°19'750 m, A. Kudrna jr. lgt.", 1 ♂, (JHAC).

Remarks. The species is described according to male, holotype specimen. The female specimen is firstly illustrated here (Figs. 13-15). The species *Attagenus kibwezianus* Háva, 2017 is newly transferred to the genus *Telopes*.

Distribution. Species known from Kenya, new to Ethiopia.

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