

A new dermestid species (Coleoptera: Dermestidae) from the Republic of Namibia

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Abstract. A new species *Attagenus* (s. str.) *namibicus* sp. nov. from Namibia is described, illustrated and compared with similar looking species. A list of all species from Namibia which belong to the genus *Attagenus* is furthermore provided.

INTRODUCTION

The genus *Attagenus* Latreille, 1802 is one of about 60 genera established within the beetle family Dermestidae. This genus includes of about 250 different species respectively subspecies worldwide (Háva 2015), 11 of them have still been recorded from the Republic of Namibia (Háva 2005, Herrmann & Háva 2007, Háva & Kadej 2008, Herrmann & Háva 2014, Háva, Herrmann & Kadej 2015, Herrmann & Háva 2016). In the present paper we describe a new species of this genus which was detected during an examination of some unidentified dermestids deposited in the collection of the Royal Belgian Institute of Natural Sciences (ISNB).

MATERIAL AND METHODS

The dried specimens were weakened for 5 days in a solution of 1% pepsin in diluted hydrochloric acid to free them roughly from protein tissues and to make the extremities of the body moveable, again. The abdomen was disconnected from the body and glued upside-down onto the same cardboard plate, just behind the beetle. Before this, the genitalia were extracted and then cleaned with a fine needle in a drop of 99 percent glycerol. Afterwards it was also glued onto the plate behind the beetle, firmly embedded in a drop of a solution consisting of polyvinylpyrrolidone, aqua demineralisata and diglycerin (the liquid solution

becomes permanently solid after a few minutes). Photos of body and abdomen were taken with a digital SLR camera Sony alpha 35, connected to an objective Nikon CF N Plan Achromat 4x 160/- and extension rings; for the photos of the genitalia and antenna a Bresser Junior USB-Handmikroskop at 200x magnification was used. Because of the low depth of field all photos were taken as layered images, afterwards combined on a PC by software.

Nomenclature and systematics employed in the present paper follow Háva (2015).

The size of the beetle and of its body parts can be useful in species recognition, so the following measurements were made:

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

pronotal length (PL) - maximal length measured from anterior margin to posterior margin;

pronotal width (PW) - maximal linear transverse distance;

elytral length (EL) - linear distance from shoulder to apex of elytron.

elytral width (EW) - maximal linear transverse distance;

The type specimens of the species described are provided with a red, printed label showing the following text: „HOLOTYPUS [respectively PARATYPUS], *Attagenus* (s. str.) *namibicus* n. sp., Herrmann & Háva det. 2019”.

Acronyms of type depositories:

AHEC Private collection of Andreas Herrmann, Stade, Germany;

ISNB Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium.

DESCRIPTION

Attagenus (Attagenus) namibicus sp. nov.

(Figs. 1-3)

Type material. Holotype (♂) labelled: “Namibia, Kuzikus W.R., 23°14'17”S 18°23'29”E, 17.ix-5.x.2012 Malaise trap, leg. J. Constant, V. Sougnez & N. Maes, I.G.:32.223”. Paratypes (2 ♂♂): with the same record data, legs and antennae partly damaged or missing. Holotype deposited in ISNB, paratypes in ISNB and AHEC.

Description. Body robust, longish oval (Fig. 1); measurements (in mm): TL 2.4, PL 0.6, PW 1.2, EL 1.9, EW 1.5. Head shiny black, with coarse and dense punctures, sparsely covered with quite long and recumbent light brown hairs, intermixed with very few whitish hairs; palpi dark brown. Eyes large, with short and hardly visible erect interfacetal setae. Ocellus distinct, shiny and convex. Antenna 11-segmented, yellow, segments 2 and 8 darkened, segments 1, 9, 10 and 11 black; the last three segments forming a distinct club densely covered by fine decumbent dark pubescence; the last segment of the club roughly as long as the two preceding combined, the whole club somewhat longer than antennomeres 1-8 combined (Fig. 2); on these segments, there are few erect brown hairs. Pronotum slightly bulged, broadest at apical edges, narrowing forward, entirely black and punctured as the head, lateral margins smooth, untoothed, not visible from above; dorsal surface sparsely covered with decumbent brown and whitish hairs, the whitish hairs mainly concentrated at lateral margins, at the middle of the apical side building some very blurred and indistinct spots different in size. Scutellum small, black and triangular, dull by punctuation. Cuticle of elytra darkish brown, dull by the dense and coarse punctures, with two bright fasciae of

whitish hairs reaching from the suture to the lateral margins; one fascia located in the anterior third and connecting semicircular scutellum with shoulder, the second one in the apical third is even broader and somewhat indistinct, humerus with a flat and indistinct bump; the elytral pubescence consisting entirely of decumbent brown hairs except whitish hairs producing two fasciae (Fig. 1). Legs robust and light brown, covered sparsely with erect, short bright hairs. All tibiae with several rows of strong brown spines at their lateral margins. Tarsi quite long, roughly as long as tibiae, light brown. Mesosternum darkish brown, sparsely covered with decumbent brown hairs. Abdominal ventrites brown, punctured as elytra and quite densely covered with recumbent dark brown hairs. Male genitalia as shown in Fig. 3.

Female. Unknown.

Variability. Variation in size: 2.3-2.4 mm.

Differential diagnosis. The new species resembles habitually very much *Attagenus donckieri* Pic, 1916 and *Attagenus freyi* Herrmann, Háva & Kadej, 2017 from South Africa, but differs from the first species by its much bigger male antennal club and the less bulged and trapezoidal pronotum; from the latter it differs by its slender body and the male genitalia which has a shorter median lobe and broader parameres. Furthermore the new species differs from both by the apical fascia which is much broader and blurred. From all other species belonging to the genus *Attagenus* occurring in the south of the African continent it could easily be distinguished by the conspicuous elytral pubescence in combination with the form of the male antennal club and genitalia.



Figs. 1-3. *Attagenus (Attagenus) namibicus* sp. nov., holotype (♂): 1- habitus, dorsal aspect; 2- antenna; 3- male genitalia.

Etymology. The name of the new species refers to the country Republic of Namibia where the three type specimens were collected.

THE *ATTAGENUS* (S. STR.) SPECIES RECORDED
FROM THE REPUBLIC OF NAMIBIA

Attagenus aurofasciatus Háva, 2005
Attagenus cinereus (Thunberg, 1815)
Attagenus fasciatus (Thunberg, 1795)
Attagenus havai Kadej, 2006
Attagenus heinigi Herrmann & Háva, 2007
Attagenus kaniai Háva & Kadej, 2008
Attagenus muehlei Herrmann & Háva, 2014
Attagenus namibicus sp. nov.
Attagenus pardus Arrow, 1915
Attagenus pseudorobustior Herrmann & Háva, 2016
Attagenus robustior (Pic, 1951)
Attagenus vestitus Klug, 1855

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REFERENCES

- HÁVA J. 2005: New interesting Dermestidae from Namibia. *Veröffentlichungen des Naturkundemuseums Erfurt* 24: 183-186.
- HÁVA J. 2015: *World Catalogue of Insects. Volume 13. Dermestidae (Coleoptera)*. Leiden/Boston: Brill, xxvi + 419 pp.
- HÁVA J., HERRMANN A. & KADEJ M. 2015: New faunistic records of Dermestidae - Part 12. *Arquivos Entomológicos - Revista Galega de Entomoloxía* 13: 53-57.
- HÁVA J. & KADEJ M. 2008: Description of a new species of *Attagenus* from Namibia. *Genus* 19(1): 49-53.
- HERRMANN A. & HÁVA J. 2007: *Attagenus heinigi* n. sp. from Namibia. *Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie)* 705: 1-6.
- HERRMANN A. & HÁVA J. 2014: Description of two new species of the genus *Attagenus* from the Afrotropical Region. *Studies and Reports, Taxonomical Series* 10(1): 93-98.
- HERRMANN A. & HÁVA J. 2016: *Attagenus* (s. str.) *pseudorobustior* n. sp. from Namibia. *Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie)* N.S. 9: 177-179.

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