

Contribution to the knowledge of the genus *Attagenus* from Western Africa (Coleoptera: Dermestidae: Attageninae)

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Abstract. The following two new species are described, illustrated and compared with similar species: *Attagenus hromadkai* sp. nov. (Senegal); *Attagenus voltae* sp. nov. (Burkina Faso). The species *Attagenus robustior* (Pic, 1951) is newly recorded from Burkina Faso, Gambia, Ivory Coast, Sierra Leone, Guinea and Guinea-Bissau, the species *Attagenus attenuatus* (Pic, 1894) is newly recorded from Niger.

INTRODUCTION

The family Dermestidae currently consists of 62 genera, containing about 1500 species worldwide (Háva 2015). The genus *Attagenus* Latreille, 1802 is one of the most numerous genera within the family Dermestidae and currently includes more than 200 species, most of them found in Palaearctic, Ethiopian or Nearctic Regions (Háva 2015, 2016). The genus includes the species defined by the following combination 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 elongate, cylindrical, strongly sclerotized body (Peacock 1993; Kadej & Háva 2014). The genus *Attagenus* is currently split into the following two subgenera: *Aethriostoma* Motschulsky, 1858 (with six known species), and *Attagenus* s. str. (with nearly 200 species). A few articles deal with *Attagenus* from Western Africa (Pic 1942, 1951, Kalík 1955, 1986, Háva 2003a, b, 2006, 2007a, b). The present article describes two new species collected in Senegal and Burkina Faso and belonging to the nominotypical subgenus *Attagenus* (s. str.).

MATERIAL AND METHODS

All photos were taken with the Olympus SZX16 camera.

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.

Abbreviations:

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

MNHN Muséum National d'Histoire Naturelle, Paris, France;

MZLU Museum of Zoology, Lund University, Lund, Sweden;

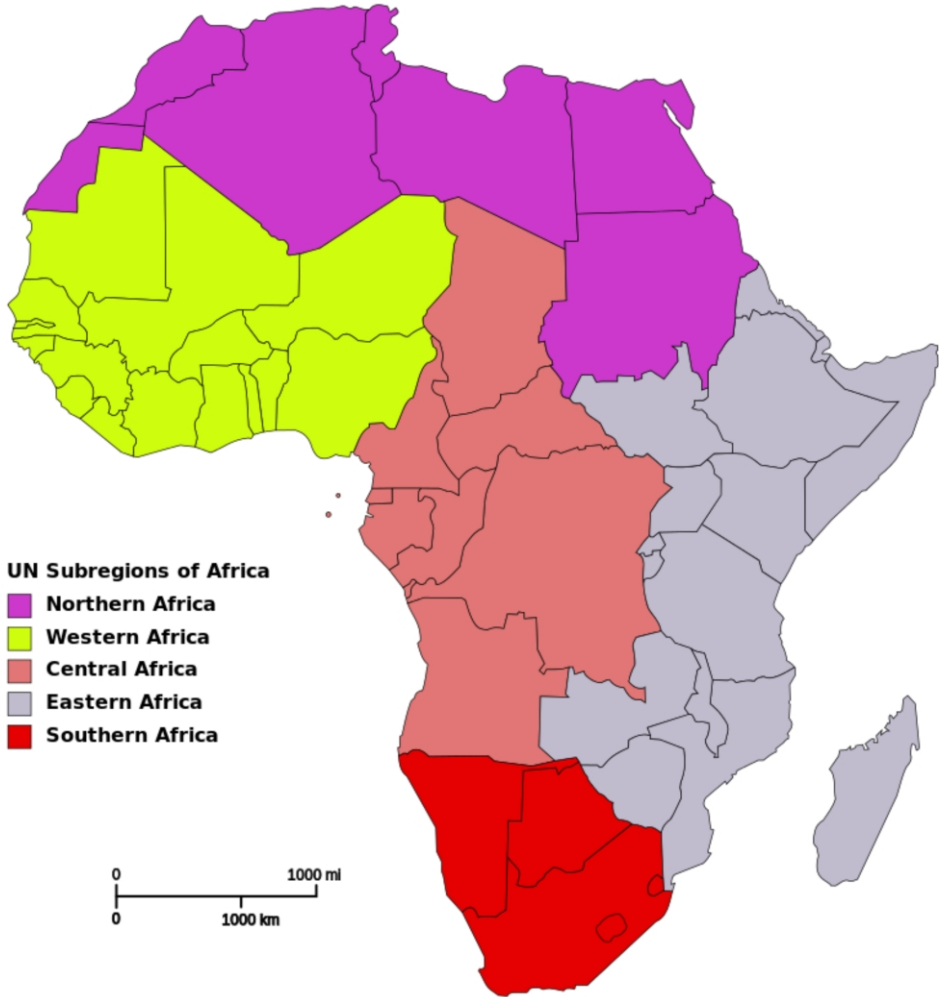
NHRS Naturhistoriska Riksmuseet Stockholm, Sweden;

VKZC Vít Kabourek, private collection, Zlín, Czech Republic.

African Subregions are considered according to a UN map:

https://cs.wikipedia.org/wiki/%C4%8Clen%C4%9Bn%C3%AD_Afriky?oldid=12172992

Type specimens were provided with red labels: "HOLOTYPE *name of taxon* sp. nov. Jiří Háva det. 2015".



RESULTS

Attagenus attenuatus (Pic, 1894)

Material examined: „Niger, Arlit road [18°44'N 7°23'E, 425 m, Agadez region], 15.11.1973", 1 ♂, (JHAC).

Distribution. A species known from Algeria, Egypt, Israel and Syria (Háva 2015), new to Niger.

***Attagenus robustior* (Pic, 1951)**

(Fig. 1)

Type material. Holotype (♀): „[Senegal] Jonpe, 14.ii.48 [unreadable, hand-written label]” / “*Telopes donckieri*” [hand written label] / “Type” [yellow, small, hand-written label] / “TYPE” [red printed label] / “*Telopes robustior* nsp [hand-written label]”, (MNHN).

Other material studied: Senegal: „Senegal, Wassadou, 3.xi.1992, Slagh, öppen kabetad skog., M. Söderlund leg.”, 1 ♂, J. Háva det., (JHAC); „[Burkina Faso] Upper Volta, Gouindougouba, 27.10.1973”, 1 ♂, J. Háva det., (JHAC); „[Burkina Faso] Upper Volta, Massili, 6.11.1973, R. Linnavuori, ex coll. Kalík”, 1 ♂, J. Háva det., (JHAC); „Gambia, Bathurst, 4-30.1.1968, T. Palm leg.”, 12 spec., J. Háva det., (8 MZLU, 4 JHAC); Ivory Coast, Madinani-Boundiali, 24.10.1973”, 1 ♂, J. Háva det., (JHAC); „Sierra Leone, 5 km W Kabala, swept along road, 11°35'W 9°35'N, 28. i.1993, loc.11” / „Lund University Sierra Leone Expedition 1993, leg. C. Cederholm, R. Danielsson, R. Hall”, 3 spec., J. Háva det., (2 MZLU, 1 JHAC); „The Gambia, Kombo North District, Bijilo Forest Park, 10.xi.1992, M. Söderlund leg.”, 2 spec., J. Háva det., (MZLU, JHAC); „Gambia, 6 km N Kartung, Swept in very dense forest with glades, 20.xi.1977, UTM 28PCK0851 loc.41” / „Lund Univ.Syst.Dept., Sweden-Gambia/Senegal Nov.1977-Cederholm, Danielsson, Hammarstedt, Hedqist, Samuelsson”, 3 spec., J. Háva det., (2 MZLU, 1 JHAC); „The Gambia, M Bollet, 10.1.1968, T-E. Leiler”, 1 spec., J. Háva det., (NHRS); „The Gambia, Brufut, 27.1.1968, T-E. Leiler”, 2 spec., J. Háva det., (HNRS); „Guinea-Bissau, Regiao Gabu, 10 km N Canjufa, 3.xi.1992, M. Söderlund leg.”, 2 ♀♀, J. Háva det., (JHAC); „Guinea, Konakry, 1962”, 2 spec, J. Háva det., (VKZC, JHAC).

Variability.

typical colour: elytra covered by yellow and brown setation, brown setation forming transverse fasciae.

var. 1: elytra covered with not yellow but grey setation, brown setation forming transverse fasciae.

var. 2: elytra covered by yellow setation only.

var. 3: antennal club is reduced (Fig. 1 b).

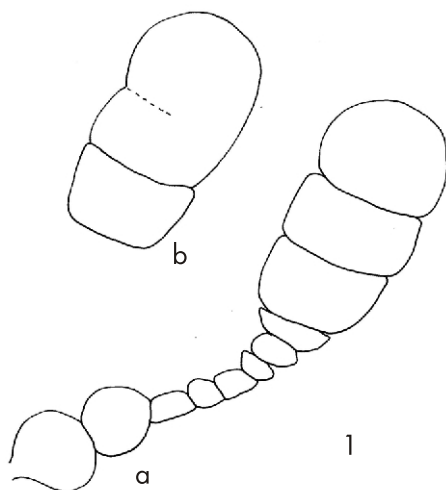


Fig. 1. Antenna of male *Attagenus robustior* (Pic, 1951): a-typical form; b-reduced form.

Remarks. Kalík (1955) illustrated and redescribed specimens from Congo Belge. According to study of type specimen of *robustior* from Pic collection deposited in Museum Paris, the Kalík's specimens published as *robustior* (1955) belong to the species *Attagenus vestitus* Klug, 1855 (= *rhodesianus* Pic, 1927).

Distribution. Háva (2015) mentioned the following distribution for *robustior*: Congo; Namibia; Senegal; Tanzania, but according to the study of the presently mentioned material the new distribution is as follows: Senegal, Congo?, new to Burkina Faso, Guinea-Bissau, Guinea, Gambia, Ivory Coast, Sierra Leone. Specimens from Namibia and Tanzania belong to *Attagenus vestitus* Klug, 1855 (= *rhodesianus* Pic, 1927) and *A. pseudorobustior* Herrmann & Háva, 2016.

***Attagenus voltae* sp. nov.**

(Figs. 2-4)

Type material. Holotype (♂): „[Burkina Faso] Upper Volta, Gouindougouba, 27.10.1973“, (JHAC). The holotype is slightly damaged, missing left antenna and legs.

Description. Male. Body: TL 2.2 mm, EW 1.2 mm; elongate and oval (Fig. 2), slightly convex; dorsally and ventrally unicolorous brown, shiny; dorsum covered with long and erect, grey yellowish setation; thoracic underside with comparatively long and recumbent, grey yellowish setation; visible abdominal ventrites with recumbent, grey yellowish setation, sparser than that on thoracic surface. Head finely punctate. Palpi brown. Frontal median ocellus present. Antennae brown with short, yellow setation, composed of 11 antennomeres, antennal club compact with 3 antennomeres (Fig. 3). Pronotum finely punctate on the disc, coarsely punctate on lateral margins. Hypomeron shining with small punctures. Scutellum small and triangular, shiny, with rounded apex, without setation. Elytra coarsely punctate on humeri and with one small humeral bump, other parts finely punctate. Epipleuron brown, very short, with short grey yellowish setae. Prosternum without “collar”, mouthparts free. Prosternal process very short and broad. Meta- and mesosternum finely punctate discally, laterally coarsely punctate, with grey yellowish, recumbent setation. Abdomen brown, with five visible abdominal ventrites, each ventrite laterally with small depressions, covered by recumbent, grey yellowish setation. Legs brown, covered with comparatively short and thick, yellow setation, tibia with lateral spines. Tarsi moderately long. Aedeagus (Fig. 4).

Female. Unknown.



Figs. 2-4. *Attagenus voltae* sp. nov.: 2-habitus; 3-antennae of male; 4-male genitalia.

Differential diagnosis. The new species is similar to *Attagenus madoni* Pic, 1942 (Gambia, Senegal), but differs from it by the following characters:

- body black, terminal antennomere dark brown and very small and oval, other antennomeres brown; median lobe of aeadeagus narrow *Attagenus madoni* Pic, 1942
- body brown; terminal antennomere small and triangular antennae entirely brown; median lobe of aeadeagus broad *Attagenus voltae* sp. nov.

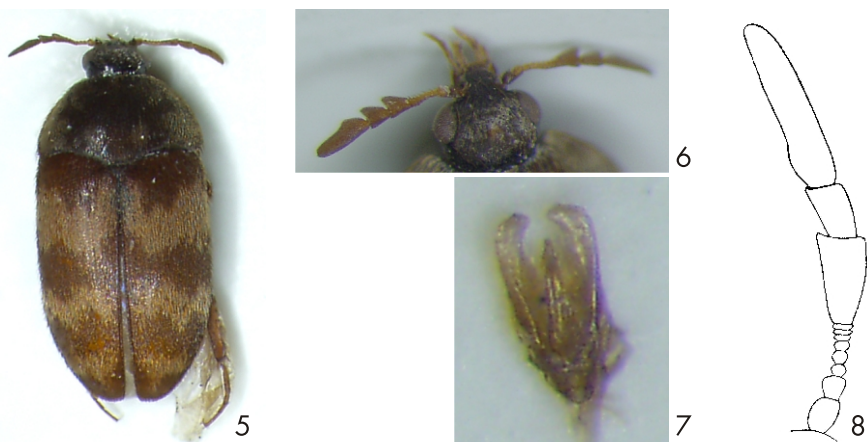
Etymology. Toponymic, named after the type country Haute Volta - *voltae*.

***Attagenus hromadkai* sp. nov.**

(Figs. 5-7)

Type material. Holotype (♂): „Senegal, Fleuve env., Richard Toll, 31.viii.1989, Malaise trap“, (JHAC).

Description. Male. Body: TL 2.8 mm, EW 1.5 mm; elongate and oval (Fig. 5), slightly convex; dorsally and ventrally unicolorous dark brown, shiny; dorsum covered with long and recumbent, brown and grey setation; thoracic underside with comparatively long and recumbent, grey setation; visible abdominal ventrites with recumbent, grey setation, sparser than that on thoracic surface. Head finely punctate. Palpi brown, very narrow and long. Frontal median ocellus present. Antennae brown with very long, yellow setation, composed of 11 antennomeres, antennal club compact with 3 antennomeres (Fig. 6). Pronotum finely punctate on the disc, coarsely punctate on lateral margins; covered by brown and grey setation, brown setation forming large discal spot, grey setation forming on the disc two isolated circular spots and lateral parts (Fig. 5). Hypomeron shiny with fine punctures. Scutellum small and triangular, shiny, with rounded apex, with brown setation. Elytra coarsely punctate on humeri and with one small humeral bump, other parts finely punctate; covered by brown and grey setation; grey setation forming three transverse fasciae (Fig. 6). Epipleuron brown, very short, with short grey setae. Prosternum without “collar”, mouthparts free. Prosternal process long and broad. Meta- and mesosternum finely punctate discally, laterally coarsely punctate, with grey, recumbent setation.



Figs. 5-8. *Attagenus hromadkai* sp. nov.: 5- habitus; 6- antennae of male; 7- male genitalia; 8- male antenna of *Attagenus placitus* Normand, 1950.

Abdomen brown, with five visible abdominal ventrites, each ventrite laterally with small depressions, covered by recumbent, grey setation. Legs brown, covered with comparatively short and thick, grey setation. Tibia short with brown spines along shaft. Tarsi moderately long. Aedeagus (Fig. 7).

Female. Unknown.

Differential diagnosis. The new species is similar to *Attagenus placitus* Normand, 1950 (Morocco, Tunisia), but differs from it in pronotal and elytral patterns, structure of antennae and male genitalia. *Attagenus placitus* Normand, 1950 male antenna as in Fig. 8.

Etymology. Named in memory of Lubomír Hromádka (*1931 - †2016), my friend and specialist in Staphylinidae (Coleoptera).

SPECIES OF *ATTAGENUS* RECORDED FROM WESTERN AFRICA

Attagenus attenuatus (Pic, 1894)
Attagenus cyphonoides Reitter, 1881
Attagenus endroedyi Háva, 2003
Attagenus ensicornis Wollaston, 1867
Attagenus fasciatus (Thunberg, 1795)
Attagenus kratochvili Kalík, 1955
Attagenus madoni Pic, 1942
Attagenus nigripennis Arrow, 1915
Attagenus hromadkai **sp. nov.**
Attagenus postfasciatus (Pic, 1951)
Attagenus robustior (Pic, 1951)
Attagenus voltae **sp. nov.**

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