

## A contribution to knowledge of the Dermestidae (Coleoptera) from Western Sahara

Jiří HÁVA

Department of Forest Protection and Entomology,  
Faculty of Forestry and Wood Sciences,  
Czech University of Life Sciences, Kamýcká 1176,  
CZ-165 21, Prague 6 - Suchbát, Czech Republic;  
E-mail: jh.dermestidae@volny.cz

### Taxonomy, new species, new records, Coleoptera, Dermestidae, Western Sahara, Morocco.

**Abstract.** *Anthrenus* (s. str.) *kabateki* sp. nov. from Western Sahara is described, illustrated and compared with similar species *Anthrenus* (s. str.) *crustaceus* Reitter, 1881, *Anthrenus* (s. str.) *senegalensis* Pic, 1927 and *Anthrenus* (s. str.) *kubistai* Háva et Votruba, 2005. The new species differs by its unicolorous scales on dorsal surfaces, structure of antennae and male genitalia. The species *Dermestes* (*Dermestinus*) *sardous* Küster, 1846, *Attagenus heydeni* (Reitter, 1881), *Attagenus uniformis* Fairmaire in Fairmaire et Coquerel, 1860 and *Phradonoma cercyonoides* Reitter, 1887 are newly recorded from the area.

### INTRODUCTION

The Western Sahara is a disputed territory in the Maghreb region of North Africa, bordered by Morocco to the north, Algeria to the extreme northeast, Mauritania to the east and south, and the Atlantic Ocean to the west.

The present article deals with Dermestidae (Coleoptera) species recently collected in “Moroccan controlled part” of Western Sahara and supplemented by material deposited in Finnish Museum of Natural History, Helsinki, Finland collected by H. Lindberg. Dermestidae from the territory is very poorly known, Kocher (1956, 1969a,b) mentioned in his catalogue the area as “Occidental Sahara” for seven species, but without detailed data, Peyerimhoff (1946) mentioned only one species from “Sahara Occidental”.

### MATERIAL AND METHODS

Species are arranged in alphabetical order, the nomenclature and zoogeography follow Háva (2007).

The dissected male genitalia was macerated in 10 % solution of KOH and heated up to 90°C for a few minutes. Abdomen and genitalia is glued on the same card.

The following measurements were made:

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

pronotal length (PL) - maximum length measured from anterior margin to posterior margin.

pronotal width (PW) - maximum linear transverse distance.

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

elytral width (EW) - maximum linear transverse distance.

Abbreviations:

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

MZHF Finnish Museum of Natural History, Helsinki, Finland.

The map is taken from: [http://en.wikipedia.org/wiki/Western\\_Sahara](http://en.wikipedia.org/wiki/Western_Sahara)



Map. 1. Map of Western Sahara.

## RESULTS

### Subfamily Attageninae Tribe Attagenini

#### *Attagenus heydeni* (Reitter, 1881)

**Material examined:** Sahara Español, Meseiet pr., Aaiun, 11-12.iv.1963, Lindberg [leg.], V. Kalík det. 1983, J. Háva revid., 19 spec., J. Háva det., (17 MZHF, 2 JHAC).

**Remarks.** The series includes females that have reduced transverse elytral fasciae and are more yellow pubescent.

**Distribution.** Species known from Algeria, Egypt, Mauretania, Morocco, Israel, Saudi Arabia, first detailed locality data from Western Sahara.

#### *Attagenus uniformis* Fairmaire in Fairmaire et Coquerel, 1860

**Material examined:** Sahara Español, Meseiet pr., Aaiun, 11-12.iv.1963, Lindberg [leg.], 1 female, J. Háva det., (MZHF).

**Distribution.** A species known from Sicily, Algeria, Egypt, Libya, Morocco, Sudan, Tunisia, Iraq, Israel and Syria, new to Western Sahara.

### Subfamily Dermestinae Tribe Dermestini

#### *Dermestes (Dermestinus) sardous sardous* Küster, 1846

**Material examined:** Morocco, W Sahara, Saguia el Hamra, N Smara, 26°51'N 11°56'W, 140 m, 8.v.2011, P. Kabátek lgt., 1 male, J. Háva det., (JHAC).

**Distribution.** A Mediterranean species, new to Western Sahara.

### Subfamily Megatomininae Tribe Megatomini

#### *Phradonoma cercyonoides* Reitter, 1887

**Material examined:** Morocco, W Sahara, Saguia el Hamra, N Smara, 26°51'N 11°56'W, 140 m, 8.v.2011, P. Kabátek lgt., 23 spec., J. Háva det., (JHAC).

**Distribution.** A species known from Egypt, Libya, Morocco, Israel and Syria, new to Western Sahara.

## Tribe Anthrenini

### *Anthrenus* (s. str.) *kabateki* sp. nov.

(Figs 1-2)

**Type material.** Holotype (♂): Morocco, W Sahara, Saguia el Hamra, N Smara, 26°51'N 11°56'W, 140 m, 8.v.2011, P. Kabátek lgt., (JHAC). Specimen of the presently described species is provided with a red, printed label with texts as follows: "HOLOTYPE *Anthrenus* (s. str.) *kabateki* sp. nov. Jiří Háva det. 2014".

**Description.** Body measurements (mm): TL 1.9 PL 0.5 PW 1.0 EL 1.5 EW 1.3; body small, oval, elytra broader behind middle. Integument of head, elytra and pronotum dark brown, legs light brown. Dorsal surface covered with milky scales, ventral side mainly with milky scales, with some intermixed yellow scales.

Head with only milky scales. Labial palpi entirely brown. Antennae with 11 antennomeres, antennomeres dark brown; antennal club oblong oval, with 3 antennomeres (Fig. 1). Eyes large, with brown microsetae; inner margin emarginate. Median ocellus present on frons.

Pronotum with only milky scales, without spots. Antennal fossa broad, closed and conforming to shape of antennal club. Prosternum covered with milky scales only.

Elytra covered only with milky scales. Individual scales widest at proximal 1/3 or at middle. Epipleuron very short, brown, with milky scales.

Mesosternum and metasternum covered with milky scales only.

Visible ventrites covered with milky scales; ventrites I-IV without small spots of blackish scales at lateral margins. Ventrite V without lateral spots; IX ventrite is very narrow. Pygidium brown with brown setation.

Legs entirely light brown, with some short, light white setae, femora also with few milky scales.

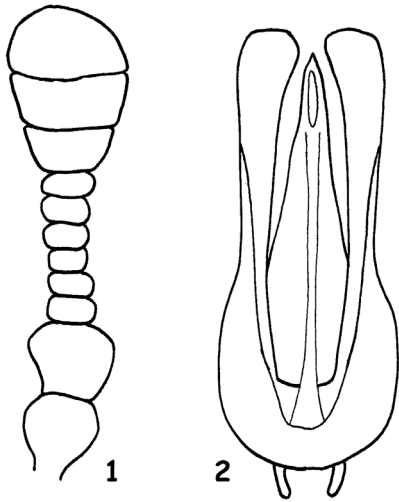
Male genitalia as in Fig. 2.

**Sexual dimorphism.** Female unknown.

**Differential diagnosis.** The new species belongs, according to its 11-antennomered antennae and eyes with median emargination of anterior margin to the nominotypical subgenus *Anthrenus* (s. str.) and is very similar to *Anthrenus* (s. str.) *crustaceus* Reitter, 1881, *Anthrenus* (s. str.) *senegalensis* Pic, 1927 and *Anthrenus* (s. str.) *kubistai* Háva et Votruba, 2005, but differs from the three species by its unicolorous milky scales on dorsal and ventral surfaces, structure of antennae and male genitalia, from other known species it differs by the structure of antennae and male genitalia.

**Etymology.** Patronymic, named after the collector of the new species and my friend Petr Kabátek (Prague, Czech Republic).

**Remarks.** Kocher (1956, 1969a,b) mentioned species *Dermestes maculatus* DeGeer, 1774, *Attagenus piceus* (Olivier, 1790) (= *A. unicolor* (Brahm, 1790)), *Attagenus posticalis* Fairmaire, 1879, *Attagenus antennatus* (Reitter, 1887) (= *A. escaleraei* Mader, 1954), *Anthrenus fasciatus* Reitter, 1881 (= *A. flavipes flavipes* LeConte, 1854), *Anthrenus verbasci* (Linnaeus, 1767) and *Thorictus mogadoricus* Escalera, 1914 from Occidental Sahara but



Figs 1-2. *Anthrenus (s. str.) kabateki* sp. nov. (holotype): 1- antenna; 2- male genitalia.

Fig. 3. Type locality Saguia el Hamra of *Anthrenus (s. str.) kabateki* sp. nov.



we cannot determine whether occidental Sahara belongs to Morocco or Western Sahara. Peyerimhoff (1946) mentioned only one species from Western Sahara, *Attagenus* sp. (group *heydeni*), Mr. V. Kalík (pers. comm.) determined the specimens as *Attagenus heydeni*. It is to expect that the species listed here will also be found in the territory of Western Sahara due to their extension.

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