

ARTIGO / ARTÍCULO / ARTICLE

A new species of the genus *Anthrenus* (s. str.) from Zambia
(Coleoptera: Dermestidae: Megatomini).Andreas Herrmann¹, Marcin Kadej² & Jiří Háva³¹ Bremervörder Straße 123, D-21682 Stade, GERMANY. e-mail: herrmann@coleopterologie.de² Department of Invertebrate Biology, Evolution and Conservation, Institute of Environmental Biology, Faculty of Biological Science, University of Wrocław, Przybyszewskiego 65, PL-51-148 Wrocław, POLAND. e-mail: marcin.kadej@uwr.edu.pl³ 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

Abstract: *Anthrenus klichai* sp. nov. from Zambia is described, illustrated and compared with the related species *Anthrenus* (s. str.) *kantneri* Háva, 2003 (Malawi, Mozambique, Tanzania, Zimbabwe).

Key words: Coleoptera, Dermestidae, *Anthrenus*, Zambia.

Resumen: Una nueva especie del género *Anthrenus* (s. str.) de Zambia (Coleoptera: Dermestidae: Megatomini). Se describe e ilustra la especie *Anthrenus klichai* sp. nov. de Zambia y se compara con la especie cercana *Anthrenus* (s. str.) *kantneri* Háva, 2003 (Malawi, Mozambique, Tanzania, Zimbabwe).

Palabras clave: Coleoptera, Dermestidae, *Anthrenus*, Zambia.

Recibido: 22 de diciembre de 2016

Aceptado: 27 de diciembre de 2016

Publicado on-line: 30 de diciembre de 2016

urn:lsid:zoobank.org:pub:405B280A-CFEB-4790-BF44-516B39125E96

Introduction

The genus *Anthrenus* Geoffroy, 1762 is one of the 62 genera known within the family Dermestidae and includes approximately 280 species worldwide (Háva 2015). The short morphological characteristic of the genus have been provided by Beal (1998) and Kadej (2011). The new species of *Anthrenus* described herein was collected by the Czech entomologist Miroslav Klícha from Kafue National Park in Zambia (the country located in South Africa). The African continent is still a challenge for taxonomists and naturalists. New taxa of Dermestidae are still being discovered and described from many parts of the Afrotropical zone (e.g. Herrmann et al. 2015, 2016; Kadej & Háva 2015, 2016).

Material and methods

The specimen was stored for 5 days in a solution of 1% pepsin in hydrochloric acid to free it roughly from protein tissues and making the extremities of the body moveable. The abdomen was disconnected from the body and glued upside-down onto the same cardboard plate, just behind the beetle. Before this the genitalia was excluded 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 with 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 systematic in this paper follow Háva (2015).

Because the size of the beetles as well as of their body parts can be useful in species recognition, the following measurements were made:

- a) total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.
- b) pronotal length (PL) - maximal length measured from anterior margin to posterior margin.
- c) pronotal width (PW) - maximal linear transverse distance.
- d) elytral length (EL) - linear distance from shoulder to apex of elytron.
- e) elytral width (EW) - maximal linear transverse distance.

The specimen of the described species is provided with a red, printed label showing the following text: "HOLOTYPUS *Anthrenus* (s. str.) *klichai* sp. n., A. Herrmann, M. Kadej & J. Háva det. 2016".

Description

Anthrenus (s. str.) *klichai* sp. nov. (Figs. 1, 3, 5, 7)

Type material. Holotype (♂): "Zambia, Kafue National Park, Mumbwa, 30.11.-2.12.2010, leg. Miroslav Klícha". The Holotype is deposited in the collection of the first author.

Description.

Body short and oval, cuticula on dorsal and ventral surface entirely shiny black to darkish brown. Body measurements (in mm): TL 2.4, PL 0.6, PW 1.4, EL 1.8, EW 1.7. Head densely and coarsely punctuate; the puncture hardly visible since hidden by scales. Maxillary palpi and labrum brown. Eyes large with erected and extreme short microsetae. Ocellus present on front. Antennae reddish brown, 11-segmented, the first two segments as well as the club somewhat darkened; antennal club with 3 antennomeres, the last segment roughly twice as long as the two preceding combined, the whole club half as long as the preceding antennomeres I-IX (see Fig. 3).

Pronotum broadest at the hind edges, narrowed towards the front, the apical border rendered and in the middle conspicuously proceeded towards the scutellum, shiny blackish, punctured as in the head, quite densely covered with black, brown and whitish scales which are distinctly bigger than those on the head, building indistinct and blurred spots and maculae; pronotal lateral margins smooth, untoothed. Scutellum very small, triangular. Puncture and scales of the elytra as in the pronotum, some brighter scales form a very indistinct cross in the anterior part just behind the scutellum; humeri with a flat bump each (see Fig. 1). Mesosternum covered with more or less bright scales mainly. Legs brown with a few fine brown hairs at the edges, tarsi darkened and much shorter than the tibiae, the underside of the femora covered quite densely with small bright scales. Abdominal ventrites I-V black, distinctly and finely punctured, covered densely with yellowish scales; only some parts with brownish and grayish scales (see Fig. 7). Male genitalia as shown in Fig. 5.

Female. Unknown.

Differential diagnosis. The new species looks habitually similar to *Anthrenus* (s. str.) *kantneri* Háva, 2003 but differs in the form of the genitalia. The paramers are much bended and narrower than in *A. kantneri*; moreover, the aedeagus is narrower at its base than in *A. kantneri* (see Fig. 5). Furthermore, the segments of the antenna club are relatively broader in the new species and the club is separated more distinctly from the preceding antennomeres I-IX (see fig. 2). From all other species, *Anthrenus*

(*s. str.*) *klichai* sp. nov. differs by the arrangement of elytral spots built by scales in combination with the form of the genitalia and antennal club.

Etymology. Patronymic, the name is dedicated to the coleopterist Miroslav Klícha (Czech Republic), the collector of this new species.

Acknowledgements

A special thank goes to Miroslav Klícha (Czech Republic) for generously sparing his interesting material to the first author.

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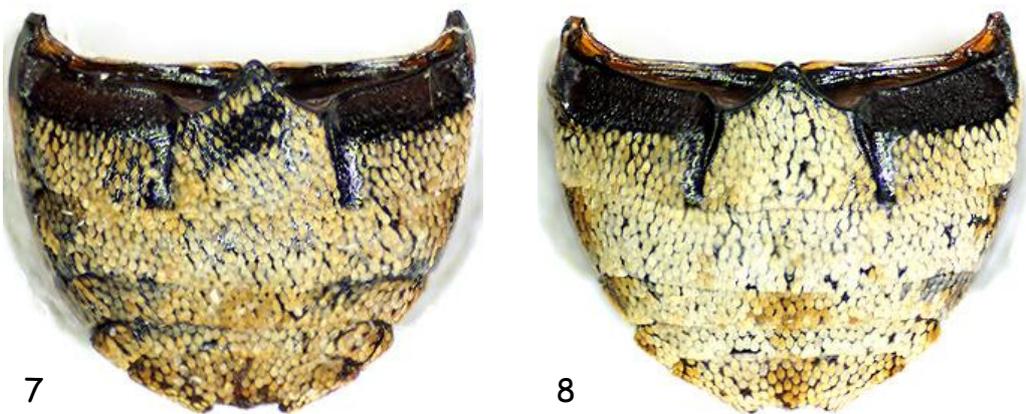
Figs. 1-2.- Habitus of male: 1.- *Anthrenus* (*s. str.*) *klichai* sp. nov. (Holotypus). 2.- *Anthrenus* (*s. str.*) *kantneri* Háva, 2003.



Figs. 3-4.- Antenna of male: **3.-** *Anthrenus* (s. str.) *klichai* sp. nov. **4.-** *Anthrenus* (s. str.) *kantneri* Háva, 2003.



Figs. 5-6.- Genitalia of male: **5.-** *Anthrenus* (s. str.) *klichai* sp. nov. **6.-** *Anthrenus* (s. str.) *kantneri* Háva, 2003.



Figs. 7-8.- Abdomen of male: **7.-** *Anthrenus* (s. str.) *klichai* sp. nov. **8.-** *Anthrenus* (s. str.) *kantneri* Háva, 2003.