

A new species of *Anthrenus* Geoffroy, 1762 (Coleoptera: Dermestidae) from southern Africa

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Taxonomy, new species, Coleoptera, Dermestidae, *Anthrenus*, Namibia, Afrotropical region

Abstract. *Anthrenus* (*Nathrenus*) *hawai* sp. n. from Namibia is described, illustrated and compared with related species.

INTRODUCTION

The genus *Anthrenus* Geoffroy, 1762 comprises more than 160 species and subspecies worldwide (Mroczkowski 1968, Háva 2003, 2006). Members of the genus are still being examined - numerous species have been described recently (Háva, 2006b; Háva & Herrmann, 2006).

Genus *Anthrenus* was divided into 9 subgenera: *Anthrenodes*, *Anthrenops*, *Anthrenus* s. str., *Florilinus*, *Helocerus*, *Nathrenus*, *Peacockia*, *Ranthrenus*, *Solskinus*. *Nathrenus* is species-rich subgenus, and currently includes about 47 species. Almost half of them were recorded from the Afrotropical region. In the present paper a new species collected in Namibia is described and illustrated.

MEASUREMENTS AND METHODS

Explanation of abbreviations:

BL body length (measured from the pronotum anterior margin to the apex of the elytra).

BW body width (measured maximum linear transverse distance).

HW head width (measured as a distance between two lateral head margins on the eyes level).

PL pronotum length (measured from the top of the anterior margin to scutellum).

PW pronotum width (measured between the two posterior angles of pronotum).

LMP length of lateral margin of pronotum (measured as a distance between inferior part of pronotum and exterior angle).

All measurements are given in mm. The morphological characters were observed under phase contrast microscope Nikon Eclipse E 600 with drawing attachment in transparenting light in glycerol. The dissected pieces are conserved in glycerol in microvials pinned under the respective specimens. The photos were taken with the camera Nikon Coolpix 4500.

Type specimen was labeled with red, printed label bearing the text as follows: "HOLOTYPE *Anthrenus (Nathrenus) havai* sp. n. KADEJ, 2006 det. ". Locality labels are cited in the original version.

RESULTS

Anthrenus (Nathrenus) havai sp. n.

(Figs 1-11)

Type material. Holotype (♂) labelled: „Namibia, Waterberg, 23.ix.1978". Holotype deposited in coll. Jiří Háva, Private Entomological Laboratory and Collection, Únětice u Prahy, Praha-západ, Czech Republic.

Description. Body strongly convex, covered with long and narrow scales (BL: 1.95; BW: 1.3) (Figs 1-3).

Head with big convex eyes. Frons with pseudoocelli, covered with yellowish scales. Antenna of male light brown, 11- segmented, antennal club 2- segmented (Fig. 5), covered densely with brown pubescence. Terminal segment oval, covered densely with light-brown pubescence. Antenna occupies only part of the cavity of antennal fossa. Antennal fossa completely open (AFL: 0.2) along lateral margin of the pronotum (LMP: 0.37).

Dorsal and ventral surfaces of integument brown, slightly punctuated. Dorsum covered with yellowish, light brown and brown scales (Figs 1, 10).

Pronotum (PL: 0.45; PW: 1.0), covered with yellowish and light brown scales (Fig. 1).

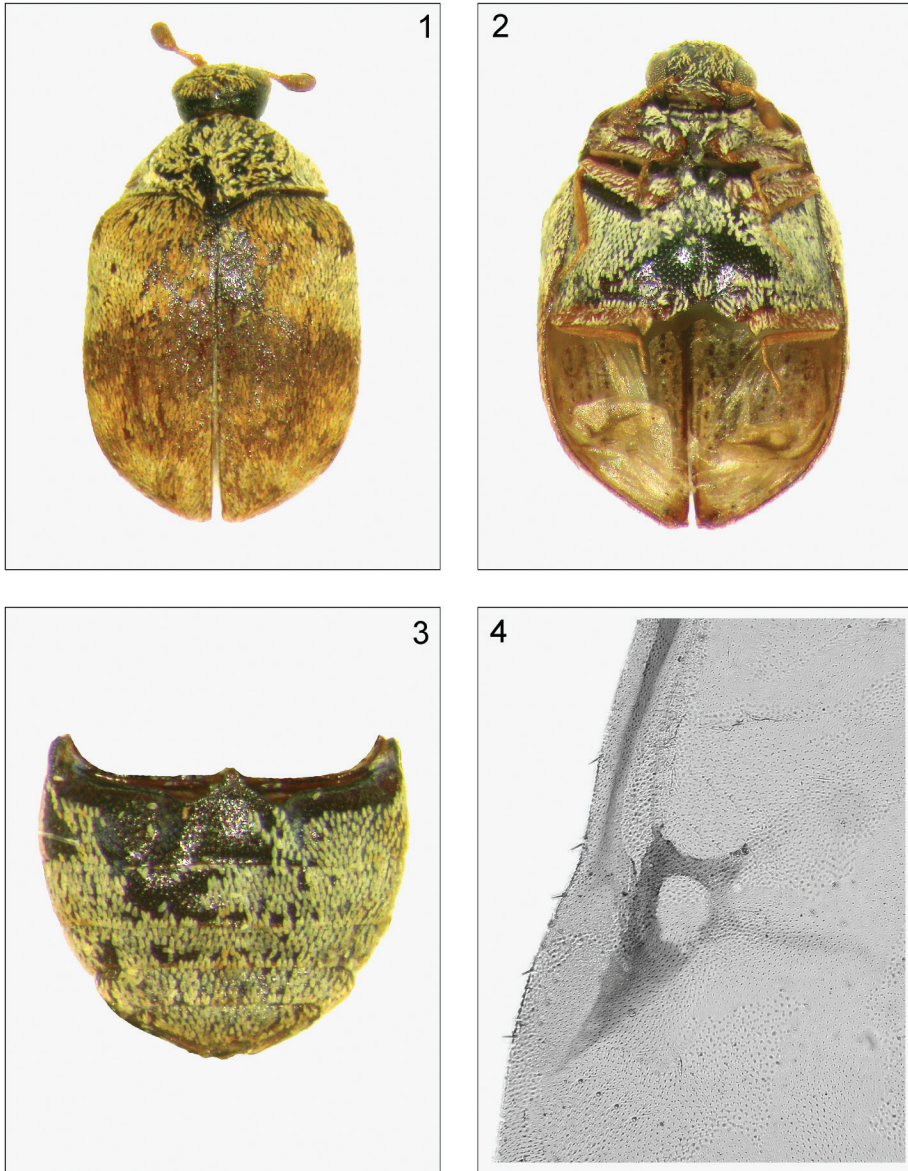
Elytra covered with yellowish, light brown and brown scales which create transversal bands (Fig. 1). Ventral surface and abdominal sternites (SL: 1.05; SW: 1.25) (Figs 2-3) only with yellowish scales.

Legs brown, covered with yellowish scales on dorsal surface. Tarsus with two slightly curved tarsal-claws (Fig. 11).

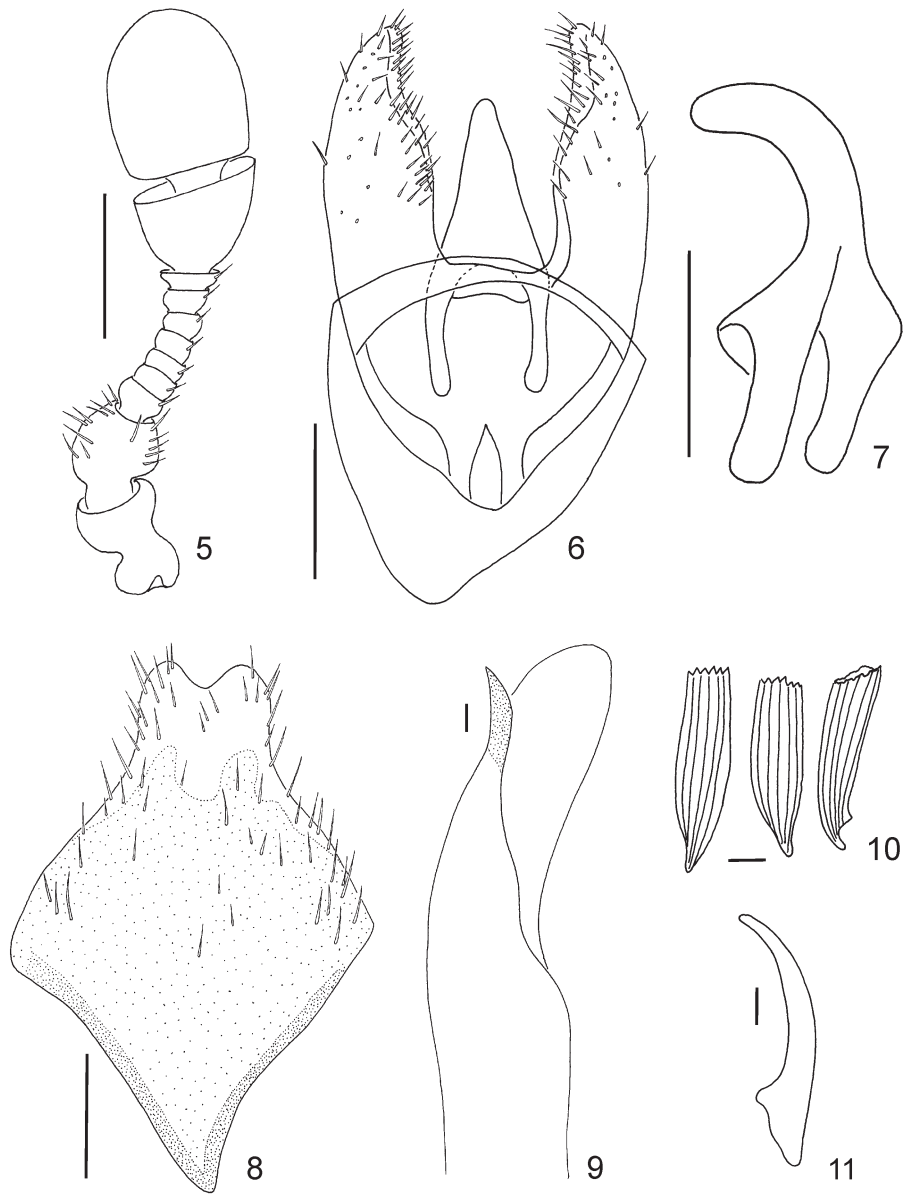
Male genitalia as in Fig. 6. Parameres broad, covered with numerous setae. Median lobe wide posteriorly, slightly curved with the apex bent, in lateral view similar to the letter L (Figs 6-7).

Abdominal sternites IX rhomboidal with numerous short setae on the lateral margins (Fig. 8). Galea and lacinia as in Fig. 9.

Wing as in Fig. 4.



Figs 1-4. *Anthrenus (Nathrenus) havai* sp. n.: 1- habitus dorsal aspect; 2- habitus ventral aspect; 3- sternites; 4- wing (part);



Figs 5-11. *Anthrenus (Nathrenus) havai* sp. n.: 5- antenna of male; 6- genitalia; 7- median lobe (lateral aspect); 8- IXth abdominal sternit; 9- galea with lacinia; 10- scales; 11- tarsal-claw. Scale bar = 0.1 mm.

Differential diagnosis. The new species belongs to the subgenus *Nathrenus* Casey, 1900 and due to 2- segmented antennal club is similar to Afrotropical species *A. (N.) constantini* Háva & Herrmann, 2006, but differs from it by the following characters:

Dorsal surfaces covered with yellowish, light brown and brown scales, antennal segments X-XI broad and short, abdominal sternites covered with yellow scales only (Namibia) *A. havai* sp. n.
Dorsal surfaces covered by white and black scales, antennal segments X-XI narrow and long, abdominal sternites with white and black scales (black scales laterally and medially forming small spots) (South Africa)
.....*A. constantini* Háva & Herrmann, 2006

The new species differs from other Afrotropical species by 2- segmented antennal club (other Afrotropical species within subgenus *Nathrenus* have 3- segmented antennal club) and structure of aedeagus. New species is habitually similar to the other Afrotropical species: *A. luteovestitus* (Pic, 1937), *A. oculus* Arrow, 1937 and *A. splendidus* Háva, 2004 but they all belong to subgenus *Anthrenops* Reitter, 1881. The new species differs from them by 11- segmented antennae, all species are included in subgenus *Anthrenops* have 9 antennomeres.

Name derivation. The species name is dedicated to the specialist in Dermestidae and Nosodendridae (Coleoptera), my very good friend - Jiří Háva (Prague, Czech Republic).

ACKNOWLEDGEMENTS. We would like to thank L. Borowiec / B. Tomaszewicz / R. Stelmaszczyk (Zoological Institute, Wrocław University) for their helpful comments and J. Háva for providing the interested material. This work was supported by founding (2020/ IZ/2006) from the Institute of Zoology, University of Wrocław.

REFERENCES

- HÁVA J. 2003: World Catalogue of the Dermestidae (Coleoptera). *Studie a Zprávy Oblastního Muzea Praha-východ v Brandýse nad Labem a Staré Boleslavi* Supplementum 1, 196 pp.
- HÁVA J. 2006: Dermestidae World (Coleoptera). World Wide Web electronic publication: <http://www.dermestidae.wz.cz>
- HÁVA J. 2006b: Contribution to the knowledge of species of the genus *Anthrenus*, subgenus *Florilinus* from Bulgaria (Coleoptera: Dermestidae: Anthrenini), *Acta Entomologica Slovenica* 14(2): 157-160.
- HÁVA J. & HERRMANN A. 2006: *Anthrenus (Nathrenus) constantini* sp. nov. (Coleoptera: Dermestidae) from South Africa. *Entomologische Zeitschrift*, Stuttgart 115: 81-82.
- MROČEKOWSKI M. 1968: Distribution of the Dermestidae (Coleoptera) of the world with a catalogue of all known species. *Annales Zoologici* 26: 15-191.

