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Description of a new species of *Anthrenus* GEOFFROY, 1762 from East Africa (Coleoptera: Dermestidae: Megatominae: Anthreninii)

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ABSTRACT. *Anthrenus nadeini* n. sp. from East Africa, Ethiopia is described, illustrated
and compared with related species.

Key words: entomology, taxonomy, morphology, Coleoptera, Dermestidae, Megatominae,
Anthrenus, new species, East Africa, Ethiopia.

INTRODUCTION

Genus *Anthrenus* GEOFFROY, 1762, currently includes ca. 216 species, 80 of species within genus recorded in Africa (HÁVA, 2003, 2007), but only three species (*Anthrenus* (*Anthrenops*) *megalops* ARROW, 1915; *A.* (*Anthrenus s.str.*) *ethiopicus* HÁVA, 2004 and *A.* (*Anthrenus s.str.*) *flavipes* LECONTE, 1854 are listed from Ethiopia. In the material studied recently we have found specimen representing new species and its detailed description is given below.

Mesurements and methods

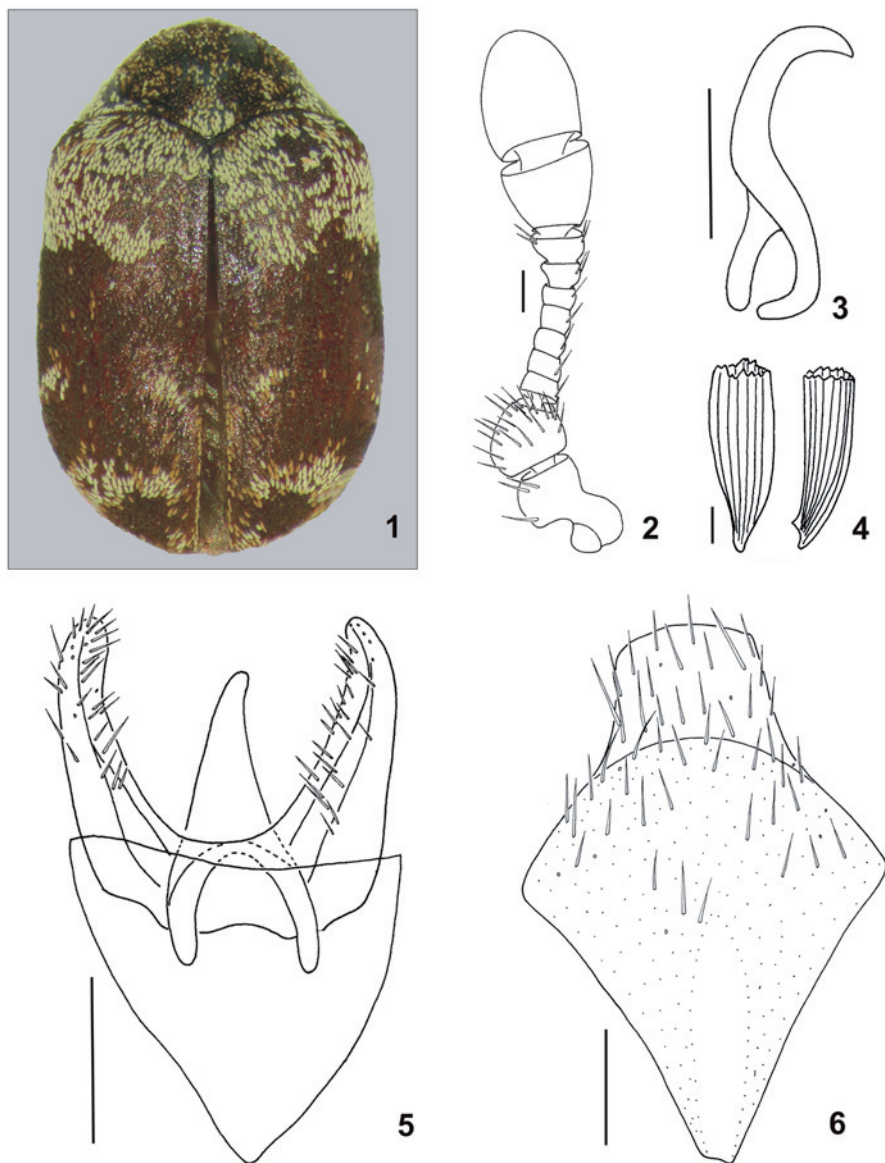
The following measurements were made:

BL - body length (measured from the head anterior margin to the apex of the elytra).
BW - body width (measured between two anterolateral humeral calli).
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).

SL - sternites length (measured from the anterior margin to the apex of posterior margin).



1-8. *Anthrenus nadeini* n. sp.: 1 - habitus (dorsal aspect); 2 - antenna of male; 3 - median lobe (lateral view); 4 - scales; 5 - male genitalia; 6 - ninth abdominal sternite. Scale bar: 0.1 mm (Figs. 2-3, 5-6), 0.01 mm (Fig. 4)

SW - sternites width (measured between two lateral margins in the anterior part of sternites).

AFL - antennal fossa length (measured along the antennal fossa).

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

The following abbreviations refer to the collection where the examined material is deposited:

MNHN - Muséum national d'Histoire naturelle, Paris, France.

All measurements are given in millimeters. The morphological structures were observed under phase contrast microscope Nikon Eclipse E 600 with drawing attachment in transparent light in glycerin. All morphological structures were put into plastic micro vials with glycerin under proper specimens. 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) nadeini* n. sp. det. KADEJ & HÁVA, 2007".

***Anthrenus (Nathrenus) nadeini* n. sp.**

(Figs 1-6)

DISTRIBUTION

East Africa: Ethiopia.

NAME DERIVATION

The species name is dedicated to the specialist of Chrysomelidae – Konstantin Nadein (Russian Academy of Science, Sankt Petersburg, Russia).

DIAGNOSIS

Anthrenus nadeini n. sp. can be easily distinguished from the allied species within *Anthrenus* by the dorsal patterns and morphology of male genitalia. *Anthrenus nadeini* n. sp. is confusingly similar to *A. jakli* HÁVA, 2001 (Asia: Oman; Yemen), *A. basilewskyi* KALÍK, 1965 (Africa: Kenya; Malawi; Tanzania; Zambia) and *A. noctua* HÁVA, 2005 (South Africa), but differs by the colors of scales on dorsal aspect, structure of genitalia, antenna and form of scales.

From the three species know from Ethiopia, new species differs by the following characters:

1. Antennae composed of 11 segments 2.
- Antennae composed of 9 segments *A. megalops*
2. Eyes with median margin broadly and deeply emarginate at about 1/3 3.
- Eyes with median margin complete, dorsal aspect as in fig. 1.... *A. nadeini* n. sp.
3. Elytrae with orange-yellow scales, with small white spots *A. flavipes*
- Elytrae with black scales and broad transverse fasciae, with yellow scales anteriorly *A. ethiopicus*

DESCRIPTION

Body convex, elongate, covered by scales (BL: 2.6; BW: 1.75) (Figs 1). Head with big convex eyes. Frons with median ocellus, covered with grey, yellowish and brown scales.

Antenna light-brown, 11-segmented, antennal club 3-segmented (Fig. 2), covered densely with brown pubescence.

Antenna occupies whole cavity of antennal fossa. Antennal fossa completely open (AFL: 0.25) along lateral margin of the pronotum (LMP: 0.55).

Dorsal and ventral surface of integument brown, slightly punctated, covered with scales (Figs 1). Pronotum (PL: 0.5; PW: 1.35): covered with mixed yellowish (almost red) and dark brown scales in the central part, gray scales on the angles and central bottom apex.

Elytra covered with gray, dark brown and yellowish (almost red) scales. The anterior part of the elytra covered with gray scales (almost 1/3 of its length). Middle part of elytra covered with dark brown scales, only lateral part with mixed gray and yellowish scales creating small and irregular area. The terminal parts covered with dark brown scales creating distinctive spot, surrounded by gray and yellowish scales.

Ventral surface with gray scales except for abdominal sternites, which are covered with mixture of grey and brown scales – especially anterolateral parts of the sternites I-IV (SL: 1.5; SW: 1.75).

Legs brown, covered with gray scales on dorsal surface. Tarsus with two tarsal-claws slightly curved. Male genitalia as in figure 5. Parameres U-shaped, covered with numerous short setae. Median lobe S-shaped, wide posteriorly, with the apex slightly curved (Fig. 3, 5). Ninth abdominal sternite as in Fig. 6.

FEMALE. Unknown.

TYPE MATERIAL

Holotype male: Abyssinie A. Raffray Voy. 1881 (deposited in MNHN).

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