

A new species of the genus *Anthrenus* from Socotra Island (Coleoptera: Dermestidae: Megatominae)

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

Abstract. *Anthrenus* (*Nathrenus*) *purcharti* sp. nov. from Socotra Island, Yemen is described, illustrated and compared with similar species *Anthrenus* (*Nathrenus*) *jakli* Háva, 2001 from Oman and Yemen, and *Anthrenus* (*Anthrenops*) *longus* Arrow, 1915 from Socotra Island and East Africa.

Key words. Coleoptera, Dermestidae, Megatominae, Anthrenini, *Anthrenus*, new species, Yemen, Socotra

Introduction

The family Dermestidae (Coleoptera: Bostrichoidea) currently contains 1480 species and subspecies worldwide; 53 species are known from Arabian Peninsula, and nine species have been recorded from Socotra Island so far (HÁVA 2007a,b, 2011, 2013; HÁVA et al. 2013a,b).

Study of the rich Dermestidae material collected recently in Socotra by Czech entomological expeditions and deposited in the National Museum, Prague revealed another undescribed species of the genus *Anthrenus* Geoffroy, 1762, subgenus *Nathrenus* Casey, 1900, which I describe below.

Material and methods

The size of the beetles or their body parts can be useful in species identification and thus the following measurements were made:

total length (TL) – linear distance from anterior pronotal margin to elytral apex;

elytral width (EW) – maximum linear transverse distance of elytra.

The material included in this study is deposited in the following collections:

JHAC Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-West, Czech Republic;

NMPC Národní muzeum, Prague, Czech Republic (Jiří Hájek).

Taxonomy

Anthrenus (Nathrenus) purcharti sp. nov.

(Figs 1–3)

Type locality. Yemen, Socotra Island, Hagher mountains, area of Mt. Scand, 12°34'33"N 54°01'31"E, ca. 1300–1500 m.

Type material. HOLOTYPE: ♂: 'YEMEN, SOKOTRA Isl., Skant area, 1300–1500 m, 12°34'33"N 54°01'31"E, 31.i.-1.ii.2010, L. Purchart lgt.' (NMPC). PARATYPES: 2 ♂♂, same data as holotype (1 NMPC, 1 JHAC). Type specimens were labelled with red, printed labels bearing the text as follows: 'HOLOTYPE [or PARATYPE, respectively] *Anthrenus (Nathrenus) purcharti* sp. nov. J. Háva det. 2013'.

Description. Holotype. Measurements. TL = 2.9 mm, EW = 1.6 mm; body narrow and elongate, elytra parallel-sided, slightly broader behind middle (Fig. 1). Integument of elytra and pronotum brown, integument of head dark brown. Dorsal surface covered with blackish, whitish and light brown scales, ventral side mainly with whitish scales, with some intermixed brown scales.

Head with a mixture of black, brown and whitish scales. Labial palpi brown. Antennae with 11 antennomeres, antennomeres I–VIII light brown, antennomeres IX–XI darker; antennal club oblong oval, trimerous (Fig. 2). Eyes large, with brown microsetae; inner margin not emarginate. Median ocellus presents on frons.

Pronotum (Fig. 1) discally with blackish scales and one very narrow transverse fascia bearing whitish scales; lateral parts and area adjacent to scutellum covered with intermixed whitish and light brown scales.

Elytral pattern consists of three transverse stripes made up from whitish and light brown scales; first stripe located subbasally, second postmedially and third preapically. In addition, predominantly light brown scales form more or less distinct patches along elytral base, in middle of elytra and on elytral apex; other parts of elytra covered with blackish scales (Fig. 1). Scales drop-shaped, widest in posterior third; apex broadly rounded. Epipleuron very short, with light brown scales.

Ventral side. Prosternum covered with whitish scales only; antennal fossa broad and closed. Mesoventrite and metaventrite covered with whitish scales only. Abdominal ventrites covered with whitish scales; ventrites II–V with small spots of light brown scales at lateral margins.

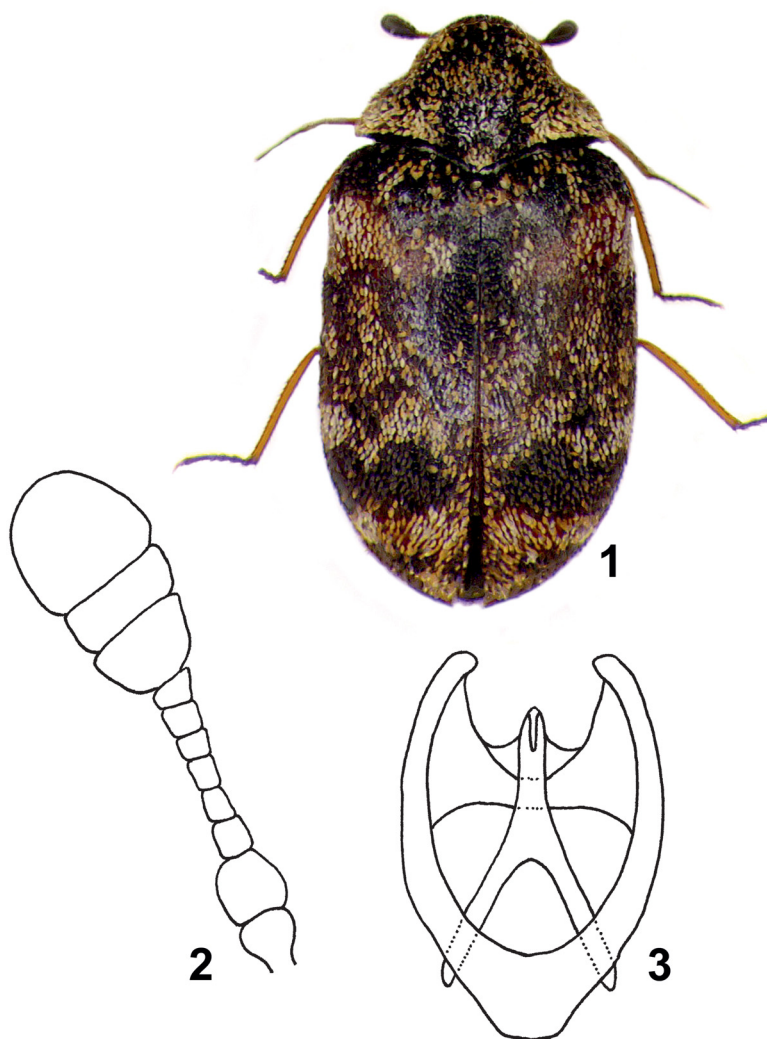
Legs entirely brown, with some short, light brown setae, femora also with few whitish scales.

Male genitalia as in Fig. 3.

Female unknown.

Variability. Both paratypes agree well with the holotype, especially in shape and distribution of pronotal and elytral scales. Measurements: TL = 3.3–3.4 mm, EW = 1.7–1.8 mm.

Differential diagnosis. Based on the antenna with 11 antennomeres, and eye with complete median margin, the new species is classified in the subgenus *Nathrenus*. The subgenus currently contains 66 species worldwide. Only one species of this subgenus is known from the Arabian Peninsula: *Anthrenus (Nathrenus) jakli* Háva, 2001 (Oman, Yemen); *A. purcharti* sp. nov. differs from this species in larger body length (2.3–2.6 mm in *A. jakli*), shape and structure of antennae, drop-shaped scales of dorsal surface (setiform scales in *A. jakli*), and in shape of male genitalia (see also HÁVA 2001). From *Nathrenus* species occurring in north-eastern Africa, i.e. *Anthrenus (N.) nadeini* Kadej & Háva, 2008 (Ethiopia) and *A. (N.) verbasci* (Linnaeus,



Figs 1–3. *Anthrenus (Nathrenus) purcharti* sp. nov., holotype. 1 – dorsal habitus; 2 – male antenna; 3 – aedeagus in dorsal view. Drawings are schematic, without setation.

1767) (Somalia and Sudan), the new species differs in larger body, and shape and structure of antennae and genitalia. The only other *Anthrenus* species known from Socotra – visually similar *Anthrenus (Anthrenops) longus* Arrow, 1915 – differs from *A. purcharti* sp. nov. in different number of antennomeres (9 antennomeres in *A. longus*).

Etymology. Patronymic, dedicated to the collector of the new species Luboš Purchart (Brno, Czech Republic).



Fig. 4. Skand, the type locality of *Anthrenus* (*Nathrenus*) *purcharti* sp. nov.

Collection circumstances. The type series was collected in the highest mountain zone of the Socotra Island, the Skand Mt. (ca. 1300–1500 m a.s.l.), covered with evergreen woodland (alliance *Crotonion sulcifructi*, association *Leucado haggierensi-Pittosporum viridiflorum*) (Fig. 4) (L. Purchart, pers. comm.).

Distribution. So far known only from the highest part of Hagher Mts., Socotra Island, Yemen.

Acknowledgements

I am very much obliged to Luboš Purchart (Brno, Czech Republic) for the photo of the type locality, to Jiří Hájek (NMPC) for the loan of interesting material and to Miloslav Rakovič (Dobřichovice, Czech Republic) for revision of the English. The research was supported by the Internal Grant Agency (IGA n.20124364), Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Prague.

References

- HÁVA J. 2001: *Anthrenus* (*Nathrenus*) *jakli* sp. n. (Coleoptera: Dermestidae) from the Sultanate of Oman, and distributional notes on some other *Anthrenus* species. *Acta Societatis Zoologicae Bohemicae* **65**: 1–3.
- HÁVA J. 2007a: New species and new records of Dermestidae (Insecta: Coleoptera) from the Arabian Peninsula including Socotra Island. *Fauna of Arabia* **23**: 309–317.
- HÁVA J. 2007b: *Orphinus* (*Orphinus*) *socotrensis* n. sp. from the Yemen (Coleoptera: Dermestidae: Megatominae). *Mitteilungen des Internationalen Entomologischen Vereins e.V.* (Frankfurt am Main) **32**: 107–109.
- HÁVA J. 2011: Contribution to the Dermestidae (Coleoptera) from the Arabian Peninsula. 1. *Latvijas Entomologs* **50**: 5–8.
- HÁVA J. 2013: Contribution to the knowledge of the Globicornis Latreille, 1829 species (Coleoptera: Dermestidae: Megatominae) from Socotra Island (Yemen). *Arquivos Entomolóxicos* **9**: 73–76.
- HÁVA J., HERRMANN A. & KADEJ M. 2013a: New faunistic records of Dermestidae (Coleoptera) – Part 7. *Arquivos Entomolóxicos* **8**: 135–140.
- HÁVA J., HERRMANN A. & KADEJ M. 2013b: New faunistic records of Dermestidae (Coleoptera) – Part 8. *Arquivos Entomolóxicos* **8**: 309–314.

