

New interesting Dermestidae (Coleoptera) from Namibia

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Abstract

Attagenus aurofasciatus sp. n., *Anthrenus (Nathrenus) arndti* sp. n. and *Phradonoma namibicum* sp. n. all from Namibia are described, illustrated and compared with related species.

Zusammenfassung

Attagenus aurofasciatus sp. n., *Anthrenus (Nathrenus) arndti* sp. n. und *Phradonoma namibicum* sp. n. – alle aus Namibia – werden beschrieben, abgebildet und mit verwandten Taxa verglichen.

Key words: Taxonomy, new species, Coleoptera, Dermestidae, Namibia.

The family Dermestidae is one of the commonly known beetle families and it currently contains about 1300 species or subspecies worldwide (HÁVA 2003, 2005). During the determination of some material belonging to from the collection of Naturkundemuseum Erfurt, Germany, I found three new species of Dermestidae, collecting by Prof. Dr. E. Arndt (Leipzig) and his wife H. Gröger in Namibia, Namib-Naukluft Park in 1993.

Material and Methods

The shades of colours used in the descriptions are classified according to PACLT (1958), integumental structures are named according to HARRIS (1979). Locality labels of the mentioned material are cited in the original version. Separate labels are indicated by slashes (/). Remarks of the author are found in square brackets [].

Moreover, following abbreviations refer to the collections, in which the examined material is deposited: JHAC – Jiří Háva, Private Entomological Laboratory and Collection, Prague, Czech Republic; NME – Naturkundemuseum Erfurt, Germany.

Descriptions

Attagenus aurofasciatus sp. n. (Figs. 2-5)

Type material. Holotype (male): „Namibia C., Naukluft [Namib-Naukluft Park], 23-24.iii.1994, leg. Arndt & Gröger“ (NME). **Paratypes** (1 female): the same data as holotype (NME); (1 male): „Namibia: Osona bei Okahandja, iii-iv.1989, J. Irish leg.“ (JHAC). Type specimens provided with red, printed label: „HOLOTYPE (or PARATYPE, respectively) *Attagenus aurofasciatus* sp. n., Jiří Háva & 2005“.

Distribution. Namibia.

Name derivation. Named according to characteristic setation on elytra.

Description. Body length 3.4 mm, maximum width 1.7 mm, oblong, narrow slightly arched. Head longer than wide, finely punctate with long yellow setation, clypeus slightly extended. Palpi entirely brown; pubescence on mentum denser. Median ocellus on front present. Antennae black with 11 antennomeres, antennal club with 3 antennomeres (Fig. 3). Pronotum wider than long, slightly arcuately narrowed forward; finely punctate like head with coarse, decumbent yellow and brown setation; brown setation forming discally a large spot; anterior angles rounded, visible from above; posterior angles almost arcuate, middle of base slightly convexly extended. Scutellum triangular finely punctate as pronotum, with very short brown setation. Elytra finely punctate; black with two orange transverse bands and apical spot covered by coarse decumbent orange-yellow setation; other parts with coarse decumbent brown setation; elytral bands arranged as in (Fig. 2). Legs brown with yellow setation; metatibiae with distinct spines, on the exterior side. Femora covered by yellow setation. Prosternum narrow, before coxae non erect; prosternal process long and narrow. Mesosternum and metasternum with short yellow setation. Abdominal sternites with long decumbent yellow setation. Male genitalia (Fig. 5).

Female externally similar to male, differs by the structure of antennae (Fig. 4), body length 3.8 mm, maximum width 1.8 mm.

Differential diagnosis. New species similar to *Attagenus pustulatus* (Thunberg, 1815) known from South Africa, but differs from it by the following characters:

A. aurofasciatus sp. n.: pronotum covered by orange pubescence with one large black spot on the disc; each elytron with two orange transverse fasciae and apical spot covered by yellow-orange setation; terminal antennal antennomere short.

A. pustulatus (Thunberg, 1815): pronotum covered by black pubescence with eight small orange spot; each elytron with small orange spot near scutellum, two orange transverse fasciae divided on spots and orange apical spot; terminal antennal antennomere long.

Remarks. In several collections the newly described *A. aurofasciatus* is present under the undescribed name *A. auronotatus* Kalkf. All investigated specimens are morphologically identical.

Anthrenus (Nathrenus) arndti sp. n. (Figs. 6-7)

Type material. **Holotype** (male): „Namibia C., Naukluft [Namib-Naukluft Park], 23-24.III.1994, leg. Arndt & Gröger“ (NME). **Paratypes** (1 male 1 female): the same data as holotype (1 female NME, 1 male JHAC). Type specimens provided with red, printed label: „HOLOTYPE (or PARATYPE, respectively) *Anthrenus (Nathrenus) arndti* sp. n., Jiří Háva & 2005“.



Fig. 1. Map of area type locality in Namibia.

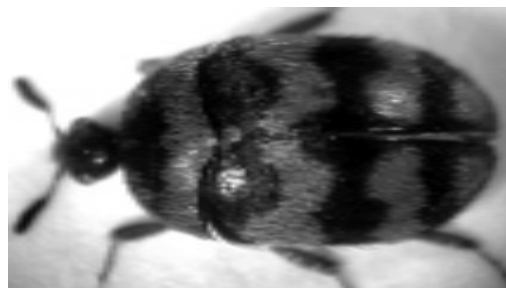


Fig. 2. *Attagenus aurofasciatus* sp. n. – habitus dorsal aspect

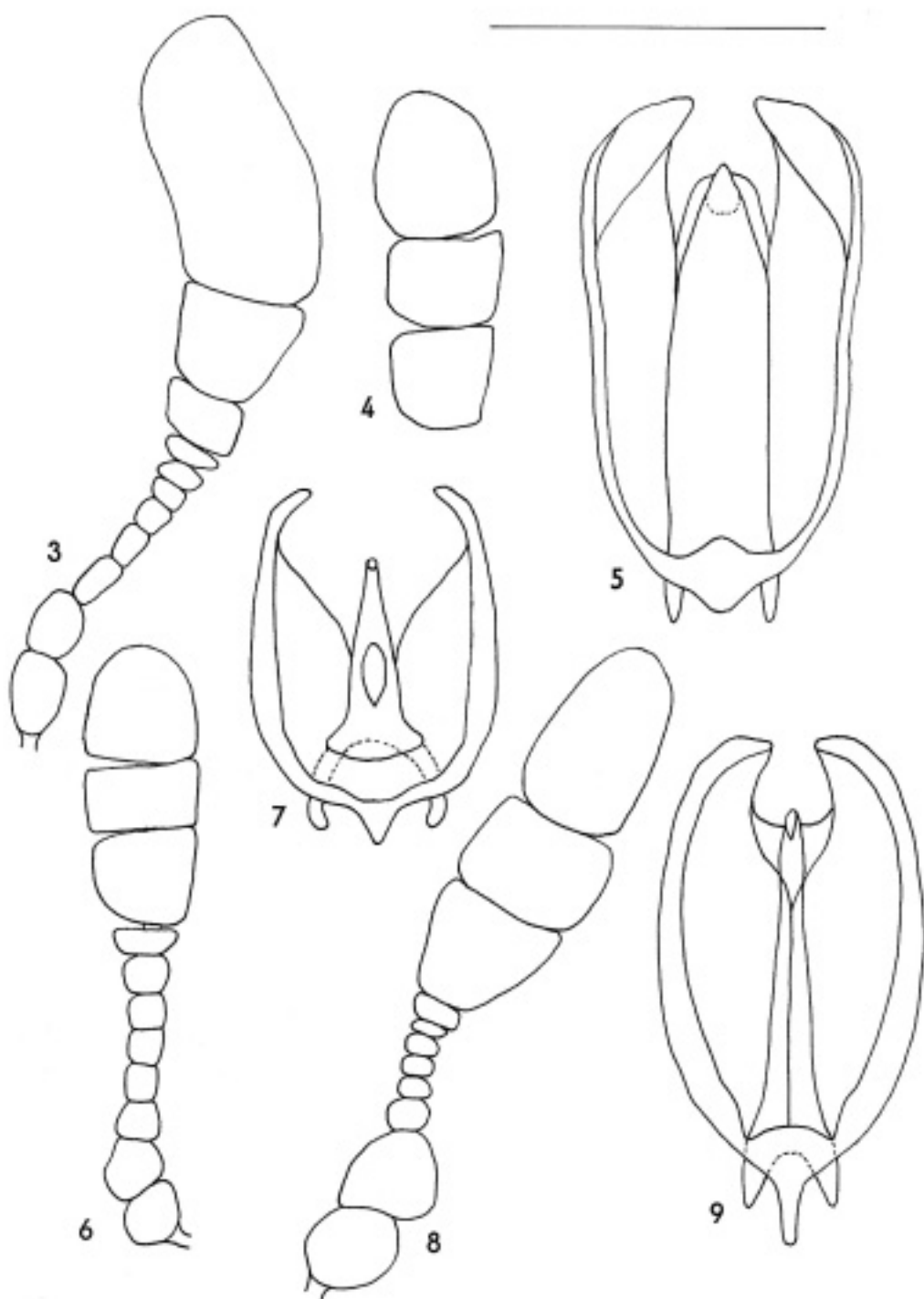
Distribution. Namibia.

Name derivation. Dedicated to the collector of the new species Mr. Erik Arndt (Leipzig, Germany).

Description. Male body length 2.0-2.1 mm, maximum width 1.4-1.6 mm; body oval, black. Dorsal surface covered by intermixed white, grey and yellow scales. Individual scales widest at about proximal 1/3, parallel-sided or slightly tapering toward apex. Head covered by white scales with median ocellus. Labial palpi black, lacinia black. Antennae with 11 antennomeres, black, antennal club with 3 antennomeres (Fig. 6). Eyes with median margin entire. Pronotum covered by grey scales on the disc and intermixed white and yellow on other parts. Scutellum very small, triangular, without scales. Each elytron covered by intermixed white and yellow scales with small two or three ill-defined patterns with grey scales. Ventral surface covered with white and yellow scales, particular abdominal sternites without small spots of dark scales at antero-lateral margins. Sternites I-V covered only white scales. Prosternum covered by only white scales. Metasternum covered by white and yellow scales, without a large patch at lateral margins. Legs black with white scales and white setae. Male genitalia (Fig. 7).

Female externally similar to male. Body length 2.1 mm, maximum width 1.6 mm.

Differential diagnosis. The new species visually very similar to the *Anthrenus* (*Anthrenus*) *namibicus* Háva, 2000, but differs from it by the structure of scales, antennae and male genitalia (Háva 2000). From other known Afrotropical species belonged to the subgenus *Nathrenus*, new species differ by the structure of antennae and male genitalia.



Figs 3-9. *Attagenus aurofasciatus* sp. n.: 3- antenna of male; 4- antennal club of female; 5- aedeagus. *Anthrenus (Nathrenus) arndti* sp. n.: 6- antenna; 7- aedeagus; *Phradonoma namibicum* sp. n.: 8- antenna of male; 9- aedeagus. (Scale = 2.25 mm. Figures schematically without setation).

Anthrenus (Anthrenus) namibicus Háva, 2000: eyes with median margin broadly and deeply emarginate at about anterior 1/3; individual scales widest at about proximal 1/3, parallel-sided or slightly tapering toward apex; aedeagus long, parameres broad; antennae brown with 11 antennomeres.

Anthrenus (Nathrenus) arndti sp. n.: eyes with median margin entire; individual scales mostly widest about middle with sides converging to strongly rounding apex; aedeagus short, parameres very narrow; antennae black with 11 antennomeres.

***Phradonoma namibicum* sp. n. (Figs. 8-9)**

Type material. **Holotype** (male): „Namibia C., Naukluft [Namib-Naukluft Park], 23-24.III.1994, leg. Arndt & Gröger“ (NME). **Paratype** (1 male): the same data as holotype (JHAC). Type specimens provided with red, printed label: „HOLOTYPE (or PARATYPE, respectively) *Phradonoma namibicum* sp. n., Jiří Háva & 2005“.

Distribution. Namibia.

Name derivation. The specific name is derived from the country Namibia, where the holotype was collected.

Description. Male. Body maximum length 2.4 mm, maximum width 1.6 mm; oval, shiny, dorsally black and orange, ventrally black. Head coarsely punctate with suberect brown setation, maxillary palpi brown, eyes large with microsetae. Antennae with 11 antennomeres, antennal club with 3 antennomeres (Fig. 8). Antennal fossa broad. Median ocellus on front present. Pronotum black, shiny, finely punctate with suberect brown setation discally, yellow laterally, lateral margins not visible from above. Scutellum triangular with short brown setation. Elytra black, shiny, with orange apex, orange apex covered by brown setation. On each elytron intermixed in brown setation small patches with white setation; anterior part of elytron densely foveolate, rest finely punctate. Pro- and metasternum with short decumbent yellow setation. Legs brown, anterior tibia with black spines along shaft. Abdominal sternites finely punctate with long decumbent yellow setation. Male genitalia (Fig. 9).

Paratype body maximum length 3.2 mm, maximum width 2.0 mm.

Female unknown.

Differential diagnosis. New species habitually similar to *P. babaulti* (Pic, 1921) and *P. eximium* (Arrow, 1915), but differs from this species of characters mentioned in the following key:

- 1(2) body form narrow, parallel, elytra without white setation, black with orange apex; antennal club with 5 antennomeres (Kenya, Namibia, Tanzania)
..... *P. babaulti* (Pic, 1921)
- 2(1) body form oval, elytra with brown and white setation
- 3(4) each elytron with one orange transverse fasciae, small median orange patches and orange apical spot all covered by white setation; antennal club with 3 antennomeres; terminal antennomere very short and circular (Botswana, Congo, Namibia, South Africa, Zambia, Zimbabwe)
..... *P. eximium* (Arrow, 1915)
- 4(3) each elytron with orange apex covered by brown setation; antennal club with 3 antennomeres; terminal antennomere long triangular (Namibia)
..... *P. namibicum* sp. n.

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References

- HARRIS R. A. (1979): The glossary of surface sculpturing. - Occasional Papers in Entomology **28**: 1-31.
- HÁVA J. (2000): New interesting Dermestidae (Coleoptera) from the world with descriptions of ten new species. - Veröffentlichungen Naturkundemuseum Erfurt **19**: 161-171.
- (2003): World Catalogue of the Dermestidae (Coleoptera). - Studie a zprávy Okresního muzea Praha- východ, Suppl. 1, 196 pp.
- (2005): Homepage on the Internet: <http://www.Dermestidae.wz.cz>
- PACLT J. (1958): Farbenbestimmung in der Biologie. Jena, VEB Gustav Fischer Verlag, 76 pp.

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