

## Notes on Dermestidae (Coleoptera) with new synonyms and description of three new species

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**Abstract** – The following new species are described: *Globicornis (Pseudomesalia) maculatus* sp. n. (Iran), *Anthrenus (Anthrenops) zagrosensis* sp. n. (Iran), *Anthrenus (Anthrenodes) israelicus* sp. n. (Israel). New records extending the known geographic distribution are published for the following species: *Attagenus endroedyi* HÁVA, 2003 (Togo); *Attagenus ensicornis* WOLLASTON, 1867 (Senegal); *Attagenus lineatus* (PIC, 1894) (Morocco); *Globicornis (Globicornis) kafkai* HÁVA, 2000 (Iran); *Hemirhopalum longipenne* PIC, 1916 (Bolivia); *Anthrenus (Anthrenops) coloratus* REITTER, 1881 (Eritrea); *Anthrenus (Anthrenops) subclaviger* REITTER, 1881 (Eritrea); *Anthrenus (Anthrenodes) endroedyi* HÁVA, 2003 (Angola); *Anthrenus (Anthrenus) bartolozzii* HÁVA, 2003 (Kenya); *Anthrenus (Anthrenus) pfefferi* KALÍK, 1954 (Greece, Creta); *Anthrenus (Anthrenus) pimpinellae mroczkowski* KALÍK, 1954 (Corsica); *Anthrenus (Anthrenus) seminulum* ARROW, 1915 (Kenya); *Anthrenus (Anthrenus) x-signum* REITTER, 1881 (Morocco); *Anthrenus (Anthrenus) oceanicus* FAUVEL, 1903 (Indonesia: Madura I.); *Dermestes (Dermestes) wittei* KALÍK, 1955 (Madagascar); *D. (Dermestes) schneideri* HÁVA, 2002 (Mandzhuria); *Hemirhopalum cyaneum* PIC, 1916 (Bolivia); *Megatoma (Pseudohadrotoma) tianschanica* SOKOLOV, 1972 (China: Xinjiang); *Phradonoma eximium* (ARROW, 1915) (Zambia, South Africa, Namibia); *Trogoderma megatomoides* REITTER, 1881 (Algeria). The following synonymies are proposed: *Anthrenus (Nathrenus) verbasci* (LINNAEUS, 1767) = *Anthrenus funebris* REITTER, 1889, syn. n.; *Trogoderma serrigerum* SHARP, 1877 = *Trogoderma pictulum* BROUN, 1911, syn. n.; *Trogoderma maestum* BROUN, 1880 = *Trogoderma suffusum* BROUN, 1886, syn. n.; *Labrocerus moerens* SHARP, 1908 = *Labrocerus gravidus* SHARP, 1908, syn. n.. Lectotypes are designated for *Trogoderma rufopictum* ARROW, 1915 (South Africa: Natal) and *Trogoderma nitens* ARROW, 1915 (Brazil). With 16 figures.

**Key words** – Coleoptera, Dermestidae, taxonomy, distribution, new species, nomenclature.

### INTRODUCTION

During the determination of material of Dermestidae coming from various collections I found three new species and several other species representing new country records.

The following abbreviations refer to the collections in which the investigated material is deposited (with names of curators in parentheses): AHEC = collection of ANDREAS HERRMANN, Stade, Germany; BMHN = British Natural History Museum, London, England (S. SHUTE); FANC = collection of FERNANDO ANGELINI, Francavilla Fontana, Brindisi, Italia; HNHM = Hungarian Natural History Museum, Budapest, Hungary (O. MERKL); IJEC = collection of IVO JENIŠ, Náklo, Czech Republic; JHAC = collection of JIŘÍ HÁVA, Prague, Czech Republic; JHCP = collection of JIŘÍ HÁJEK, Prague, Czech Republic; NHMI = Natural History Museum, Tel Aviv, Israel (V. CHIKATUNOV); NMPC = National Museum, Prague, Czech Republic (J. JELÍNEK); NZAC = New Zealand Arthropod collection, Auckland, New Zealand (R. LESCHEN); VKAC = collection of VLADIMÍR KALÍK, Pardubice, Czech Republic; ZMAN = Zoologisch Museum, Amsterdam, Netherland (B. BRUGGE); ZMUB = Museum für Naturkunde, Berlin, Germany (M. UHLIG).

In cases of a lectotype and paralectotype designation, each specimen bears a red label "Lectotype or Paralectotype, *name of taxon*, Jiří HÁVA design. 2003". The lectotypes and paralectotypes are designated in order to preserve stability of nomenclature in this group, according to the Article 74.7.3 of ICZN (1999).

Specimens of the species described hereunder are tagged with a red, printed label with text as follows: "HOLOTYPE [or PARATYPE] *species name* sp. n. Jiří HÁVA det. 2004". Text of the labels are separated by slashes (\). Remarks of the author are found in [square] brackets.

## FAUNISTICS

### *Anthrenus (Anthrenops) coloratus* REITTER, 1881

*Material examined* – "Africa or., Katona" \ "Assab [Eritrea], 1907", J. HÁVA det. (4 specimens, HNHM, JHAC).

*Distribution* – Europe, Canary Islands, Turkey, Algeria, Egypt, Morocco, Sudan, Tunisia, Afghanistan, India, Israel, Kazakhstan, Saudi Arabia, Syria, Tadjikistan, Turkmenistan, U.S.A. (HÁVA 2003b). First record from Eritrea.

### *Anthrenus (Anthrenops) subclaviger* REITTER, 1881

*Material examined* – "Africa or., Katona" \ "Assab [Eritrea], 1907", J. HÁVA det. (12 specimens, HNHM, JHAC).

*Distribution* – Himalaya, India, Saudi Arabia, Yemen (HÁVA 2003b). First record from Eritrea.

*Anthrenus (Anthrenodes) endroedyi* HÁVA, 2003

*Material examined* – “Angola, Dundu, gig 17, vii.1948, A. de Barros Machado [lgt.]”, J. HÁVA det. (1 female, JHAC).

*Distribution* – Described from Ghana (HÁVA 2003c). First record from Angola.

*Anthrenus (Anthrenus) bartolozzii* HÁVA, 2003

*Material examined* – “KENYA or., Voi (Tsavo), 8–18.xi.1996, M. Snížek lgt.”, J. HÁVA det. (45 specimens, JHAC); “Brit. O. Afrika [Kenya], Kibwezi, 3.x.1908, G. Scheffler leg.”, J. HÁVA det. (27 specimens, ZMUB); “Brit. O. Afrika [Kenya], Kibwezi, No 41, Scheffler S. V. [lgt.]”, J. HÁVA det. (8 specimens, ZMUB).

*Distribution* – Described from Kenya (HÁVA 2003a).

*Anthrenus (Anthrenus) oceanicus* FAUVEL, 1903

*Material examined* – “Indonesia, Madura I., viii.2003, import to the Czech Republic on a Dream Catcher”, J. HÁVA det. (ca. 80 adults, numerous larvae and pupae, JHAC).

*Distribution* – England (introduced), Egypt, Hawaiian Isl., India, Malaysia, Sri Lanka, New Caledonia (HÁVA 2003b). First record from Indonesia (Madura Island) and from the Czech Republic as introduced species.

*Remarks* – “Dream Catcher”: as a native American legend is told, by hanging a dream catcher over your sleeping area the bad dreams will be deterred by the bead in the feathers, and it will attract and allow the good dreams to pass through. All specimens were collected on the feathers.

*Anthrenus (Anthrenus) pfefferi* KALÍK, 1954

*Anthrenus pimpinellae* var. *pfefferi* KALÍK, 1954: 370.

*Anthrenus (Anthrenus) pfefferi*: HÁVA 2003b: 82.

*Type material* – Holotype of *Anthrenus pimpinellae* var. n. *pfefferi* Kalík, 1954 (male): “Kalavryta [Greece], Pelop.[onnesos], Dr. Pfeffer [lgt.]”, (VKAC). Paratype (male): same data as holotype (VKAC).

*Material examined* – “GREECE, Kalavryta, Pelop., 1936”, J. HÁVA det. (1 female, JHAC); “Greece, Kalavryta, Ahaia, 28–29.iv.1999, F. Angelini lgt.”, J. HÁVA det. (10 specimens, FANC, JHAC); “GREECE, Arkadia, Stavrodromi, 27.iv.1999, F. Angelini lgt.”, J. HÁVA det. (2 specimens, FANC); “CRETE, Drosia, 12 km S Sises, 400m NN, 10.iv.1998, A. Kopetz lgt.”, J. HÁVA det. (1 male, JHAC); “CRETE, Sitia, 10 km SW, Ag. Georgios, E, 200m NN, 18.iv.2000, A. Kopetz lgt.”, J. HÁVA det. (1 female, JHAC).

*Distribution* – Described from mainland Greece (KALÍK 1954). First records from Crete.

*Anthrenus (Anthrenus) pimpinellae mroczkowski* KALÍK, 1954

*Material examined* – “Corsica, 1905, Diener [lgt.]” \ “coll. Dr. J. Fodor”, J. HÁVA det. (1 male, HNHM).

*Distribution* – Albania, Bulgaria, Crete, Croatia, Greece, Italy, Algeria (HÁVA 2003b). First record from Corsica.

*Anthrenus (Anthrenus) seminulum* ARROW, 1915

*Material examined* – “KENYA or., Voi (Tsavo), 8–18.xi.1996, M. Snížek lgt.”, J. HÁVA det. (1 male, JHAC).

*Distribution* – Species known only from South Africa (HÁVA 2003b), first record from Kenya.

*Anthrenus (Anthrenus) x-signum* REITTER, 1881

*Material examined* – “MOROCCO, AntiAtlas, Tata env., 28.iv.1990 (oasis), Z. Kejval lgt.”, J. HÁVA det. (3 females, JHAC).

*Distribution* – Corsica, Algeria, Egypt, Tunisia (HÁVA 2003b). First record from Morocco.

*Attagenus endroedyi* HÁVA, 2003

*Material examined* – “TOGO, Bismarckburg, 24.ii.[18]93, L. Conradt S. [lgt.]”, J. HÁVA det. (1 female, ZMUB).

*Distribution* – Described from Ghana (HÁVA 2003c). First record from Togo.

*Attagenus ensicornis* WOLLASTON, 1867

*Material examined* – “Senegal, Thies, 1908, Riggerbach [lgt.]”, J. HÁVA det. (2 males, ZMUB).

*Distribution* – Cape Verde Islands (HÁVA 2003b). First record from Senegal.

*Attagenus lineatus* (PIC, 1894)

*Material examined* – “Morocco, Sale, 14.v.1991, I. Jeniš lgt.”, V. KALÍK det. (1 female, IJEC); “Morocco, Khemisset, 25.iv.1995, M. Šárovec lgt.”, J. HÁVA det. (13 specimens, JHAC); “Morocco, Zagora, 17.iv.1995, M. Šárovec lgt.”, J. HÁVA det. (1 female, JHAC); “N Morocco, Kenitra env., 4–5.v.1995, P. Průdek lgt.”, J. HÁVA det. (1 female, JHAC); “Morocco, Sidi-Slimane, 4.iv.1995, M. Šárovec lgt.”, J. HÁVA det. (1 female, JHAC); “Morocco, Bouznika, Skhirat, 23.iv.1995, M. Šárovec

lgt.", J. HÁVA det. (1 male, JHAC); "Morocco, Sidi Taibi, 5.iv.1995, M. Šárovec lgt.", J. HÁVA det. (3 females, JHAC).

*Distribution* – Described from Algeria (HÁVA 2003b). First records from Morocco.

### *Dermestes (Dermestes) schneideri* HÁVA, 2002

*Dermestes nidum*: MROCKOWSKI 1966: 439.

*Dermestes (Dermestes) bicolor*: ZHANTIEV 1973: 187.

*Dermestes schneideri*: HÁVA 2003c: 22.

*Material examined* – "Mandzhuria, Charbin [Harbin, Heilongjiang prov., China], i-vi.1911, A. Emeljanov lgt.," \ *Dermestes nidum* Arr. M. MROCKOWSKI det. 1959, J. HÁVA revid. (1 male, AHEC).

*Distribution* – This species was known from Mongolia (HÁVA 2002, 2003c). The specimen from Charbin differs from *D. nidum* ARROW, 1915 in the form of terminal antennal segment, lateral impressions on first visible abdominal ventrite and male genitalia see below). This specimen (evidently from the series mentioned by MROCKOWSKI (1966) and deposited in St. Petersburg) belongs to *Dermestes schneideri*. First record from Mandzhuria.

	<i>D. schneideri</i> HÁVA, 2002	<i>D. nidum</i> ARROW, 1915
terminal antennal segment	large	very small
lateral impressions on first visible abdominal ventrite	lateral impressions is very deep and broad	lateral impressions is very flat and narrow
median lobe of male genitalia	Fig. 1	Fig. 2

### *Dermestes (Dermestes) wittei* KALÍK, 1955

*Material examined* – "Madagascar, Mahajanga prov., Ankofia riv., Ambodimanga, 14–15.xi.1995, I. Jeniš lgt.", J. HÁVA det. (1 female, IJEC).

*Distribution* – Congo, Gambia, Somalia, South Africa, Tanzania, Zimbabwe (HÁVA 2003b). First record from Madagascar.

### *Globicornis (Globicornis) kaffkai* HÁVA, 2000

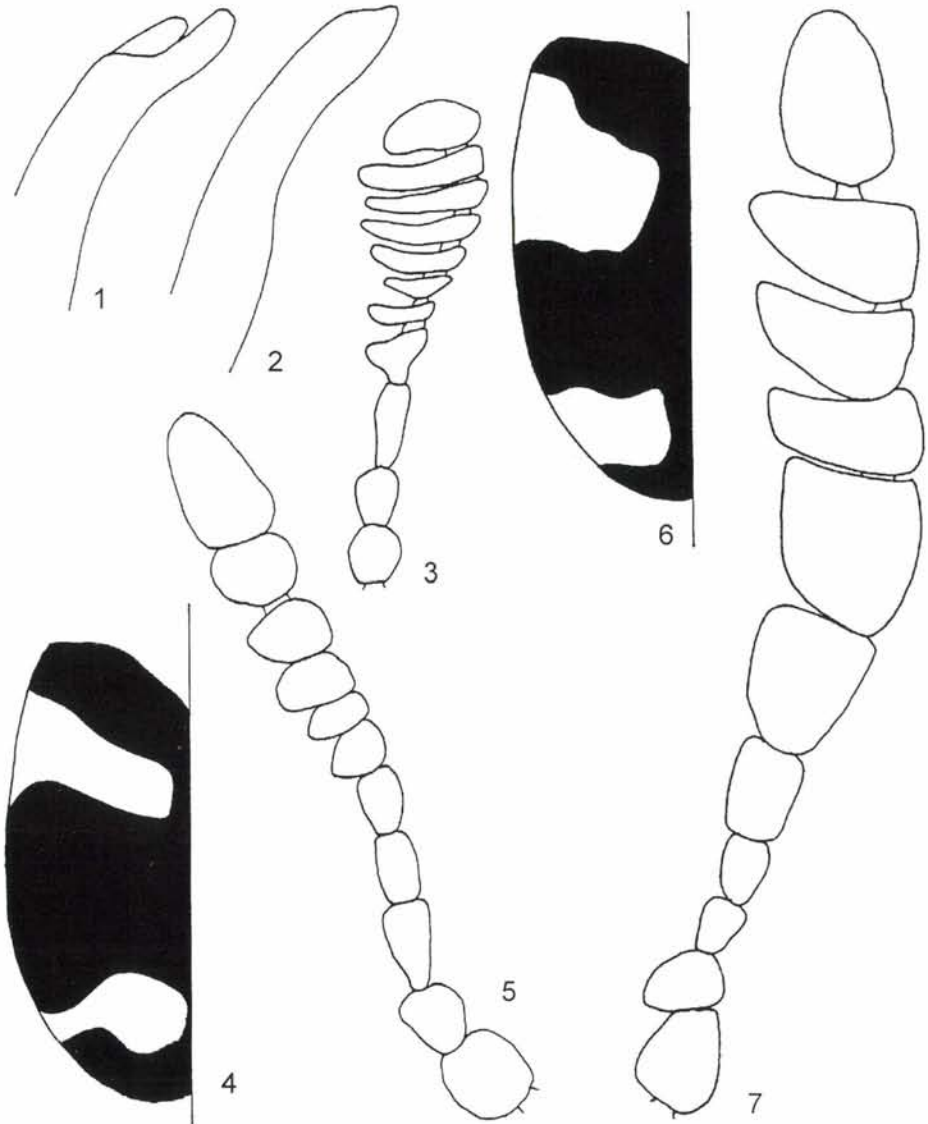
*Globicornis (Dearthrus) kaffkai* HÁVA 2000: 369.

*Globicornis (Globicornis) kaffkai*: HÁVA, 2003b: 109.

*Material examined* – "IRAN, 20–21.iv.2000, Fars prov., Zagros Mts., 10 km N Firuz Abad, 28 55 N, 52 31 E, 1450 m., J. Hájek lgt." \ "Iran 2000 Czech biological expedition, J. Hájek & M. Mikát

igt.", J. HÁVA det. (1 male, 2 females, JHAC); "S Iran, Fars pass., 140 km NE Siraz, 20–21.iv.2002, P. Kabátek lgt.", J. HÁVA det. (1 female, JHAC).

*Distribution* – Iran. Described from specimens collected in environs of Teheran.



**Figs 1–5.** 1 = *Dermestes (Dermestes) schneideri* HÁVA, 2002, median lobe, 2 = *D. (D.) nidum* ARROW, 1915, median lobe, 3 = *Trogoderma serrigerum* SHARP, 1877 (holotype), female antenna, 4–5 = *T. rufopictum* ARROW, 1915 (lectotype): 4 = left elytron, 5 = female antenna. 6–7 = *T. nitens* ARROW, 1915 (lectotype): 6 = left elytron, 7 = female antenna

*Hemirhopalum cyaneum* PIC, 1916

*Material examined* – “Bolivia” [without detailed data], J. HÁVA det. (2 males, NZAC, JHAC).

*Distribution* – Peru (MROCKOWSKI, 1958, 1968). First reliable record from Bolivia.

*Megatoma (Pseudohadrotoma) tianschanica* SOKOLOV, 1972

*Material examined* – “China, Xinjiang prov., road Narat-Kuytun, Erenhaberga Shan, 40 km S Maytag, 1500m, 11.vii.1993, J. Turna lgt.”, J. HÁVA det. (1 female, AHEC).

*Distribution* – Kazakhstan, Kyrgyzstan, Mongolia (HÁVA 2003b). First record from China (Xinjiang province).

*Phradonoma eximium* (ARROW, 1915)

*Trogoderma eximium* ARROW, 1915: 431.

*Phradonoma eximium*: HINTON 1945: 375.

*Type material* – Three syntypes (BMNH). One female: “Salisbury, Mashonal’ d, xii.04, G.A.K. Marshall” \ “*Trogoderma eximium* Arrow type”; One female: “Mashonaland, Salisbury, jan.1905, G.A.K. Marshall” \ “G.A.K.Marshall 1913–48”; One male: “Old Umtali, Manika xi.1897, G.A.K. Marshall 1913–48”.

*Material examined* – “Zambia, Rimo Marine Motel, Kafue River, 15°49’S 28°12’E, 16–18.iii.1993, U. Göllner leg.”, J. HÁVA det. (1 specimens, ZMUB); “Namibia, Exp. ZMB 1992, Bushmanland: Klein Dobe, 19°25’S 20°21’E, 19–21.11.1992, U. Göllner lgt.”, J. HÁVA det. (2 specimens, ZMUB); “Namibia, Voigts Farm, Okaparakaha, 90 km NO von Windhoek, 2–4.iii.2001, U. Göllner leg.”, J. HÁVA det. (1 specimens, ZMUB); “Namibia, Exp. ZMB 1992, Grootfontein: Askavolt Farm, 20 km E Otavi, 19°40’S 17°33’E, 18.ii.1992, M. Uhlig leg.”, J. HÁVA det. (1 specimens, ZMUB); “Namibia, Exp. ZMB 1992, Kavango: Gelukkie, Kavango-Ufer, 18°03’S 21°08’E, 1.iii.1992, U. Göllner leg.”, J. HÁVA det. (1 specimens, ZMUB); “RSA, North West, Prov. Klerksdorp, 11.i.2001, M. Snížek lgt.”, J. HÁVA det. (1 male, 1 female, AHEC).

*Distribution* – Botswana, Congo and Zimbabwe (HÁVA 2003b). First records from Zambia, South Africa and Namibia.

*Trogoderma megatomoides* REITTER, 1881

*Material examined* – “Algeria, Di Aures, vi.1932, [A.] Pfeffer lgt.”, J. HÁVA det. (1 male, NMPC).

*Distribution* – Europe, Iran, U.S.A. and Mexico (HÁVA 2003b). First reliable record from Algeria.

## SYNONYMIES AND TYPE DESIGNATIONS

*Trogoderma rufopictum* ARROW, 1915  
(Figs 4–5)

*Trogoderma rufopictum* ARROW, 1915: 432.

*Type material* – Three syntypes (females), one is designated as lectotype and two are as paralectotypes: “Frere, Natal, oct. 1892” \ “Sweeping, G.A.K.Marshall. 1913–48” \ “*Trogoderma rufopictum* Arrow type”. Lectotype and one paralectotype are deposited in BMNH, one paralectotype in JHAC.

*Distribution* – Known only from South Africa, Natal province.

*Remarks* – There are no illustrations in the original description. The elytral pattern (Fig. 4) and antenna of female (Fig. 5) are illustrated here for the first time.

*Trogoderma nitens* ARROW, 1915  
(Figs 6–7)

*Trogoderma nitens* ARROW, 1915: 432.

*Type material* – Two syntypes (females), one specimen is designated as lectotype and one as paralectotype: “Santa Gatha” \ “Fry Coll. 1905–100.” \ “*Trogoderma nitens* Arrow type” [or co-type]. Both are deposited in BMNH.

*Distribution* – Known only from Brazil.

*Remarks* – There are no illustrations in the original description. The elytral pattern (Fig. 6) and antenna of female (Fig. 7) are illustrated here for the first time.

*Anthrenus (Nathrenus) verbasci* (LINNAEUS, 1767)

*Anthrenus funebris* REITTER, 1889: 256 **syn. n.**

*Material examined* – “Greece, Kerkira Isl., Mesongi env., 22.vi.–6.vii.1997, D. Král lgt., J. HÁVA det. as *Anthrenus funebris* (2 males, 4 females, JHAC); “Graecia, Dodecanesos” [without detailed data], J. HÁVA det. as *Anthrenus funebris* (2 males, NMPC); “Südl. Sporaden, Chalki, v. Oertzen [lgt.]”, J. HÁVA det. (27 specimens, ZMAN).

*Additional material studied* – *Anthrenus verbasci*, ca. 800 specimens from the Afrotropical, Oriental, Palearctic, Nearctic and Australian regions.

*Remarks* – *Anthrenus funebris* was described from Greece (Dodecanese Islands). Its type depository of is unknown. *Anthrenus verbasci* is a cosmopolitan



species. According to the description *Anthrenus funebris* differs from *A. verbasci* only in the shape of scales (scales long and very narrow). Typical scales of *Anthrenus verbasci* are broad and short, but in the highly variable populations of this species, the shape of scales ranges from narrow to broad. *Anthrenus funebris* does not differ from *A. verbasci* morphologically; male genitalia are identical. So *Anthrenus funebris* is considered a junior synonym of *A. verbasci*.

*Trogoderma maestum* BROUN, 1880

*Trogoderma maestum* BROUN, 1880: 241.

*Trogoderma suffusum* BROUN, 1886: 953, **syn. n.**

*Type material* – *Trogoderma maestum*, holotype, female: “New Zealand, Broun Coll., Brit. Mus., 1922–482 / Paparoa” (BMNH); *Trogoderma suffusum*, holotype, female: “New Zealand, Broun Coll., Brit. Mus., 1922–482 / Howick” (BMNH).

*Additional material studied* – “New Zealand SD, Queen Charlotte Drive, Picton, 3. jan.1971, M. G. McPherson lgt.”, J. HÁVA det. (3 males, 2 NZAC, 1 JHAC).

*Remarks* – Study of the type material of *Trogoderma suffusum* (a teneral specimen) and *T. maestum* reveals that these two species are identical. So *Trogoderma suffusum* is a junior synonym of *Trogoderma maestum*.

*Trogoderma serrigerum* SHARP, 1877

(Fig. 3)

*Trogoderma serrigerum* SHARP, 1877: 270.

*Trogoderma pictulum* BROUN, 1911: 100, **syn. n.**

*Type material* – *Trogoderma serrigerum*, holotype, female: “Riccarton N. Zd., sep.22.1873” (BMNH); *Trogoderma pictulum*, holotype, female: “Chatham Is., Broun Coll., Brit. Mus., 1922–482 / Pittsland, I. Hall” (BMNH).

*Remarks* – Study of the type material of *Trogoderma serrigerum* and *T. pictulum* reveals that these two species are identical. So *Trogoderma pictulum* is a junior synonym of *T. serrigerum*. There are no illustrations in the original description. The antenna of female (Fig. 3) is illustrated here for the first time.

*Labrocerus moerens* SHARP, 1908

*Labrocerus moerens* SHARP, 1908: 406.

*Labrocerus gravidus* SHARP, 1908: 407, **syn. n.**

*Labrocerus moerens*: BEAL 2000: 384 (lectotype designation, redescription, illustrations of antennae and male genitalia).

*Type material* – Eight syntypes of *Labrocerus gravidus*. One male, designated as lectotype: “Koholuamano, Kauai, Perkins. Iv.1895” / “Sandwich Is. 1912–215”; one female, designated as paralectotype: same data as lectotype; five females, designated as paralectotypes: “Kilauea, Hawaii, Perkins vii.1895” / “Sharp coll. 1905–313”; one female, designated as paralectotype: “Kona, Hawaii, 3000 ft., Perkins v.1892” \ “Sharp coll. 1905–313”. Lectotype and 5 paralectotypes are deposited in BMNH, 1 paralectotype in JHAC.

*Distribution* – Kauai, Kilauea and Kona (Hawaii Islands).

*Remarks* – According to the redescription and illustrations (BEAL 2000) of *Labrocerus moerens*, it is evident that *L. gravidus* is identical with *L. moerens*. No differences are visible in the male genitalia, male and females antennae of the two species. *Labrocerus gravidus* is therefore considered a junior synonym of *L. moerens*.

## DESCRIPTIONS

***Anthrenus (Anthrenops) zagrosensis* sp. n.**

(Figs 8–10)

*Type material* – Holotype (male): “IRAN, 20–21.iv.2000, Fars prov., Zagros Mts., 10 km N Firuz Abad, 28 55 N, 52 31 E, 1450 m., J. Hájek lgt.” \ “Iran 2000 Czech biological expedition, J. Hájek & M. Mikát lgt.”. Paratypes (15 specimens, not sexed): same data as holotype. Holotype and one paratype are deposited in HHNM, 12 paratypes in JHAC, 2 paratypes in JHCP.

*Description* – Holotype, male. Body length 2.2 mm, width 1.3 mm; body oval, black. Dorsal surface covered with white and black scales (Fig. 8). Individual scales with sides parallel or slightly diverging from proximal 1/3 or middle; apex truncate or slightly rounded. Antennae 9-segmented, brown, antennal club black, 3-segmented (Fig. 9). Eye with median margin entire. Pronotum covered with black scales on the disc and white scales on the lateral margins. Elytra covered with black scales, and two transverse fasciae and one spot covered with white scales. Ventral surface covered with white and black scales. Prosternum with white scales only. Metasternum with white scales, without small patch of black scales at lateral margins. Abdominal ventrites bearing small spots of black scales at antero-lateral margins. Ventrites I–IV without black spots in the middle. Legs brown with white scales and short white setae. Male genitalia: Fig. 10. Females showing no external morphological differences.

*Variability* – Paratypes with body length 1.9–2.3 mm, width 1.0–2.3 mm.

*Bionomy* – Unknown; all specimens were collected from flowers at 1450 m a.s.l. (J. HÁJEK, pers. comm.).

*Etymology* – It is named after the Zagros Mountains, the type locality.

*Remarks* – The new species is very similar to *Anthrenus* (*Anthrenops*) *zebra* REITTER, 1889, but differs in the following characters:

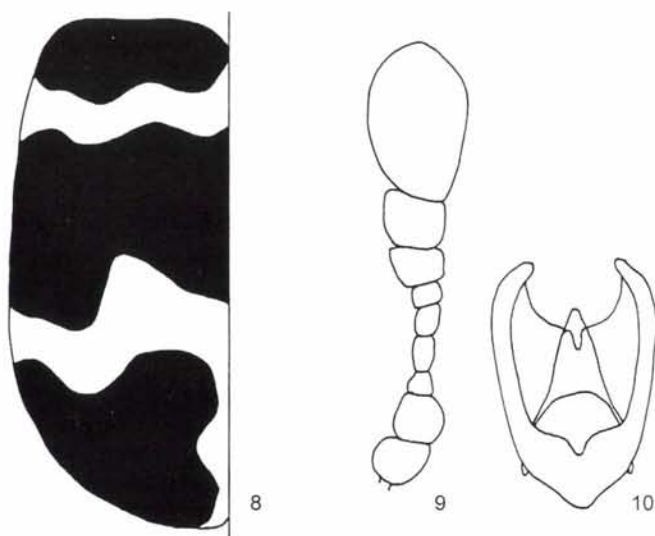
- 1 (2) Dorsal surface covered with black, yellow and white scales; abdominal ventrites without spots at antero-lateral margins; Armenia, Azerbaijan, Afghanistan, E Iran, Turkmenistan    *A. (Anthrenops) zebra* REITTER, 1889
- 2 (1) Dorsal surfaces covered with black and white scales; abdominal ventrites with spots at antero-lateral margins; Iran: Zagros Mts

***A. (Anthrenops) zagrosensis* sp. n.**

***Anthrenus* (*Anthrenodes*) *israelicus* sp. n.**

(Figs 11–13)

*Type material* – Holotype (male): "Israel, Nahal Oren, Mt. Carmel, 16.iv.1996, Pavlíček & Chikatunov lgt.". Paratype No.1 (female): same data as holotype; Nos 2–11: "Israeel, Negev-Wüste, Nahal (Wadi) Shelomo, 5 km SW Elat, 200m, 29°32'N 34°54'E" \ "11. März 1996, U. Heinig leg., gestreift". Holotype is deposited in NHMI, paratype Nos 1 and 11 in JHAC, Nos 2–10 in AHEC.



**Figs 8–10.** *Anthrenus* (*Anthrenops*) *zagrosensis* sp. n. (holotype): 8 = left elytron, 9 = male antenna, 10 = aedeagus

*Description of holotype* – Body length 2.7 mm, width 1.4 mm; body oval, brown. Dorsal surface covered with white and honey-coloured scales (Fig. 11). Individual scales with sides parallel or slightly diverging from proximal 1/3 or middle; apex truncate or slightly rounded. Antennae 10-segmented, brown, antennal club black, 3-segmented (Fig. 12). Eye with median margin entire. Pronotum covered with honey-coloured scales on the disc and white scales along posterior margin. Elytra covered with honey-coloured scales, and with three transverse fasciae and one apical spot covered with white scales. Ventral surface covered with white scales. Prosternum with white scales only. Metasternum with white scales, without small patch of black scales at lateral margins. Abdominal ventrites without small spots of black scales at antero-lateral margins. Ventrites I–IV without black spots in the middle. Legs brown with white scales and short white setae. Male genitalia: Fig. 13. Females showing no external morphological differences.

*Variability* – Paratypes with body length 2.5–2.8 mm, width 1.3–1.5 mm.

*Etymology* – The species is named after the type locality.

*Remarks* – This new species is very similar to *Anthrenus (Anthrenodes) umbellatarum* CHOBAUT, 1898, but differs in the following characters:

1 (2) Dorsal surface covered with brown, yellow and white scales; parameres long and narrow, median lobe long and narrow, not curved

A. (*Anthrenodes*) *umbellatarum* CHOBAUT, 1898

2 (1) Dorsal surface covered with honey-coloured and white scales; parameres short and broad, median lobe very short and curved

A. (*Anthrenodes*) *israelicus* sp. n.

### ***Globicornis (Pseudomesalia) maculatus* sp. n.**

(Figs 14–16)

*Type material* – Holotype (male): “IRAN, 20–21.iv.2000, Fars prov., Zagros Mts., 10 km N Firuz Abad, 28 55 N, 52 31 E, 1450 m., J. Hájek lgt.” \ “Iran 2000 Czech biological expedition, J. Hájek & M. Mikát lgt.” Holotype specimen, presently in JHAC later to be deposited in NMPC.

*Description* – Male. Body length 2.3 mm, maximum width 1.1 mm; generally small and elongate; cuticle dark-brown on dorsal and ventral surfaces. Head finely punctate with long yellow pubescence; pubescence on mentum denser. Palpi entirely brown. Median ocellus present on front. Antennae 9-segmented, antennal club brown, 3-segmented, apical segment circular (Fig. 14). Pronotum finely punctate as head, with long yellow pubescence on the disc and long white-yellow pubescence in posterior angles. Scutellum triangular, finely punctate as pronotum, without short pubescence. Elytra finely punctate, with orange combined fasciae forming X, covered with long yellow pubescence; other parts with long brown pubescence (Fig. 15). Legs brown with yellow pubescence; tibiae with short brown spines. Meso- and metaventrite with short yellow pubescence. Abdominal ventrites with short yellow pubescence. Male genitalia: Fig. 16). Female unknown.

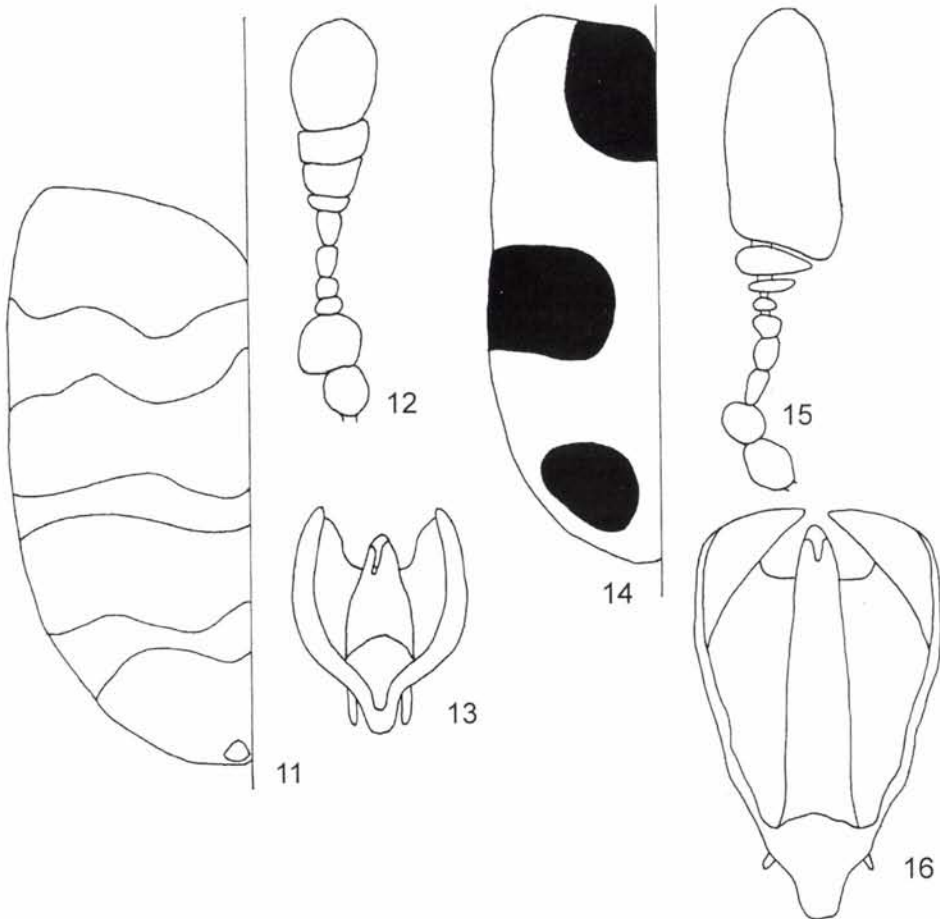
*Bionomy* – Unknown; the type specimen was collected from flowers at 1450 m a.s.l. (J. HÁJEK, pers. comm.).

*Etymology* – The name refers to the black pattern on the elytra.

*Remarks* – This new species is similar to *Globicornis (Globicornis) kaffkai* HÁVA, 2000, but differs in the following characters:

- 1(2) Cuticle black, elytra with two separated transverse yellow fasciae (one in the anterior half and one at apex); antennae 11-segmented, black, apical segment oval; pronotum densely, coarsely punctate; Iran

*G. (Globicornis) kaffkai* HÁVA, 2000



**Figs 11–16.** 11–13 = *Anthrenus (Anthrenodes) israelicus* sp. n. (holotype): 11 = left elytron, 12 = male antenna, 13 = aedeagus. 14–16 = *Globicornis (Pseudomesalia) maculatus* sp. n. (holotype): 14 = left elytron, 15 = male antenna, 16 = aedeagus

- 2(1) Cuticle dark-brown, elytra with orange combined fasciae forming X (Fig. 15), antennae 9-segmented, brown, apical segment circular; pronotum finely punctate; Iran **G. (*Pseudomesalia*) maculatus** sp. n.

\*

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## REFERENCES

- ARROW, G. J. (1915): Notes on the Coleopterous Family Dermestidae, and Descriptions of some new Forms in the British Museum. – *Annals and Magazine of Natural History* **15**: 425–451.
- BEAL, R. S. (2000): Revision of the Hawaiian Genus *Labrocerus*. – *Transactions of the American Entomological Society* **126**: 373–399.
- BROUN, T. (1880): *Manual of the New Zealand Coleoptera. Parts I and II*. – J. Hughes, Lambton Quay., Wellington, xix + 744 + xxi–xxiii pp.
- BROUN, T. (1886): *Manual of the New Zealand Coleoptera. Parts III and IV*. – G. Didsbury, Wellington, xvii + 745–973 pp.
- BROUN, T. (1911): Additions to the Coleopterous Fauna of the Chatham Islands. – *Transactions of the New Zealand Institute* **43**: 92–115.
- HÁVA, J. (2000): *Globicornis* (*Dearthrus*) *kafkai* sp. n. from Iran (Insecta: Coleoptera: Dermestidae). – *Reichenbachia* **33**: 369–372.
- HÁVA, J. (2003a): New species of Dermestidae found in tropical Africa. – *Frustula Entomologica* **24** [2001]: 75–79.
- HÁVA, J. (2003b): World Catalogue of the Dermestidae (Coleoptera). – *Studie a zprávy Oblastního Muzea Praha-východ v Brandýse nad Labem a Staré Boleslavi*, **Suppl. 1**: 1–196.
- HÁVA, J. (2003c): Notes on Dermestidae (Coleoptera) with description of eight new species. – *Annales historico-naturales Musei nationalis hungarici* **95**: 19–35.
- HINTON, H. E. (1945): *A Monograph of the Beetles Associated with Stored Products. Volume I*. – British Museum (Natural History), London, VIII + 443 pp.
- ICZN (1999): *International Code of Zoological Nomenclature. Fourth edition*. International trust of zoological nomenclature, London, xxix + 306 pp.
- KALÍK, V. 1954: New and interesting Dermestidae (Coleoptera). – *Annals and Magazine Natural History* **7**: 367–370.
- MROCKOWSKI, M (1958): Notes on the genus *Hemirhopalum* Sharp, with a description of a new species from Brazil (Coleoptera, Dermestidae). – *Annales Zoologici, Warszawa* **17**: 49–64.

- MROCKOWSKI, M. (1960): Kozheedy (Coleoptera, Dermestidae) Turkmenii. [Skin beetles (Coleoptera, Dermestidae) of Turkmenia.] – *Trudy Zoologicheskogo Instituta Akademii Nauk SSSR* **27**: 208–219.
- MROCKOWSKI, M. (1966): Contribution to the knowledge of Silphidae and Dermestidae of Korea (Coleoptera). – *Annales Zoologici* **23**: 433–443.
- MROCKOWSKI, M. (1968): Distribution of the Dermestidae (Coleoptera) of the world with a catalogue of all known species. – *Annales Zoologici* **26**: 15–191.
- REITTER, E. (1889): Berichte über die von E. v. Oetzen im Jahre 1887 in Griechenland u. Klein-Asien gesammelten Coleopteren. IX. Neue Arten aus verschiedenen Familien. – *Deutsche Entomologische Zeitschrift* **1889**: 251–259.
- SHARP, D. (1877): Descriptions of some new species, and indications of new genera of Coleoptera from New Zealand. – *Entomologist's monthly Magazine* **13**: 265–272.
- SHARP, D. (1908): Dermestidae. – In: SHARP, D. (ed.): *Fauna Hawaiiensis or the zoology of the Sandwich (Hawaiian) Isles: Being Results of the Explorations instituted by the Joint Committee appointed by the Royal Society of London for promoting natural knowledge and the British Association for the advancement of science and carried on with the assistance of those Bodies and of the Trustees of the Bernice Pauahi Bishop Museum at Honolulu. Vol. III, part V.* Cambridge University Press, Cambridge, pp. 367–579, pls. XIII–XVI.
- ZHANTIEV, R. D. (1973): Ergebnisse der zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei. Nr. 321. Dermestidae (Coleoptera). – *Annales historico-naturales Musei nationalis hungarici* **65**: 187–194.
- ZHANTIEV, R. D. (1976): *Zhuki-kozheedy fauny SSSR. [Skin beetles of the fauna of the USSR.]* – Izdatelstvo Moskovskogo Universiteta, Moscow, 181 pp.

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