

## WORLD KEYS TO THE GENERA AND SUBGENERA OF DERMESTIDAE (COLEOPTERA), WITH DESCRIPTIONS, NOMENCLATURE AND DISTRIBUTIONAL RECORDS\*

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Abstract. All the known genera and subgenera belonging to the family Dermestidae are keyed. The genus *Trinoparvus* gen. n. with two new species *Trinoparvus laboriosus* sp. n. and *T. villosus* sp. n. is described and illustrated. The tribe *Ctesini* REES, 1943 is newly synonymized with the tribe *Megatomini*; the genus *Ctesias* STEPHENS, 1830 is newly divided into the following subgenera described here with designations of type species: *Ctesias* s. str., subgenus *Tiresiomorpha* (PIC, 1954) stat. n. with *Ctesias (Tiresiomorpha) klapperichi* (PIC, 1954) comb. n., subgenus *Decemctesias* subgen. n., subgenus *Novemctesias* subgen. n.. The genus *Caccoleptus* SHARP, 1902 is newly divided into the following subgenera described here with designations of type species: *Caccoleptus* s. str., subgenus *Bicaccoleptus* subgen. n., subgenus *Pecticaccoleptus* subgen. n.. The subgenus *Pseudomesalia* GANGLBAUER in BODEMEYER, 1900 of the genus *Globicornis* LATREILLE, 1829 is a resurrected subgenus from synonymy and it is compared with subgenus *Dearthrus* LE CONTE, 1861. The species *Novelsis sabulorum* BEAL, 1984 is newly transferred to the genus *Sefrania* as *Sefrania sabulorum* (BEAL, 1984) comb. n.. The following new synonymy is proposed: *Dermestes (D.) wittei* KALÍK, 1955 (= *D. (D.) tanzanianus* HÁVA, 2000 syn. n.). Extending the known geographic distribution, new records of the following species are published: *Dermestes (Dermestes) leechi* KALÍK, 1952 (Mali); *D. (D.) semistriatus* BOHEMANN, 1851 (Benin); *D. (Dermestinus) maculatus* DEGEER, 1774 (Vietnam); *Anthrenus (Anthrenodes) fernandesi* HÁVA, 2003 (Cameroon); *A. (A.) ineptus* HÁVA et TEZCAN, 2004 (Iran); *A. (Anthrenus) crustaceus* REITTER, 1881 (Eritrea); *A. (Nathrenus) natalensis* HÁVA, 2004 (Cape province); *Attagenus assuanensis* (PIC, 1899) (Algeria); *A. brunneus* FALDERMANN, 1835 (Iran); *A. endroedyi* HÁVA, 2003 (Congo); *A. fasciatus* (THUNBERG, 1795) (Benin, Pakistan); *A. pelio* (LINNAEUS, 1758) (Argentina); *A. unicolor japonicus* REITTER, 1877 (Netherlands); *A. unicolor unicolor* BRAHM, 1791 (Indonesia: Sumatra); *Ctesias (Tiresiomorpha) klapperichi* (PIC, 1954) (China: Hubei prov.); *Evorinea iota* (ARROW, 1915) (Vietnam); *Mariouta letourneuxi* PIC, 1898 (Tunisia); *Orphinus (Orphinus) apicalis* PIC, 1918 (Indonesia: Sumatra); *O. (O.) aethiops* ARROW, 1915 (Indonesia: Java); *Phradonoma haemorrhoum* (GERSTAECKER, 1871) (Congo); *Reesa vespulae* (MILLIRON, 1939) (Romania); *Trogoderma inclusum* LE CONTE, 1854 (Tunisia); *Turcicornis kopeckyi* HÁVA, 2000 (Turkey). The larval hastisetae and antenna of *Orphinus (O.) aethiops* ARROW, 1915 are illustrated for the first time.

■ Taxonomy, distribution, keys, new genus, new subgenus, new species, new synonymy, new combination, Coleoptera, Dermestidae, World

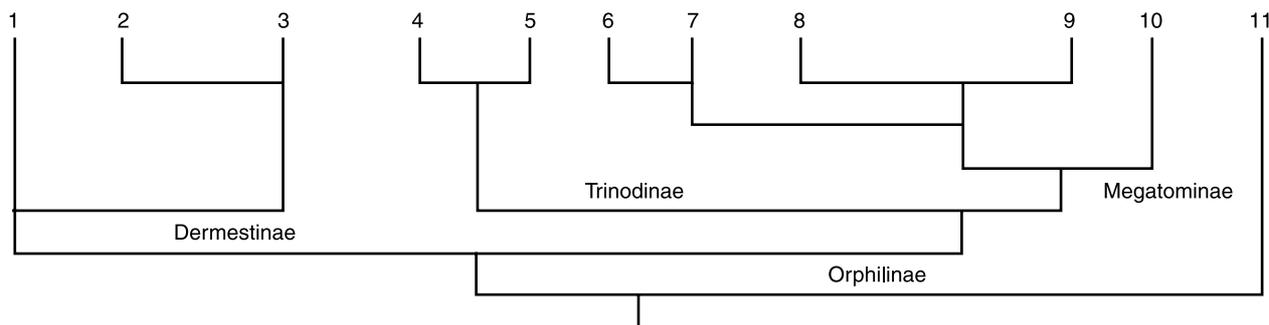
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### Introduction

The family Dermestidae contains 1200 species of worldwide (Háva 2003a). The World Catalogue of Dermestidae contains 45 genera in 12 tribes (Háva 2003a). The key of the worldwide genera is unknown. The present paper deals with the keys of all the known tribes, genera and subgenera of worldwide. The following papers present the local keys, descriptions of new genera and other complete information on the genera: Beal (1967) nearctic genera of the tribe Megatomini; Beal (1970) revision of the nearctic genus *Attagenus*; Beal (1985) revision of the nearctic genus *Cryptorhopalum*; Beal (1992) description of the new genus from Morocco and definition by groups of the genera of the subfamily Megatominae; Beal (1998) revision of nearctic genus *Anthrenus*; Beal (2000) revision of the genus *Labro-*

*cerus*; Beal (2003) key of the nearctic genera and catalogue of species; Crowson (1959) studies on the Dermestoidea; Crowson (1965) studies on the Cleroidea, genera *Decamerus* SOLIER and *Diontolobus* SOLIER transferring to subfamily Decamerinae of family Peltidae; Háva (2000a) description of new genus from Turkey; Háva (2000b) review of the genus *Adelaidia*; Háva (2001a) description of a new subgenus of the genus *Dermestes* from Afrotropical region; Háva (2001b) description of a new genus from Indonesia; Háva (2003a) World Catalogue of Dermestidae; Háva (2003b) revision of the genus *Hirtomegatoma*; Háva (2004) review of the genus *Caccoleptus*; John and Andreae (1967) revision of the tribe Thorictini from Afrotropical region; Kalík (1987) description of a new genus from India; Menier and Villemant (1993) description of a new subgenus

Tab. 1. Cladogram of phylogenetic relations between the main taxa (tribes) of the family Dermestidae. Tribes: 1 – Dermestini; 2 – Trinodini; 5 – Trichelodini; 6 – Attagenini; 7 – Egidyellini; 8 – Anthrenini; 9 – Megatomini; 10 – Thylodriadini; 11 – Orphilini.



with key of all subgenera of the genus *Anthrenus*; Mroczkowski (1967) revision of the genus *Megatoma*; Mroczkowski (1968) World Catalogue of Dermestidae; Mroczkowski and Slipinski (1997) review of the Marioutinae; Peacock (1978) revision of the subfamily Trinodinae; Peacock (1993) keys to the European tribes and genera; Roach (2000) revision of the genus *Anthrenocerus*; Zhantiev (1976) Dermestidae from Russia and adjacent countries; Zhantiev (2000) cladistic analysis of Dermestidae, but without all the known genera and subgenera.

## Material and methods

Separate labels are indicated by slashes (/). Remarks of the author are found in square brackets [ ].

The study comprises material loaned from the following institutions or collections:

- ANIC Australian National Insects coll., SCIRO Entomology, Canberra, Australia
- BMNH British Museum (Natural History) [= The Natural History Museum], London, United Kingdom
- CNCI Canadian National Insect Collection, Ottawa, Canada
- DEIC Deutsches Entomologisches Institut, Eberswalde, Germany
- HNHM Hungarian Natural History Museum, Budapest, Hungary
- IZAS Institute of Zoology, Academia Sinica, Peking, China
- JHAC Jiří HÁVA, Private Entomological Laboratory and Collection, Prague, Czech Republic
- MCSN Museo Civico di Storia Naturale «G. Doria», Genova, Italy
- MHNG Museum d'histoire naturelle, Genève, Switzerland
- MNHN Muséum National d'Histoire Naturelle, Paris, France
- MRAC Royal Museum for Central Africa, Tervuren, Belgie
- MZHF Finnish Zoological Museum of Natural History, Helsinki, Finland
- MZPW Zoological Museum, Academy of Sciences, Warszawa, Poland

- MZUF Museo Zoologico «La Specola», Florence, Italy
- NMED Naturkundemuseum Erfurt, Germany
- NMPC National Museum, Praha, Czech Republic
- SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany
- USNM United States National Museum, Washington, D.C., U.S.A.
- VKAC Vladimír Kalík private collection, Pardubice, Czech Republic
- ZMAN Zoologisch Museum, Amsterdam, Netherlands
- ZMAS Zoological Museum, Academy of Sciences, St. Petersburg, Russia
- ZMUB Zoologisches Museum, Museum für Naturkunde der Humboldt Universität, [= MNHUB], Berlin, Germany

## Key of subfamilies

- 1(2) median ocellus on front absent . . . . . Dermestinae
- 2(1) median ocellus on front present
- 3(4) pronotum with strong raised ridge near side margin in basal half . . . . . Trinodinae
- 4(3) pronotum without strong raised ridge near side margin in basal half
- 5(6) metacoxal lamina extending to side of body, dorsal surface glabrous . . . . . Orphilinae
- 6(5) metacoxal lamina not extending to side of body . . . . . Megatominae

## subfamily Dermestinae

- 1(4) compound eyes, hind wings, and scutellum present
- 2(3) prosternal process strongly reduced and not reaching between coxae (narrow but extending behind middle of procoxae; procoxal cavities with complete internal bar (with incomplete internal closure) . . . . . tribe *Dermestini* LATREILLE, 1807 . . . . . *Dermestes* LINNAEUS, 1758
- a(b) abdomen with white and black pubescence, concealing abdominal integument; terminal segment of maxillary palpus narrow (cosmopolitan) . . . . . *Dermestinus* ZHANTIEV, 1967

- b(a) abdomen with concolorous pubescence, abdominal integument visible
- c(f) terminal segment of maxillary palpus narrow; mandibles bluntly pointed
- d(e) pronotum widest at base, in some species of pronotum parallel-sided in posterior half. Body more elongate and more convex (cosmopolitan) . . . . . *Dermestes* s. str.
- e(d) pronotum widest before its midlength, distinctly narrowed. Body robust, slightly depressed (Palearctic) . . . . . *Montandonia* JACQUET, 1886
- f(c) terminal segment of maxillary palpus very broad and clavate; mandibles with narrow acute tip (Afrotropical) . . . . . *Dermalius* HÁVA, 2001
- 3(2) prosternal process reduced to almost absent; procoxal cavities with complete internal closure and hidden trochantin . . . . . tribe *Marioutini* JACOBSON, 1913
- a(b) antenna with loose, flattened 3- segmented club; elytron striate-punctate with epipleuron present; surfaces shortly and sparsely pubescent (Palearctic) . . . . . *Mariouta* PIC, 1898
- b(a) antenna with rounded, compact 3- segmented club; elytron irregularly punctate with epipleuron apparently absent; surfaces densely pubescent (Palearctic) . . . . . *Rhopalosilpha* ARROW, 1929
- 4(1) compound eyes absent or very small; hind coxae rounded, not reaching outer edge of metasternum and not proved to receive femora . . . . . tribe *Thorictini* AGASSIZ, 1846
- 1(2) hind coxa spherical, without coxal plate; abdominal sternite I occasionally with lateral pits (cosmopolitan) . . . . . *Thorictodes* REITTER, 1875
- 2(1) meso-, meta- and occasionally prosternum with trichomes
- 3(4) legs strong, femur and tibiae flat, middle- and hind tibiae almost four times (normally less) longer than broad, carrying thorns. Tarsi shorter than tibiae, thick, continuously constricted to the end. Segment 1–4 mostly broader than long, claws thin and free-standing. Pronotum broader than long, mostly looking like a pillow, rounded all over the surface, margin rounded, largest width near the middle. Elytra oval or cuneiform; very seldom pronotum with slight longitudinal furrows and transverse bulges (which are separately bulged), margins almost parallel, constricted to the front only. Elytra oblong, between shoulder and middle slightly drawn in (males) or parallel (females) (Palearctic, Afrotropical) . . . . . *Thorictus* GERMAR, 1834
- 4(3) length of the legs increases very much from the front legs to the hind legs. Front legs like in *Thorictus*, middle and hind legs slender, femur and tibiae hardly flattened. Tibiae four times longer than broad, carrying hairs or bristles. Tarsi about as long as the tibiae, slender, mostly all segments with the same width, much longer than broad. Claws mostly long and strong, rarely grown together. Pronotum with longitudinal furrows and transverse bulges
- 5(6) body short, oval, largest width at the hind margin of the pronotum (females). The combination of head and pronotum builds a semicircle. Pronotum roundly narrowed only to the front, twice as broad as long, hind margin drawn in twice, hind edges slightly acute-angled, the whole hind margin shows a finely impressed borderline. Longitudinal furrows short, transverse bulges slight, elytra only very less narrower than the pronotum, as long as broad (together), largest width at the shoulders, much less narrowed to the front, to the apex distinctly narrowed in slight rounding, apex very shortly rounded, the cave in the middle of the base small and shallow. Tarsi of the middle legs slightly but noticeably narrowed to the end; the tarsi of the hind legs hardly narrowed to the end. Claws rather tender, the front claws free-standing, the middle claws grown together in the basal third, the hind claws grown together almost completely. Chin deeply drawn in over the whole breadth, margins sharply peaked (Afrotropical) . . . . . *Afrothorictus* ANDREAE, 1967
- 6(5) body oblong, almost parallel. Pronotum between 1/2 and 3/5 broader than long. Rarely behind the middle drawn in, largest width mostly at the hind margin, rarely at the middle. Longitudinal furrows long and deep, transverse bulges strong, their hind margin with various forms, mostly blackish, without impressed borderline, the middle part of the base (mostly in a slight bow bent backwards) with a finely impressed borderline, which ends at the longitudinal furrows or at the inner side of the transverse bulges. Elytra a little bit narrower than the pronotum, less than 1/3 longer than broad (together), margins slightly bent, sometimes parallel up to the middle, apex broadly rounded, largest width mostly ahead of the middle. Depression in the middle of the base big and deep, bordered laterally by bulges which are located behind the longitudinal furrows of the pronotum. Tarsi of the middle and hind legs not narrowed to the end, all segments much longer than broad, claws long and strong, free-standing. Antenna club mostly distinctly segmented at the underside, sometimes the last segment also at the upper side distinctly separated. Fore chin truncated or in its middle deep circularly drawn in (Afrotropical) . . . *Macrothorictus* ANDREAE, 1967
- subfamily Trinodinae**
- 1(2) pronotum without such carina or furrow; antennal club 1–3- segmented; median ocellus present, usually distinct and differentiated from surrounding derm; prosternum with distinct antennal grooves . . . . . tribe *Trinodini* CASEY, 1900
- a(b) antennal club 1 or 2- segmented in male, 2- segment-

- ed in female, antennae 11- segmented; posterior margin of metasternum without small median emargination; middle of mesosternum broadly rounded anteriorly, fitting into posterior part of prosternum between fore coxae (Afrotropical, Oriental) . . . . . *Evorinea* BEAL, 1961
- b(a) antennal club 3- segmented in both sexes; posterior margin of metasternum with or without a small median emargination
- c(f) body form oval; parameres narrow and long, median lobe separated from parameres
- d(e) prosternum extended posteriad as an acuminate process fitting into a deep notch in mesosternum; 1<sup>st</sup> visible abdominal sternite usually with 2 short, oblique lines diverging from inner edges of hind coxae; antennae 11- segmented (Palaeartic, Afrotropical, Oriental) . . . . . *Trinodes* DEJEAN, 1821
- e(d) prosternum truncate or slightly emarginate posteriorly; middle of mesosternum fitting into posterior part of prosternum between fore coxae (as in *Evorinea*); 1<sup>st</sup> visible abdominal sternite without diverging lines; antennae 11- segmented (Neotropical, Nearctic) . . . . . *Apsectus* LE CONTE, 1854
- f(c) body form circular, very small; antennae 10- segmented; parameres broad and short, median lobe not separated from parameres (Afrotropical, Oriental) . . . . . *Trinoparvus* gen. n.
- 2(1) sides of pronotum with prominent longitudinal sublateral carina or deep furrow, at least in basal half, separating disc from side borders; antennae 11- segmented, antennal club 4–6- segmented; median ocellus absent or inconspicuous, sometimes defined only as a pale spot beneath derm; prosternum without distinct antennal groves (Australian) . . . . . tribe *Trichelodini* PEACOCK, 1978  
. . . . . *Trichelodes* CARTER, 1935

**subfamily Orphilinae**

- metacoxal lamina extending to side of body tribe *Orphilini* LE CONTE, 1861 dorsal surface glabrous; front leg in repose completely covering antenna within antennal fossa (Holarctic) . . . . . *Orphilus* ERICHSON, 1848

Note. Ivie (2002) placed the genus *Orphilus* ERICHSON, 1846 in the family Nosodendridae, but the described larvae have a number of features in common with those of other Dermestidae (Háva 2003a).

**subfamily Megatominiae**

- metacoxal lamina not extending to side of body  
1(2) antennae filiform, without an apical club; elytra soft

- and strongly dehiscent at apex in male, absent in female; abdomen with 7 visible abdominal sternites . . . . . tribe *Thylo driadini* MROCKZKOWSKI, 1954  
. (cosmopolitan) *Thylo drias* MOTSCHULSKY, 1839
- 2(1) antennae with antennal club; elytra hard, present in both sexes, never noticeably dehiscent at apex
- 3(6) prosternum not forming a “collar”, therefore mouthparts free (Text-fig. 21a)
- 4(5) antennal club with 3 segments; elytra not shortened; abdomen with 5 visible sternites . . . . . tribe *Attagenini* CASEY, 1900
- 1a(1b) segments of antennal club compact . . . . . *Attagenus* LATREILLE, 1802
- a(b) disc of metasternum nearly twice as wide as long, body strongly convex and broadly oval (Oriental, Afrotropical, Australian, Palaeartic) . . . . . *Aethriostoma* MOTSCHULSKY, 1858
- b(a) disc of metasternum nearly twice as long as wide, body more narrowly obovate and less convex (cosmopolitan) . . . . . *Attagenus* s. str.
- 1b(1a) segments of antennal club loosely joined a(b) cuticle bicolorous or unicolorous with bicolorous pubescence (Nearctic) . . . . . *Novelsis* CASEY, 1900
- b(a) cuticle and pubescence unicolorous, body more flat, terminal antennal segment very long, arenicollis species (Holarctic) . . . . . *Sefrania* PIC, 1899\*<sup>0</sup>
- 5(4) antennal club with 6–7 segments; elytra shortened; abdomen with 6 visible sternites . . . . . tribe *Egidyellini* SEMENOV-TIAN-SHANSKIY, 1916  
. . . . . (Holarctic) *Egidyella* REITTER, 1899
- 6(3) prosternum forming a “collar” under which mouthparts fit when head is retracted (Text-fig. 21b)
- 7(8) dorsal and ventral surfaces covered by flat scales . . . . . tribe *Anthrenini* CASEY, 1900
- 1a(1b) antennal club with 4–11 segments . . . . . *Anthrenus* O. F. MÜLLER, 1764
- a(d) antennae with 11 segments
- b(c) eye with median margin broadly and deeply emarginate at about anterior 1/3 (cosmopolitan) . . . . . *Anthrenus* s. str.
- c(b) eye with median margin complete (cosmopolitan) . . . . . *Nathrenus* CASEY, 1900
- d(a) antennae with less segments
- antennae with 10 segments (Palaeartic) . . . . . *Anthrenodes* CHOBAUT, 1898
- antennae with 9 segments (Afrotropical, Holarctic) . . . . . *Anthrenops* REITTER, 1881

\*<sup>0</sup> Beal et Zhantiev (2001) discussed *Novelsis sabulorum* BEAL, 1984 and *Sefrania bleusei* PIC, 1899 as two arenicollis species described in two genera. All general morphological differences of the both species are identical. The species *N. sabulorum* is presently newly transferred to the genus *Sefrania* as *Sefrania sabulorum* (BEAL, 1984) comb. n. The genus *Sefrania* is very unique similarities as the genus *Egidyella* in view of their adaptation to sand dune and sandy deserts habitats.

- antennae with 8 segments (cosmopolitan) . . . . .  
. . . . . *Florilinus* MUSLANT et REY, 1868
- antennae with 7 segments . . . . .  
. . . . . *Solskinus* MROCZKOWSKI, 1962
- antennae with 6 segments (Morocco) . . . . .  
. . . . . *Peacockia* MENIER et VILLEMANT, 1993
- antennae with 5 segments (sometimes 6 of females)  
(Holarctic) . . . . *Helocerus* MUSLANT et REY, 1868
- antennae composed with 4- segments (Palaeartic) . .  
. . . . . *Ranthenus* MROCZKOWSKI, 1962
- 1b(1a) antennal club with 3 segments (Australian) . . . . .  
. . . . . *Neoanthrenus* ARMSTRONG, 1941
- 8(7) dorsal surfaces covered by pubescence . . . . .  
. . . . . tribe *Megatomini* GANGLBAUER, 1904  
. . . . . tribe *Ctesiini* REES, 1943:9 syn. n. \*1

The following groups of the tribe Megatomini defined by Beal (1992) and supplemented with descriptions of two new genera by Háva (2000, 2001). Beal (1992) divided the species within the scope of this tribe into particular groups based on trophic relationships of larval stages, provided that the incorporation of particular genera into particular groups is already stabilized and commonly used. The key to particular groups of adults has not been yet elaborated; it must be completed. For this purpose, it is, however, necessary to implement a complete revision of species in certain genera (e. g. *Orphinus* with more than 65 species or *Trogoderma* 130 species), since it is possible to expect that a number of species are improperly classed, or possibly that new genera will be established.

**Group I**

- 1(4) antennae with 9–10 segments
- 2(3) antennal club with 3 segments; lateral margins of pronotum not densely dentate . . . . .  
. . . . . *Globicornis* LATREILLE, 1829
- a(d) antenna with 9 segments
- b(c) cuticle bicolorous; elytra with red or orange fasciae or patterns; body broad (Palaeartic) . . . . .  
. . . . . *Pseudomesalia* GANGLBAUER in BODEMEYER, 1900 resurrected subgen. \*2
- c(b) cuticle unicolorous; elytra without fasciae or patterns; body narrow (Nearctic) . . . . .  
. . . . . *Dearthrus* LE CONTE, 1861 \*2
- d(a) antenna with 10 segments
- e(f) terminal antennal segment circular (Palaeartic) . . . . .  
. . . . . *Globicornis* s. str.

- f(e) terminal antennal segment long and triangular (Palaeartic, Neotropical ?) . . . . .  
. . . . . *Hadrotoma* ERICHSON, 1848
- 3(2) antennae pectiniform, without distinct antennal club; lateral margins of pronotum densely dentate (Turkey) . . . . .  
. . . . . *Turcicornis* HÁVA, 2000
- 4(1) antennae with 11 segments
- 5(6) antennal club with 2–3 segments . . . . .  
. . . . . *Megatoma* HERBST, 1792
- a(d) antennal club with 3 segments
- b(c) antennal club small, considerably shorter than remaining part of antenna; terminal segment not longer than 9 and 10 segments combined (Caucasus) . . . . .  
. . . . . *Caucasotoma* MROCZKOWSKI, 1967
- c(b) antennal club big, at least as long as remaining part of antenna; terminal segments longer than the combined length of 9 and 10 segments (Palaeartic, Nearctic) . . .  
. . . . . *Megatoma* s. str.  
(R. S. Beal pers. comm.: not defined differential diagnosis of *Perimegatoma* HORN, 1857, probably syn. n.)
- d(a) antennal club with 2 segments (Palaeartic, Nearctic) . . . . .  
. . . . . *Pseudohadrotoma* KALÍK, 1949
- 6(5) antennal club with 7–8 segments
- 7(8) prosternal process not very thin; metasternum with lateral or diagonal carinae (Jordan, Iran) . . . . .  
. . . . . *Hirtomegatoma* PIC, 1931
- 8(7) prosternal process very thin; metasternum without lateral or diagonal carinae (Morocco) . . . . .  
. . . . . *Zhantievus* BEAL, 1992

**Group 2**

- 1(2) anterior tibiae with spines along shaft (Palaeartic, Afro-tropical) . . . *Phradonoma* JACQUELIN DU VAL, 1859
- 2(1) anterior tibiae without spines along shaft
- 3(4) antennae with 10 segments; body very small, oval (Seychelles) . . . . . *Paratrogoderma* SCOTT, 1926
- 4(3) antennae with 10–11 segments
- 5(10) antennal cavity open
- 6(9) metasternum without transverse striae at anterior margin
- 7(8) male antennal club with 8 segments; antenna with 10–11 segments (Neotropical) . . . . .  
. . . . . *Caccoleptus* SHARP, 1902\*3
- a(d) cuticle on dorsal surfaces unicolorous
- b(c) antenna with 10 segments, not pectinate . . . . .  
. . . . . *Caccoleptus* s. str.

\*1 The tribe *Ctesiini* is different only in larval stages according to the original description (Rees 1934). The other genera in tribe Megatomini, the characters about larval stages not differing in the other species.

\*2 The present study of the subgenus *Pseudomesalia* is reinstated from synonymy of *Dearthrus* and compared with it in the present key. The following list presents new combination of species of both subgenera. List of species of the subgenus *Pseudomesalia* GANGLBAUER in BODEMEYER, 1900, *Globicornis* (*P.*) *bodemeyeri* (GANGLBAUER in BODEMEYER, 1900) [type species]; *G. (P.) quadriguttatus* (REITTER, 1878) comb. subgen. n.; *G. (P.) quadripunctata* ZHANTIEV, 1975 comb. subgen. n. List of species of the subgenus *Dearthrus* LE CONTE, 1861, *Globicornis* (*D.*) *longulus* (LE CONTE, 1863); *G. (D.) stebbinsi* (BEAL, 1954)

- c(b) antenna with 10 segments, pectinate . . . . . *Pecticacoleptus* subgen. n.<sup>\*3</sup>  
 . . . . . *Pecticacoleptus* subgen. n.<sup>\*3</sup>  
 d(a) cuticle on elytra bicolorous, antenna with 11 segments  
 . . . . . *Bicacoleptus* subgen. n.<sup>\*3</sup>  
 8(7) male antennal club with 5 segments; antenna with 11  
 segments (Sumatra) . . . . . *Trogoparvus* HÁVA, 2001  
 9(6) metasternum with transverse striae at anterior margin;  
 elytra with single diagonal subbasal fascia (cos-  
 mopolitan; parthenogenetic species; known only fe-  
 males) . . . . . *Reesa* BEAL, 1967  
 10(5) antennal cavity closed; male antennal club with 3–8  
 segments (cosmopolitan) . . . . .  
 . . . . . *Trogoderma* DEJEAN, 1821

### Group 3

- antennal club with 4–8 segments; mesosternum divi-  
 ded; antennal cavity closed (Hawaiian Is.) . . . . .  
 . *Labrocerus* SHARP in BLACKBURN et SHARP, 1885

### Group 4

- 1(4) antennal club with 3 segments  
 2(3) antennal club elongate or oval in outline (Neotropical,  
 Nearctic) . . . . .  
 . . . *Cryptorhopalum* GUÉRIN-MÉNEVILLE, 1838  
 3(2) terminal segment of male is very big flat (oval, trian-  
 gular) (cosmopolitan) . . . . .  
 . . . . . *Thaumaglossa* REDTENBACHER, 1867  
 4(1) antennal club with 2 segments  
 5(8) terminal segment oval, thick  
 6(7) form of body parallel or parallel-oval; pubescence  
 raised or adpressed or body glabrous (Neotropical) . .  
 . . . . . *Hemirhopalum* SHARP, 1902  
 7(6) form of body oval; pubescence raised (India) . . . . .  
 . . . . . *Claviella* KALÍK, 1987<sup>\*4</sup>  
 8(5) terminal segment of male very big or small, flat and  
 slightly vaulted (cosmopolitan) . . . . .  
 . . . . . *Orphinus* MOTSCHULSKY, 1858

- a(b) antennal terminal segment long and suboval, body  
 small (Oriental) . . . . . *Falloorphinus* (PIC, 1931)  
 b(a) antennal terminal segment oval  
 c(d) body small, oval or slightly convex; elytra variable in  
 the colour patterns and pubescence (cosmopolitan) . .  
 . . . . . *Orphinus* s. str.  
 d(c) body robust, parallel, elongate; each elytron with large  
 red fasciae in anterior part (China) . . . . .  
 . . . . . *Curtophinus* (PIC, 1954)

### Group 5

- femora and tibiae strongly compressed; antennal fos-  
 sae inconspicuous (Australian, Oriental) . . . . .  
 . . . . . *Adelaidia* BLACKBURN, 1891

### Group 6

- 1(2) head abnormal, frons with a concavity surmounted by  
 a transverse elevated ridge; antennal fossae distinct  
 (Australia) . . *Myrmeanthrenus* ARMSTRONG, 1945  
 2(1) head normal; antennal fossae anteriorly foveiform  
 (Australian, Europe (introduced)) . . . . .  
 . . . . . *Anthrenocerus* ARROW, 1915

### Group 7

- antennae with 9–11 segments; antennal pectinate club  
 with 3 segments (Palaeartic, Nearctic, Afrotropical)  
 . . . . . *Ctesias* STEPHENS, 1830  
 a(b) cuticle on elytra unicolorous; pubescence unicolorous  
 without fasciae or patches; antennae 11 segmented . .  
 . . . . . *Ctesias* s. str.  
 b(a) cuticle on elytra bicolorous; pubescence bicolorous  
 with fasciae and patches; antennae 9–11 segmented  
 c(d) antennae 11 segmented . . . . .  
 . . . . . *Tiresiomorpha* (PIC, 1954) stat. n.<sup>\*5</sup>  
 d(c) antennae with less segments  
 e(f) antennae 10 segmented . . . *Decemctesias* subgen. n.<sup>\*5</sup>  
 f(e) antennae 9 segmented . . . *Novemctesias* subgen. n.<sup>\*5</sup>

<sup>\*3</sup> Derivatio nominis. The name *Pecticacoleptus* is composed of the genus name *Cacoleptus* and Latin word *pectinis*. The name *Bicacoleptus* is composed of the genus name *Cacoleptus* and Latin word *bicolorous*. List of species of the genus *Cacoleptus* SHARP, 1902, *Cacoleptus* s. str. – type species: *C. rotundus* SHARP, 1902; *Cacoleptus rotundus* SHARP, 1902; *C. anisotomoides* SHARP, 1902; *C. honeymani* BEAL, 1979; *Bicacoleptus* subgen. n. – type species: *C. wicki* BEAL, 1978; *Cacoleptus* (*C.*) *wicki* BEAL, 1978 comb. subgen. n.; *C. (C.) ornatus* HÁVA, 2004 comb. subgen. n.; *Pecticacoleptus* subgen. n. – type species: *C. pectinis* HÁVA, 2004; *C. (P.) pectinis* comb. subgen. n.

<sup>\*4</sup> In the original description holotype not sexed. The holotype according to the recent study is male.

<sup>\*5</sup> The genus *Ctesias* consists of four species groups (Háva 2003a). The groups are newly raised to four keyed subgenera. The genus *Tiresiomorpha* (described from China), differs from the genus *Ctesias* only by following characters: antennae with 11 segments; antennal club with 3 segments; dorsal surfaces black with small patches of white pubescence. The mentioned characters identical with one species group in the genus *Ctesias*. *Tiresiomorpha* combined newly as a subgenus of the genus *Ctesias*. Derivatio nominis of the two new subgenera presented combination of the genus name *Ctesias* and number of antennomeres. List of species of the genus *Ctesias* STEPHENS, 1830, *Ctesias* s. str. – type species: *C. serra* (FABRICIUS, 1792). *Ctesias dusmae* BEAL, 1960; *C. hebei* HÁVA, 2004; *C. serra* (FABRICIUS, 1792); *C. orientalis* ZHANTIEV, 1988; *Tiresiomorpha* (PIC, 1954) comb. n. – type species: *T. klapperichi* (PIC, 1954) comb. n.; *Ctesias* (*T.*) *gemma* ZHANTIEV, 1976 comb. subgen. n.; *C. (T.) schawalleri* HÁVA, 2002 comb. subgen. n.; *C. (T.) variegata* ARROW, 1915 comb. subgen. n.; *C. (T.) klapperichi* (PIC, 1954) comb. n.; *Decemctesias* subgen. n. – type species: *C. syriaca* GANGLBAUER, 1904; *Ctesias* (*D.*) *intermedia* MROCZKOWSKI, 1961 comb. subgen. n.; *C. (D.) kaliki* MROCZKOWSKI, 1961 comb. subgen. n.; *C. (D.) morocco* HÁVA, 2000 comb. subgen. n.; *C. (D.) syriaca* GANGLBAUER, 1904 comb. subgen. n.; *C. (D.) sogdiana* ZHANTIEV, 1975 comb. subgen. n.; *Novemctesias* subgen. n. – type species: *C. tschuiiensis* SOKOLOV, 1972, *Ctesias* (*N.*) *fasciata* ZHANTIEV, 1975 comb. subgen. n.; *C. (N.) nuratavica* SOKOLOV, 1983 comb. subgen. n.; *C. (N.) tschuiiensis* SOKOLOV, 1972 comb. subgen. n.

Tab. 2. Differential characters of *Trinoparvus laboriosus* and *T. villosus*.

	<i>T. laboriosus</i> sp. n.	<i>T. villosus</i> sp. n.
Antennal club	Text-fig 1.	Text-fig 9.
Elytra	Each elytron with small depressions (bump) near scutellum	Each elytron without small depressions (bump) near scutellum
Metasternum	With small striae near coxa (Fig. 4)	Without small striae near coxa (Fig. 10)
Abdominal sternites	First visible abdominal sternite with small striae near post-coxal line (Fig. 5)	First visible abdominal sternite without small striae near post-coxal line (Fig. 11)

### Genera of the tribe Megatomini incertae sedis

The following genera are known to me only according to their original descriptions.

*Pseudothaumaglossa* PIC, 1918 (Brazil)

*Reeveana* DUNSTAN, 1923 (fossil)

*Tryoniopsis* DUNSTAN, 1923 (fossil)

*Falsocryptorhopalum* PIC, 1936 (Brazil)

*Miocryptorhopalum* PIERCE, 1960 (fossil-larva)

### Descriptions

#### *Trinoparvus* gen. n.

Type species. *Trinoparvus villosus* sp. n. (by monotypy).

Adult male. Body very small, length 1.1–1.2 mm. Antennae 10- segmented, antennal club 3- segmented. Median ocellus present. Median lobe of aedeagus not separated from the parameres.

Adult female. External characters corresponding to the male.

Diagnosis. *Trinoparvus* gen. n. belongs to the subfamily Trinodinae and tribe Trinodini. Differential diagnosis is present in the key to the tribes and genera of the subfamily Trinodinae above.

Distribution. So far known from Madagascar and New Caledonia.

Name derivation. The name *Trinoparvus* is composed of the genus name *Trinodes* and Latin word parvus (= small).

#### *Trinoparvus laboriosus* sp. n.

Text-figs 1–6

Type material. Holotype (female): “MADAGASCAR, Morondova (48km ENE), 20°04’S, 44°39’E, 30m, 4–10.i.1991, \ tropical dry forest”. Holotype specimen provided with label: “HOLOTYPE *Trinoparvus* gen. n. *laboriosus* sp. n. Jiří Háva det. 2002”. [red label, printed]. Holotype deposited in (JHAC).

Type locality. Madagascar, Morondova [district].

Name derivation. The specific name according to the Latin word laboriosus (= labourious).

Description. Female. Body brown on dorsal and ventral surfaces, shiny, oval; length 1.1 mm, maximal body width 0.5 mm. Head finely punctate with long brown

pubescence; maxillary palpi brown; pubescence on mentum denser. Ocellus on front present (Text-fig. 2). Antennae yellow 10- segmented, antennal club 3- segmented, segment XI about as long as broad, IX small and X obviously transverse (Text-fig. 1). Pronotum finely punctate as head with erect long brown pubescence. Scutellum triangular with short yellow pubescence. Elytra (Text-fig. 3) finely punctate as head and pronotum with erect long brown pubescence. Legs brown with long yellow setae. Prosternal process very straightly broad, without tip. Metasternum with short brown pubescence and with small striae near coxa (Text-fig. 4). Abdominal sternites brown, finely punctate with short and brown pubescence; first visible abdominal sternite with small striae near post coxal line (Text-fig. 5); XIII abdominal sternite and tergite (Text-fig. 6).

Male unknown.

Differential diagnosis. *Trinoparvus laboriosus* sp. n. similar to the *T. villosus* sp. n., but differs in the following characters see Table 2.

#### *Trinoparvus villosus* sp. n.

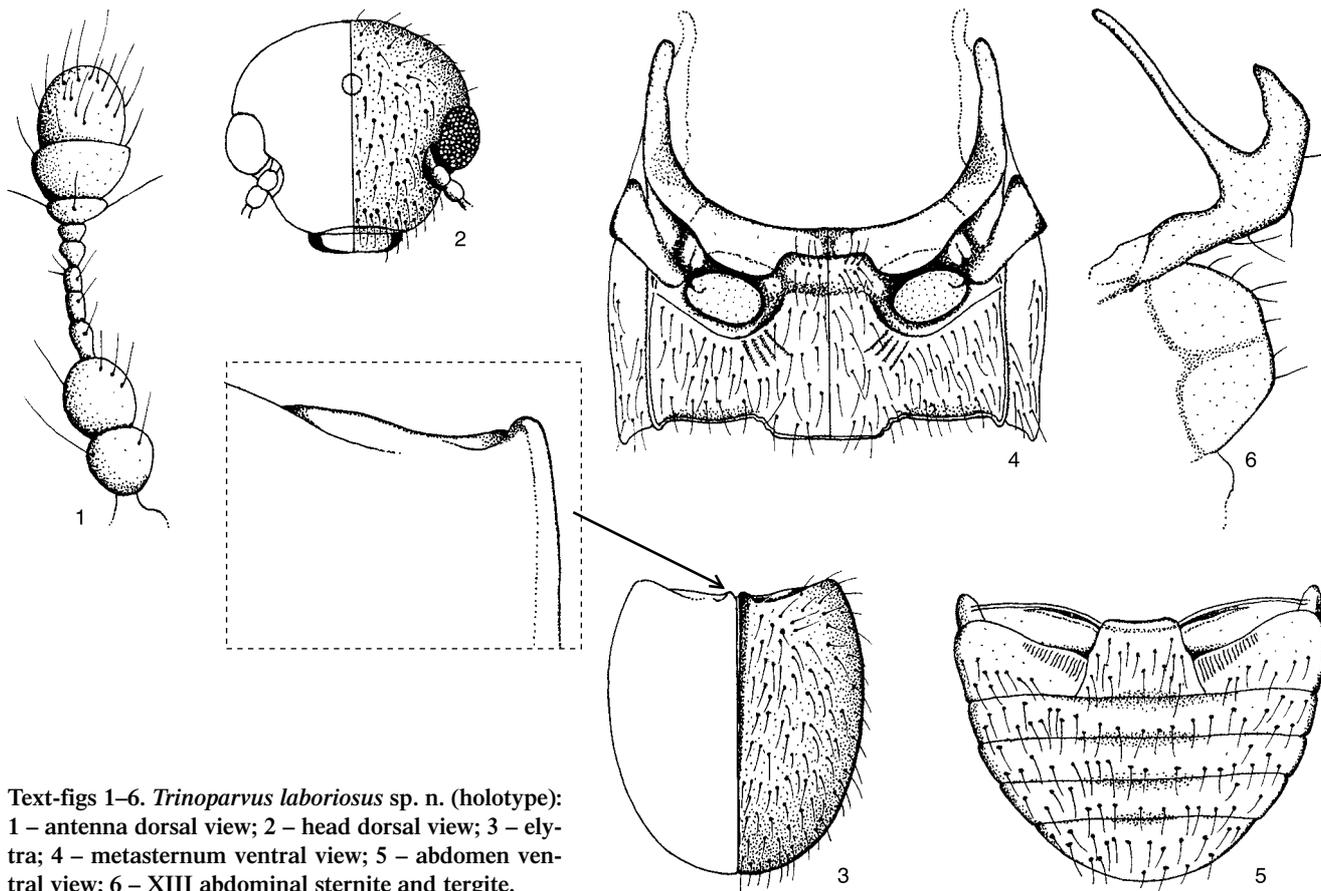
Text-figs 7–13

Type material. Holotype (male): “NEW CALEDONIA, Mt. Dore, coast side, 8.oct. 1978” Holotype specimen provided with label: “HOLOTYPE *Trinoparvus* gen. n. *villosus* sp. n. Jiří Háva det. 2002”. [red label, printed]. Holotype deposited in the (JHAC).

Type locality. New Caledonia, Mt. Dore.

Name derivation. The specific name according to Latin word villosus (= shaggy).

Description. Male. Body (Text-fig. 7–8) brown on dorsal and ventral surfaces, shiny, oval; length 1.2 mm, maximal body width 0.7 mm. Head finely punctate with erect long brown pubescence; maxillary palpi brown; pubescence on mentum denser. Ocellus on front present. Antennae yellow 10- segmented, antennal club 3- segmented, segment XI about as long as broad, IX small and X obviously transverse (Text-fig. 9). Pronotum (Text-fig. 3) finely punctate as head with erect long brown pubescence. Scutellum triangular with short yellow pubescence. Elytra finely punctate as head and pronotum with erect long brown pubescence. Legs brown with long yellow setae. Prosternal process very straightly broad, without tip. Metasternum with erect long brown pubescence and without small striae near coxa (Text-fig. 10). Abdominal sternites brown, finely



Text-figs 1–6. *Trinoparvus laboriosus* sp. n. (holotype): 1 – antenna dorsal view; 2 – head dorsal view; 3 – elytra; 4 – metasternum ventral view; 5 – abdomen ventral view; 6 – XIII abdominal sternite and tergite.

punctate with long and brown pubescence; first visible abdominal sternite without small striae near post coxal line (Text-fig. 11). Male genitalia (Text-fig. 12–13).

Female unknown.

Differential diagnosis. *Trinoparvus villosus* sp. n. similar to the *T. laboriosus* sp. n., but differs in the characters mentioned in the diagnosis of *T. laboriosus* sp. n.

#### Faunistic part

##### *Dermestes (Dermestinus) maculatus* DEGEER, 1774

Material examined: “Vietnam, Nha Trang [12°15'N 109°21'E], 40 km N of Saigon, x.2003, J. Strnad lgt., more than 50 adults and larvae, J. Háva det., (JHAC).

Remarks. All the mentioned specimens collected on dead *Trachypleus gigas* (Merostomata) (J. Strnad pers. comm.).

Distribution. Cosmopolitan species (HÁVA, 2003a), new faunistic record from Vietnam.

##### *Dermestes (Dermestes) leechi* KALÍK, 1952

Material examined: “Mali, Gao [16°17'N 0°4'W], 8.iii.1981, light trap, J. W. Everts lgt.”, 1 female, V. Kalík det., J. Háva revid., (ZMAN).

Distribution. Species known from England (intr.), Scotland (intr.), Spain, Egypt, Morocco, Yemen, Sudan, Tunisia, Afghanistan, India, Iran, Pakistan, Russia: SW Siberia, Tadjikistan, Turkmenistan, Uzbekistan (Háva 2003a), new faunistic record from Mali.

##### *Dermestes (Dermestes) semistriatus* BOHEMANN, 1851

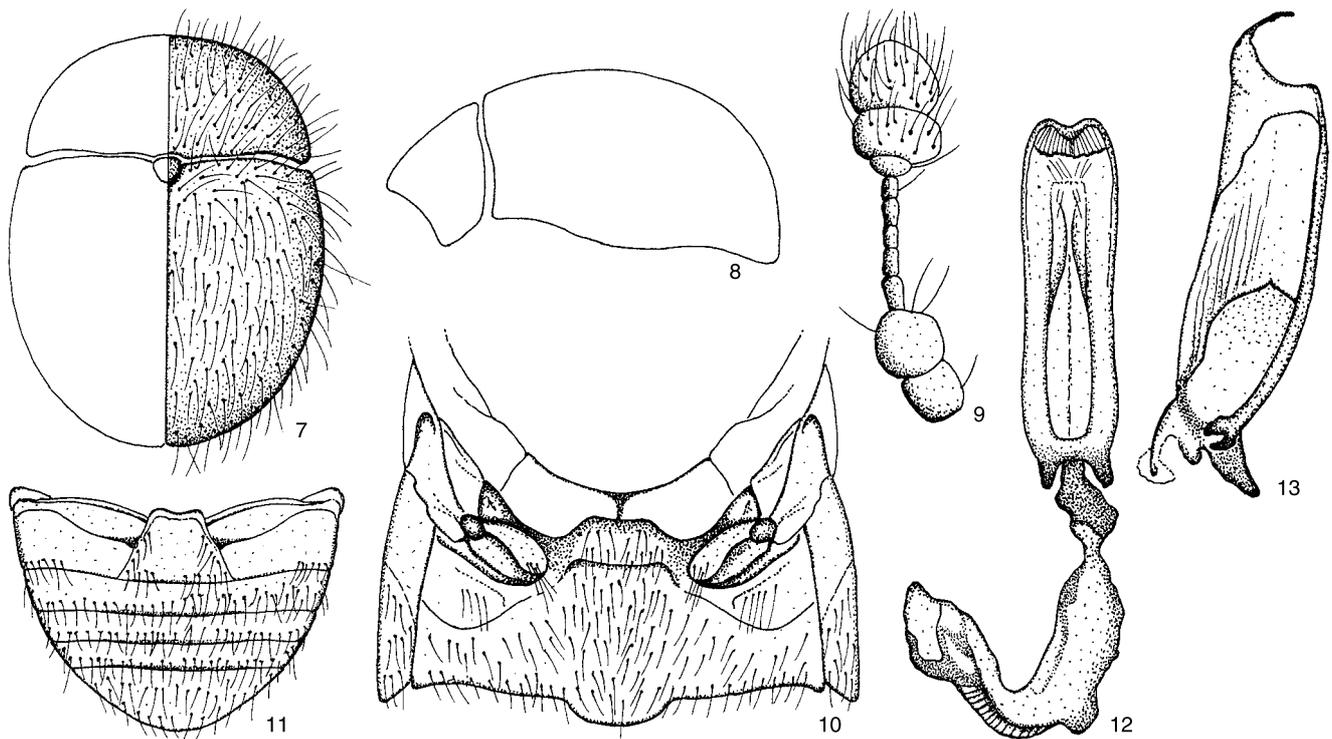
Material examined: “Benin Rep. Pop., Prov. de Borgou, viii-ix-x.1984, I. v. Woersen lgt.”, 2 females, J. Háva det., (ZMAN, JHAC); “Zambezi [Zimbabwe], Bradshaw, 1878”, 1 male, V. Kalík det., J. Háva revid., (ZMAN).

Distribution. Species known from Botswana, Congo, Mozambique, South Africa, Zimbabwe (Háva 2003a), new faunistic record from Benin.

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

*Dermestes wittei* KALÍK, 1955:95  
*Dermestes tanzanianus* HÁVA, 2000c:367 syn. n.

Remarks. *D. wittei* was described from Congo and recorded from the following countries. The second species *D. tanzanianus* is described from Tanzania. According to a recent study of the distribution of species *D. wittei* and *D. tanzanianus* the morphological variable characters in vari-



Text-figs 7–13. *Trinoparvus villosus* sp. n. (holotype): 7 – form of body dorsal view; 8 – form of body lateral view; 9 – antenna dorsal view; 10 – metasternum ventral view; 11 – abdomen ventral view; 12 – male genitalia; 13 – IX sternite lateral view.

ous populations of both species are identical. The species *D. tanzanianus* is a junior synonym of *D. wittei*.

**Distribution.** Species known from Congo, Gambia, Madagascar, Somalia, South Africa, Tanzania, Zimbabwe.

***Anthrenus (Anthrenodes) ineptus*  
HÁVA et TEZCAN, 2004**

*Anthrenus angustus* KALÍK: Schawaller, 1994:27 nomen nudum

**Remarks.** Kalík determined material from Iran, Golhak, deposited in SMNS as *Anthrenus angustus* sp. n.. This species has never been described and is identical with *A. ineptus* HÁVA et TEZCAN, 2004 described from Turkey. Schawaller (1994) mentioned this undescribed species in the Coleoptera type's catalogue Naturkundemuseum Stuttgart.

***Anthrenus (Anthrenodes) fernandezii* HÁVA, 2003**

**Material examined:** “Cameroun: M’Balmayo (M’Barga) [38 km S of Yaoundé, 3°31’N 11°30’E], ex. coll. Breuning”, 129 spec., J. Háva det., (114 MRAC, 15 JHAC).

**Distribution.** Species described from Burkina Faso, new faunistic record from Cameroon.

***Anthrenus (Anthrenus) crustaceus* REITTER, 1881**

**Material examined:** “Africa or., Katona” \ “Assab [Eritrea], 1907”, 45 spec., J. Háva det., (HNHM, JHAC).

**Remarks.** All the mentioned specimens collected in Eritrea, differs from typical specimens of the brown-yellowish scales on dorsal surfaces; elytra with small three transverse fasciae with white scales. Median lobe of aedeagus more broad.

**Distribution.** Species known from Egypt, Saudi Arabia, Syria, Yemen (Háva 2003a), new faunistic record from Eritrea.

***Anthrenus (Nathrenus) natalensis* HÁVA, 2004**

**Material examined:** “South Africa, Eastern Cape, Alexandria- Woody Cape, 10–13. 12. 1997, Ivo Jeniš lgt.”, 1 male, J. Háva det., (coll. I. Jeniš, Náklo, Czech Republic).

**Distribution.** Species described from South Africa, Natal province, new faunistic record from Eastern Cape province.

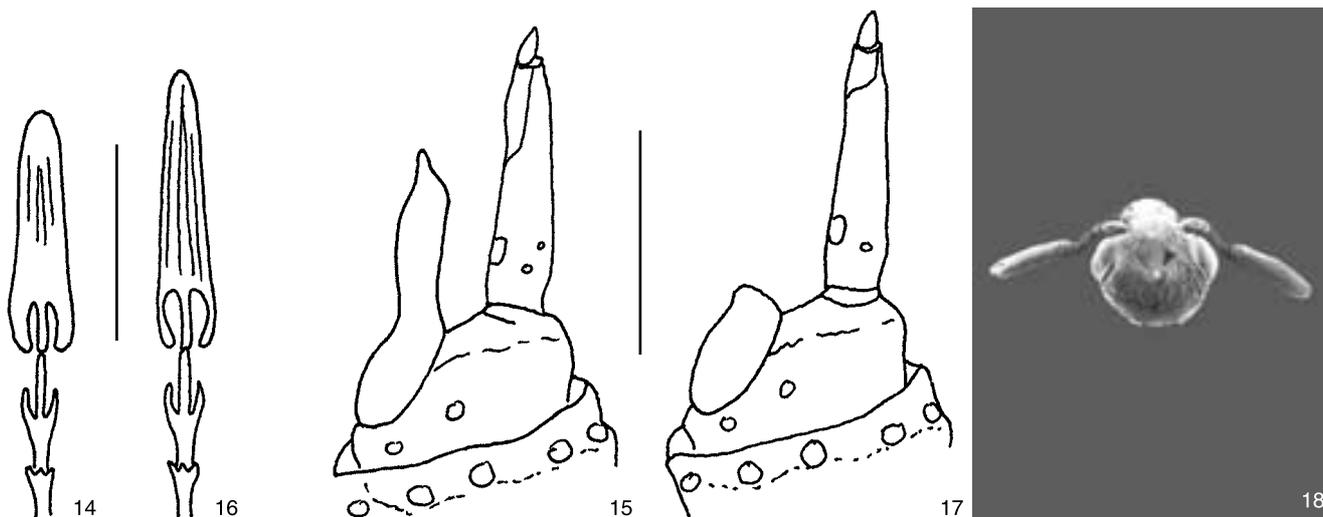
***Attagenus assuanensis* (PIC, 1899)**

**Material examined:** “Algeria bor., Hamman Salahine, Biskra, 24–25. v. 1971, Hoffer + Horák lgt.”, 12 spec., V. Kalík det., J. Háva revid., (JHAC).

**Distribution.** Species known only from Egypt (Háva 2003a), new faunistic record from Algeria.

***Attagenus brunneus* FALDERMANN, 1835**

**Material examined:** “Iran NE, Golestan prov., Gorgan [36°50’N, 54°26’E], 30. 5. 2003, Orszulik lgt.”,



Text-figs 14–18. *Orphinus aethiops* ARROW: 14 – larval hastisetae; 15 – larval antenna; *O. fulvipes* (GUÉRIN-MÉNEVILLE): 16 – larval hastisetae; 17 – larval antenna. Scale lines for figs 14 and 16 = 25 µm; 15 and 17 = 50 µm. (without setation); 18 – median ocellus on front (*Attagenus* sp.).

2 females, J. Háva det., 1 spec. in (JHAC), 1 in coll. K. Orszulik (Frýdek Místek, Czech Republic).

**Distribution.** Species known from Europe, Turkey, Algeria, Egypt, Morocco, Tunisia, Canada, U.S.A., Afghanistan, Kyrgyzstan, Pakistan, Turkmenistan, Uzbekistan (Háva 2003a), new faunistic record from Iran.

#### *Attagenus endroedyi* HÁVA, 2003

**Material examined:** “Congo Belge, P. N. G., Miss. H. De Saeger, II/fd/17, 15-i-1952, Rec. H. De Saeger, 3026”, 1 female, J. Háva det., (MRAC).

**Distribution.** Species known from Burkina Faso and Ghana, new faunistic record from Congo.

#### *Attagenus fasciatus* (THUNBERG, 1795)

**Material examined:** “Benin Rep. Pop., Prov. de Borgou, viii-ix-x.1984, I. v. Woersen lgt.”, 2 females, J. Háva det., (ZMAN, JHAC); “Pakistan, Sukkur [27°41’N, 68°50’E], 27.8.1980, A. Rousek lgt.”, 1 female, J. Háva det., (JHAC).

**Distribution.** Cosmopolitan species (Háva 2003a), new faunistic records from Benin and Pakistan.

#### *Attagenus pellio* (LINNAEUS, 1758)

**Material examined:** “Argentina, Rio Salado [La Pampa prov.], 1923, acq., Le Moul’t”, 1 male, J. Háva det., (ZMAN).

**Distribution.** Cosmopolitan species (Háva 2003a), new faunistic record from Argentina.

#### *Attagenus unicolor japonicus* REITTER, 1877

**Material examined:** “Netherlands, Amsterdam [52°23’N, 4°53’E], vii.1937, T.C.N. Drescher lgt.” \ “Atta-

genus piceus dalmatinus, P. v. d. Wiel det. 1937”, 2 males, J. Háva det. (ZMAN).

**Distribution.** Subspecies known from Romania (intr.), Switzerland (intr.), Canada, U.S.A., N China, Japan, N Korea, Mongolia, Russia: Siberia (Háva 2003a), new faunistic record from Netherland.

#### *Attagenus unicolor unicolor* BRAHM, 1791

**Material examined:** “W Sumatra, Sidjoendjoeng [Siborongborong, 2°12’N, 98°58’E], Kleiweg de Zwaan [lgt.]”, 1 spec., J. Háva det., (ZMAN).

**Distribution.** Cosmopolitan species (Háva 2003a), new faunistic record from Sumatra.

#### *Ctesias (Tiresiomorpha) klapperichi* (PIC, 1954)

**Material examined:** “China, W Hubei [prov.], saddle 5 km N Gaucho road Xingshan – Badong, 31°2’N, 110°5’E, 1500 m, 22.vi.2003, J. Turna lgt.”, 1 female, J. Háva det., (JHAC).

**Distribution.** Species known from China province Fukien (Háva 2003a), new faunistic record from Hubei province.

#### *Evorinea iota* (ARROW, 1915)

*Aspectus iota* ARROW, 1915:449.

*Trinodes minor* PIC, 1922:6.

*Aspectus* (sic!) *minor*: KALÍK, 1954:369.

*Evorinea iota*: BEAL, 1961:112.

*Evorinea minor*: MROCKZKOWSKI, 1968:157.

*Evorinea iota*: HÁVA, 2003a:51.

**Material examined.** “Vietnam, Mai lam, NE of Hanoi, 12–14. iv. 1966, Exp. Gy. Topál” \ “Nr. 85, beaten from bushes”, 37 spec., J. Háva det., (HNHM, JHAC);

“Vietnam, Dinh Vi [21°6'N, 105°56'E], NE of Hanoi, 15.iv.1966, Exp. Gy. Topál” \ “Nr. 60, beaten from bushes”, 3 spec., J. Háva det., (HNHM); “Vietnam, Yen so, SE of Hanoi, 19–23.iv.1966, Exp. Gy. Topál” \ “Nr. 121, beaten from trees”, 5 spec., J. Háva det., (HNHM, JHAC).

Remarks. *Trinodes minor* PIC is described from “Tonkin” without detailed data. According to descriptions of *Trinodes minor* PIC and *Evorinea iota* (ARROW) all the diagnostic characters are identical with those of *E. iota*. The species *T. minor* is considered a junior synonym of *E. iota*.

Distribution. Species known from Japan, Philippines, Sumatra, Vietnam, Caroline Is., Irian Jaya, Mariana Is., Palau, Ponape, Tanimbar Is., Truk (Háva, 2003a).

### *Mariouta letourneuxi* PIC, 1898

Material examined: “Tunisia, 13.4.1999, Blidette – Bargu, J. Batelka lgt.”, 1 spec., J. Háva det., (coll. J. Batelka, Prague, Czech Republic).

Distribution. Species known from Algeria, Egypt, Morocco, Tunisia (Háva, 2003a), first concrete data about distribution in Tunisia.

### *Orphinus (Orphinus) apicalis* PIC, 1918

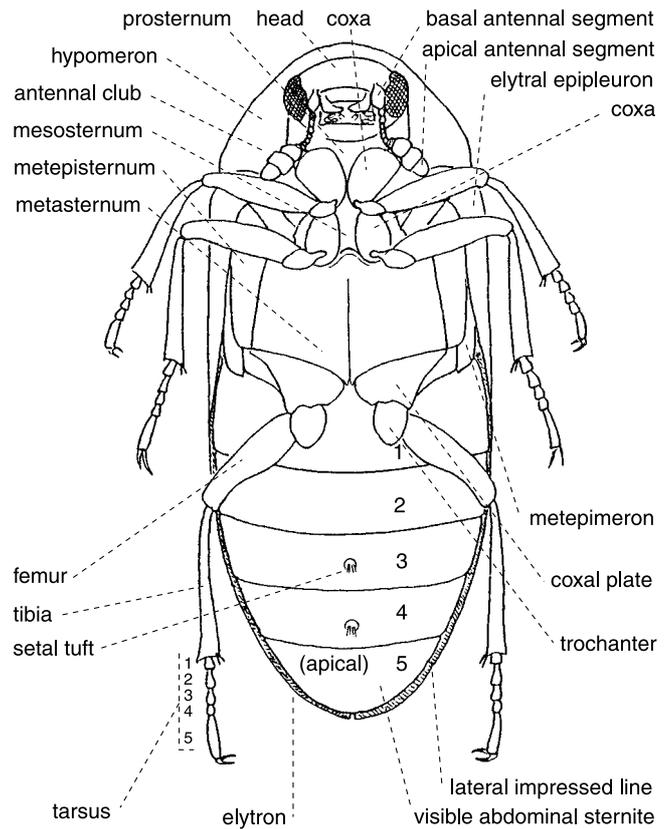
Material examined: “Sumatra, Deli, dr. Bassy”, 9 spec., M. Pic det., J. Háva revid., (ZMAN).

Distribution. Species known only from Java (Háva 2003a), new faunistic record from Sumatra.

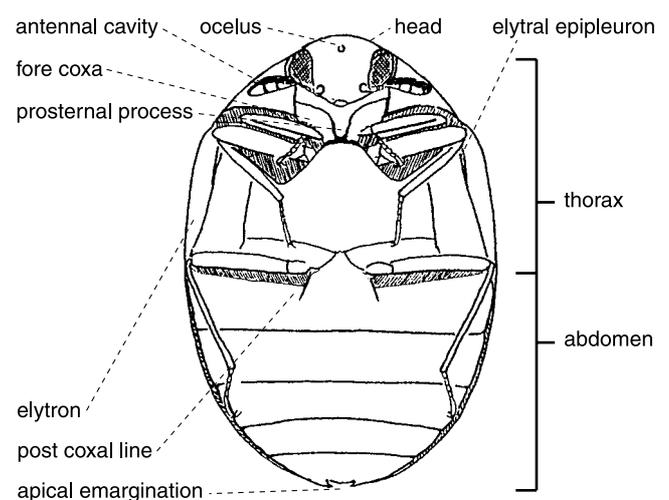
### *Orphinus (Orphinus) aethiops* ARROW, 1915

*Orphinus formosanus* PIC, 1918:2

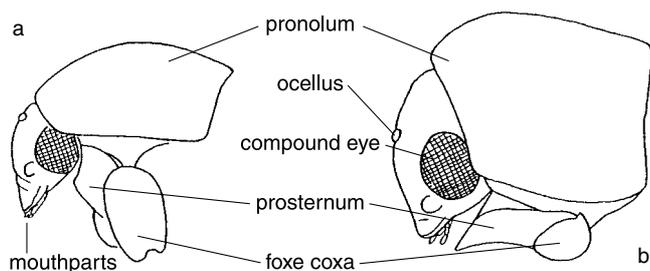
Material examined: “Sumatra, Fort de Kock, 920m, 1922, E. Jacobson leg.”, M. Pic det. 1926 as *O. formosanus*, 1 spec., J. Háva det., (ZMAN); “Sumatra, Fort de Kock, 920 m, 1924, E. Jacobson leg.”, M. Pic det. 1926 as *O. formosanus*, 5 spec., J. Háva det., (ZMAN); “Sumatra, Fort de Kock, 920 m, 1925, E. Jacobson leg.”, M. Pic det. 1926 as *O. formosanus*, 3 spec., J. Háva det., (ZMAN); “Sumatra, Fort de Kock, 920 m, 1926, E. Jacobson leg.”, M. Pic det. 1927 as *O. formosanus*, 6 spec., J. Háva det., (2 ZMAN, 4 JHAC); “Sumatra’s Westkust, Pahang, 2.m.1926, E. Jacobson leg.”, M. Pic. det. 1927 as *O. formosanus* var., 1 spec., J. Háva det., (ZMAN); “Sumatra’s O.K, Medan [3°35'N, 98°40'E], 10. 4. 1921, 20m, J. B. Corporaal [lgt.]”, 2 spec., J. Háva det., (ZMAN); “Sumatra’s O.K, Siantar [1°58'N, 98°47'E], Naga Hasta, 30. 5. 1921, 400 m, J. B. Corporaal [lgt.]”, 12 spec., J. Háva det. (11 ZMAN, 1 JHAC); “Java, Noesa, Kambangan [7°21'S, 112°14'E], xi-1913, F. C. Drescher [lgt.]”, 1 spec., J. Háva det., (ZMAN); “Java, Oengaran, 20. 9. 1906, F. C. Drescher [lgt.]”, 1 spec., J. Háva det., (ZMAN); “Java, Tjilatjap, 7. 1919, F. C. Drescher [lgt.]”, 3 spec., J. Háva det., (2 ZMAN, 1 JHAC); “Batavia, oct. 1947, C.v.Nidek [lgt.]”, 1 spec., J. Háva det.,



Text-fig. 19. Ventral view of *Dermestes* sp. to show labelled parts. (according to PEACOCK 1993)



Text-fig. 20. Ventral view of *Anthrenus verbasci* to show labelled parts. (according to PEACOCK 1993)



Text-fig. 21. Side view of head and prothorax (appendages removed): a – *Attagenus* sp.; b – *Megatoma* sp. (according to PEACOCK 1993)

(ZMAN); “Batavia, aug. 1949, C.v.Nidek [lgt.]”, 1 spec., J. Háva det., (ZMAN); “Batavia, apr. 1949, C.v.Nidek [lgt.]”, 1 spec., J. Háva det., (ZMAN).

**Larvae.** 2 dry larvae [sticked on small paper]: “Sumatra’s O.K, Siantar [1°58’N, 98°47’E], Naga Hasta, 30. 5. 1921, 400 m, J. B. Corporaal [lgt.]”, J. Háva det., (1 ZMAN, 1 JHAC).

**Remarks.** The present two mentioned larvae are very similar to larvae of *O. fulvipes* (GUÉRIN-MÉNEVILLE, 1838), but differ in the form of hastisetae and antennae. Body light brown, length of dry larvae 2.2–2.4 mm. Hastisetae (Text-fig. 14). Antenna (Text-fig. 15). The mentioned specimens determined by Pic as *O. formosanus* var. are only immature stage of this species.

**Distribution.** Species known from Angola, S Nigeria, Mauritius, Sumatra and Taiwan (Háva 2003a), new faunistic record from Java.

### *Phradonoma haemorrhoum* (GERSTAECKER, 1871)

**Material examined:** “Lulua: Sandoa [Congo, 9°42’S, 22°50’E], ix.1930, G. F. Overlaet [lgt.]”, 2 males, 1 female, J. Háva det., (2 MRAC, 1 JHAC); “Lundu (Mayumbe) [Congo, 2°30’N, 27°37’E], 24-iii-1925, A. Col-lart [lgt.]”, 1 female, J. Háva det., (MRAC).

**Distribution.** Species known from Kenya, Tanzania: Zanzibar I., Uganda (Háva 2003a), new faunistic record from Congo.

abdomen	hind part of body, derived from 10 segments, concealed from above by elytra in adult
accessory appendage	a small conical process (la)
acrotergite	the part of tergite anterior to transverse ridge or antecostal suture (la)
antecostal suture	a transverse line at anterior margin of tergite; external groove of antecosta (la)
antennal cavities	excavations of the hypomera which receive antennae, when retracted (ad)
anterior transverse ridge	a transverse ridge on anterior margin of tergite, in same position as the antecostal suture (la)
apical	at or near apex
basal	at base; end nearest point of attachment to body; part of elytra and pronotum nearest scutellum
basal strut	basal part of head of hastiseta (la)
cardo	basal piece of 1st maxilla
carina	fine ridge
caudal	pertaining to posterior end of body

### *Reesa vespulae* (MILLIRON, 1939)

**Material examined:** “Romania, Bucuresti [44°26’N, 26°7’E], 3. 6. 2003, K. Orszulik lgt.”, 1 spec., J. Háva det., (JHAC).

**Distribution.** Species known from Europe, Algeria, Egypt, Morocco, Tunisia, Canada, Mexico, U.S.A., Chile, Afghanistan, Japan, Russia, Australia, New Zealand (Háva 2003a), new faunistic record from Romania.

### *Trogoderma inclusum* LE CONTE, 1854

**Material examined:** “Tunisia, Skanés, 23–24.ix. 1977, No. 199, S. Mahunka lgt.”, 1 female, J. Háva det., (HNHM).

**Distribution.** Species known from Europe, Turkey, Algeria, Egypt, Morocco, South Africa, Canada, U.S.A., India, Iran, Israel, Japan, Russia, new faunistic record from Tunisia.

### *Turcicornis kopecky* HÁVA, 2000

**Material examined:** “Turkey, ill. Adana, Dibek Dağlari, 19.v.1993, P. Průdek lgt.”, 1 male, J. Háva det., coll. I. Jeniš (Náklo, Czech Republic).

**Distribution.** Species known only from the type series (Turkey, Pozanti p. Adana), new faunistic record from Turkey.

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### Glossary

la = larva; ad = adult. The occasional insert in brackets, immediately after the word to be defined, is plural ending.

caudal tuft	tuft of setae near posterior end of body (1a)
compound eye	eye present on either side of head, usually with many facets (1a)
contiguous	very close together (coxae) (ad)
copulatory sac	bursa copulatrix; vagina (female) (ad)
coxa (e)	basal segment of leg
coxal cavities open behind (fore coxal cavities)	not bordered posteriorly by the hypomeron (usually), which in closed cavities may extend medially to meet prosternal process (ad)
coxal plate	(hind coxae) (ad) a thin flat lamina partly covering femur when retracted
cuticle	a fairly hard exoskeleton, which provides protective armour and waterproof cover (ad)
deflexed	(head) abruptly bent downward
disc	central upper surface
dorsal	upper
dorsal line	longitudinal line down middle of back (1a)
eccentrically	not centrally
elytra	“wing cases”; hardened, but usually movable, fore-wings which meet in a longitudinal straight line (suture) down the back of the beetle and form a protective covering for the hind-wings (ad)
emarginate	notched or with an obtuse, curved or quadrate section cut from a margin
epicranial suture	a Y-shaped suture on dorsal surface of head, with the arms diverging anteriorly (1a)
epipharynx	an organ, probably of taste, attached to the inner surface of the labrum
epipleuron (a)	sharply defined inflexed margin of elytra, seen from ventral side of body (ad)
erect	standing upright
femur (ora)	thigh, stoutest segment of leg, articulated to body through the trochanter and coxa and bearing the tibia
feral	wild
filiform	thread-like; slender and of equal diameter
frons	part of head lying between arms of epicranial suture
frontal	pertaining to frons
frontal suture	clypeal or epicranial suture
galea	outer lobe of maxilla, usually 2-segmented, often hood-like
glabrous	without setae
gula	throat sclerite, forming the central part of underneath of head
hastisetæ	the unique multi-segmented spear-headed setae found on the Megatiminae (1a)
hind wings	functional membranous, veined wings, which are borne on the posterior part of the thorax (meta). These are usually much larger than the elytra under which they are folded when not in use (ad)
hypognathous	having head vertical and mouth directed downwards
hypomeron (a)	inflexed margin of pronotum (seen from beneath) (ad)
indigenous	native (of), not immigrant
instar	stage between moults (shedding a skin) (1a)
khapra	destroyer
labial palps	paired 1 to 4-segmented sensory appendages of the labium, borne on the palpiger, shorter than maxillary palps
labium	lower lip
labrum	upper lip, covers base of mandible and forms roof of mouth
lacinia	a blade, inner lobe of 1st maxilla, articulated to the stipes, bearing brush of setae or spines
lamina	a thin flat chitinous plate (ad)
lanceolate (seta)	lance or spear-shaped; oblong and tapering to end (1a)
laterad	towards side; away from midline
lateral impressed lines	grooves at sides of abdomen in Dermestes spp. (ad)
laterally	at the side
ligula	central sclerite of labium
linear (seta)	straight-sided (1a)
lobed	with processes (ad)
mandibles	1st pair of jaws
maxillae	2nd pair of jaws
maxillary palp	sensory organ on outer end of stipes, 1 to 7-segmented
median	in or at the middle
membranous	thin, semi-transparent, pliable
mesonotum	upper surface of mesothorax
mesothorax	middle thoracic segment, bearing middle legs
metanotum	upper surface of metathorax
metasternum	underside of metathorax
metathorax	posterior thoracic segment, bearing hind legs
metepimeron	sclerite near hind coxae
metepisternum	sclerite next to metasternum nearer side of body (ad)
morphology	study of form and structure
normal setae	not modified (1a)
nudisetæ	smooth setae
ocellus (i)	simple eye
open behind	see coxal cavities
palpiger	sclerite bearing a palp
papilla (e)	soft projection (1a)
papular urticaria	a chronic or recurrent eruption of irritable papules, usually grouped in irregular clusters and frequently seasonal in incidence

pretarsal setae	paired setae near base of claw, on underside (1a)
pronotum	the upper surface of prothorax
prosternal process	part of prosternum between fore coxae which projects posteriorly towards mesosternum (ad)
prosternum	the fore breast, the sclerite between the fore legs
prostheca	articulating mandibular sclerite set with setae; fleshe or membranous process on interior face of mandible
prothorax	1st thoracic segment (nearest head), bearing the fore legs
pubescence	covering of setae
pupa	resting, inactive instar between larva and adult
pygopod	appendage of 10th abdominal segment, used for locomotion (1a)
recumbent	lying down
retorse	(tubercles) backwardly directed (1a)
ribs (on elytra)	weak longitudinal ridges (ad)
sclerite	any piece of the insect body wall bounded by sutures
scutellum	triangular piece between elytra (ad)
seta (e)	hair
simple	(seta) unmodified (1a)
sinuate	wavy
spermatheca	sac in female that receives sperm during coition (ad)
spinulate setae	“rat-tailed” setae; slender setae covered with sharply pointed imbricate scales or spines (1a)
spiracle	breathing pore
spiracular sclerite	sclerite adjoining spiracle (1a)
sternite	ventral body sclerite
stria (e)	longitudinal row of punctures (ad)
supra-anal organ	an elliptical cuticular plate situated at the upper middle portion of the last larval segment above the anus (in some species of <i>Anthrenus</i> ). It bears long spicisetae which are capable of rapid vibration
suture	a seam or impressed line indicating the division of the distinct parts of the body wall; also see “elytra”
tarsal formula	the number of segments on each tarsus, quoted in the order, fore, middle and hind – e.g. 5,5,5 (ad)
tarsus (i)	foot (fused with claw in dermestid larvae)
tergite	sclerite on dorsal side of body
thorax	middle section of body between head and abdomen, bearing the legs (and wings in adults)
tibia	4th segment of leg, articulated to the femur and bearing the tarsus (claw+tarsus in larva)
transverse	broader than long; running across
trochantin	a small sclerite associated with the fore and middle coxae, usually concealed (ad)
tubercle	small raised outgrowth or prominence in the cuticle (1a)
unicolourous	of one colour throughout
urogomphi	paired dorsal spines or processes, on 9th abdominal segment (1a)
ventral	under

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## Explanation of the plate

### PLATE 1

22. Dorsal view *Sefrania bleusei* PIC, 1899 (male).
23. Dorsal view *Egidyella prophetea* REITTER, 1899 (male).
24. Dorsal view *Rhopalosilpha wasmanni* ARROW, 1929 (male).
25. Dorsal view *Claviella besucheti* KALÍK, 1987 (male).
26. Dorsal view *Paratrogoderma mahense* SCOTT, 1926 (male).
27. Dorsal view *Trogoparvus sumatrensis* HÁVA, 2001 (male).
28. Dorsal view *Orphilus beali* ZHANTIEV, 2001 (male).
29. Dorsal view *Thylotrias contractus* MOTSCHULSKY, 1839 (male).
30. Dorsal view *Thylotrias contractus* MOTSCHULSKY, 1839 (female).
31. Dorsal view *Dermestes lardarius* LINNAEUS, 1758 (male).
32. Dorsal view *Anthrenus pimpinellae* (FABRICIUS, 1775) (male).
33. Dorsal view *Attagenus unicolor* (BRAHM, 1791) (male).
34. Dorsal view *Trogoderma versicolor* (CREUTZER, 1799) (male).
35. Dorsal view *Trinodes emarginatus* ARROW, 1915 (male).
36. Dorsal view *Thaumaglossa hilleri* REITTER, 1881 (male).
37. Dorsal view *Phradonoma nobile* (REITTER, 1881) (male).
38. Dorsal view *Cryptorhopalum quadripunctatum* GUÉRIN-MÉNEVILLE, 1838 (male).
39. Dorsal view *Thorictodes heydeni* REITTER, 1875.

Plate 1



22



23



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