

Review of the genus *Dermestocyphon* (Coleoptera: Scirtidae: Scirtinae)

Rafał RUTA¹⁾, Hiroyuki YOSHITOMI²⁾ & Bernhard KLAUSNITZER³⁾

¹⁾Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Przybyszewskiego 63/77, 51-148 Wrocław, Poland; e-mail: scirtes@biol.uni.wroc.pl

²⁾Ehime University Museum, Bunkyo 3, Matsuyama, 790-8577 Japan; e-mail: hymushi@agr.ehime-u.ac.jp

³⁾Member of Senckenberg Deutsches Entomologisches Institut, Lannerstraße 5, D-01219 Dresden, Germany; e-mail: klausnitzer.col@t-online.de*

Abstract. *Dermestocyphon* Pic, 1918 is elevated to generic rank on the basis of adult morphological characters. *Oreocyphon* Klausnitzer, 2009 is regarded as a subgenus of *Dermestocyphon*. A new subgenus, *Himacyphon* subgen. nov., is described to include *Dermestocyphon optatus* (Klausnitzer, 1980). The following new combinations are proposed: *Dermestocyphon anticestaceus* (Klausnitzer, 1976) comb. nov. for *Prionocyphon anticestaceus*, *Dermestocyphon drianti* (Pic, 1918) comb. nov. for *Cyphon drianti*, *Dermestocyphon honorus* (Klausnitzer, 1980) comb. nov. for *Cyphon honorus*, *Dermestocyphon optatus* (Klausnitzer, 1980) comb. nov. for *Cyphon optatus*, and *Dermestocyphon umbratilis* (Klausnitzer, 1976) comb. nov. for *Prionocyphon umbratilis*. The type species of the genus, *Dermestocyphon drianti* (Pic, 1918) is redescribed, and five new species, *Dermestocyphon apiciconcavus* sp. nov. (Vietnam), *D. brancuccii* sp. nov. (Vietnam), *D. niisatoi* sp. nov. (Laos), *D. suturalis* sp. nov. (Laos, Myanmar, Thailand), and *D. thailandicus* sp. nov. (Thailand) are described. The previously unknown females of *Dermestocyphon drianti*, *D. honorus*, *D. umbratilis*, *D. optatus*, and a species related to *D. optatus* are described and new localities of these species are reported. A key to the species of *Dermestocyphon* is given. *Cyphon* (*Dermestocyphon*) *beattyi* Pic, 1918 is excluded from *Dermestocyphon* and tentatively retained in *Cyphon* Paykull, 1799.

Key words. Coleoptera, Scirtidae, *Cyphon*, *Dermestocyphon*, *Oreocyphon*, *Himacyphon* subgen. nov., new subgenus, new species, new combination, Indochina, Himalaya, Oriental Region

* This is the 170th contribution to the knowledge of Scirtidae by B. Klausnitzer.

Introduction

Dermestocyphon Pic, 1918 is a poorly known taxon distributed in the Himalaya Region and South-East Asia. Its peculiar morphology has been confusing taxonomists since its description. Unlike most of the Scirtidae, the male genitalia are relatively uniform in *Dermestocyphon*, and often have a limited diagnostic value. On the other hand, several morphological structures, such as the labial palpi, meso- and metaventral processes, and excitators (modifications of elytra present in females, presumably secretory structures, see RUTA 2008) are remarkably diverse.

Dermestocyphon was established as a subgenus of the genus *Cyphon* Paykull, 1799 by Pic (1918) to accommodate the Chinese *Cyphon drianti* Pic, 1918 and the Japanese *Cyphon beattyi* Pic, 1918. NAKANE (1963a,b) included four other Japanese species (*Cyphon ainu* Nakane, 1963, *Cyphon hasegawai* Nakane, 1963, *Cyphon sanno* Nakane, 1963, and *Cyphon seryu* Nakane, 1963) in *Dermestocyphon*. SASAGAWA (1985) published a revision of the Japanese *Cyphon* and formally designated *C. drianti* as the type species of the subgenus *Dermestocyphon* (he did not study the holotype of *C. drianti*).

However, that concept of *Dermestocyphon* was clearly unsatisfactory. YOSHITOMI (1996, 2005) did not include any of the Japanese *Cyphon* in the subgenus *Dermestocyphon*. In particular, male and female genital features of *Cyphon beattyi* (see YOSHITOMI 2005) show no close affinities to those in *Dermestocyphon*, suggesting that the species should be tentatively retained in *Cyphon*. Other Japanese species of *Cyphon* show no affinities with *Dermestocyphon* either. These conclusions were unfortunately not reflected in a recent key to the generic-level taxa of “*Cyphon*-like” Scirtidae (RUTA 2009), as the *Dermestocyphon* features were based solely on the study of *C. beattyi* (the type of *C. drianti* could have been studied only after the key was prepared) and are thus erroneous.

In addition, KLAUSNITZER (2009) erected *Oreocyphon* Klausnitzer, 2009 as a subgenus of the genus *Cyphon* to accommodate four species known from the Himalaya Region (Nepal, India, and Bhutan). As a result of our collaborative work including the examination of the holotype of *C. drianti*, it became clear that *Dermestocyphon* should be treated as a separate genus and *Oreocyphon* should become its subgenus. In the present paper *Dermestocyphon* is revised, and five new species are described from the Indochina.

Materials and methods

The specimens used in this study are preserved in the following collections and institutions:

BMNH	Natural History Museum, London, United Kingdom;
CKD	Bernhard Klausnitzer collection, Dresden, Germany;
CPE	Andreas Pütz collection, Eisenhüttenstadt, Germany;
DBET	Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Poland;
EUM	Entomological Laboratory, Ehime University Museum, Matsuyama, Japan;
KUMJ	Kyushu University Museum, Japan;
MNHN	Muséum national d'Histoire naturelle, Paris, France;
NMB	Naturhistorisches Museum, Basel, Switzerland;
NME	Naturkundemuseum Erfurt, Germany;
NMPC	National Museum, Prague, Czech Republic;

NMS Staatliches Museum für Naturkunde Stuttgart, Germany;
 NMW Naturhistorisches Museum Wien, Austria;
 ZMHB Museum für Naturkunde der Humboldt-Universität, Berlin, Germany.

For methodology and technical terms see YOSHITOMI (2005) and KLAUSNITZER (2009a), with the exception of female genitalia terminology, in which we follow NYHOLM (2002), and wing venation terminology, in which we follow FRIEDRICH & BEUTEL (2006). Genitalia of several specimens were mounted on permanent slides, which are stored together with the rest of the specimen (numbers of slides are indicated in the text). The Kashmir 3D 8.8.2 (© Sugimoto Tomohiko) software was used to make the distribution map. Geographical coordinates of several sites were validated with the Himalaya Gazetteer by D. Ahrens (<http://www.serica.gmxhome.de/layout05/HimGaz1NEW.htm>). All specimens and structures were measured with ocular micrometers attached to stereomicroscopes or compound microscopes. The mean values are shown in the parentheses after the range.

The abbreviations for measurements used in the present paper are as follows:

EL maximum length of elytra;
 EW maximum width of elytra;
 L length;
 PL maximum length of the pronotum;
 PW maximum width of pronotum;
 TL total length (PL plus EL);
 W maximum width.

Check-list of *Dermestocyphon* Pic, 1918

<i>D. (Dermestocyphon) apiciconcavus</i> sp. nov.	Vietnam
<i>D. (Dermestocyphon) drianti</i> (Pic, 1918)	China: Yunnan
<i>D. (Dermestocyphon) suturalis</i> sp. nov.	Laos, Myanmar, Thailand
<i>D. (Oreocyphon) anticestaceus</i> (Klausnitzer, 1976)	Bhutan
<i>D. (Oreocyphon) brancuccii</i> sp. nov.	Vietnam
<i>D. (Oreocyphon) honorus</i> (Klausnitzer, 1980)	India, Nepal
<i>D. (Oreocyphon) niisatoi</i> sp. nov.	Laos
<i>D. (Oreocyphon) thailandicus</i> sp. nov.	Thailand
<i>D. (Oreocyphon) umbratilis</i> (Klausnitzer, 1976)	Bhutan, India, Nepal
<i>D. (Himacyphon) optatus</i> (Klausnitzer, 1980)	India, Nepal

Systematics

Dermestocyphon Pic, 1918

Dermestocyphon Pic, 1918: 18 (subgenus of *Cyphon* Paykull, 1799, type species: *Cyphon drianti* Pic, 1918 (subsequent designation by SASAGAWA (1985)).

Diagnosis. Body oval to oblong (Figs 1–17); coloration yellowish-brown to black, dorsum often with colour pattern, very variable in some species. Head and pronotum covered with subtle, granulate punctures; elytra with normal punctuation. Antennomere I cylindrical, anten-

nomere II globular to cylindrical, remaining antennomeres more or less conical; segment III of labial palpi arising from the lateral (Fig. 20) or terminal (Figs 23, 26) part of segment II; mandibles (Figs 18, 21, 24) symmetrical, simply pointed at apices. Hind wing (Figs 27–29) with long MP_4 connected with $CuA + AA_{1+2}$ in median portion (form 2 sensu YOSHITOMI 2005). Mesoventral process long and narrow, subparallel-sided, bilobed at apex in *Himacyphon* subgen. nov. and *Oreocyphon*. Apodemes of male tergite VII small, not protruding; apodemes of male tergite VIII connected with a transverse rod-like structure in basal portion of plate (e.g., Fig. 60); tegmen small, U-shaped, with long lateral rod-like projections (e.g., Fig. 61); penis elongate, with well developed trigonium and elongate, sometimes apically widening parameroids (e.g., Fig. 62). Female: excitators on the elytra (Figs 10, 13, 15–17, 44–51, 111–115) either only in apical portion or both in apical and humeral portions of elytra (excitators at outer margin of humeral region of elytra are found among Scirtidae only in *Dermestocyphon*); ovipositor in some species with a relatively well sclerotized proctiger, which is composed of paired thumb-like projections; baculus simple, long, without branchlet (Figs 52, 54, 56); in *Himacyphon* subgen. nov. and *Oreocyphon* sternite VII with a membranous flap (Figs 32–33, 35–36) having species-specific morphology; bursella with proximal (*Himacyphon* subgen. nov.), distal (*Oreocyphon*) or both proximal and distal sclerites (*Dermestocyphon* s. str.).

Remarks. The synapomorphies of *Dermestocyphon* are as follows: 1) hind wing morphology (MP_4 connected with median portion of $CuA + AA_{1+2}$ at right angle; radial cell subtriangular, proximal portion of $RA3+4$ joining $RA1+2$ at right angle); 2) bauplan of male genitalia (small tegmen with elongate lateral rods, penis with elongate trigonium and well developed parameroids).

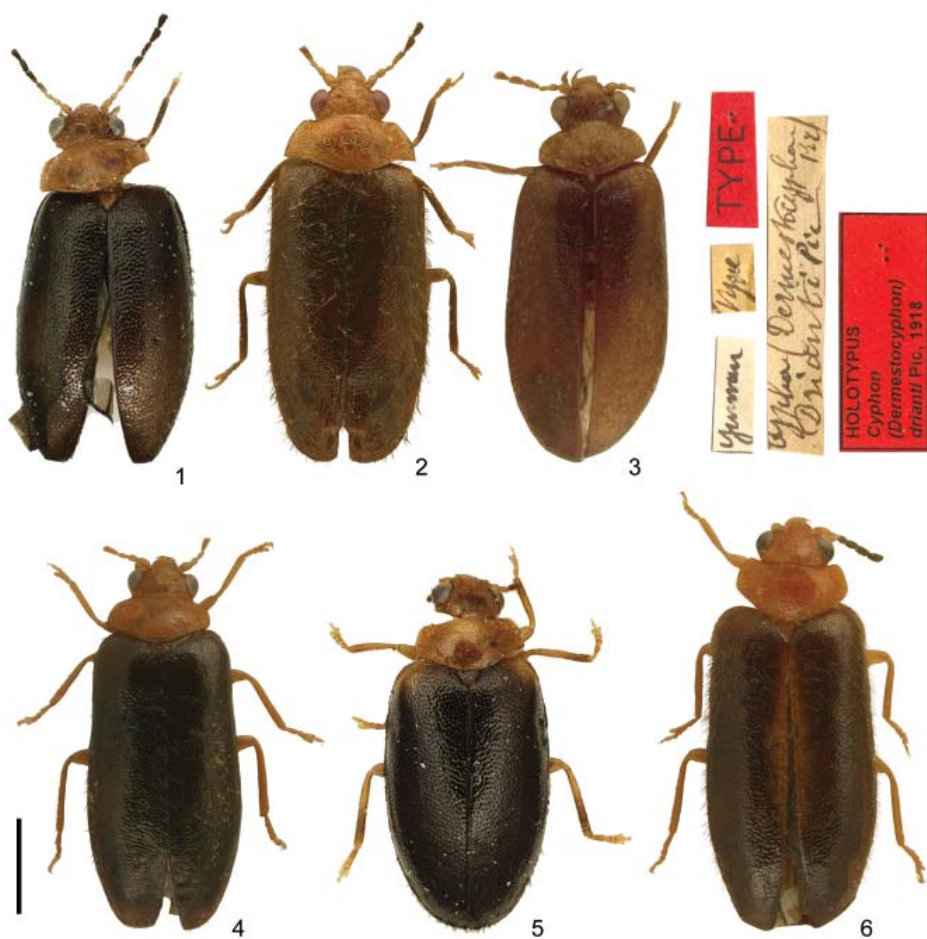
Dermestocyphon has a relatively uniform morphology of the male genitalia, but several other features vary remarkably, allowing a distinction of three subgenera:

1. Segment III of labial palpi arising from the side of segment II (Fig. 20); body elongate (TL/EW 1.9–2.2), sides subtly curved to subparallel (Figs 1–6); mesoventral process narrow, tempered at apex; elytra of females with humeral excitators, rarely also with apical excitator (Figs 44–51); bursella with tricornate proximal sclerite and two small oval distal sclerites (Figs 53, 55, 57). *Dermestocyphon* s. str.
- Segment III of labial palpi arising from the apex of segment II (Figs 23, 26); body oval to oblong oval; elytra of females with adscutellar or apical excitators (present in all species with known females); bursella either with tricornate proximal sclerite or with 4 distal sclerites. 2
2. Body oval (TL/EW 1.3–1.5, Figs 7–9, 11–13); mesoventral process moderately narrow, distinctly bilobed at apex; elytra of females with apical excitators (Figs 10, 13; uncertain if in all species); bursella with 4 sclerites in distal portion (Fig. 85).
 *Oreocyphon* Klausnitzer, 2009
- Body oblong oval (TL/EW 1.6–1.8, Figs 14–16); mesoventral process narrow, subtly bilobed at apex; elytra of females with fungiform adscutellar excitators (Figs 15, 16) and microreticulated areas in basal portion of elytra (Figs 17, 111, 115; in some species also in lateral and apical portions of elytra); bursella with tricornate proximal sclerite (Figs 110, 118). *Himacyphon* subgen. nov.

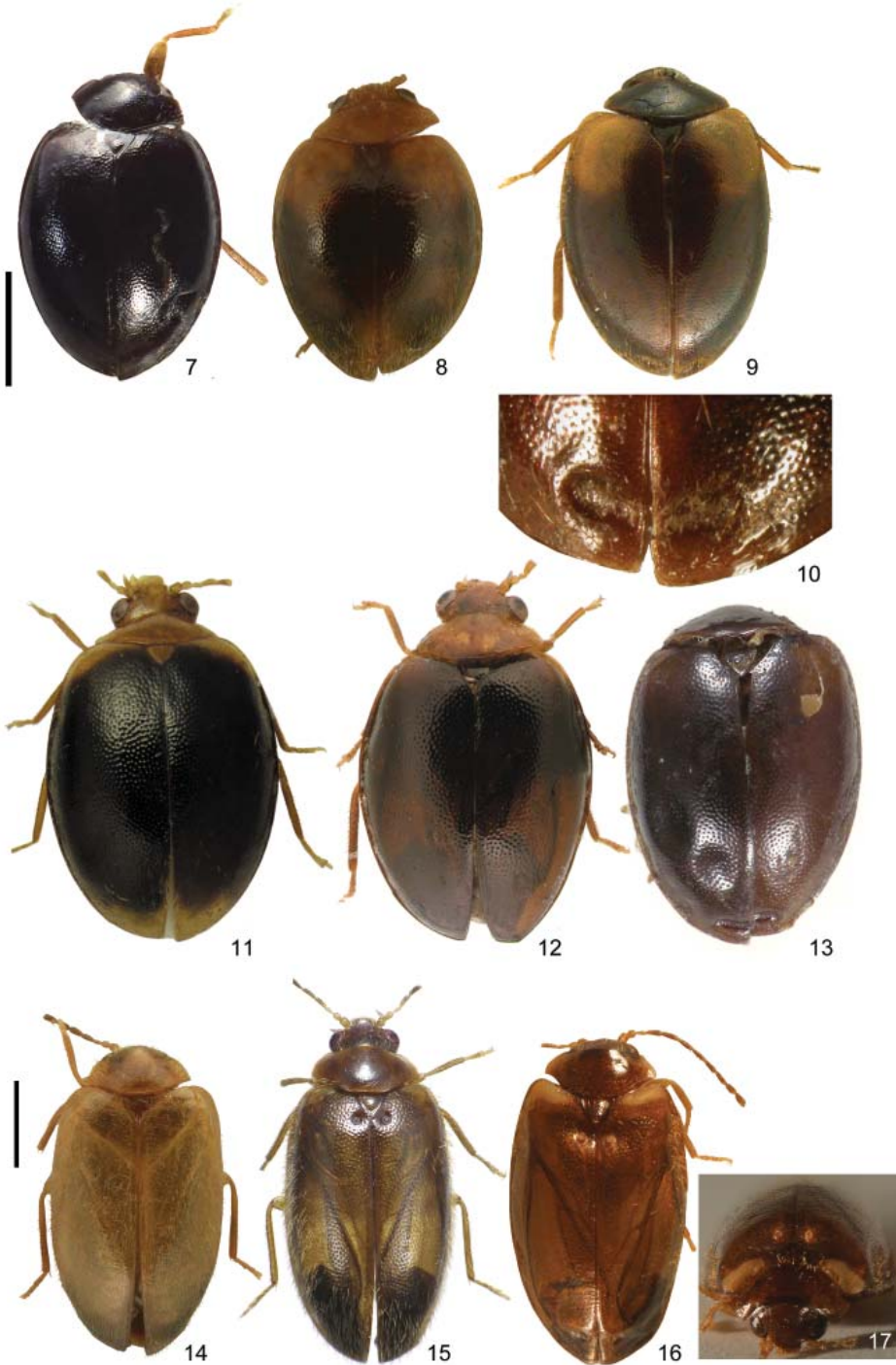
Subgenus *Dermestocyphon* Pic, 1918

Type species. *Cyphon drianti* Pic, 1918

Diagnosis. Body elongate, parallel-sided (Figs 1–6); pronotum always yellow to orange, elytra black or with yellow humeral or adsutural portions; segment III of labial palpi arising from lateral part of segment II (Fig. 20); mandibles with long, narrow, and abruptly curved apical portion (Fig. 18); females always with humeral excitators (Figs 44, 46, 48–51), in *D. apiciconcavus* also with apical excitators (Fig. 47). Sternite VII (♀) without distinct membranous flap (Fig. 30). Concave groove on tergite VII (♀) indistinct (Fig. 31). Bursella with proximal tricornate sclerite and two small oval distal sclerites (Figs 53, 55, 57). Ovipositor



Figs 1–6. Habitus of *Dermestocyphon* (*Dermestocyphon*): 1 – *D. apiciconcavus* sp. nov., holotype, male; 2 – ditto, paratype, female; 3 – *D. drianti* (Pic, 1918), holotype, male and labels; 4 – ditto, female; 5 – *D. suturalis* sp. nov., paratype, male; 6 – ditto, female. Scale bar = 1.0 mm.



with relatively well sclerotized proctiger, which is composed of a pair of thumb-like projections covered with dense setae (Figs 52, 54, 56).

Redescription. Body small to medium, oblong, sides subparallel, covered with semierect setae that are easily broken. Head and pronotum orange, elytra dark brown to black, with yellow to orange maculation.

Head small, labrum transverse, with straight anterior edge, slightly wider than clypeus, which is short and has straight anterior margin. Eyes relatively small, distance between bottom edge of eye and genal ridge ca. 1/9 diameter of eye; antennomeres II and III ca. 1/2 length of antennomere I, which is as long as antennomere IV; segment 3 of labial palpi arising from side of segment 2; galea with irregularly arranged setae; mandibles triangular, with long, abruptly curved apical portion which is gradually narrowing towards apex, inner edge without teeth.

Pronotum small, about 70 % of maximum width of elytra, about 1.9–2.2 times as wide as long, anterior angles subtly projecting forward, posterior angles almost obtuse to sharp, sides rounded, basal margin bisinuate, with complete margination. Elytra without raised longitudinal carinae, sides subparallel, punctures stronger than on pronotum, epipleura relatively wide, gradually narrowing towards the apex. Pronotal process small, narrow, reduced, rod-like; mesoventral notch for reception of prosternal process absent; mesoventral process long, narrow, apex widened, tempered; metaventral discrimen complete.

Male tergite VIII broad, apical portion well sclerotized, covered with sparse setae, apodemes short; tergite IX membranous with weakly sclerotized plate and relatively long apodemes; sternite IX trapezoidal, with setae on apical portion. Tegmen small, weakly sclerotized, U-shaped with long lateral rods. Penis with narrow parameroids, trigonium broadly triangular, with pointed or excised apex, basal margin of pala shallowly or deeply excised.

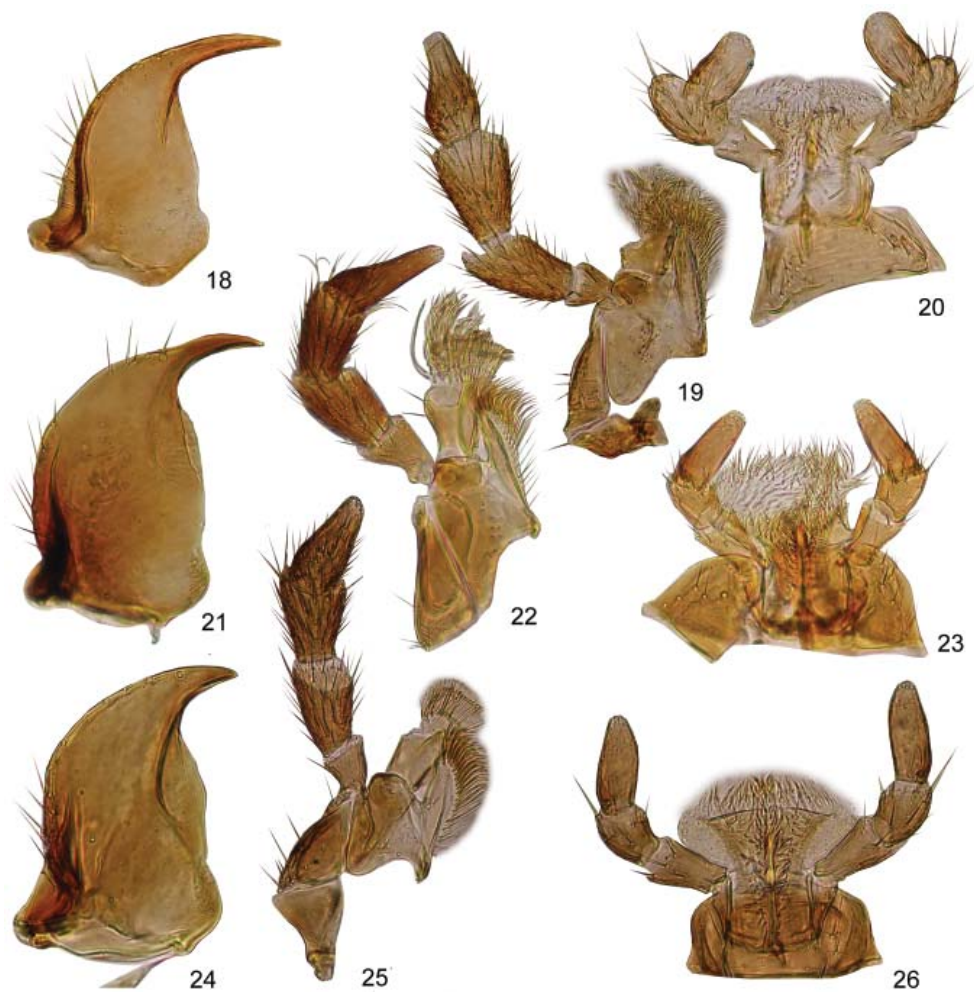
Female with distinct humeral excitators on elytra, which are more or less concave, but always present on outer margin, and sometimes extending to epipleural portion. Sternite VII without distinct membranous flap; tergite VII with indistinct groove; ovipositor long, coxites narrow, membranous, styli short, apical; proctiger well sclerotized, proximal bursellar sclerite with tricornate anterior margin, distal portion of bursella with paired sclerites.

Key to species

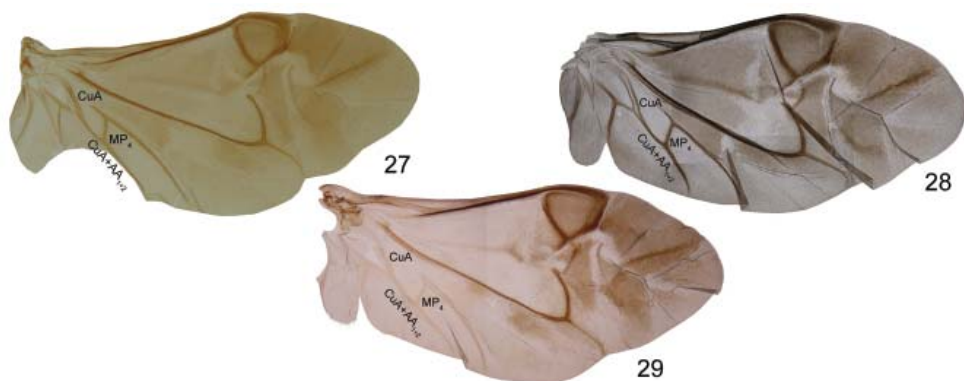
1. Femora and tibiae black (Figs 1–2); posterolateral angles of pronotum (especially in ♀) projecting posteriorly (Figs 38, 39); elytra (♀) with both humeral and apical excitators (Figs 44–47); humeral concavities present in humeral angles. *D. apiciconcavus* sp. nov.
- Femora and tibiae evenly yellowish to orange (Figs 3–6); posterolateral angles of pronotum obtuse (Figs 40–43); apical excitators on ♀ elytra absent. 2.
2. Elytra uniformly dark brown to black (Figs 3–4); parameroids of penis distinctly longer than trigonium (Fig. 67); elytra (♀) with very shallow humeral excitators (Figs 48, 49); antennomere IV yellow. *D. drianti* (Pic, 1918)

Figs 7–17. Habitus of *Dermestocyphon* (*Oreocyphon*) (7–13) and *Dermestocyphon* (*Himacyphon* subgen. nov.) (14–17): 7 – *D. brancuccii* sp. nov., holotype; 8 – *D. honorus* (Klausnitzer, 1980), male; 9 – ditto, female; 10 – ditto, apex of elytra; 11 – *D. niisatoi* sp. nov., paratype; 12 – *D. thailandicus* sp. nov., holotype, male; 13 – *D. umbratilis*, (Klausnitzer, 1976), female; 14 – *D. optatus* (Klausnitzer, 1980), male; 15 – ditto, female; 16 – *D. sp.*, female; 17 – ditto, frontal view. Scale bars = 1.0 mm (7–9, 11–16).

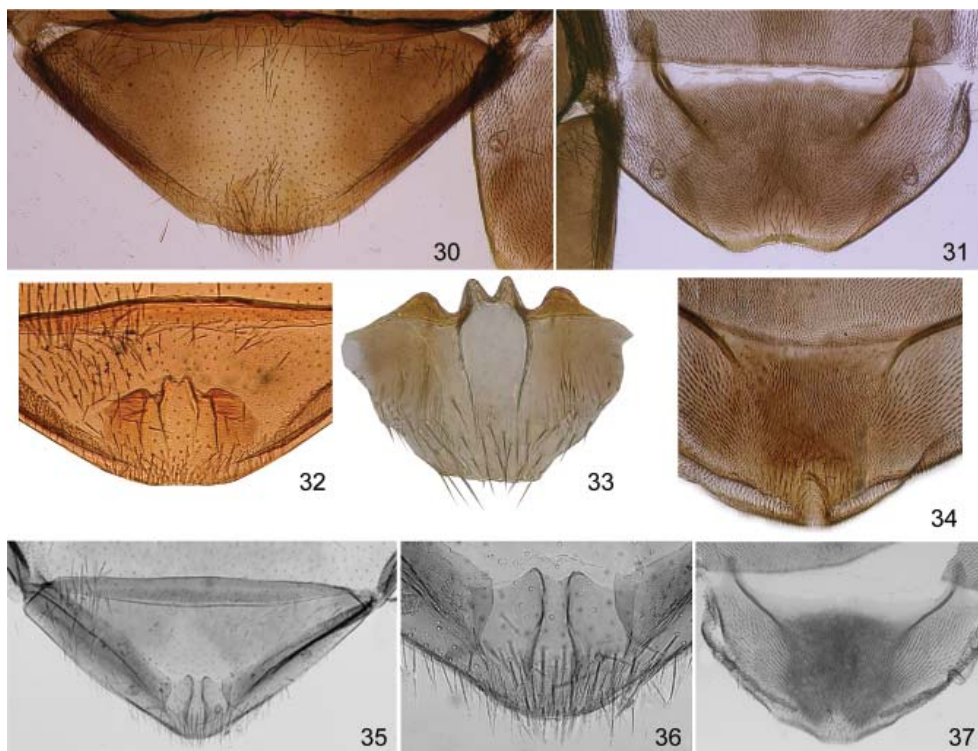
- Elytra black with yellow humeral portions (rarely elytra unicolored in ♂) or yellow adsutural region (in ♀) (Figs 5, 6); parameroids of penis only slightly longer than trigonium (Figs 72–73); female with deep and concave humeral excitator (Figs 50, 51); antennomere IV black. *D. suturalis* sp. nov.



Figs 18–26. Mouthparts of *Dermestocyphon* (males); 18, 21, 24 – mandible; 19, 22, 25 – maxilla; 20, 23, 26 – labium: 18–20 – *D. driori* (Pic, 1918); 21–23 – *D. optatus* (Klausnitzer, 1980); 24–26 – *D. niisatoi* sp. nov.



Figs 27–29. Hind wing: 27 – *D. driori* (Pic, 1918); 28 – *D. optatus* (Klausnitzer, 1980); 29 – *D. niisatoi* sp. nov.



Figs 30–37. Last visible sternite (30, 32, 35), membranous flap (33, 36) and tergite VII (31, 34, 37) of female: 30–31 – *D. suturalis* sp. nov.; 32–34 – *D. honoris* (Klausnitzer, 1980); 35–37 – *D. optatus* (Klausnitzer, 1980).

***Dermestocyphon (Dermestocyphon) apiciconcavus* sp. nov.**

(Figs 1–2, 38–39, 44–47, 52–53, 59–62)

Type material. HOLOTYPE: ♂ (NMW), “S-VIETNAM 14km SW Bao Loc 16.–29.5.1994 Pacholatko & Dembicky”.

PARATYPE: ♀ (NMW), same data as holotype.

Diagnosis. Similar to *D. drianti* and *D. suturalis* sp. nov., *D. apiciconcavus* sp. nov. can be identified on the basis of the following characters: 1) coloration of legs dark brown (orange in *D. drianti* and *D. suturalis* sp. nov.), 2) pronotum with distinctly bisinuate basal margin and well marked posterior angles (especially in females), 3) a pair of deep concavities present at humeral angles of female elytra (at proximal 1/6 in *D. drianti* and *D. suturalis* sp. nov.), 4) oval dorsal patch and large, deep concavities present on apices of female elytra.

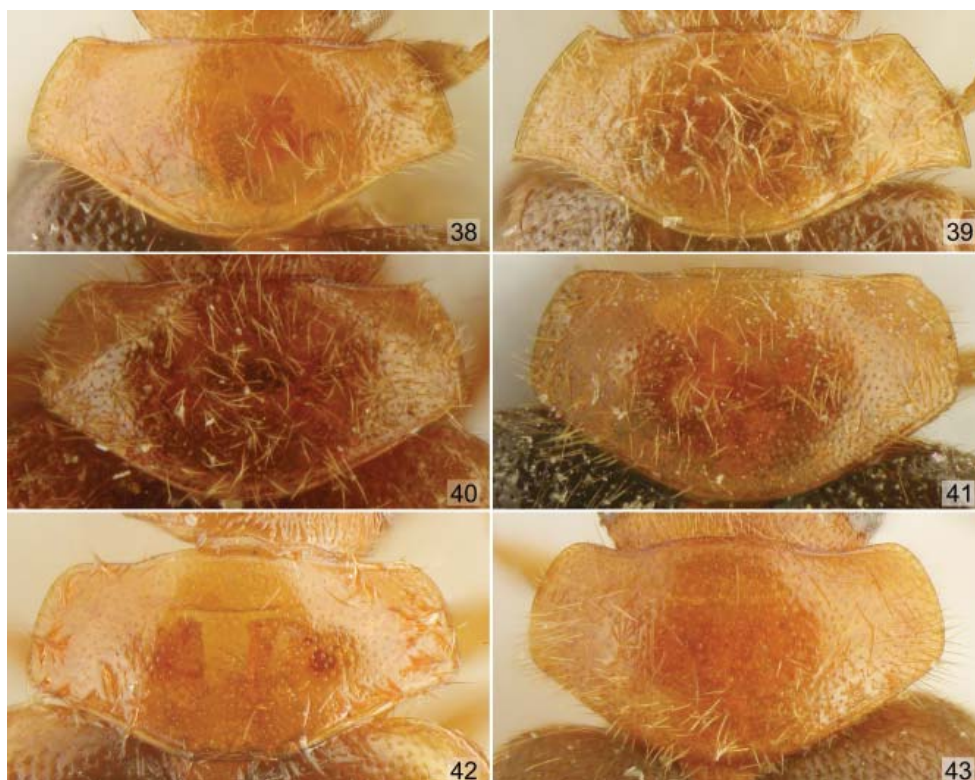
Description. Male. Body oblong, slightly convex dorsally, strongly shining, closely covered with easily removable short setae throughout. Coloration of head, mouthparts, antennal segments I–IV, pronotum, and scutellum yellowish-orange; antennal segments V–VIII, legs, elytra and ventral surface of meso- and metathorax and abdomen black except for yellowish apices of femora, basal parts of tibiae, and tarsi.

Head moderate in size, finely punctate, slightly convex dorsally; distance between eyes about 1.7 times as long as maximum diameter of eye. Eyes moderate in size, strongly prominent. Pronotum transverse, depressed in lateral portions, finely punctate; anterior margin straight; anterolateral angles about 120°, not projecting anteriorly; lateral margins gently arcuate; posterolateral angles about 90°; posterior margin gently bisinuate; PW/PL 2.31. Scutellum small, equilateral-triangular, finely punctate. Elytra oblong, subparallel-sided near base to apical 1/5, closely punctate; humeral portions slightly elevated; EL/EW 1.67; EL/PL 5.45; EW/PW 1.42; TL/EW 1.97. Legs relatively long.

Tergite VII with a pair of short apodemes. Caudal margin of sternite VII arcuate. Sternite IX (L 0.25 mm, W 0.37 mm) slightly sclerotized, semicircular, bearing short setae in apical portion; tergite VIII (L 0.46 mm, W 0.39 mm) moderately sclerotized, arcuate at caudal margin, bearing short setae, closely covered with minute setae and punctures, with a pair of relatively long apodemes; tergite IX membranous. Tegmen short (L 0.21 mm, W 0.21 mm), slightly sclerotized; parameres short, widening apically, obtuse; lateral rods long (L 0.46 mm), pointed at apices. Penis (L 0.50 mm, W 0.20 mm) moderately sclerotized, widest at middle; pala oval, shallowly concave at basal margin; parameroids relatively short, slender, closely punctate; trigonium short, wide at basis, triangular, minutely serrate at apex.

Female. Sexual dimorphism distinct; pronotum slightly projecting in anterolateral angles, acute in posterolateral angles, basal margin distinctly bisinuate; humeral portions of elytra depressed anterolaterally, with deep and diagonal concavities at humeral margin; a pair of crescent-shaped flat areas present in apical 1/4 of elytra, black, closely covered with fine setae; a pair of large and deep excitators present near apices of elytra, ear-like shaped, extending outwards to form S-shaped structures (Fig. 45); PW/PL 2.30; EL/EW 1.87; EL/PL 5.13; EW/PW 1.20; TL/EW 2.23.

Caudal margin of sternite VII somewhat pointed. Ovipositor relatively long (L 1.60 mm); coxites punctate in apical portions; proctiger well sclerotized, cup-shaped, with a pair of subconical projections bearing short spines. Proximal bursellar sclerite (L 0.20 mm, W 0.31 mm) tricornate at anterior margin, with long median projection; distal bursellar sclerites consisting of two plate-like, elongate oval structures (L 0.15 mm).



Figs 38–43. Pronotum of male (38, 40, 42) and female (39, 41, 43): 38–39 – *D. apiciconcavus* sp. nov.; 40–41 – *D. drianti* (Pic, 1918); 42–43 – *D. suturalis* sp. nov.

Measurements. Male ($n = 1$): TL 3.55 mm; PW 1.27 mm; PL 0.55 mm; EL 3.00 mm; EW 1.80 mm. Female ($n = 1$): TL 3.68 mm; PW 1.38 mm; PL 0.60 mm; EL 3.08 mm; EW 1.65 mm.

Etymology. The name refers to the presence of the concave excitator at the elytral apex of the female (Latin *apici-* standing for apex, Latin *concavus* = concave).

Distribution. Vietnam, known only from the type locality.

Dermestocyphon (Dermestocyphon) drianti (Pic, 1918)

(Figs 3–4, 18–20, 27, 40–41, 48–49, 54–55, 63–67)

Cyphon (Dermestocyphon) drianti Pic, 1918: 18.

Type material. HOLOTYPE: ♂ (MNHN), “Yunnan” [handwritten]; “type” [handwritten]; “TYPE” [red label, printed]; “Cyphon (*Dermestocyphon* Pic) / *Drianti* Pic” [handwritten by Pic].

Additional material studied. CHINA: YUNNAN: 3 ♀♀ (CPE, EUM), “CHINA: Yunnan [CH07-14] Baoshan Pref., Gaoligong Shan, 32km SE Tengchong, 2100–2200m, 24°51’22”N, 98°45’36”E, decid[uous] forest, litter, wood, fungi sifted, 31. V. 2007, leg. A. Pütz”; 1 ♂ (NMW), “China, W-Yunnan, env. Baoshan, 06.–08.06.1993, E. Jendek & O. Sausa leg.”; 3 ♀♀ (NMW, CKD), “China, W-Yunnan, env. Baoshan, 06.–08.06.1993, E. Jendek & O. Sausa leg.”; 3 ♀♀ (NMW, CKD), “China, Yunnan, 100 km W Baoshan, Gaoligongshan Nat. Res., 14.–21.06.1993, E. Jendek & O. Sausa leg.”



Figs. 44–51. Excitators of females of *D. apiciconcavus* sp. nov. (44–47), *D. drienti* (Pic, 1918) (48–49), and *D. suturalis* sp. nov. (50–51): 44, 46, 48–51 – Humeral area in lateral view; 45, 47 – apex of elytra in lateral (45) and caudal (47) view.

Redescription. Male. Body oblong, slightly convex dorsally, strongly shining, closely covered with easily removable short setae throughout. Coloration of head, mouthparts, pronotum, scutellum, antennal segments I–VI and legs yellowish-orange; elytra, ventral surface of meso- and metathorax and abdomen brownish.

Head moderate in size, finely punctate, slightly convex dorsally; distance between eyes about 1.7 times as long as maximum diameter of eye. Eyes moderate in size, strongly prominent. Pronotum transverse, weakly depressed in lateral portions, closely covered with fine punctures; anterior margin almost straight; anterolateral angles about 100° , not projecting anteriorly; lateral margins gently arcuate; posterolateral angles obtuse, about 120° ; posterior margin gently bisinuate; PW/PL 2.01. Scutellum small, equilateral-triangular, punctate as pronotum. Elytra oblong, subparallel-sided between humeri and apical 1/4, closely punctate; humeral portions slightly elevated; EL/EW 2.08; EL/PL 5.05; EW/PW 1.31; TL/EW 2.45. Legs relatively long.

Tergite VII with a pair of short apodemes. Caudal margin of sternite VII gently arcuate. Sternite IX (L 0.20 mm, W 0.20 mm) slightly sclerotized, subtriangular, bearing long setae; tergite VIII (L 0.45 mm, W 0.38 mm) moderately sclerotized, transversely trapezoidal, bearing sparse, short setae at apical margin, plate sparsely covered with minute setae and punctures, with a pair of long apodemes; tergite IX (L 0.32 mm, W 0.22 mm) slightly sclerotized, with a pair of long apodemes. Tegmen (L 0.20 mm, W 0.20 mm) short, slightly sclerotized; parameres obtuse; lateral projections long (L 0.45 mm), pointed at apices. Penis (L 0.50 mm, W 0.15 mm) moderately sclerotized, widest at basal 1/2; pala oval, concave at basal margin; parameroids relatively long, slender, closely punctate; trigonium short, triangular, concave at apex.

Female. Sexual dimorphism distinct; elytra evenly black, with a pair of shallow concavities at basal 1/6 of lateral margins; PW/PL 2.09–2.12 (2.11); EL/EW 1.88–1.91 (1.89); EL/PL 5.85–6.10 (5.97); EW/PW 1.49–1.51 (1.50); TL/EW 2.16–2.19 (2.17). Caudal margin of sternite VII somewhat pointed. Tergite VIII moderately sclerotized, elongate trapezoidal, bearing short spines at apical margin, punctate in lateral parts, with a pair of long and slender apodemes; sternite VIII slightly sclerotized, oblong, deeply excised at apical margin, bearing short spines on apical portions. Ovipositor relatively long (L 1.70); stylus ovate, bearing two pairs of apical setae; coxites closely punctate; proctiger well sclerotized, composed of a pair of thumb-like projections, bearing long setae. Proximal bursellar sclerite (L 0.13 mm, W 0.15 mm) tricnate; distal bursellar sclerites oval (L 0.06 mm).

Measurements. Male (n = 1): TL 3.70 mm; PW 1.15 mm; PL 0.57 mm; EW 1.51 mm; EL 3.14 mm. Female (n = 2): TL 3.45 mm & 3.61 mm; PW 1.06 mm & 1.11 mm; PL 0.50 mm & 0.53 mm; EW 1.60 mm & 1.65 mm; EL 3.05 mm & 3.10 mm.

Remarks. The holotype has a pale brown coloration of the body (Fig. 3), hence it is probably a teneral specimen.

Distribution. China, Yunnan.

Dermestocyphon (Dermestocyphon) suturalis sp. nov.

(Figs 5–6, 30–31, 42–43, 50–51, 56–58, 68–73)

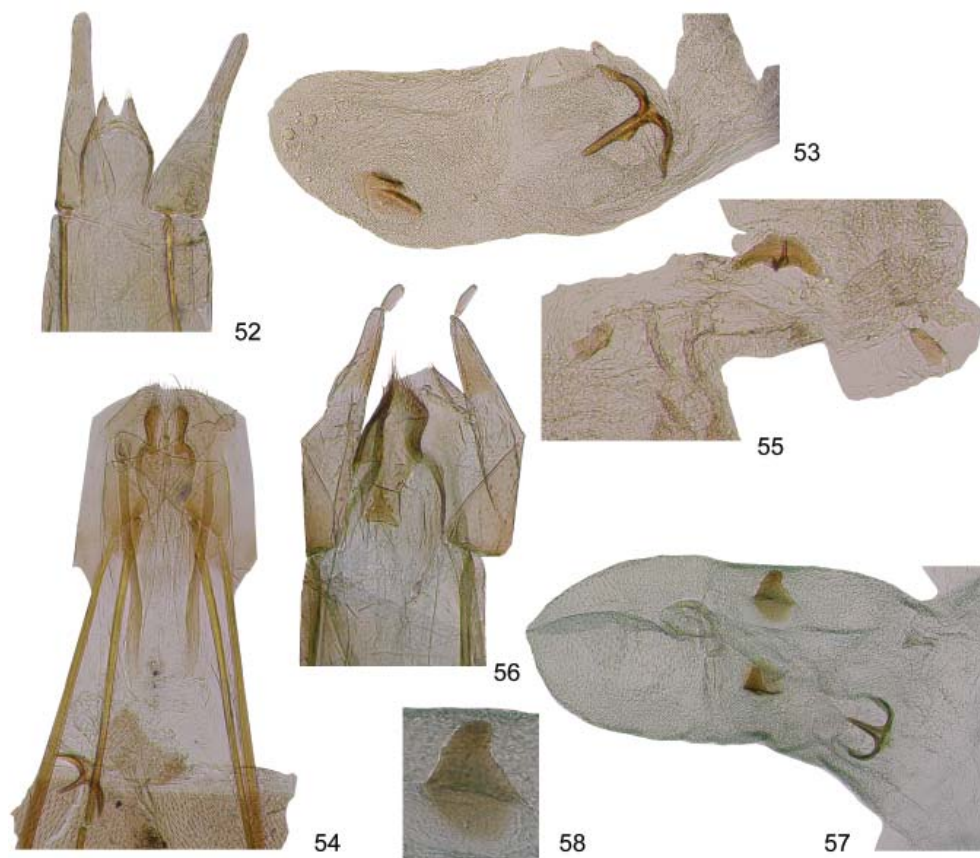
Type material. HOLOTYPE: 1 ♂ (NMB), “LAOS, Phongsaly prov., PHONGSALY env., 6.–17.v.2004, ~1500m, 21°41'N 102°06'–8'E, V. Kubán leg.”. PARATYPES: 2 ♀♀, 1 ♂ (NMB), “LAOS, 10.–16.v.1999, Louangphrabang pr., 20°33'–4'N 102°14'E, Ban Song Cha (5 km W), 1200m, Vit Kubán leg.”; 1 ♀ (CKD), “LAOS, Louangnamtha pr., 21°09'N 101°19'E, Namtha Muang Sing, 5.–31.v.1997, 900–1200m, Vit Kubán leg.”; 1 ♀ (NMPC), “LAOS – NE; HUA PHAN prov.; / 25 km SE Vieng Xai (by road); BAN KANGPABONG env.; 20°19'N 104°25'E; J. Bezděk leg.; 14.–18.v.2001”; 1 ♂ (NMW), “MYANMAR: Sagaing Division Chatthin WS, ca. 200m 1km W San Myaung Camp 23°32.263'N 95°38.167'E 15.–20. 6. 2002 (MBS 87)”, genitalia on slide no. HY 866; 1 ♂ (EUM), “Mt. Doi Suthep Chiang Mai N. THAILAND 28. V. 1983 S. Ohmomo leg.”; 1 ♀ (NMW), “NW THAI 7–14. V. DOI SUTHEP PUI 1300–1500m 1992 leg. Pacholatko”; 1 ♂ (NMB) “NW Thailand, 8.–17.V.1992, MAE HONG SON, Ban Huei Po, 1600m, S. Bily leg.”; 2 ♂♂ (NMB, CKD) “THAI-N, 1.–15.v.1998, Chiang Mai prov., 19°19'N 98°50'E, SAN PAKIA, 1400m, Vit Kubán leg.”; 1 ♂ (NMB) “THAILAND, bor. occ., 19.–23.4.1991, Doi Suthep, Jan Farkaš leg.”.

Diagnosis. Similar to *D. apiciconcavus* sp. nov. and *D. driori*. Differs from *D. apiciconcavus* sp. nov. in the following characters: 1) coloration of legs evenly yellowish-orange (dark brown in *D. apiciconcavus* sp. nov.), 2) a pair of diagonal concavities present at proximal 1/6 in humeral parts of female elytra (at humeral angles of female elytra in *apiciconcavus* sp. nov.), 3) apical excitator on female elytra absent. It can be distinguished from *D. driori* on the basis of the following characters: 1) humeral portion (♂) or adsutural portion of elytra (♀)

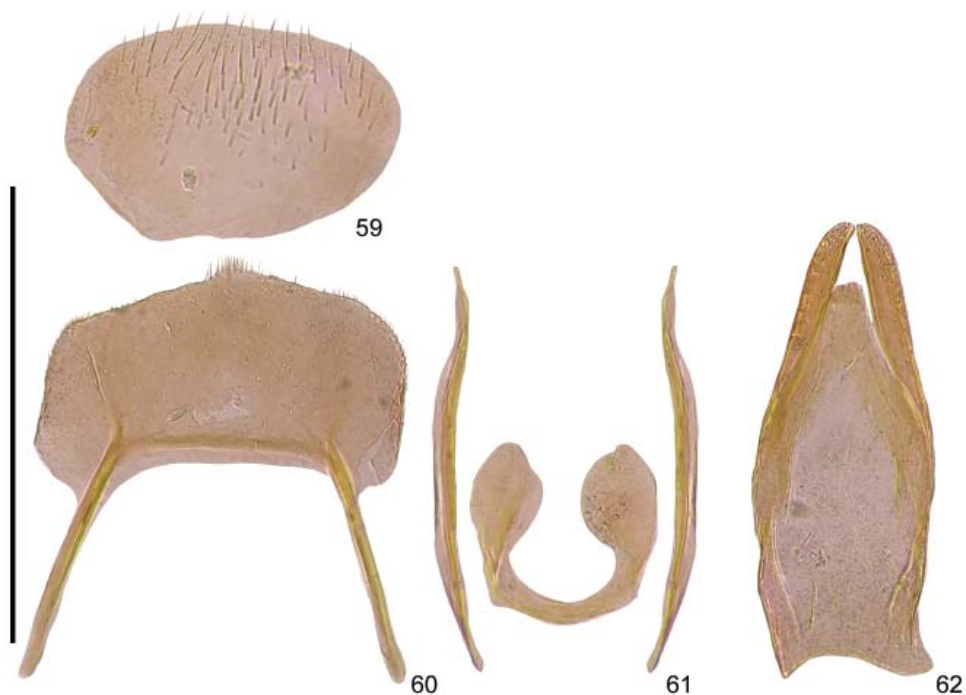
usually yellow to orange (uniformly brown to black in *D. drianti*); 2) parameroids slightly longer than trigonium (distinctly longer in *D. drianti*); 3) a pair of deep concavities present at proximal 1/6 of outer margins of female elytra (concavities shallow in *D. drianti*).

Description. Male. Body oblong, slightly convex dorsally, strongly shining, closely covered with easily removable short setae throughout. Coloration of head, mouthparts, pronotum, scutellum, antennal segments I–III, humeral portions of elytra and legs yellowish-orange; antennal segments IV–IX (remaining missing in studied specimens), elytra, ventral surface of meso- and metathorax and abdomen black.

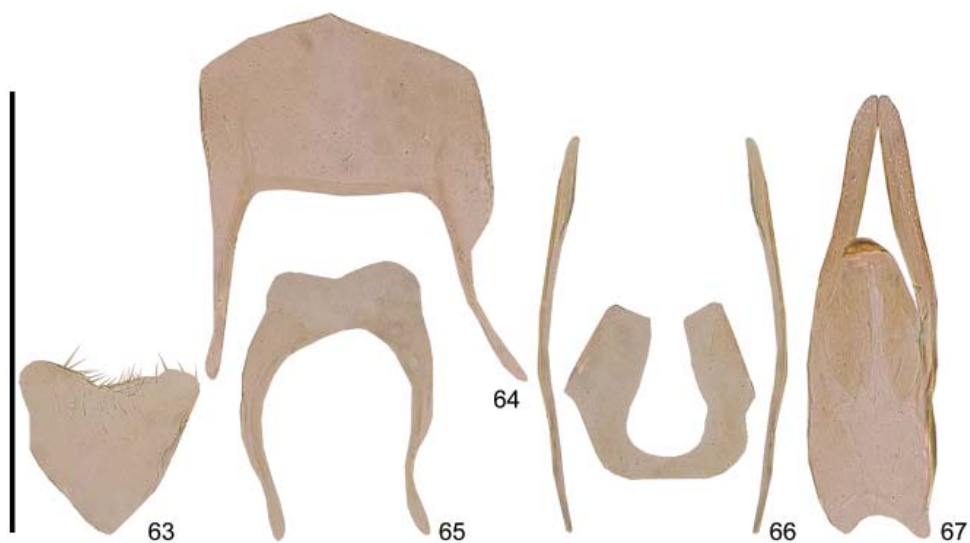
Head moderate in size, finely punctate, slightly convex dorsally; distance between eyes about 1.7 times as long as maximum diameter of eye. Eyes moderate in size, strongly prominent. Pronotum transverse, weakly depressed in lateral portions, closely covered with fine punctures; anterior margin almost straight; anterolateral angles about 100°, not projecting anteriorly; lateral margins gently arcuate; posterolateral angles obtuse, about 120°; posterior



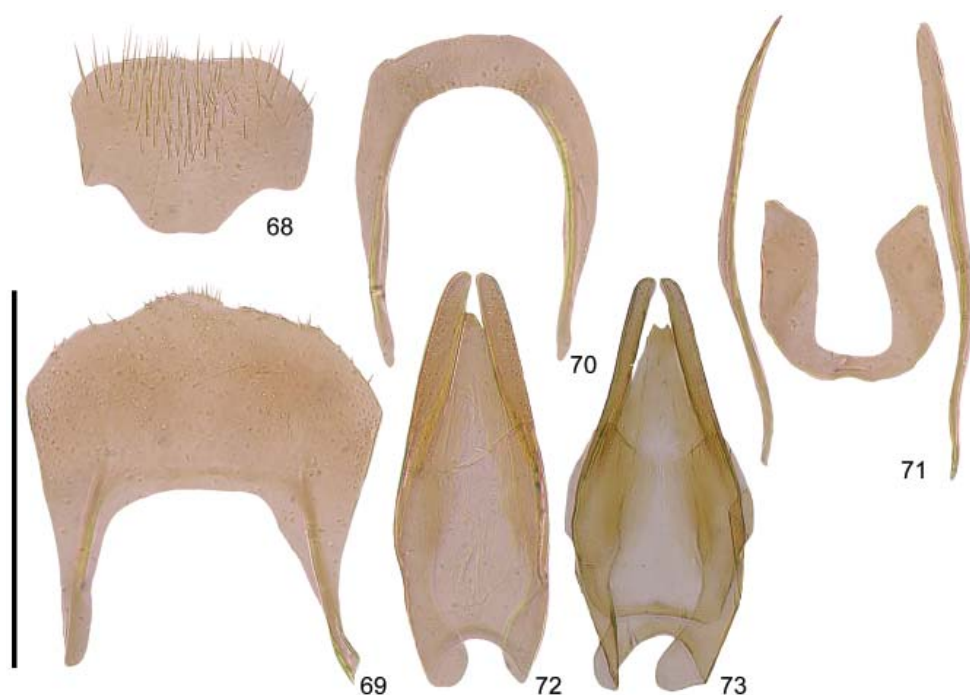
Figs 52–58. *Dermestocyphon* (*Dermestocyphon*) spp., female genitalia: ovipositor (52, 54, 56), bursella (53, 55, 57), and distal bursellar sclerite (58): 52–53 – *D. apiciconcavus* sp. nov.; 54–55 – *D. drianti* (Pic, 1918); 56–58 – *D. suturalis* sp. nov.



Figs 59–62. *Dermestocyphon (Dermestocyphon) apiciconcavus* sp. nov., holotype, male genitalia: 59 – sternite IX; 60 – tergite VIII; 61 – tegmen with lateral projections; 62 – penis. Scale bar = 0.5 mm.



Figs 63–67. *Dermestocyphon (Dermestocyphon) drianiti* (Pic, 1918), male genitalia: 63 – sternite IX; 64 – tergite VIII; 65 – tergite IX; 66 – tegmen with lateral projections; 67 – penis. Scale bar = 0.5 mm.



Figs 68–73. *Dermestocyphon* (*Dermestocyphon*) *suturalis* sp. nov., male genitalia; specimen from Laos (68–72) and from Myanmar (73): 68 – sternite IX; 69 – tergite VIII; 70 – tergite IX; 71 – tegmen with lateral projections; 72–73 – penis. Scale bar = 0.5 mm.

margin gently bisinuate; PW/PL 1.88–2.08 (1.97). Scutellum small, equilateral-triangular, punctate as pronotum. Elytra oblong, subparallel-sided between humeri and apical 1/4, closely punctate; humeral portions slightly elevated; EL/EW 1.70–1.79 (1.73); EL/PL 4.77–5.38 (5.01); EW/PW 1.44–1.49 (1.47); TL/EW 1.97–2.10 (2.02). Legs relatively long.

Tergite VII with a pair of short apodemes. Caudal margin of sternite VII gently arcuate. Sternite IX (L 0.25 mm, W 0.35 mm) slightly sclerotized, semicircular, bearing long setae; tergite VIII (L 0.50 mm, W 0.43 mm) moderately sclerotized, transversely trapezoidal, bearing short spines and setae at apical margin, sparsely covered with minute setae and punctures, with a pair of long apodemes; tergite IX (L 0.45 mm, W 0.33 mm) slightly sclerotized, with a pair of long apodemes. Tegmen (L 0.35 mm, W 0.24 mm) short, slightly sclerotized; parameres obtuse; lateral projections long (L 0.61 mm), pointed at apices. Penis (L 0.55 mm, W 0.21 mm) moderately sclerotized, widest at basal 1/3; pala oval, deeply concave at basal margin; parameroids relatively short, slender, closely punctate; trigonium short, triangular, concave at apex.

Female. Sexual dimorphism distinct: elytra evenly black in humeral portions, with a pair of shallow concavities at basal 1/6 of lateral margins; PW/PL 1.85–1.92 (1.88); EL/EW 1.95–2.09 (2.02); EL/PL 5.31–5.69 (5.50); EW/PW 1.38–1.52 (1.45); TL/EW 2.24–2.44

(2.34). Caudal margin of sternite VII relatively pointed. Tergite VIII moderately sclerotized, elongate trapezoidal, bearing short spines at apical margin, punctate in lateral parts, with a pair of long and slender apodemes; sternite VIII slightly sclerotized, oblong, deeply excised at apical margin, bearing short spines on apical portions. Ovipositor long (L 2.00 mm); stylus ovate, bearing two pairs of apical spines; coxites closely punctate; proctiger well sclerotized, composed of a pair of thumb-like projections, bearing long setae. Proximal bursellar sclerite (L 0.10 mm, W 0.14 mm) tricornate; distal bursellar sclerites in a form of transverse plates with serrate margins (L 0.10 mm).

Measurements. Male (n = 3): TL 3.40–4.10 mm (3.72 mm); PW 1.23–1.35 mm (1.25 mm); PL 0.60–0.65 mm (0.63 mm); EW 1.73–1.95 mm (1.83 mm); EL 2.93–3.50 mm (3.18 mm). Female (n = 2): TL 4.03 mm & 4.25 mm; PW 1.20 mm & 1.25 mm; PL 0.65 mm; EW 1.64 mm & 1.89 mm; EL 3.45 mm & 3.70 mm.

Variation. One male from northern Thailand has evenly black elytra.

Etymology. The species name refers to the yellowish sutural stripe present in females.

Distribution. Indochina: Laos, Myanmar, Thailand.

Subgenus *Oreocyphon* Klausnitzer, 2009, stat. nov.

Oreocyphon Klausnitzer, 2009: 81 (subgenus of *Cyphon*).

Type species. *Cyphon honorus* Klausnitzer, 1980.

Diagnosis. Body oval (Figs 7–9, 11–13), coloration yellowish-brown to black, dorsum often with colour pattern, very variable in some species; segment III of labial palpi arising from terminal part of segment II (Fig. 26); mandibles triangular, with short and wide apical portion (Fig. 24); Females with one apical excitator close to the elytral suture (Figs 9, 10, 13). Distal portion of bursella with four oval structures covered with minute setae (Figs 84, 85, 99); proximal bursellar sclerite absent; proctiger membranous, slightly sclerotized (Fig. 102); sternite VII (♀) with a membranous flap (Figs 32, 33, 96, 97). Concave groove on tergite VII (♀) well developed (Figs 34, 98).

Description. Body small, oval, sides rounded, covered with semi-erect setae that are easily broken. Coloration of dorsum variable, from pale yellow to entirely black, often with contrasting dorsal pattern.

Head small, labrum transverse, with straight anterior edge, slightly wider than clypeus, which has subtly rounded anterior margin. Eyes relatively small, bottom edge of eye meeting genal ridge; antennomeres II and III ca. 1/2 length of antennomere I, which is as long as antennomere IV, antennomere II globular; segment 3 of labial palpi arising from end of segment 2; galea with two rows of regularly arranged setae; mandibles triangular, stout, with short apical portion, inner edge without teeth.

Pronotum small, about 60 % of maximum width of elytra, about 2.2–2.9 times as wide as long, anterior angles subtly projecting forward, posterior angles almost right-angled, sides rounded, basal margin bisinuate, with complete margination. Elytra without raised longitudinal carinae, sides rounded, punctures stronger than on pronotum, epipleura wide in basal portion, narrowing in the middle of its length. Pronotal process well developed, tear-shaped,

setose; mesoventral notch for reception of prosternal process well developed; mesoventral process relatively short, wide, apex distinctly bilobed; metaventral discrimen reaching 3/4 length of the metaventricle.

Male tergite VIII broad, apical portion well sclerotized, covered with sparse setae, apodemes short; tergite IX membranous with weakly sclerotized plate and relatively long apodemes; sternite IX trapezoidal, with setae on apical portion. Tegmen small, weakly sclerotized, U-shaped with long lateral rods. Parameroids of penis narrow or widening apically, trigonium narrowly triangular, pointed apically, to narrow and parallel-sided, basal margin of pala shallowly to deeply excised.

Female with distinct transversely oval excitators in apical portion of elytra. Sternite VII with membranous flap; tergite VII with distinct groove; ovipositor long, coxites narrow, membranous, styli short, apical; proctigers membranous, proximal bursellar sclerite absent, distal portion of bursella with 4 sclerotized oval structures covered with setae.

Key to species

The present key enables the identification of males, females are only known for two species.

1. Penis shallowly concave at basal margin (Figs 77, 90, 95); distributed in Indochina. .. 2
 - Penis deeply concave at basal margin (Fig. 83); distributed in the Himalayas. 4
2. Apex of trigonium pointed conically (Figs 77, 78). Pronotum, scutellum and elytra completely black (Fig. 7). ***D. brancuccii* sp. nov.**
 - Apex of trigonium concave (Figs 90, 95). Pronotum, scutellum, and sometimes also elytral pattern yellowish-orange (Figs 11–12). 3
3. Punctuation of elytra very dense, punctures separated by ca. 0.3 diameter; humeral and apical part of elytra yellowish-orange (Fig. 11); trigonium subtriangular, sides converging apically (Fig. 90). ***D. niisatoi* sp. nov.**
 - Punctuation of elytra sparser, punctures separated by ca. 0.5 diameter; elytra black without color pattern (Fig. 12); trigonium with subparallel margins (Fig. 95) ***D. thailandicus* sp. nov.**
4. Pronotum and elytra evenly dark brown (Fig. 13). ***D. umbratilis*** (Klausnitzer, 1976)
 - Pronotum yellowish-orange, very rarely dark brown; elytra black with yellowish-orange markings on humeral portions (Figs 8–9). 6
5. Apex of trigonium very narrow, not excised; sclerotization of apical portion not distinctly different from basal portion of trigonium. Anterior pronotal margin extended slightly forward. Elytra with narrow yellowish-brown stripe around humeri. ***D. antictestaceus*** (Klausnitzer, 1980)
 - Apex of trigonium relatively broad, distinctly excised; apical portion (L 0.06) distinctly more sclerotized than basal portion. Anterior pronotal margin almost straight. Elytra with humeri and apex extensively yellowish-brown or with only narrow yellowish-brown marks around humeri (Figs 8–9). ***D. honorus*** (Klausnitzer, 1980)

***Dermestocyphon (Oreocyphon) anticetestaceus* (Klausnitzer, 1976), comb. nov.**

Prionocyphon anticetestaceus Klausnitzer, 1976: 219.

Cyphon (Oreocyphon) anticetestaceus: KLAUSNITZER (2008: 87).

Habitus and genitalia photographs: KLAUSNITZER (2008).

Distribution. Bhutan.

***Dermestocyphon (Oreocyphon) brancuccii* sp. nov.**

(Figs 7, 74–78)

Type material. HOLOTYPE: ♂ (CKD, to be deposited in Deutsches Entomologisches Institut, Müncheberg), “Vietnam, N; 55 km NNW Hanoi, Tam Dao vill. env., 800–900 m NN, 11.–14.08.1998, leg. A. Napolov”.

Diagnosis. This species is similar to *D. umbratilis* known from Nepal and *D. niisatoi* sp. nov. It can be distinguished on the basis of the morphology of the aedeagus, which has a shallowly concave basal margin and a conically pointed trigonium.

Description. Male. Body oval, slightly convex dorsally, strongly shining, closely covered with easily removable setae throughout. Coloration of body completely black; mouthparts, antennae, middle and hind tibiae and tarsi yellowish-orange, all femora somewhat darker.

Head moderate in size, finely punctate, slightly convex dorsally; distance between eyes about 2.0 times as long as maximum diameter of eye. Eyes moderate in size, slightly prominent. Pronotum transverse, strongly depressed in lateral parts, finely punctate; anterior margin almost straight; anterolateral angles obtuse, slightly projecting anteriorly; lateral and posterior margins almost straight; posterolateral angles about 90°; PW/PL 2.27. Scutellum small, equilateral-triangular, finely punctate. Elytra oval, widest at middle, closely punctate, gently arcuate at lateral margins; shoulder parts slightly elevated; EL/EW 1.29; EL/PL 4.44; EW/PW 1.51; TL/EW 1.58. Legs relatively short.

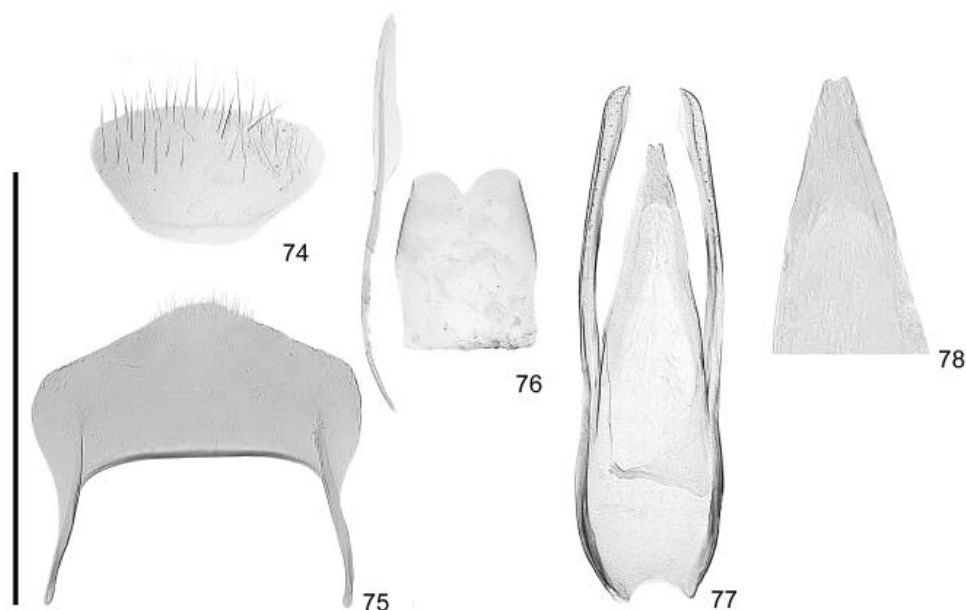
Caudal margin of sternite VII arcuate, somewhat pointed in middle (L 0.89 mm, W 0.30 mm). Sternite IX (L 0.14 mm, W 0.25 mm) moderately sclerotized, semicircular, bearing long setae and short spines in apical portion; tergite VIII moderately sclerotized, transversely trapezoidal (plate W 0.37 mm, L 0.18 mm), bearing short spines at mesal portion of posterior margin, this part is more curved, bearing short setae in posterolateral portions, with a pair of short apodemes (L 0.25 mm); tergite IX slightly sclerotized, with a pair of long apodemes. Tegmen short, slightly sclerotized; parameres short, with broad rounded apices (L 0.16 mm; W 0.20 mm); lateral projections long (L 0.46 mm), pointed at apices. Penis moderately sclerotized (L 0.53 mm, W 0.14 mm), widest at basal 1/4; pala oval, shallowly concave at basal margin; parameroids long, slender, closely punctate; trigonium short, triangular, apex carved, covered with very short microtrichia, partly arranged in rows.

Female unknown.

Measurements. Male (n = 1): TL 2.61 mm; PW 1.09 mm; PL 0.48 mm; EW 1.65 mm; EL 2.13 mm.

Etymology. This species is named after the late Coleoptera curator in Naturhistorisches Museum Basel, Dr. Michel Brancucci (1950–2012), an expert on water beetles, who had great merits for the study of Coleoptera from Southeast Asia.

Distribution. Vietnam.



Figs 74–78. *Dermestocyphon (Oreocyphon) brancuccii* sp. nov., holotype, male: 74 – sternite IX; 75 – tergite VIII; 76 – tegmen with lateral projection; 77 – penis; 78 – trigonium, close-up. Scale bar = 0.5 mm.

***Dermestocyphon (Oreocyphon) honorus* (Klausnitzer, 1980), comb. nov.**

(Figs 8–10, 32–34, 79–85)

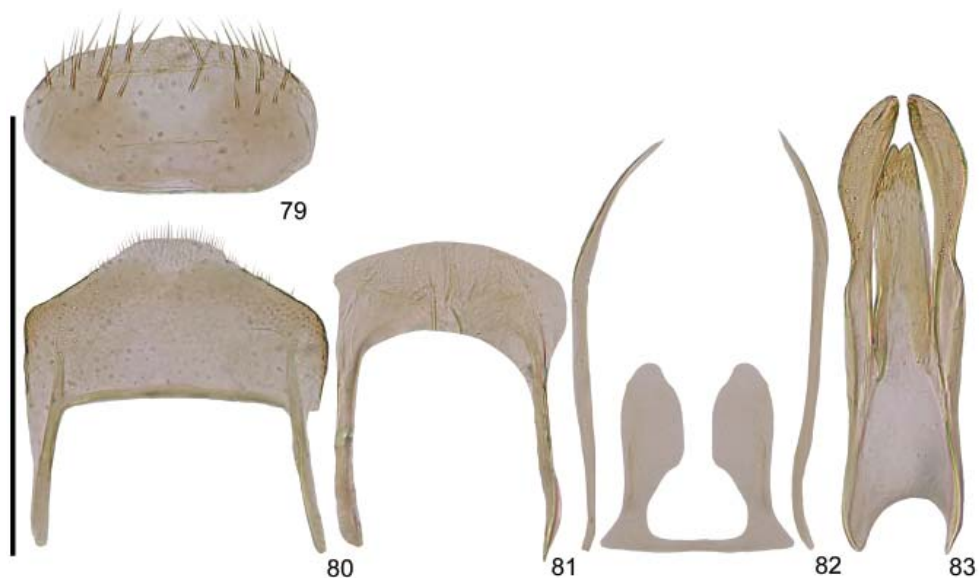
Cyphon honorus Klausnitzer, 1980: 205.

Cyphon (Oreocyphon) honorus: KLAUSNITZER (2008: 87).

Habitus and genitalia photographs: KLAUSNITZER (2008).

Material examined. **INDIA, SIKKIM:** (NMB, CKD), 2 ♂♂ “Jadung, 800 m, 07.07.1985, leg. Ch. J. Rai”; 1 ♂, “Khyonthang, 1800 m, 25.04.1985, leg. Ch. J. Rai”; 1 ♂, “Inchay, 2000 m, 04.11.–07.11.1984, leg. Ch. J. Rai”; 1 ♂, “Morung, 1000 m, 30.04.1985, leg. Ch. J. Rai”; 1 ♀ (BMNH), “Sikkim: Singhik, 3,500ft. 23.iv.1924., Maj.R.W.G.Hingston”, “Everest Exp., Brit. Mus., 1924–386”. **WEST BENGAL:** (NMB, NME, CKD), 1 ♂, “Kalimpong, Chibo, 900 m, 27.04.1987, leg. Ch. J. Rai”; 1 ♂, “Kalimpong, Chibo, Busty, 1100 m, 03.11.1985, leg. Ch. J. Rai”; 2 ♂♂, “Kalimpong, Nunsung, 700 m, 07.05.1987, leg. Ch. J. Rai”; 1 ♂, “Kalimpong, Khangaybung, 1400 m, 05.05.1987, leg. Ch. J. Rai”; 1 ♂, “Kalimpong, Alghera, 1182 m, 07.04.1984, leg. Ch. J. Rai”; 1 ♂, “Kalimpong, 06.1984, leg. Ch. J. Rai”; 1 ♂, “Kalimpong, Dumra Busty, 1000 m, 29.03.1991, leg. N. Dangal”; 1 ♂, “Kalimpong, Khani-Busty, 23.04.1991, leg. N. Dangal”; 1 ♂, “Nambung, 1100 m, 08.05.1986, leg. Ch. J. Rai”; 4 ♂♂, “Rinkingpong, 2000 m, 22.04.1986, leg. Ch. J. Rai”; 1 ♂, “Suntuk, 900 m, 14.05.1986, leg. Ch. J. Rai”; 1 ♂, “Gumbha, 2500 m, 20.05.1986, leg. Ch. J. Rai”; 1 ♂, “Yok Forest, 2000 m, 06.05.1986, leg. Ch. J. Rai”; 1 ♂, “Jombuke, 04.1985, leg. Ch. J. Rai”. **UTTARAKHAND:** 1 ♀ (BMNH), “W. Almora, Kumaon, India. H.G.C.”, “H.G. Champion Coll., B.M. 1953-156”; 2 ♂♂ (DBET), “N-INDIA, Uttaranchal state, 20 km NE Rishikesh, Ganga river vall., KAUDIYALA env., ca 500 m, 25.–27.vii.2003, Z. Kejval & M. Tryzna lgt.”. **NEPAL:** 1 ♂ (BMNH), “TAPLEJUNG DISTR., Sang, c 6200’”, “Yellow blooms of cultivated Compositae, 16–29.x.1961”, “BRIT. MUS. East Nepal Exp., 1961-62, R.L. Coe Coll., B.M. 1962-177”.

Description of female. Elytra with a pair of elongate, oblique depressions (L 0.15 mm) near apex, with tuft of hairs (Fig. 9, 10). Caudal margin of sternite VII relatively straight, with a



Figs 79–83. *Dermestocyphon (Oreocyphon) honorus* (Klausnitzer, 1980); male genitalia: 79 – sternite IX; 80 – tergite VIII; 81 – tergite IX; 82 – tegmen with lateral projections; 83 – penis. Scale bar = 0.5 mm.



Figs 84–85. *Dermestocyphon (Oreocyphon) honorus* (Klausnitzer, 1980), female genitalia: 84 – genital tract; 85 – bursellar sclerite.

trilobate structure. Tergite VII (L 0.52 mm, W 0.67 mm) with a narrow, concave structure at mesal portion of apical margin. Tergite VIII with a rectangular plate (L 0.40 mm, W 0.33 mm) with fine hairs at margin and long apodemes (L 0.98 mm). Sternite VIII (L 0.58 mm, W 0.32 mm), with long plate and two groups of fine hairs at margin. Ovipositor relatively long; lateral processes elongate, with two tufts of setae; coxite (L 0.30 mm) narrow (Fig. 85). Bursellar sclerites consisting of four similar oval sclerites (L 0.17 mm, W 0.09 mm) (Fig. 85); central portion serrate; outer margin with dense hair-like structure (Fig. 84).

Note on variability. A single female from India (Almora) (Fig. 9), has a blackish pronotum and dark brown elytra with large yellowish humeral maculae. This type of coloration has not been reported for this species.

Distribution. Nepal, India.

***Dermestocyphon (Oreocyphon) niisatoi* sp. nov.**

(Figs 11, 24–26, 29, 86–90)

Type material. HOLOTYPE: ♂ (EUM), “Phu Pan (Mt.) alt. 1,500–1,800m N20°11’/E104°01’ Houaphan Prov. North eastern Laos 25. IV – 5. V. 2004”, genit. s. no. HY 1061. PARATYPES: 1 ♂ (DBET), “LAOS, Hua Phan prov., 2004, 20°13’N 103°59’E, 6–18 V, Ban Saluei, Phu Phan Mt. env., J. Bezděk leg., 1300–2000m”; 1 ♂ (NMB), “LAOS-NE, Hua Phan pr., ~20°12’N, 104°01’E, PHU PHAN Mt., 1500–1900m, 17.v.–3.vi.2007, Vit Kubáň leg.”; “NHMB Basel, expedition to Laos 2007”; 2 ♂♂ (NMB, CKD), “LAOS-NE, Hua Phan pr., 20°13’09–19”N, 103°59’54”E – 104°00’03”E, 1480–1550m, PHU PHAN Mt., 1.–16.vi.2009, Zdeněk Kraus leg.”; “NHMB Basel, NMPC Prague, expedition to Laos 2009”.

Diagnosis. Similar to *D. honorus* in habitus and morphology of male genitalia, differs from the latter in the following characters: 1) basal margin of penis shallowly concave (deeply concave in *D. honorus*); 2) parameroids moderately wide in apical portion (very wide in *D. honorus*); 3) strong punctation of elytra, punctures separated by ca. 0.3 diameter (in *D. honorus* separated by ca. 0.5 diameter).

Description. Male. Body oval, slightly convex dorsally, strongly shining, closely covered with easily removable setae throughout. Coloration of body black; head, mouthparts, antennae, pronotum, scutellum, humeral and apical part of elytra, forelegs, middle and hind tibiae and tarsi yellowish-orange.

Head moderate in size, finely punctate, slightly convex dorsally; distance between eyes about 1.9 times as long as maximum diameter of eye. Eyes moderate in size, slightly prominent. Pronotum transverse, strongly depressed in lateral parts, finely punctate; anterior margin almost straight; anterolateral angles obtuse, slightly projecting anteriorly; lateral and posterior margins gently arcuate; posterolateral angles about 90°; PW/PL 2.26–2.88 (2.51). Scutellum small, equilateral-triangular, finely punctate. Elytra oval, widest at middle, closely punctate, gently arcuate at lateral margins; shoulder parts slightly elevated; EL/EW 1.26–1.33 (1.29); EL/PL 5.19–6.38 (5.67); EW/PW 1.73–1.81 (1.76); TL/EW 1.48–1.58 (1.52). Legs relatively short.

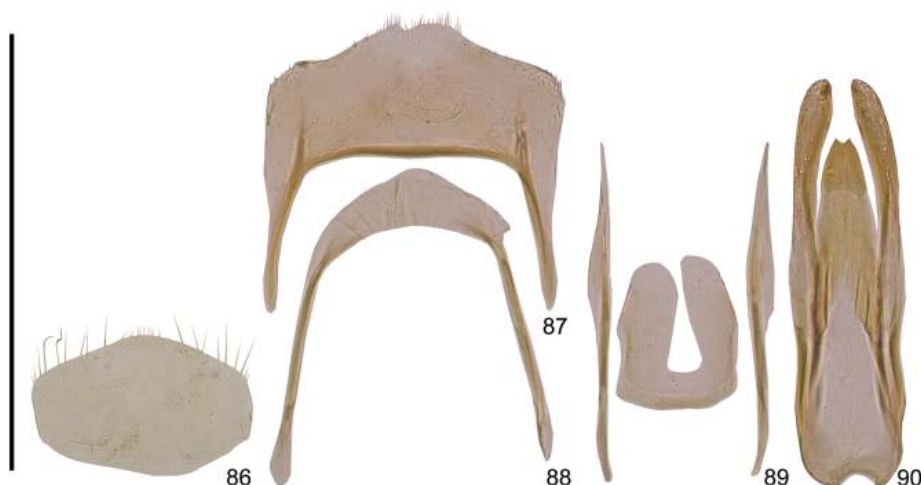
Caudal margin of sternite VII arcuate. Sternite IX (L 0.18 mm, W 0.25 mm) moderately sclerotized, semicircular, bearing long setae and short spines in apical portion; tergite VIII (L 0.34 mm, W 0.35 mm) moderately sclerotized, transversely trapezoidal, bearing short spines at mesal portion of posterior margin, and short setae in posterolateral portions, with a pair of short apodemes; tergite IX (L 0.33 mm, W 0.22 mm) slightly sclerotized, with a pair of long apodemes. Tegmen short (L 0.18 mm, W 0.16 mm), slightly sclerotized; parameres short, obtuse at apices; lateral projections long (L 0.34 mm), pointed at apices. Penis (L 0.47 mm, W 0.12 mm) moderately sclerotized, widest at basal 1/4; pala oval, shallowly concave at basal margin; parameroids long, slender, closely punctate; trigonium short, triangular, shallowly concave at apex.

Female. Unknown.

Measurements. Male (n = 3): TL 2.95–3.28 mm (3.15 mm); PW 1.15–1.20 mm (1.18 mm); PL 0.40–0.53 mm (0.48 mm); EW 2.00–2.17 mm (2.08 mm); EL 2.55–2.75 mm (2.68 mm).

Etymology. This species is named after Dr. Tatsuya Niisato, Bioindicator Co., Ltd., Tokyo, who gave the second author a specimen of this species.

Distribution. Laos.



Figs 86–90. *Dermestocyphon (Oreocyphon) niisatoi* sp. nov., holotype, male genitalia: 86 – sternite IX; 87 – tergite VIII; 88 – tergite IX; 89 – tegmen with lateral projections; 90 – penis. Scale bar = 0.5 mm.

***Dermestocyphon (Oreocyphon) thailandicus* sp. nov.**

(Figs 12, 91–95)

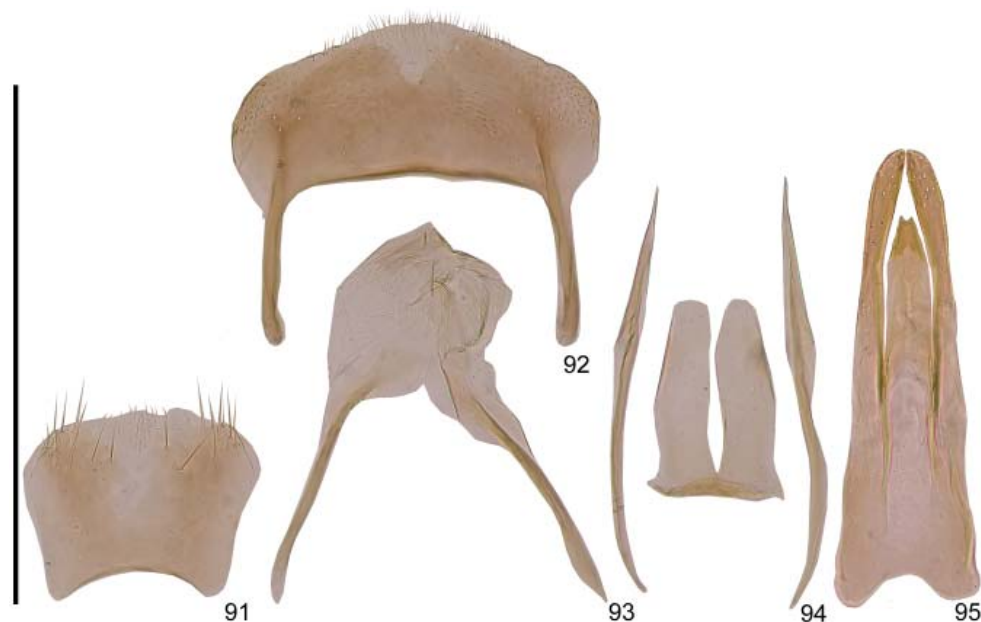
Type material. HOLOTYPE: ♂ (NMB), “THAI 2-3/6 1995, 18.49 N 98.54E, DOI PUI 1400 m, Vit Kubáň leg.”.

Diagnosis. This species is similar to *D. niisatoi* sp. nov., but the elytra are sparsely punctate – distance between punctures ca. 0.5 of their diameter (in *D. niisatoi* sp. nov. 0.3 of their diameter) and it differs in the morphology of penis (sides of trigonium subparallel in *D. thailandicus* and subtriangular in *D. niisatoi* sp. nov.).

Description. Male. Body oval, slightly convex dorsally, strongly shining, closely covered with easily removable setae throughout. Head and pronotum orange, elytra and scutellum black; mouthparts and antennae yellowish, protibiae yellowish brown, middle and hind tibiae brownish, femora somewhat darker.

Head moderate in size, finely punctate, slightly convex dorsally; distance between eyes about 2.0 times as long as maximum diameter of eye. Eyes moderate in size, slightly prominent. Pronotum transverse, somewhat depressed in lateral parts, finely punctate (punctures similar to those on head); anterior margin almost straight; anterolateral angles obtuse, slightly projecting anteriorly; lateral and posterior margins almost straight; posterolateral angles about 90°; PW/PL 2.19. Scutellum small, equilateral-triangular, finely punctate. Elytra oval, widest at middle, closely punctate (punctures separated by ca. 0.7–1.0 of their diameter), gently arcuate at lateral margins; shoulder parts slightly elevated; EL/EW 1.27; EL/PL 4.81; EW/PW 1.73; TL/EW 1.53. Legs relatively short.

Caudal margin of sternite VII arcuate. Sternite IX (L 0.19 mm, W 0.25 mm) moderately sclerotized, square, with concave basal portion, bearing long setae in apical portion; tergite VIII (L 0.31 mm, W 0.35 mm) moderately sclerotized, transversely trapezoidal, bearing



Figs 91–95. *Dermestocyphon (Oreocyphon) thailandicus* sp. nov., holotype, male: 91 – sternite IX; 92 – tergite VIII; 93 – tergite IX; 94 – tegmen with lateral projections; 95 – penis. Scale bar = 0.5 mm.

short setae at mesal portion of posterior margin, this part is more curved, and short setae in posterolateral portions, with a pair of short apodemes; tergite IX (L 0.37 mm, W 0.28 mm) slightly sclerotized, with a pair of long apodemes. Tegmen (L 0.19 mm, W 0.14 mm) short, slightly sclerotized; parameres short, with broad rounded apices; lateral projections long (L 0.42 mm), pointed at apices. Penis (L 0.44 mm, W 0.15 mm) moderately sclerotized, widest at basal portion; pala oval, shallowly concave at basal margin; parameroids long, slender, slightly widening apically, closely punctate; trigonium relatively long, subparallel-sided, apex emarginated, covered with few very short microtrichia.

Female. Unknown.

Measurements. Male (n = 1): TL 3.08 mm; PW 1.16 mm; PL 0.53 mm; EW 2.01 mm; EL 2.55 mm.

Etymology. This species is named after its terra typica.

Distribution. Thailand.

***Dermestocyphon (Oreocyphon) umbratilis* (Klausnitzer, 1976), comb. nov.**

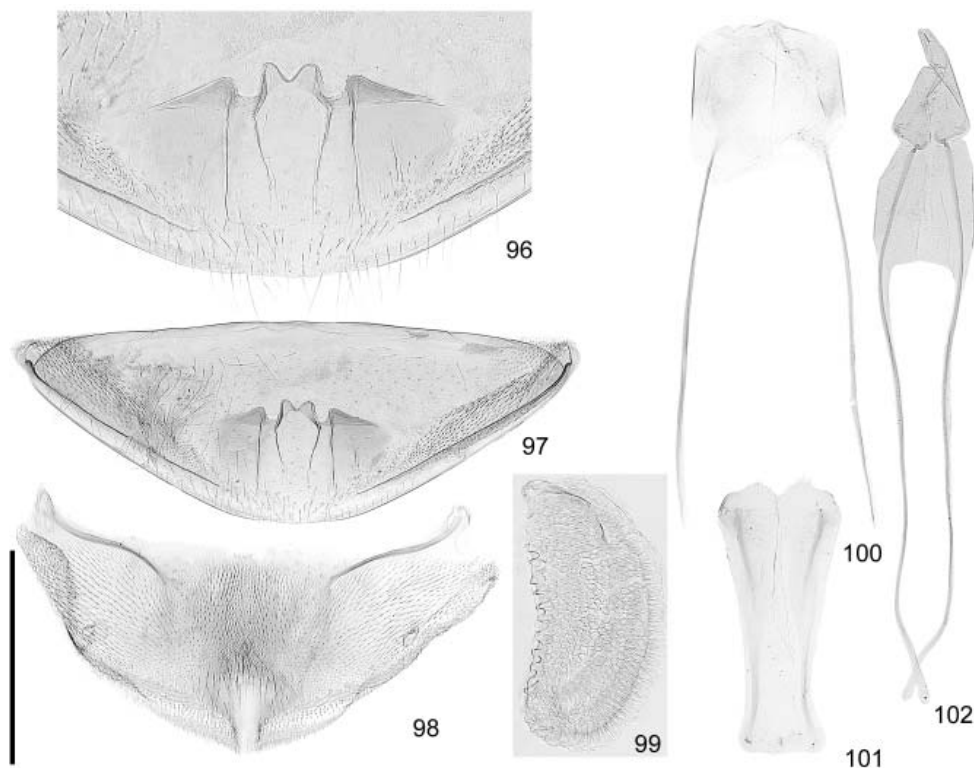
(Figs 13, 96–102)

Prionocyphon umbratilis Klausnitzer, 1976: 218.

Cyphon (Oreocyphon) umbratilis: KLAUSNITZER (2008: 87).

Habitus and genitalia photographs: KLAUSNITZER (2008).

Material examined. **INDIA:** WEST BENGAL: 1 ♀ (BMNH), “INDIA: Darjeeling D., Algara, 1400 m, 04.04.1984, leg. Ch. J. Rai”; **NEPAL:** 1 ♂ (NMS), “Bhojpur Distr., Phedi to Dilkharka, 1500–1900 m, 26.05.1997, leg. W. Schawaller”.



Figs. 96–102. *Dermestocyphon* (*Oreocyphon*) *umbratilis* (Klausnitzer, 1976), female: 96 – membranous flap on sternite VII; 97 – sternite VII; 98 – tergite VII; 99 – sclerite of bursella; 100 – tergite VIII; 101 – sternite VIII; 102 – ovipositor. Scale bar = 0.5 mm (97, 98, 100–102).

Description of female. Elytra with a pair of transverse concavities (L 0.15 mm) near apex, with thick tuft of hairs (Fig. 13). Caudal margin of sternite VII relatively straight, with a trilobate structure (Figs 96, 97). Tergite VII (L 0.45 mm, W 0.82 mm) with elongate concave area in mesal portion (Fig. 98). Tergite VIII with a nearly square plate (L 0.34 mm, W 0.37 mm) with fine hairs at the margin, and long apodemes (L 0.94 mm) (Fig. 100). Sternite VIII (L 0.56 mm, W 0.25 mm) in a form of long plate with two groups of fine hairs at the margin (Fig. 101). Ovipositor relatively long; stylus missing (artefact); coxite (L 0.30 mm) narrow (Fig. 102). Bursella with four similar bean-like sclerites (L 0.20 mm, W 0.09 mm); inner portion microreticulated, outer margin microsetose (Fig. 99).

Measurements. Female (n = 1): TL 3.68 mm; PW 1.38 mm; PL 0.60 mm; EW 1.65 mm; EL 3.08 mm.

Distribution. India, Bhutan, Nepal. Not recorded from India before.

Subgenus *Himacyphon* subgen. nov.

Type species. *Cyphon optatus* Klausnitzer, 1980, by present designation.

Diagnosis. Body elongate oval (Figs 14–16), coloration yellowish-brown to black; segment III of labial palpi arising from the apex of segment II (Fig. 23); mandibles triangular, with narrow and pointed apical portion (Fig. 21); Females always with adscutellar excitators (Figs 15–17), in some species also with apical excitators present. Basal portion of elytra (♀) with microreticulated, opaque area, similar areas are present near lateral and apical margins of elytra in some species (Figs 111, 115). Bursella with tricornate proximal sclerite (Figs 110, 117, 118); proctiger moderately sclerotized (Fig 109); sternite VII (♀) with a membranous flap (Figs 35, 36, 116). Groove on tergite VII (♀) indistinct (Figs 37, 116).

Description. Body moderately small, elongate oval, sides rounded, covered with semi-erect setae that are easily broken. Coloration of dorsum variable, from pale yellow to entirely black.

Head small, labrum transverse, with straight anterior edge, slightly wider than clypeus, which has subtly rounded anterior margin. Eyes relatively small, distance between bottom edge of eye and genal ridge ca. 1/10 diameter of eye; antennomeres II and III ca. 2/3 length of antennomere I, antennomere IV as long as antennomeres I and II combined; segment III of labial palpi arising from end of segment 2; galea with a row of regularly arranged setae and a tuft of longer ones, which are irregularly arranged; mandibles triangular, stout, with narrow and pointed apical portion, inner edge without teeth.

Pronotum small, about 60–65 % of maximum width of elytra, about 2.2 times as wide as long, anterior angles subtly projecting forward, posterior angles almost right-angled, sides subtly rounded, basal margin bisinuate, with complete margination. Elytra without raised longitudinal carinae, sides rounded, punctures stronger than on pronotum, epipleura relatively wide, narrowing in the middle of their length. Pronotal process small, narrow, setose; mesoventral notch for reception of prosternal process present, small; mesoventral process long, narrow, apex narrow but bifid; metaventral discrimen reaching 3/4 length of the metaventricle.

Male tergite VIII broad, apical portion well sclerotized, covered with sparse setae, apodemes short; tergite IX membranous with weakly sclerotized plate and relatively long apodemes; sternite IX trapezoidal, with setae on apical portion. Tegmen small, weakly sclerotized, U-shaped with long lateral rods. Penis with narrow parameroids, trigonium triangular, pointed apically, basal margin of pala shallowly excised.

Female with distinct excitators on elytra, which are present either only in adscutellar portion in a form of depressions with fungiform outgrowths or also in apical portion and densely microreticulated patches located near basal and lateral portions of elytra. Sternite VII with membranous flap; tergite VII with indistinct groove; ovipositor long, coxites narrow, membranous, styli short, apical; proctiger moderately sclerotized, proximal bursellar sclerite with sharp carinae on ventral portion, distal portion of bursella without sclerotized structures.

Etymology. Name refers to the area inhabited by members of the subgenus – Himalaya Mountains.

Key to species

1. Elytra with adscutellar excitators only, scutellum in ♀ flat. *D. optatus* (Klausnitzer, 1980)
- Elytra with adscutellar and apical excitators, scutellum in ♀ very convex. *D. (Himacyphon) sp.* (known from a single female specimen)

***Dermestocyphon (Himacyphon) optatus* (Klausnitzer, 1980), comb. nov.**

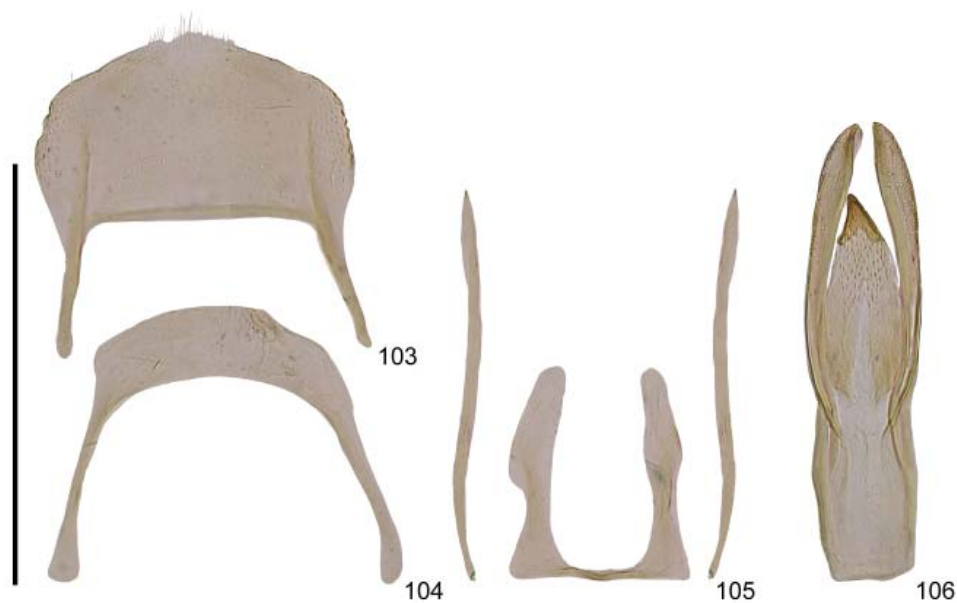
(Figs 14–15, 21–23, 28, 35–37, 103–110)

Cyphon optatus KLAUSNITZER, 1980: 203.*Cyphon (Oreocyphon) optatus*: KLAUSNITZER (2008: 87).

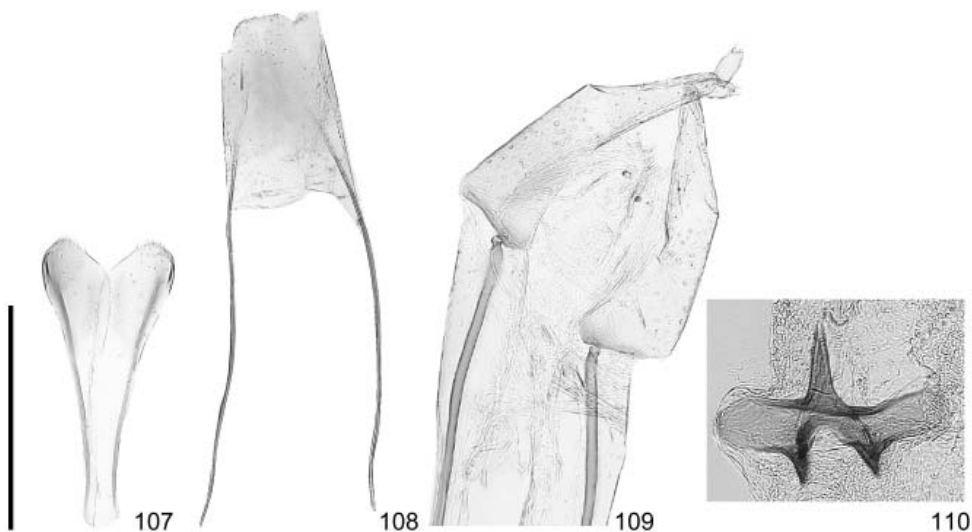
Material examined. **NEPAL:** 7 ♂♂ (KUMJ, EUM, NMW), “(E. NEPAL) Basantapur (2300m) 27°07’N, 87°24’E May 4, 1972 Malaise Trap (2) Kyushu Univ. Col.”; 4 ♂♂, ditto, but May 8, 1972; 3 ♂♂, ditto, but May 7, 1972; 2 ♂♂, 1 ♀, ditto, but May 9, 1972; 21 ♂♂, ditto, but May 6, 1972, 1 ♂ genitalia on slide no. HY 786; 4 ♂♂, ditto, but May 5, 1972; 1 ♂, ditto, but May 2, 1972; 3 ♂♂, ditto, but May 3, 1972, 1 ♂ genitalia on slide no. HY 748; 1 ♂ (CKD), “Karnali/Humla, 6 km NW Simikot, Dandaphaya (Dharapuri), 30°00’09” N, 81°46’08” E, 2300 m, 18.06.2001, leg. A. Weigel”; 1 ♂ (CKD), “Koshi, Mutidhunga-Chitre, 2200–2400 m, 28.05.1985, leg. M. Brancucci”; 1 ♂ (CKD), “Koshi, Basantapur, 2300 m, 30.05.–02.06.1985, leg. M. Brancucci”; 1 ♂ (CKD), “Langtang, Rain Forest, 2300–2800 m, 05.–06.1990, leg. S. Bilý”; 1 ♂ (CKD), “Gandaki, Kopchepani, 1500–1700 m, 15.05.1984, leg. C. R. Rai”. 1 ♂ (ZMHB) “Nepal: Umg. Jalkini (15 km n. Kathmandu), 1700m, 7 IV 1991, Erber”. **INDIA:** **SIKKIM:** 3 ♂♂ (BMNH), “Sikkim: Singhik. / 3,500 ft. 23.iv.1924. / Maj. R.W.G. Hingston”, “Everest Exp. / Brit. Mus. / 1924-386.” **UTTARAKHAND:** (CKD), 4 ♂♂, “Ranikhet, leg. Ch. J. Rai”; 2 ♂♂, “Almora, leg. Ch. J. Rai”; 1 ♂, “Bhatkot, leg. Ch. J. Rai”; 1 ♂ (BMNH), “West Bhatkot, Kumaon, 4000’, May ’20, HGC.”, “H. G. Champion Coll., B.M. 1953-156”; 1 ♂ (BMNH), “W Almora Divu, Kumaon U. P., Apr, 1918, HGC.”, “H. G. Champion Coll., B. M. 1953-156”. **WEST BENGAL:** (NMB, NME, CKD), 4 ♂♂, “Suntuk, 900 m, 14.05.1986, leg. Ch. J. Rai”; 1 ♂, “Yok Forest, 2000 m, 06.05.1986, leg. Ch. J. Rai”; 1 ♂, “Shukubarry, 1000 m, 11.04.1986, leg. Ch. J. Rai”; 1 ♂, “Kurseong, Thingay, Bari, 800 m, 15.04.1991, leg. N. Danggal”; 2 ♂♂, “Kalimpong, Dumra Busty, 1000 m, 29.03.1991, leg. N. Danggal”; 2 ♀♀ (BMNH, CKD). **INDIA:** Darjeeling D., Shukubarry, 1000 m (KPG), 11.04.1986, leg. Ch. J. Rai.” **ARUNACHAL PRADESH:** 1 ♂ (CKD), “Dirang vicinity, 27°21’23” N, 92°13’16” E, 1550±150 m, 01.–09.06.2004, leg. L. Dembický”.

Description of female. Elytra with a pair of round depressions (diameter 0.10 mm) near scutellum, with fungiform outgrowth in middle (Fig. 15). Sternite VII triangular (L 0.42–0.43 mm; W 0.87–0.98 mm), caudal margin straight, with membranous flap (Figs 35, 36). Tergite VII (L 0.47–0.50 mm, W 0.55–0.57 mm) with concave structure at mesal portion of apical margin (Fig. 37). Tergite VIII with rectangular plate (L 0.30–0.32 mm, W 0.22–0.27 mm) with fine hairs at margin, and long apodemes (L 0.85–0.93 mm) (Fig. 108). Sternite VIII (L 0.55–0.58 mm, W 0.26–0.28 mm) with long diverging plate, distal margin rounded on both sides, with a group of fine hairs (Fig. 107). Ovipositor relatively long; proctiger membranous; lateral processes elongate, with two tufts of setae (Fig. 109); coxite (L 0.28–0.30 mm). Distal bursellar sclerites not discernible. Proximal bursellar sclerite (L 0.14–0.16 mm; W 0.20–0.21 mm) with one tooth at proximal margin (L 0.07 mm), and two teeth at distal margin with (L 0.03 mm) (Fig. 110).

Distribution. Nepal, India.



Figs 103–106. *Dermestocyphon* (*Himacyphon*) *optatus* (Klausnitzer, 1980), male: 103 – tergite VIII; 104 – tergite IX; 105 – tegmen with lateral projections; 106 – penis. Scale bar = 0.5 mm.



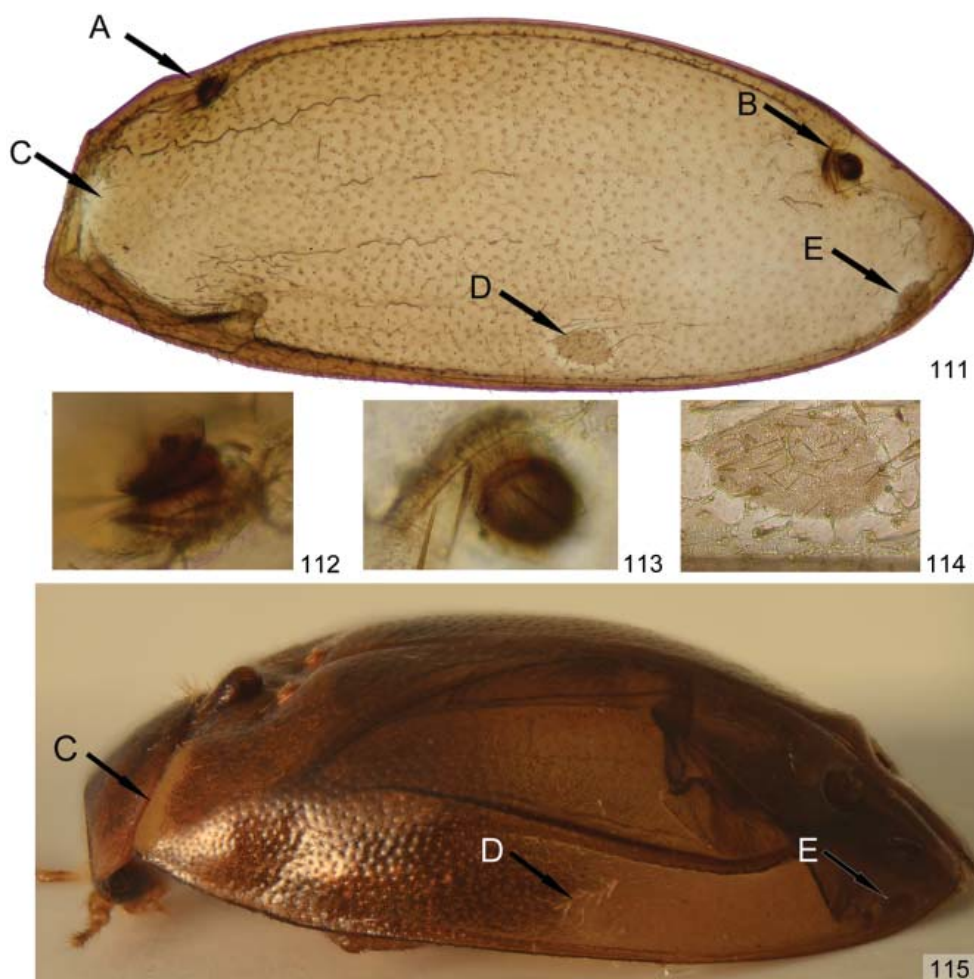
Figs 107–110. *Dermestocyphon* (*Himacyphon*) *optatus* (Klausnitzer, 1980), female: 107 – sternite VIII; 108 – tergite VIII; 109 – ovipositor; 110 – bursal sclerite. Scale bar = 0.5 mm (107–108).

Dermestocyphon (Himacyphon) sp.

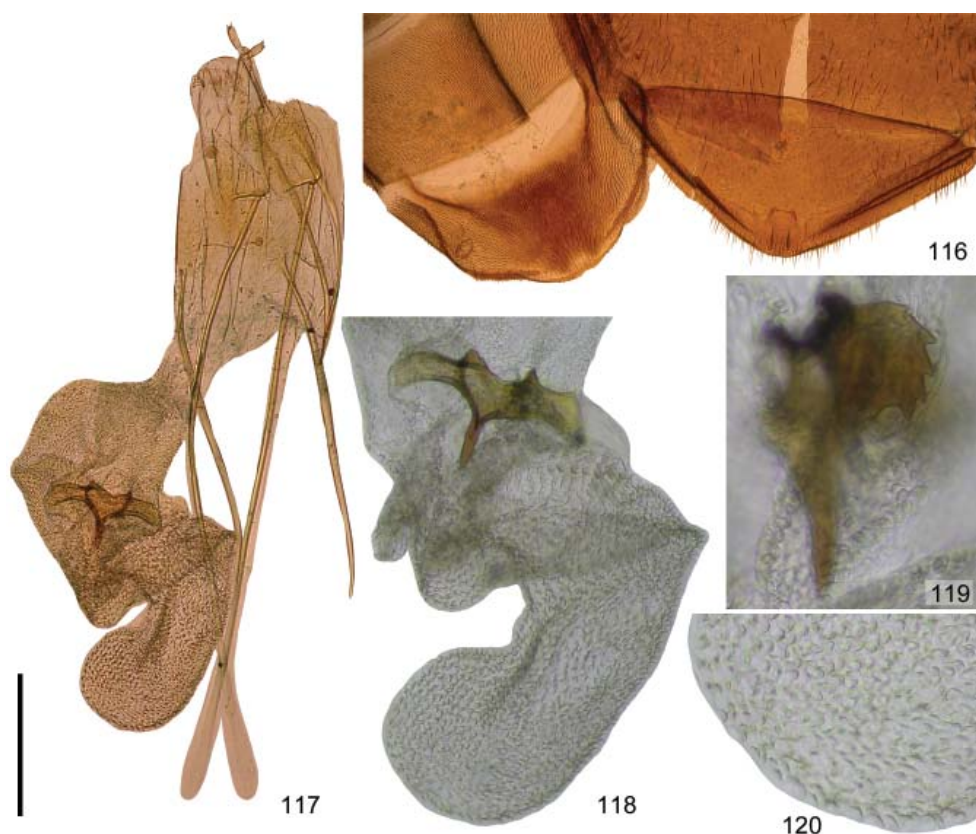
(Figs 16–17, 111–120)

Material examined. NEPAL: 1 ♀ (BMNH), “TAPLEJUNG DISTR: Dobhan, E bank of River Tamur. c.3500’”, “Mixed vegetation by stream in deep gully. i–ii.1962.”, “BRIT. MUS. East Nepal Exp. 1961–62. R.L. Coe Coll. B.M. 1962–177”.

Description of female. Body elongate (TL/EW 1.88), dark brown (Fig. 16). Antennomeres 1–3 and legs lighter, yellowish brown. Basal portion of elytra seeming yellowish, what is



Figs 111–115. *Dermestocyphon (Himacyphon) sp.*, female: 111 – left elytron, light microphotography: A, B – fungiform excitators, C, D, E – microreticulated patches; 112 – adscutellar excitator (A), close-up, light microphotography; 113 – apical excitator (B), close-up, light microphotography; 114 – lateral microreticulated patch (D), close-up, light microphotography; 115 – dorsolateral view.



Figs 116–120. *Dermestocyphon* (*Himacyphon*) sp., female: 116 – sternite and tergite VII; 117 – female genital tract; 118 – bursella with proximal bursellar sclerite; 119 – proximal bursellar sclerite, lateral view; 120 – bursella, close-up. Scale bar = 0.5 (117).

caused by the presence of peculiar excitator-like structures (Fig. 17, see below). Scutellum very convex, covered with dense punctures. Elytra with transverse depressed area behind scutellum, with a fungiform outgrowth (diameter 0.07 mm) in adsutural portion of each elytron. Apical portion of elytra with a transversely elevated area and a pair of round depressions (diameter ca. 0.20 mm), each with a fungiform outgrowth (diameter 0.09 mm) in its central portion. Three microsculptured areas are present on each elytron: in anterior portion of elytra (along basal margin, microsculpture is so dense that the surface of elytra is opaque and seems to be yellowish), near outer margin of lateral portion, and near outer margin of posterior portion (Figs 111–115). Sternite VII triangular (L 0.44 mm; W 0.93 mm), caudal margin straight, with membranous flap (Fig. 116). Tergite VII (L 0.52 mm, W 0.72 mm) with concave structure at mesal portion of apical margin. Tergite VIII with rectangular plate (L 0.28 mm, W 0.25 mm) with fine hairs at margin, and long apodemes (L 1.12 mm). Sternite VIII (L 0.62 mm,

W 0.23 mm) with long diverging plate, distal margin on both sides rounded, with a group of fine hairs. Ovipositor relatively long (Fig. 117); proctiger membranous; lateral processes elongate, with two tufts of setae; coxites (L 0.32 mm) membranous. Distal bursellar sclerites not discernible. Proximal bursellar sclerite (L 0.15 mm; W 0.26 mm) with long outgrowth at proximal margin (L 0.08 mm) and two sharp carinae covered with minute denticles on ventral portion (Figs 118–119).

Remark. We have carefully examined all available male specimens belonging to the subgenus *Himacyphon* in search of cryptic species corresponding to the above female. No significant morphological differences were noticed in the males examined and all of them are hence considered as belonging to *D. (H.) optatus*.

Discussion

Systematics. *Cyphon* is one of the largest genera of the family Scirtidae with over 300 species known from all over the world (YOSHITOMI 2005; KLAUSNITZER 2005a,b, 2009a). Two subgenera and several species-groups of *Cyphon* have been recognized (e.g. KLAUSNITZER 2005a,b, 2009a; NYHOLM 1972; RUTA 2009; YOSHITOMI 2005). According to the present study, *Dermestocyphon* is an independent genus and *Oreocyphon* is a subgenus of *Dermestocyphon*. Hence, there are currently no subgenera recognized within the genus *Cyphon*. Recent changes in the taxonomic status of several groups previously included in *Cyphon* are listed in the Table 1 (only major changes, like erecting new genera or reviews of neglected and poorly known taxa are included).

Table 1. Major changes in the taxonomic status of taxa originally included in *Cyphon* in the last 10 years

Group / subgenus of <i>Cyphon</i>	Current status	Remarks
<i>chlorizans</i> species group	<i>Ypsilonyphon</i> Klausnitzer, 2009	KLAUSNITZER (2009b)
<i>Dermestocyphon</i> Pic (subgenus)	<i>Dermestocyphon</i> Pic (genus)	present paper
<i>hashimotorum</i> species group	<i>Calvarium</i> Pic, 1918	RUTA (2010)
<i>japonicola</i> species group	<i>Herthania</i> Klausnitzer, 2006	KLAUSNITZER (2006)
<i>Oreocyphon</i> Klausnitzer (subgenus)	subgenus of <i>Dermestocyphon</i> Pic	present paper
several Afrotropical and Madagascan “ <i>Cyphon</i> ”	<i>Brachycyphon</i> Fairmaire, 1896	RUTA (2009)

Distribution. Distribution map based on KLAUSNITZER (2006, 2008) and the present study is shown in Fig. 121. Geographical ranges of the Himalayan species are overlapping, with two widely distributed species (*D. optatus* and *D. honorus*), and two with restricted ranges (*D. anticetestaceus* and *D. umbratilis*). None of the Himalayan species reaches Indochina. Indochinese species are widely distributed in China (Yunnan), Laos, Myanmar, Thailand, and Vietnam. Cumulative geographical ranges of the *Oreocyphon* are overlapping with the range of *Himacyphon* subgen. nov. (in the Himalayas) and cumulative ranges of the *Dermestocyphon* s. str. (in Indochina). All species occur at altitudes between 700 m and 2800 m, with only one exception – a single specimen of *D. suturalis* sp. nov. was found in Myanmar at 200 m. Occurrence at higher altitudes might have provided a barrier for dispersal across lowland areas of the Indian subcontinent and Indochina.

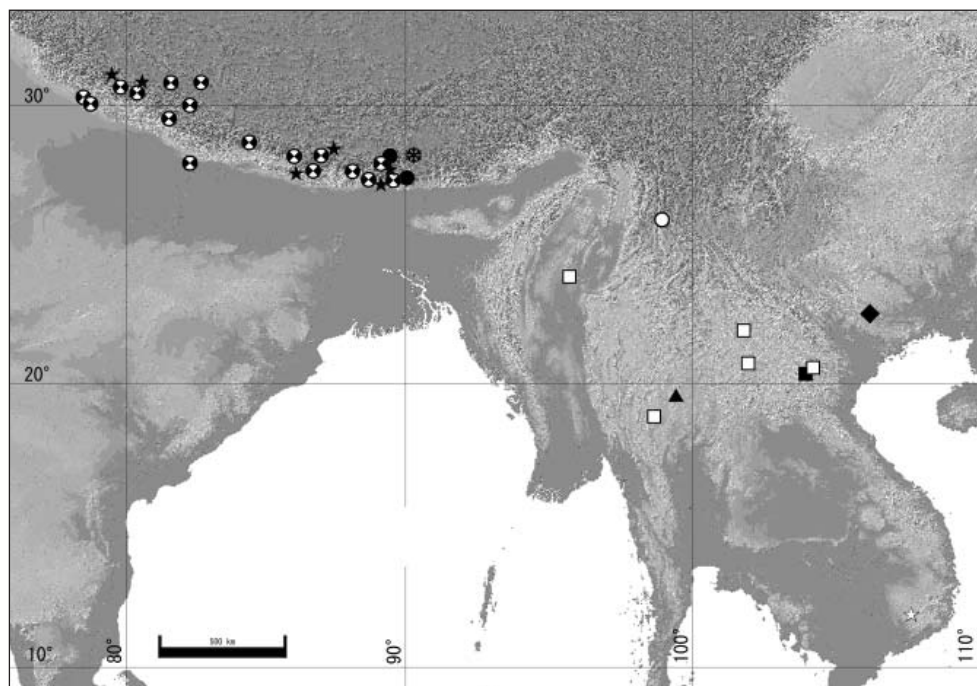


Fig. 121. Distribution map of *Dermestocyphon* spp.: black snowflake – *D. anticetaceus* (Klausnitzer, 1976); white star – *D. apiconcavus* sp. nov.; black rhomb – *D. brancuccii* sp. nov.; white circle – *D. dianti* (Pic, 1918); black star – *D. honorus* (Klausnitzer, 1980); black square – *D. niisatoi* sp. nov.; black & white circle – *D. optatus* (Klausnitzer, 1980); black triangle – *D. thailandicus* sp. nov.; black circle – *D. umbratilis* (Klausnitzer, 1976). Overlapping or inaccurately reported localities of *D. honorus* and *D. optatus* were omitted.

Acknowledgements

We wish to express our sincere gratitude to Maxwell Barclay (BMNH), Michel Brancucci (NMB), Thierry Deuve (MNHN), Jiří Hájek (NMPC), Matthias Hartmann (NME), Manfred A. Jäch (NMW), Bernd Jaeger (ZMHB), Malcolm Kerley (BMNH), Munetoshi Maruyama (KUMJ), Andreas Pütz, Wolfgang Schawaller (NMS), Azadeh Taghavian (MNHN), and Manfred Uhlig (ZMHB) for the loan of specimens. Jan Bezděk and Zbyněk Kejval are thanked for a gift of specimens used in the present revision, and Lutz Behne (SDEI) for some photographs (Figs 7, 13, and 15). The exceptional specimen of *Himacyphon* sp. was found by the first author in Swedish Museum of Natural History during a stay sponsored by SYNTHESYS grant (SE-TAF-2074) founded by a European Community – Research Infrastructure Action under the FP7 “Capacities” Specific Programme.

References

- FRIEDRICH F., BEUTEL R. G. 2006: The pterothoracic skeletomuscular system of Scirtoidea (Coleoptera: Polyphaga) and its implication for the relationships of the beetle suborders. *Journal of the Zoological Systematics*

- and *Evolutionary Research* **44**: 290–315.
- KLAUSNITZER B. 1976: Ergebnisse der Bhutan-Expedition 1972 des Naturhistorischen Museums in Basel, Coleoptera: Fam. Helodidae. *Deutsche Entomologische Zeitschrift, Neue Folge* **23**: 213–220.
- KLAUSNITZER B. 1980: Zur Kenntnis der Helodidae des Himalaja-Gebietes (Col.). *Entomologica Basiliensia* **5**: 195–214.
- KLAUSNITZER B. 2005a: Zwei neue Arten der Gattung Cyphon Paykull, 1799 aus Myanmar (Birma) (Col., Scirtidae) und Anmerkungen zur Cyphon coarctatus-Gruppe. *Entomologische Nachrichten und Berichte* **49**: 103–109.
- KLAUSNITZER B. 2005b: Eine neue Art der Cyphon variabilis-Gruppe aus Nepal (Coleoptera, Scirtidae). *Beiträge zur Entomologie* **55**: 299–304.
- KLAUSNITZER B. 2006: Beitrag zur Kenntnis der Scirtidae des Himalaja-Gebietes (Insecta: Coleoptera) mit Beschreibung von neuen Cyphon- und Hydrocyphon-Arten aus Nepal und Yunnan (China). Pp. 439–455. In: HARTMANN M. & J. WEIPERT (eds.): *Biodiversität & Naturlausstattung im Himalaya, Vol. 2*. Verein der Freunde und Förderer des Naturkundemuseums Erfurt e.V. Erfurt, 548 pp.
- KLAUSNITZER B. 2008: Zur Kenntnis einiger Cyphon-Arten aus dem Himalaja-Gebiet und Definition einer neuen Untergattung von Cyphon Paykull, 1799. *Entomologica Basiliensia et Collectionis Frey* **30**: 81–93.
- KLAUSNITZER B. 2009a: *Süßwasserfauna von Mitteleuropa. Band 20/17. Insecta: Coleoptera: Scirtidae. (Die Scirtidae der Westpaläarktis)*. Spektrum Akademischer Verlag, Heidelberg. 326 pp.
- KLAUSNITZER B. 2009b: Beschreibung einer neuen Gattung der Familie Scirtidae aus der Orientalischen Region (Coleoptera). *Beiträge zur Entomologie* **59**: 247–261.
- NAKANE T. 1963a: A list of Coleoptera from the Shiretoko Peninsula, Hokkaido, Japan (Insecta). *Scientific Reports of the Kyoto Prefectural University* **3** (5): 23–31.
- NAKANE T. 1963b: Helodidae. Pp. 139–140, pl. 70. In: NAKANE T., OHBAYASHI K., NOMURA S. & KUROSAWA Y. (eds.): *Iconographia Insectorum Japonicorum Colore naturali edita, vol. 2 Coleoptera*. 443 pp. (in Japanese).
- NYHOLM T. 1972: Die nordeuropäischen Arten der Gattung Cyphon Paykull. Taxonomie, Biologie, Ökologie und Verbreitung. *Entomologica Scandinavica, Supplementum* **3**: 1–100.
- NYHOLM T. 2002: Scirtes japonicus Kiesenwetter and its allies, with description of Scirtes ussuriensis n. sp. (Coleoptera, Scirtidae). *Entomologische Blätter* **98**: 49–60.
- PIC M. 1918: Nouveautés diverses. *Mélange Exotico-Entomologiques* **29**: 7–24.
- RUTA R. 2008: Contribution to the knowledge of Seychellois Scirtidae (Coleoptera: Scirtoidea). *Zootaxa* **1913**: 49–68.
- RUTA R. 2009: Brachycyphon Fairmaire, 1896, a neglected genus of Afrotropical Scirtidae (Coleoptera). *Annales Zoologici* (Warszawa) **59**: 621–628.
- RUTA R. 2010: Revision of the genus Calvarium Pic, 1918 (Coleoptera: Scirtidae) Part 1. Redescription of the genus and catalogue of described taxa. *Annales Zoologici* (Warszawa) **60**: 341–350.
- SASAGAWA K. 1985: The Japanese species of the genus Cyphon Paykull (Coleoptera: Helodidae). *Transactions of the Shikoku Entomological Society* **17**: 31–49.
- YOSHITOMI H. 1996: A new species of the genus Cyphon (Coleoptera, Scirtidae) from Japan. *Japanese Journal of Systematic Entomology* **2**: 97–100.
- YOSHITOMI H. 2005: Systematic revision of the family Scirtidae of Japan, with phylogeny, morphology and bionomics (Insecta: Coleoptera, Scirtoidea). *Japanese Journal of Systematic Entomology, Monographic series* **3**: 1–212.

