Koleopterologische Rundschau	73	85 – 136	Wien, Juni 2003

Revision of the East Palaearctic and Oriental species of *Philonthus* STEPHENS - Part 5. The *rotundicollis* and *sanguinolentus* species groups (Coleoptera: Staphylinidae, Staphylininae)

H. SCHILLHAMMER

Abstract

The *Philonthus rotundicollis* and *sanguinolentus* species groups are subject of part 5 of the Revision of the East Palaearctic and Oriental species of *Philonthus* STEPHENS, 1829. Nine new species are described: *P. turnai* (China), *P. schuhi* (India, Nepal, Myanmar, Thailand, Laos, Vietnam, Malaysia), *P. smetanai* (Taiwan), *P. flavohumeralis* (Nepal, India), *P. arunensis* (Nepal), *P. schuelkei* (China), *P. amplicollis* (Nepal), *P. ildefonso* (China) and *P. fasciventris* (China). *Philonthus picimanus* (MÉNÉTRIÉS, 1832) and *P. sinuatocollis* MOTSCHULSKY, 1860 are removed from synonymy with *P. rotundicollis* (MÉNÉTRIÉS, 1832). Neotypes are designated for *P. rotundicollis* and *P. sinuatocollis*; lectotypes are designated for *P. idiocerus* KRAATZ, 1859, *P. densus* CAMERON, 1926, *P. beesoni* CAMERON, 1926 and *P. virgatus* SHARP, 1889. *Philonthus rotundicollis* ssp. *nigropolitus* BERNHAUER, 1916 and *P. rotundicollis* ssp. *inopinatus* SMETANA, 1963 are placed in synonymy with the nominate subspecies, *P. formaneki* ROUBAL, 1911 and *P. formaneki* var. *incompletus* ROUBAL, 1911 are placed in synonymy with *P. picimanus*. The species groups are briefly characterized and keys to species of both groups are provided. The male genitalia of all species and morphological details of most species are illustrated.

Key words: Coleoptera, Staphylinidae, Staphylininae, Philonthina, *Philonthus*, *rotundicollis* group, *sanguinolentus* group, new species, new synonyms, systematics, taxonomy, zoogeography, key.

Introduction

This part of the *Philonthus* revision deals with two smaller species groups, the *rotundicollis* and the *sanguinolentus* species groups. While the *sanguinolentus* group was fairly easy to deal with, the *rotundicollis* group turned out to be a horrific and time consuming task. The work on this group has kept me busy for years now and I postponed the publication of the results several times. There has also been a never ending inflow of material which on the one hand was helpful for getting a better idea of the variability range but on the other hand I was in danger of loosing control over the various loans. Finally, since no ultimate solution to these systematic problems was in sight, I decided to publish what I hope will be nearer the mark than any attempt before that. I also tried to maintain some order by avoiding unnecessary additional names (particularly subspecies), and to achieve stability by carefully picking proper specimens for neotype designation.

Designation of neotypes and lectotypes

As pointed out in the introduction, both species groups treated herein contain several problematic species. In those respective species it was absolutely necessary to designate lectotypes to tie the published name to a reference specimen to ensure taxonomic stability, in particular when the type series was composed of a mixture of at least two different species, but also when the actual number of type specimens was not mentioned in the original description. Lectotypes have been designated for *P. idiocerus* KRAATZ, *P. densus* CAMERON, *P. beesoni* CAMERON and *P. virgatus* SHARP.

The designation of neotypes was based on a similar motivation in addition to the fact that the original material was obviously lost or destroyed. In the two respective species (*P. rotundicollis* MÉNÉTRIÉS and *P. sinuatocollis* MOTSCHULSKY), the neotype designation was the only chance to achieve taxonomic stability and to bring the species concept in such an order that necessary follow-up studies would not lead into utter confusion. For more detailed information on neotype and lectotype designations see the respective chapters in the description of the species.

Abbreviations and acknowledgement

The material used for this study was made available by the following institutional and private collections. The help of the respective curators and colleagues is greatly appreciated.

CAH Coll. V. Assing, Hannover
CFeM Coll. B. Feldmann, Münster
CGO Coll. V. Gollkowski, Oelsnitz
CGP Coll. K. Grebennikov, St. Petersburg
CHK Coll. G. Hirthe, Kluess
CHP Coll. L. Hromádka, Prague
CJR Coll. J. Janák, Rtyně nad Bílinou
CKB Coll. A. Kleeberg, Berlin
CKC Coll. P. Krásensky, Chomutov
CKE Coll. Yablokoff-Khnzorian, Erevan (M. Kalashian)
CKP Coll. O. Kabakov, St. Petersburg
CKS Coll. E. Kučera, Sobeslav
CMT Coll. M. Tronquet, Molitg les Bains
CPE Coll. A. Pütz, Eisenhüttenstadt
CRL Coll. G. de Rougemont, London
CSB Coll. M. Schülke, Berlin
CSO Coll. A. Smetana, Ottawa
CST Coll. Y. Shibata, Tokyo
DEI Deutsches Entomologisches Institut, Eberswalde (L. Zerche)
FMC Field Museum of Natural History, Chicago (A.F. Newton, P. Parillo)
HUB Museum der Alexander-Humboldt-Universität, Berlin (M. Uhlig, J. Frisch)
ISEZ Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Kraków (G. Pasnik)
MHNG Muséum d'Histoire naturelle, Genève (I. Löbl, G. Cuccodoro)
NHML The Natural History Museum, London (M. Brendell)
NMB Naturhistorisches Museum, Basel (M. Brancucci)
NME Naturkundemuseum Erfurt (M. Hartmann)
NMP Národní Muzeum, Praha (H. Jelínek)
NMW Naturhistorisches Museum, Wien
SMNS Staatliches Museum für Naturkunde, Stuttgart (W. Schawaller)
SMT Staatliches Museum für Tierkunde, Dresden (O. Jäger)
SNM Slovenské Národné Múseum, Bratislava (V. Janský)
ZIS Zoological Institut, Academy of Sciences, St. Petersburg (A. Solodovnikov)
ZML Zoological Museum, Lund (R. Danielsson)
ZMM Zoological Museum, Moscow (N. Nikitski)

The *Philonthus rotundicollis* species group

The species of this group resemble some members of the *politus* complex (particularly *tenuicornis* group) in external characters and even more in the shape of the aedeagus (being the reason why COIFFAIT (1967, 1974) combined some members of this and various other groups in his "Groupe de *Ph. intermedius*").

However, there are some outstanding synapomorphies which clearly support the monophyly of this group, all found in the male secondary sexual characters: abdominal sternite VI strongly extended posteriad; sternite VII with large basal impression to accommodate the extended sternite VI, impression covered with short, exceedingly dense pubescence; sternite VIII without large macro-setae, with only a few short erect setae hardly differing from ground pubescence. All other characters correspond more or less with those of the *politus* complex.

Key to species of the *Philonthus rotundicollis* species group

1 Pronotum without dorsal rows of punctures 2

\- Pronotum with dorsal rows, each with four punctures 3

2 Head more transverse (w/l ratio > 1.3); color of elytra distinctly different from that of head and pronotum ..... ***intermedius***

\- Head less transverse (w/l ratio < 1.25); color of elytra hardly different from that of head and pronotum ..... ***laminatus***

3 At least disc of head, frequently also pronotum, with distinct and dense microsculpture of rather short meshes 4

\- Disc of head and pronotum without meshed microsculpture (exceptions exceedingly rare), microsculpture usually confined to tempora 5

4 Entire fore-body bright metallic blue or greenish; distribution: Caucasus and northern Turkey ..... ***picimanus***

\- Head and pronotum black with very slight greenish hue, elytra black with variable metallic brassy/copppery hue; distribution: Far East ..... ***sinuatocollis***

5 Head about as long as wide, pronotum much wider than head (ratio > 1.35) ..... ***kiangsiensis***

\- Head wider than long (w/l ratio about 1.10), pronotum less distinctly wider than head (ratio < 1.25) 6

6 Larger (4.5 – 5.5 mm, abdomen excluded); antennae longer, segments 4 – 6 slightly oblong; first three visible tergites with two basal lines ..... ***rotundicollis***

\- Smaller (3.7 - 4.4 mm, abdomen excluded); antennae shorter, segment 4 inconspicuously oblong; first four visible tergites with two basal lines ..... ***turnai***

Philonthus intermedius (LACORDAIRE)

Staphylinus intermedius LACORDAIRE 1835: 388; SCHILLHAMMER et al. 2003: 83
Philonthus aeratus STEPHENS 1832: 228
Philonthus intermedius var. *donisthorpei* DOLLMANN 1910: 295
Philonthus moldavicus WENDELER 1924: 343

TYPE MATERIAL: I have not studied the original material of *P. intermedius* and its synonyms; for the data of *P. moldavicus* see SCHILLHAMMER et al. (2003).

DESCRIPTION: 8.5 – 13.0 mm long (4.5 – 6.0 mm, abdomen excluded). – Black, very shiny; head and pronotum metallic green to blueish green, elytra black with dark metallic greenish to

brassy hue, in color distinctly differing from head and pronotum; abdominal segments and appendages deeply black.

Head quadrangular, usually distinctly transverse (w/l ratio 1.33 – 1.50; not sexually dimorphic); eyes markedly longer than tempora (eyes/tempora = 1.54 – 1.84), posteriorly conspicuously shifted toward dorsal face of head (especially in specimens with large heads); distance between medial interocular punctures 2.5 to almost 3 times distance between medial and lateral interocular puncture; antennal segments short, segments 4 and 5 about as long as wide, segments 7 – 10 markedly transverse, not sexually dimorphic; surface of head with very fine, short-meshed, almost isodiametrical microsculpture, frequently becoming obsolete on disc of head, and with conspicuous micropunctation; pronotum slightly wider than long (w/l ratio 1.04 – 1.07), slightly wider than head (head width/pronotum width = 1.03 – 1.15), lateral margin distinctly sinuately narrowed toward base; dorsal surface without admedian punctural rows, with one large puncture medially delimiting each anterolateral row of punctures; anterolateral row dense, consisting of more than 10 punctures bearing long erect setae, usually with additional, more anteriorly situated row of finer interspersed punctures, bearing short setae, pointing posteriad; posterior puncture of sublateral group lacking; surface of pronotum very shiny, with dense micropunctation, laterally with traces of short-meshed microsculpture; elytra coarsely, moderately densely punctate, punctures separated by 2 – 5 puncture diameters in transverse direction, setation dark, sides of elytra with two long setae (subhumeral and lateral) and numerous shorter erect setae; first four visible abdominal tergites with two basal lines, elevated area between basal lines with transverse row (in places irregularly doubled) of setiferous punctures, that on first visible tergite sometimes impunctate; remaining surface of tergites coarsely, moderately densely punctate; legs stout, tibiae with numerous stout spines, first segment of hind tarsi as long as following three combined, longer than segment 5; first four segments of front tarsi triangularly dilated, somewhat more distinctly in males, ventral surface bearing pale modified setae.

Aedeagus (Fig. 1) rather short; median lobe rod-like, with obtusely pointed apex; paramere (Fig. 1c) slender, apical portion moderately long, with two subapical, parallel rows of 7 – 8 peg setae. – The shape and length of the paramere is somewhat variable, but always shorter than that of *P. laminatus* and with less numerous peg setae.

MATERIAL EXAMINED:
T U R K M E N I S T A N: Bagir, 400 m, 20.IV.1975, leg. Rataj (NMB).

DISTRIBUTION: West Palaearctic as far east as Turkmenistan.

Philonthus laminatus (CREUTZER)

Staphylinus laminatus CREUTZER 1799: 128
Philonthus aeneus (DE GEER 1774): 23
Philonthus matutinalis (FALDERMANN 1835): 124
Philonthus coxatus CURTIS 1836: pl. 610
Philonthus viridanus NORDMANN 1837: 74

TYPE MATERAL: *Staphylinus laminatus*: The HUB houses eight syntypes. One bears the original labels "6023 \ laminatus Pz. Cr. Gr. Germ." and a lectotype label attached by Drugmand. The remaining seven sepcimens have been subsequently labeled "German. 6023" and paralectotype labels have been attached. The lectotype designation has never been published and since all specimens are conspecific I refrain from doing so herein. The original material of the synonyms was not studied, the synonymies have been accepted.

DESCRIPTION: 8.5 – 14.0 mm long (5.0 – 6.1 mm, abdomen excluded). – The species is very similar to *P. intermedius* and differs mainly by the coloration of the fore body (head, pronotum and elytra bright metallic greenish to deeply blue), the less transverse head (w/l ratio 1.17 –

1.21), on average shorter eyes (eyes/tempora = 1.15 – 1.30 in females; 1.35 – 1.55 in males), more widely separated medial interocular punctures (distance ratio to lateral interocular punctures > 3.5 – 4.5), longer antennal segments of males, less numerous punctures of anterolateral rows of pronotum bearing shorter setae, and much denser punctation of elytra (punctures separated by about two puncture diameters or less in transverse direction across the entire surface).

Aedeagus (Fig. 2) longer, median lobe slightly tapering toward rounded apex; paramere (Fig. 2c) with longer apical portion, with two subapical, parallel rows of up to 12 peg setae each.

DISTRIBUTION: West Palaearctic as far east as Central Asia ("Turkestan"). The specimens from Moldovia, Turkey and C-Asia show a tendency towards a more bluish coloration.

Philonthus rotundicollis (MÉNÉTRIÉS)

Staphylinus rotundicollis MÉNÉTRIÉS 1832: 145
Philonthus scutatus ERICHSON 1840: 438
Philonthus duplopunctatus MOTSCHULSKY 1860a: 567
Philonthus rotundicollis ssp. *nigropolitus* BERNHAUER 1916: 26 = **syn.n.**
Philonthus rotundicollis ssp. *inopinatus* SMETANA 1963: 294 = **syn.n.**

TYPE MATERIAL: **Neotype** ♂ (present designation): "Caucas. min. bor. Trialetskij Chreb Bakuriani 1800-2200 m 15.-20. Juni 1987 leg.: Wrase / Schülke \ NEOTYPE *Staphylinus rotundicollis* MÉNÉTRIÉS, 1832 des. Schillhammer 2003" (HUB).

P. scutatus: 2 **syntypes**: ♂: "scutatus Er. \Europa \ 6040" (HUB); ♀: "Europa Nr. 6040" (HUB).

P. rotundicollis ssp. *nigropolitus*: I have studied the type specimen on the occasion of a visit to the FMC in 1997 but did not make any notes on the label data.

P. rotundicollis ssp. *inopinatus*: **Holotype** ♂: "Mongolia, V.-VI 59 C. Purkyně lgt. Karako...[remaining letters illegible]" (NMP); **Allotype** ♀ (NMP) and **Paratype** ♂ (CSO): "Ulaanbaator Mongolia, V-VI 59 C. Purkyně lgt.".

DESCRIPTION: The species is exceedingly variable throughout its entire distribution range. The description is kept rather general, for more detailed information on the variability in a biogeographical context see the "Comments" section below.

9.5 – 13.5 mm long (4.5 – 5.5 mm, abdomen excluded). – Black, very shiny; head and pronotum black, often with slight metallic greenish or brassy hue; elytra black, usually with metallic dark greenish, dark blueish, brassy or even coppery hue of variable intensity; abdomen and appendages black to black-brown, tibiae sometimes reddish testaceous, tarsi frequently reddish with darker first segment; palpi brown to black-brown, last segment of maxillary palpi usually paler than preceding segments.

Head rounded quadrangular to subcircular, 1.08 – 1.18 times as wide as long; eyes not protruding, about as long as or slightly longer than tempora (length eyes/tempora = 0.92 – 1.24, majority 1.0 – 1.1), posteriorly slightly shifted toward dorsal face of head; tempora almost evenly rounded; medial interocular punctures moderately widely separated, distance between medial interocular punctures about 2.5 times distance between medial and lateral interocular puncture; antennae with segments 4 – 6 inconspicuously oblong, segments 8 – 10 slightly transverse; head usually with dense micropunctation, with fine microsculpture of oblique waves on temporal portion, rarely extending along medial margin of eyes; pronotum very variable, either with sides evenly convex, or slightly angulate (resulting in an almost hexagonal shape) or distinctly sinuately emarginate in front of base; slightly wider than long (w/l ratio 1.00 – 1.13, majority 1.00 – 1.08); wider than head (pronotum width/head width about 1.20 – 1.25); dorsal rows each with four equidistant punctures, subhumeral group complete (4 punctures in rhombic arrangement); antero-lateral margins each with sparse row of about 5 larger punctures bearing

moderately long erect setae and with numerous finer punctures situated more anteriad, bearing short, pale posteriad oriented setae; surface usually with dense micropunctation (rarely lacking), and with very fine, usually inconspicuous wavy microculpture on lateral portions; elytra with wide basal depression, reaching almost toward apex of scutellum, sometimes resulting in somewhat tumescent appearance of humeral portion; densely punctate, punctation often slightly asperate, punctures separated by 1 – 2 puncture diameters in transverse direction; pubescence dark grey to yellowish-grey; surface between punctures sometimes slightly rugose; sides with two large setae (posthumeral and lateral); scutellum large, densely, slightly asperately punctate and microreticulated; first three (rarely first four) visible abdominal tergites with two basal lines, elevated area between basal lines quite densely punctate and pubescent, that on first visible tergite frequently either impunctate or with a very few scattered punctures; remaining portion of tergites moderately densely, uniformly punctate, pubescence dark or yellowish grey; first four segments of front tarsi triangularly dilated (no apparent sexual dimorphism); male sternite VIII: Fig. 27; female tergite X: Fig. 29; gonocoxites of female genital segment: Figs. 36, 37.

Aedeagus (Figs. 3 – 6, 13) with median lobe rod-like, with slightly convex sides, ventro-basally somewhat flattened, apex rounded; paramere (Figs. 3c – 6c, 7 – 12, 13c) exceedingly variable, both in shape and in number and arrangement of peg setae; peg setae arranged in two apicolateral rows, either regular or more like irregular clusters (with all possible transitions between the two states).

VARIABILITY: The species displays a high variability not only on a geographical basis but also within each population. Although certain trends can be observed which might point toward subspecific differences, I decided to synonymize all described subspecies, because geographical delimitation is somewhat difficult. In the following I have tried to assign those trends to specimens of specific geographical origin:

Caucasus: Black, elytra with inconspicuous, very dark greenish metallic hue, sides of pronotum usually convex to slightly angulate.

Europe, forest belt of Asia, Mongolia, Korea, Japan: No particular trends may be observed; pronotum and aedeagus display the full variability range. The specimens from Japan and many specimens from North Korea have the paramere as short as or even shorter than in *P. sinuatocollis*, but broader, with numerous peg setae densely arranged in apical half of apical portion of paramere, but narrowly sparing out a glabrous midline. For reasons why these specimens have been included in *P. rotundicollis*, see "Comments" further below.

C-Asia (incl. NW-China), Pakistan: Black, on average larger body size, sides of pronotum markedly sinuately emarginate in front of base; parameres longer with regular row of peg setae ("ssp. *nigropolitus*"); the Pakistan specimens show a slight metallic greenish hue on elytra.

Iran: Similar in appearance to the C-Asian specimens, but with distinct greenish-blue hue on fore body.

ADDITIONAL MATERIAL EXAMINED (East Palaearctic and C-Asian material only):

T U R K M E N I S T A N: "Bucharia Repetek" (NMW); Cemenbit, 20. – 25.IV.1993, leg. M. Snížek (NMW).

U Z B E K I S T A N: "scutatus Taschkent Leder" (NMW); "Margelan Reitter (NMW); Erdon (Alaj), 20.IV.1980, leg. M. Dvořák (NMW, CSB); Pamir Alai, Chamsaabad nr. Fergana, 14.VII.1984, leg. D. Wrase (CSB); W. Hissar mts., Tomkhozdarya river, Chopukh vill., 2600 m, 25.V.1999 (CST).

T A J I K I S T A N: "Mts. Karateghin Baldschuan 924m. F.Hauser 1898" (NMW); "Turkestan Kara-Su \ coll. Hauser" (NMW); "Turkestan Mts. Ghissar F. Hauser 1898" (NMW); "Ost-Turkestan Bagratsch-Kul. Kurla 5.1902 Coll. Hsr." (NMW); "Turkestan Kara-Su \ Collect. Hauser" (NMW); "Seravschan Kschtut. Artutsch Glasunov 1892" (NMW); "Seravschan Turusch-Dara Pass Glasunov 1892" (NMW); Seravshan, Marguzar lakes, 5th lk., Churdak, 1950 – 2400 m, 20. – 30.IV.1997, leg. S. Bajdak (NMW); same, 1800 m, 26.IV.1990, leg. Wittmer (NMB); same, leg. V. Dolin (NMB); Seravshan mts., Zavron valley, 2100 – 3000 m, 12./13.VII.1990, leg. Schülke & Wrase (CSB); Darvaskiy Khrebet, Khaburabad pass, 3400 m, 7.VII.1989, leg. K. Majer (NMB,

NMW); Hissar mts., Anzob pass, 3373 m, 15. – 19.VII.1992, leg. S. Kazantsev (NMB); Hissar mts. S Anzob pass, env. Ziddy, 2100 – 2700 m, 12. – 20.VII.1992, leg. S. Kazantsev (NMB); Hissar mts., Adshuk-Cleft nr. Warsob, 1200 m, 1. – 3.VII.1990, leg. Schülke & Wrase (CSB); Pamir, Muksu region, nr. Kishalk Muk, 2700 m, VII.1990, leg. Schmidt (HUB); same, nr. Kishlak Kandou, 2800 m, VII.1990, leg. Schmidt (HUB); same, nr. Sukran gorge, 2800 m, VII.1990, leg. Schmidt (HUB); same, Dschailgan, env. Depschaar, 2200 m, 27.VI.1990, leg. Hartmann (HUB, NMW); Peter I. mts., Tshil-Dara, 1700 – 2300 m, 21. – 24.VI.1990. leg. Schülke & Wrase (CSB, NMW).

K A Z A K H S T A N: "Aulie Ata Syr Daria" (NMW); 30 km S Alma-Ata, Medeo, 2300 – 3000 m, 7.VII.1981, leg. V. Kubán (NMB); same, VII.1988, leg. K. Denes (NMW); Zailiskiy Ala-Tau, Alma Arasan, 6.VII.1979, leg. M. Dvořák (NMW); Zailiskiy Ala-Tau, Big Lake, ca. 2000 m, 15. – 26.VI.1994, leg. A. Putchkov (NMW); N – slope of Ketmen range, 2100 – 2400 m, 28.V.1990, leg. V. Dolin (NMB); Ketmen range, env. Podgornoye, 1680 – 1800 m, 26.V.1990, leg. V. Dolin (NMB); Ketmen range, env. Bolshoy, 1900 – 2300 m, 30.V.1990, leg. V. Dolin (NMB); Orta-Tau range, Orta – Karagaylli gorge, 2000 – 2400 m, 6. – 10.VI.1991 (NMB); Tekes V., Narynkol, 8. – 12.VI.1992, leg. S. Kazantsev (NMB); Zaisan, 28.V. – 9.VI.1991, leg. N. Tselikov (NMB); Ramit valley, 220 – 2900 m, 28. – 29.VII.1992, leg. S. Kazantsev (NMB); Shakhristan, 2500 – 3000 m, 21. – 23.VII.1992, leg. S. Kazantsev (NMB); prov. Tekeli, Taldi – Kurgan, 7. – 17.V.1991, leg. N. Tselikov (NMB); Saur mts., Sargar mt., 2200 m, 10.VI.1999, leg. A. Klimenko (CST).

K Y R G Y Z S T A N: "Alai-Geb. Buadyl" (NMW); "Thian-S. Naryn-Kol" (NMW); "Tien-schan Kok-djadjak." (NMW); "Tien-schan Przewalsk." (NMW); Tien-schan Kurmenty." (NMW); Ala Archa gorge, 50 km S Frunze, 2500 m, 14.V.1978, leg. H. Muche (NMB); Kirgizskiy Ala-Tau, Ala Archa vall., 2100 – 2500 m, 7. – 19.VII.1988, leg. D. Král (NMB); Ala Archa, 2000 m, 9.VII.1984, leg. D. Wrase (CSB); Kirgizskiy Ala-Tau, N Tynashu pass, 2000 m, 14.V.1993, leg. Schawaller (SMNS); Tian Shan, Dolon pass, 2700 – 3200 m, 23. – 25.VII.1991, leg. S. Bečvař (NMW); same, leg. J. Turna (CSB); Chatkalskiy Ala-Tau; Sary-chelek, 1800 m, 12. – 16.VII.1988, leg. Vit. Kubán (NMB); same, 1200 m, 27.V.1993, leg. Schawaller (SMNS); Chatkalskiy Ala-Tau, Terek-Say, ca. 2300 m, 4. – 10.V.1992, leg. J. Kaláb (NMW); Chatkalskiy Ala-Tau, Kanysh-Kija, 7th lake, 2280 m, 5.VI.1997, leg. Dolin (NMW); Chatkalskiy Ala-Tau, Chapchana pass, 2800 m, 3.VI.1998, leg. V. Dolin & R. Andreeva (CSO); Sandalash, 1950 – 2200 m, 6.VI.1998, meadow, leg. V. Dolin & R. Andreeva (CSO); NE Talasskiy Ala-Tau, Kara-Oi, pass, 1300 m, 28. – 30.IV.1992, leg. J. Kaláb (NMW); Talasskiy Ala-Tau, 30 km S Kirovskoye, ca. 2000 m, Kara-Buura valley, 26. – 28.IV.1994, leg. J. Kaláb (CST); Talasskiy Ala-Tau, Manas mt., 2200 m, 21.V.1999 (CST); E Talasskiy Ala-Tau, Tschitschkan, Itagar River near Dangi, 42°09'37"N 72°51'04"E, 1950 – 2800 m, 19.VII.1998, leg. Müller-Motzfeld (NMW); Terskiy Ala-Tau, 30 km SW Przewalsk, Dzhety – Oguz valley, 2300 m, 8. – 10.VII.1985, leg. K. Majer (NMB); same, Telety river, 2400 – 2700 m, 16.VII.1991, leg. K. & B. Bržezina (CSO); Terskiy Ala-Tau, Ak-Su, 2100 m, 14. – 18.VI.1993, leg. Schawaller (SMNS); same, above Ak-Su, 2600 m, 16.VI.1993, leg. Schawaller (SMNS); Terskiy Ala-Tau, 4 – 8 km SE Temir-Kanat vill., 42°00'N 76°52'E, 2400 – 3200 m, VII.1999, leg. Hetzel (CFM); Terskiy Ala-Tau, Kokhkorka, 17.VIII.1994 (CST); Anta-Tau, Karagaly, 2400 m, 14.VI.1990, leg. V. Dolin (NMB); Inner Tian Shan, Urumbash river, 40 km W Kazarman, 2800 m, 6. – 8.VII.1994, leg. A. Putchkov (NMW); Ala Koi pass, Kara Kol, 3860 m, VII.1998, leg. C. Reuter (CFM); Ferganskiy Ala-Tau, 3 km below Gaza vill. Sarymay riv., 1300 m, 25.IV.1992, leg. V. Grebennikov (NMW); Ferganskiy Ala-Tau, Yarodar, 1400 – 1500 m, 16. – 19.V.1993, leg. Schawaller (SMNS); Baubashata range, NE Arslanbob, 1900 m, 19.V.1993, leg. Schawaller (SMNS); Kichik Alai, above Kara-Goy, 2400 m, 21. – 22.V.1993, leg. Schawaller (SMNS); same, 23.V.1993, leg. Schawaller (SMNS).

A F G H A N I S T A N: "Umg. Kabul Afghanistan \ Prof. Dr. A. Gilli leg. et ded." (NMW); Kabul, 1800 m, 3.IV.1970, leg. O. Kabakov (CKP); Onay, pass W Kabul, 3000 m, 24.X.1969, leg. O. Kabakov (CKP); "Afghanistan, Col d'Unay, 16.10.70, H. Fongond leg." (CMT); Nurestan, Barge Matal, 2600 m, 22./23.IX.1971, leg. O. Kabakov (CKP); Tokana, 2100 m, 29.VI.1970, leg. O. Kabakov (CKP); Oruzgan, Qobaq pass, 3300 m, 23.VII.1970, leg. O. Kabakov (CKP); Oruzgan, W Baki, 2300 m, 20.IX.1970, leg. O. Kabakov (CKP); Oruzgan, Baytomur, 3900 m, 24.IX.1970, leg. O. Kabakov (CKP); Ghor, Tulak, 2600 m, 1.XI.1969, leg. O. Kabakov (CKP); Bamyan, Safedab, 3200 m, 8.VIII.1971, leg. O. Kabakov (CKP); "A.385 \ Voyage en Aghanistan K. Lindroth \ Qal`eh No 24.10.57" (NMW); "J. Klapperich Walang, 2520 m Salangtal, 29.9.52 \ Hindukusch O. Afghanistan" (NMW); "J. Klapperich Anjuman 2900 m 9.8.52, Anjuman- \ Geb., Badakschan NO-Afghanistan" (NMW); Badakshan, Eskašem, 2500 m, 6.VII.1973, leg. O. Kabakov (CKP).

P A K I S T A N: SWAT: Marghuzar, 1300 m, 8.V.1983, leg. C. Besuchet & I. Löbl (MHNG); S Utrot, 14.V.1983 2500 – 2600 m, leg. Besuchet & Löbl (NMW); Utrot, 2300 – 2600 m, 15. – 19.VII.1997, leg. Heinz (CSO, NMW); HAZARA: Nathias Gali, 2500 m, 5.VI.1983, leg. Besuchet & Löbl (MHNG); CHITRAL: Madaglasht, 2700 m, 26.V.1983, leg. Besuchet & Löbl (MHNG); Bumboret, (Kalash vall.), 2100 – 2600 m, 8. – 10.VII.1997, leg. Heinz (CSO).

M O N G O L I A: 30 km SE Ulan Baator, Nucht im Bogdo ul, 1650 m, 3.VI./6.VII.1967, leg. Z. Kaszab (CSO); 18 km S Ulan Baator, 18 km S pass Egijn davas, 2300 m, 18. – 19.VII.1966, leg. Z. Kaszab (CSO); 20 km S

Ulanbaator, 22. – 23.VI.1998, leg. L. & M. Bocák (NMB); Ulanbaator, Zaisan, 107°E 48°N, 1400 m, 30.IV.1989, leg. S. & J. Kolibač (NMB, NMW); same, leg. L. Bocák (NMB, NMW); Ulanbaator, Chantagajka, 16.VII.1990, leg. J. Moravec (NMB); "Mongolia 1986 Cencher Mandal, Chentej ajmak, Pauliš lgt." (CJR); Kobdoskiy ajmak, r. Uljastajn-Gol, 20 km N Bulgana, 31.VI.1980, leg. Medvedev (ZIS); Uvs-ajmak, 5 km SW Ulangom, 10. – 20.VII.1986, leg. Schniter & Dorn (CSB).

C H I N A: XINJIANG: "Pamir. Stoliczka" (NHML); Yarkand (NHML); S – slope of Tian Shan, road Kuqa – Bayanbulak, 100 km NNE Kuqa, 8 – 11.V.1993, leg. J. Turna (NMW); same, leg. J. Kaláb (NMW); N – slope of Tian Shan, road Kuqa – Bayanbulak, 50 km SW Bayanbulak, ca. 2800 m, 11. – 13.V.1993, leg. J. Turna (NMW); E Tian Shan, road Bayanbulak – Narat, pass 30 km ESE Narat, 2800 m, 13. – 14.VII.1993, leg. J. Kaláb (NMW); same, leg. J. Turna (NMW); NW Kunlun Shan, Akmeqit, 100 km SSW Yecheng, 2200 m, 25.VI.1993, leg. J. Kaláb (NMW); same, 26.V.1993, leg. J. Turna (NMW); 180 km SW Urumqi, Balguntay, 7.V.1999, leg. S. Murzin (CKC); QINGHAI: 218 km W Xining, Heimahe env., 3200 m, 13.VII.1999, leg. S. Murzin (CHP); 25 km W Tongren, 3600 – 4150 m, 3VII.1999, leg. S. Murzin (NMW); Laji Shan, 50 km S Xining, 3900 – 4000 m, 28.VI.1999, leg. S. Murzin (CHP); SICHUAN: Pingwu, 7.VI.1997, leg. E. Kučera (CHP); SHAANXI: Haozhenzi, 14. – 24.VI.1999, leg. S. Murzin (CKC).

K O R E A (NORTH): "Corea septentr. Jangang-do 24 IX-1 X 1991" (ISEZ); "Korea, Phote-ćhon, distr. Samdzijon, lg. Pawlowski" (ISEZ, NMW); "Korea, Kymgang-san Mts. 16-18.06.'74 Exp. ISEZ Cr." (ISEZ); "Corea sept. 1983 prov. Hamgjong-Pukto val. Ćangćhon-su Exp.Inst.Zool.Cr." (ISEZ).

R U S S I A: "Barnaul Altai Gassner" (NMW); "Barnaul am Ob P. Babiy, 28.IV.1920" (NMW); "Telezk See Altai, Gassner" (NMW); "Krasnojarsk Ienniseisgeb. [!]" (NMW); Krasnoyarsk, 10. – 20.VIII.1990, leg. J. Stankovský (NMB); Baikal, Listvyanka 25. – 26.VI.1989, leg. J. Stankovský (NMB); "Ufa Ost-Russland \ H. Frieb leg. 1918-1920" (NMW); "Pjestschanka 8 km öst. Tschita Transbaikalien \ H. Frieb leg. 1918-1920" (NMW); "Russia: Baikal B. Koty 10.8.1983 leg. Shilenkov" (NMW); "Sibirien. Irkutsk. Loc. 9. 14.VIII.68 Lindroth" (ZML, NMW); "Werchne-Udinsk Trsbaikal. Mandl" (NMW); 30 km N Magadan, riv. Dukcha valley, nr. vill. Snezhnaya Dolina, 19.VIII.1991, leg. Ryabukhin (NMW); Prim. Kray, Partizansk, Tigrovo, 19. – 21.VIII.1982, leg. Snížek (NMW); Prim. Kray, Sikhote-Alin, Res., Kordon Kabany, 135°52'40"E 45°08'16"N, 850 – 900 m, 30.VI. – 4.VII.1999, leg. J. Sundukov (CSB); Ussuri reg., Oblakhnaya mts., 800 m, 15.VII.1989, leg. M. Nikodým (NMB); Kamtchatka, Petropavlovsk, 3.VI.1908, leg. A. Derzhavin (ZIS); same, 20.VII.1991, leg. R. Predal (CSB); Kamtchatka, nr. Esso, 600 m, 7.IX.2002 (CST); "2nd Zhemkonsk. Nasl. Yakustk. Okruga 8.VII.25 Bianki [in Russian]" (ZIS); "o-v Russkiy, 22kl. nizhe Yakutska Yakut. Muz. 23.IX.927 [in Russian]" (ZIS); "g. Yakutsk, lev. ber. r. Leny 13.VI.26L Bianki [in Russian]" (ZIS); same, "18.VI.26L" (ZIS); "Yakutsk, Maltanskaya pad Yakut. Muz. 9.VI.928 [in Russian]" (ZIS); "Kumurtuk, Chulyshman. Alt. 09 Elemyanov 9.VII. [in Russian]" (ZIS).

J A P A N: "Mt. Sanmaidake, S. Alpes 19.VII.1981 S. Morita" (DEI); "near Ohkanbazawa S.Alps, Yamanashi June 30 1980 W. Suzuki leg." (CST, NMW); "Near Kuroyondamu, Tatayama, Toyama Aug. 5-6th, 1982 W. Suzuki leg." (CST); "(OGIZAWA) Omachi, Nagano July 18-19th 1983 T. Matsumoto leg." (CST); "(NAKABUSA) Nagano, Japan Aug. 21st 1991 Y. Shibata leg." (CST); "(KITATAWA – TOGE) S.Alps, Yamanashi \ June 1. 1980 T. Matsumoto leg." (CST); "Shimajima val. Nagano pref. 27-IX-1975 col. S. Kasahara" (CST).

DISTRIBUTION: The species is at present known from the entire Palaearctic Region, except North Africa, Turkey, Nepal. In China it is known only from Xinjiang, Qinghai, Sichuan and Shaanxi, and might also occur in the Northeast.

COMMENTS: As already stated in the introduction, I faced several severe problems at the specific level ever since I started to work on this species group, some of which have remained unsolved. However, I had to come up with a solution which 1) would be satisfactory for the time being and would make the publication of this part of the revision possible and 2) to prepare the ground for follow-up studies by alerting the scientific community and maybe triggering interest in trying to solve the problems by using methods complementing the morphotypical approach used herein.

The taxa concerned are mainly *P. rotundicollis* (and its subspecies) and *P. picimanus*, and to some extent also *P. sinuatocollis*. One of the reasons for confusion was that the original material of *P. rotundicollis* was obviously lost and for a long time I had no specimens from the closer vicinity of the type locality (Caucasus) which resembled the specimens from e.g. Central Europe. Bohač (1988) synonymized *P. picimanus* with *P. rotundicollis*, most likely mislead by the aedeagal similarity. Indeed, it seems almost impossible to draw a clear line between the aedeagus

shapes of both (obviously closely related, phylogenetically young) species allowing only to recognize certain trends (see description of *P. picimanus*). The case was further complicated by the fact that it seemed almost impossible to find two specimens of *P. rotundicollis* with identical shapes of the paramere.

Given that the type specimens of both species would indeed have been conspecific, the *P. rotundicollis* from the remaining parts of the Palaearctic Region would have required another name (which would have been *P. scutatus* ERICHSON). Finally, however, I received a large series of specimens from the Caucasus which matched the generally accepted concept of *P. rotundicollis*. Furthermore, this locality provided clear evidence for sympatric occurence of both species (*P. rotundicollis* and *P. picimanus*) without any transitional forms. However, as if matters were not already complicated enough, it turned out that within the studied material of *P. picimanus* an additional species might be hidden (see "Comments" under *P. picimanus*). This, however, is one of the cases which have to be subject to future studies.

The other problematic area is the Far East of Asia where *P. rotundicollis* occurs sympatric with another evidently different species. MOTSCHULSKY (1860b) described *P. sinuatocollis* from northern Dauria. However, the original material of this species, which was treated as a synonym of *P. rotundicollis* till now, seems to be lost as well (for reasons for removing this species from synonymy see "Neotype" section under *P. sinuatocollis*). Separation of this species from *P. rotundicollis* does not pose any difficulties (externally and in sexual characters) for material from the major part of its distribution area. All studied specimens from Japan, however, as well as many specimens from North Korea which are herein assigned to *P. rotundicollis* have a fairly different paramere but do not differ externally from *P. rotundicollis*. Maybe they belong to yet another species or subspecies. For the time being, however, I refrain from naming this population because much more material has to be studied from this area to assess the variability.

NEOTYPE: No type specimen(s) of *P. rotundicollis* could be found in the ZIS where the Ménétriés collection is deposited. Also in other bigger museums (ZMM, HUB, NHML, NMW) where there had been a small chance to find the respective specimens a search was not successful. The fact that the type of *P. picimanus* which was described in the same paper was found in the ZIS supported the assumption that the original material of *P. rotundicollis* had been lost. Since a final solution of all problems associated with this and neighbouring species is still pending, a neotype had to be designated to ensure taxonomic stability.

Philonthus picimanus (MÉNÉTRIÉS)

Staphylinus picimanus MÉNÉTRIÉS, 1832: 146; KIRSHENBLAT 1933 (redescription); BOHAČ 1988 (synonym of *P. rotundicollis*).
Philonthus formaneki ROUBAL 1911: 6 = **syn.n.**
Philonthus formaneki var. *incompletus* ROUBAL 1911: 7 (preoccupied, nec HOCHHUTH 1849) = **syn.n.**

TYPE MATERIAL: *P. picimanus*: **Holotype** ♂: "Caucas. \ picimanus Menet. Caucas. \ Philonthus rotundicollis J. Boháč det. 1983" (ZIS).

P. formaneki: 7 **syntypes** (♀): "Caucasus occ. Krasnaya Polyana [in Russian] Roubal VII. 1910 \ formaneki Roubal det." (3 SNM, 1 CHP, 2 NMW).

P. formaneki var. *incompletus*: **Holotype** ♀: "Caucasus occ. Krasnaya Polyana [in Russian] Roubal VII. 1910 \ mir nicht bekannt desideratus [handwritten] \ incompletus Roubal det." (SNM).

DESCRIPTION: 9.2 – 13.0 mm long (4.7 – 5.7 mm, abdomen excluded). – Black, shiny to moderately shiny or almost mat due to distinct microsculpture; head and pronotum metallic green or blue, elytra black with dark metallic greenish hue or dark metallic blue; abdomen black to black brown; palpi dark brown to reddish brown; legs dark brown to reddish brown, medial faces

of all tibiae to various extent infuscate, tarsi entirely red or darkened to various extent or even almost black.

Head rounded quadrangular to subcircular, slightly wider than long (w/l ratio 1.08 – 1.13); eyes as long as or slightly longer than tempora (length eyes/tempora = 1.00 – 1.11, green specimens; 1.07 – 1.28, blue specimens); tempora evenly rounded; distance between medial interocular punctures 2.5 – 3.0 times distance between medial and lateral interocular punctures; surface of head usually with dense and profound microsculpture of very short, almost isodiametrical meshes, sometimes becoming weak or even obsolete on vertex; with distinct micropunctation, usually clearly visible within microsculpture; antennae with segments 4 – 6 slightly oblong, segment 7 about as long as wide, segments 8 – 10 inconspicuously transverse (the length of the antennal segments is slightly variable, however, a sexual dimorphism cannot be observed); pronotum slightly or more distinctly wider than long (w/l ratio 1.04 – 1.07, green specimens; 1.01 – 1.05, blue specimens), widest slightly in front of midlength, distinctly narrowed toward anterior and posterior angle, sides distinctly sinuately emarginate in front of base (particularly in blue specimens); dorsal rows each with four punctures, subhumeral group complete; anterolateral margins each with a row of 4 – 5 fine punctures, bearing short setae; small, posteriad oriented setae in front of anterolateral row very short, inconspicuous; surface of pronotum usually covered with dense and profound microsculpture as on head, but in blue specimens often reduced on a large area along midline; micropunctation clearly visible; elytra densely punctate, punctures separated by 1.5 – 2 (green specimens) or 2 – 3 (blue specimens) puncture diameters in transverse direction; surface between punctures frequently slightly rugose, particularly in green specimens; sides with two large setae (subhumeral and lateral); ground pubescence golden-reddish (majority of green specimens) to dark reddish or blackish with golden tips (majority of blue specimens); scutellum densely, slightly asperately punctate and microreticulated; first three or four visible abdominal tergites with two basal lines (percentage of specimens with four basal lines higher among blue specimens), elevated area between basal lines more or less densely punctate, except for first visible tergite where occasionally only a very few fine and scattered setae occur; first four segments of front tarsi as in *P. rotundicollis*; female tergite X: Figs. 30, 31; gonocoxites of female genital segment: Figs. 38, 39.

Aedeagus (Fig. 17) with median lobe as in *P. rotundicollis*, but paramere (Fig. 17c, 18 – 20) showing tendency to be narrower, peg setae somewhat smaller.

DISTRIBUTION: The species is known from the entire Caucasus and its foothills (Armenia, Azerbaidjan) and from the Pontus in northern Turkey.

COMMENTS: The two "forms" (both available names refer to the green "form") which occur sympatrically almost throughout the entire distribution range might represent two different species. The blue specimens are characterized by a slightly narrower pronotum, slightly larger eyes, slightly less densely punctate elytra and by the coloration: in addition to the blue color of the head and pronotum, the elytra do not or hardly differ in color from head and pronotum. Also, they show a trend toward darker tarsi and darker elytral ground pubescence. However, there is a slight overlap in characters and the aedeagus does not provide any substantial help (not even for separation from *P. rotundicollis*). Thus, I have decided to treat both "forms" as conspecific until other methods yield different results. There is no overlap in character states between *P. rotundicollis* and *P. picimanus* that is why I am sure that they are specifically different, despite the aedeagal similarity.

Philonthus sinuatocollis MOTSCHULSKY

Philonthus sinuatocollis MOTSCHULSKY 1860b: 121. – Removed from synonymy with *P. rotundicollis*.

TYPE MATERIAL: **Neotype** ♂ (present designation): "RUSSIA: Primorskiy Kr. Nazhinsky Dist. riv. Bolshaya Elduza 2.10.1998, leg. B. Kataev \ NEOTYPE *Philonthus sinuatocollis* MOTSCHULSKY, 1860 des. Schillhammer 2003" (NMW).

DESCRIPTION: 8 – 12 mm long (4.6 – 5.3 mm, abdomen excluded). – Black, shiny; head and pronotum frequently with slight metallic greenish hue, elytra dark metallic greenish, sometimes with slight brassy/coppery hue.

The species is very similar to the specimens of *P. rotundicollis* from the same area and differs mainly by the distinct short-meshed microreticulation on head and pronotum. In the Corean specimens the microreticulation is less evident but at least on head feebly visible. In addition, it differs by the shape of the aedeagus (Figs. 21, 22) with very short and slender paramere (Fig. 21c, 22c, 23); peg setae much less numerous and usually arranged in dense congregation close to apex hardly leaving a glabrous midline; female tergite X: Figs. 32, 33; gonocoxites of female genital segment: Fig. 40.

ADDITIONAL MATERIAL EXAMINED:

R U S S I A: FAR EAST: "scutatus Baikalsee Branczik" (NMW); "Krasnojarsk Ienniseisgeb. [!]" (NMW); "sinuaticollis Baikal Schaufuß." (NMW); "scutatus Er. Amur. Pochrofka ded. Koltze" (NMW); "Werchne-Udinsk Transbaikal. Mandl" (NMW); "Quellgebiet des Irkut Leder" (NMW); "Quell des Irbut Leder" (NMW); "Seitengraben des Perwaja Rjetschka \ Tales nördl. Wladiwostok \ H. Frieb leg. 1918-1920" (NMW); Chita, Atamanovka, *30.V.1989*, leg. Kabakov (CKP); Khabarovskiy Kr., Oblucie, 12.VII.1992 (NMW); 30 km S Khabarovsk, Bychika, bank of Ussuri riv., 11. – 12.VI.1990, leg. Schawaller (SMNS); Prim. Kray, Nazhinsky Dist., riv. Bolshaya Elduza, 2.1X.1998, leg. B. Kataev (NMW); Nazhinsky Dist., riv. Malaya Elduza, 29.IX.1998, leg. B. Kataev (NMW); Kaymanovka, 10. – 15.VII.1993 (NMW); Prim. Kray, Ussuri Nat. Res., Kordon Peischula, 13. – 20.VIII.1998, leg. Sundukov (CSB); Prim. Kray, Ussuri region, Lazo Nat. Res., Kordon Sokolewka, 16. – 20.IV.1997, leg. Sundukov (CSB); same, Kordon Amerika, 6. – 7.V.1993, leg. Sundukov (HUB); same, 24. – 29.IV.1997, leg. Sundukov (CSB); same, Perekatnaya valley, 18.V.1993, leg. Sundukov (HUB); Prim. Kray, Ussuri region, Lazo env., Lazowka valley, 26.V.1993, leg. Sundukov (HUB); same, 5. – 8.VI.1997, leg. Sundukov (CSB); same, Lazowskiy river, 18.V.1997, leg. Sundukov (CSB); Sikhote Alin Nat. Res., Blogodatno lake, 17. – 22.VI.1998, leg. Sundukov (CSB); same, Kordon Ust-Serebryaniy, 17. – 22.VI.1998, leg. Sundukov (CSB); same, mouth of Yasnaya riv., 26.VI. – 4.VII.1998, leg. Sundukov (CSB); Vladivostok env., 25.VI.1992, leg. S. & K. Belobozodov (NMB); 70 km E Vladivostok, Anisimovka, 43.11°N 132°41'E, 300 m, 6.VI.1993, brook banks, leg. L. Zerche (DEI); same, 4.VIII.1991, leg. F. Hieke (HUB); Partizanskiy dist., Alexeyevskiy Khr., 20 km E Sergeyevka, forests nr. Andreyevka river, 400 m, 26. – 29.VII.1993, leg. Pütz & Wrase (CPE); Prim. Kray, 53 km SE Ussuriysk, Przewalski mts., 43°37'N 132°35'E, 250 m, 13.VI.1993, leg. Zerche (DEI); Prim. Kray, ca. 40 km WNW Kamen Rybolow, Barabasch Lewada, 30.VII. – 1.VIII.1991, leg. F. Hieke (HUB); "Russia, Far East, Hanka lake region, Barabash-Levada vill. 28.VI.2002" (CST); Prim. Kray, 4 km S Poshiga, 37 km SE Dalnerechensk, 45°45'N 134°07'E, 150 m, 28.V.1993, leg. L. Zerche (DEI); Black Mts., Gryasnaya riv., 13. – 19.VI.1992, leg. J. Farkač (NMB, NMW); Yasnoe, 400 m, 12. – 19.VII.1989, leg. M. Nikodým (NMB); Kamtchatka, near Sevo lake, Milkovo, 31.VIII.1991, leg. R. Predel (CSB, CSO); Kamtchatka, nr. Esso, 600 m, 7.IX.2002 (CST); Sakhalin, Tymovskiy Dist., Zonalnoye vill., 10 km S Palevo, 15./19.VII.1993, leg. Pütz & Wrase (CAH, CSB, NMW); Sakhalin, Dolinsk, river bank, 25.IX.1987, leg. V. Kuznetsov (HUB).

M O N G O L I A: "MONGOLIA, Central aimak, Terelž, cca. [!] 80 km ONO von Ulan-Baator, 1530 m Exp. Dr. Z. Kaszab, 1966" (CSO).

C H I N A: "Tunkun Sajan" (NMW, FMC, CSO); "Mandchuria Chandaochedzi" (FMC); BEIJING: Xiaolongmen, 28. – 29.VI.1993, leg. de Rougemont (CRL); SHANXI: Wutaishan, 4. –5.VI.1993, leg. de Rougemont (CRL, NMW); Lishi, Guandi mts., 2. – 3.VII.1990, leg. J. Moravec (NMB).

K O R E A (NORTH): "Korea-Sohongo distr.-Samozijon leg. \ Pawlowski, 68 IX.1971 [on underside]" (ISEZ); "Corea septentr. Jangang-do 24 IX-1 X 1991" (ISEZ); "Korea sept. 1987 Pukde-ćhon Exped. ISEZ Cr." (ISEZ, NMW); "Korea, Phote-ćhon, distr. Samdzijon, lg. Pawlowski" (ISEZ).

DISTRIBUTION: The species is at present known from Russian Far East, northeastern China and North Korea. The record from Japan (MOTSCHULSKY 1862) refers to *P. japonicus* SHARP (two specimens in ZMM; one of them in very bad condition).

NEOTYPE: No type specimens were found in either the ZMM (Motschulsky collection), or in the ZIS. The search was also unsuccessful in HUB (there has been some friendly connection between Schaufuß and Motschulsky), NHML and NMW. It is impossible to be quite sure that the neotype of *P. sinuatocollis* is identical with the specimens Motschulsky studied when describing the species. However, his species definitely belonged to this species group (Motschulsky mentioned the characteristic secondary sexual characters), and since the reticulated specimens are much more common in the respective area than those of *P. rotundicollis*, the likeliness that Motschulsky really meant this species is very high. The Far East of Asia is a taxonomically problematic area where an ultimate solution at the specific and subspecific level in the *rotundicollis* species group is still pending. The neotype designation was provided to ensure taxonomic stability and to avoid the introduction of an additional name.

Philonthus turnai sp.n.

Holotype ♂: "Ch-NW Sichuan 17-18/7 32.30N 98.25E 1995 pass 20 km S Quagca alpine meadow ± 4100m Jaroslav Turna leg." (NMW).

Paratypes (45 exs.): 12 exs.: same data as holotype (NMW); 1 ex.: "Ch-NW Sichuan 14/7 33.09N 97.30E 1995 pass 15 km E Xiwu alpine meadow 4000m Jaroslav Turna leg." (NMW); 1 ex.: "CHINA: NW-Sichuan, 1992 32°59'N 98°08'E, 3700 m env. Serxü, alpine meadow 3./15.7., leg. J. Turna" (NMW); 6 exs.: "China, N Sichuan prov. 60 km S Hongyuan 27.-29.6.1991, ca. 4200 m J. Kalab leg." (NMW); 3 exs.: same, but "21.7. – 3.8.1991" (NMW); 1 ex.: "CHINA – Sichuan Zhilong VII.1992" (NMW); 1 ex.: "CHINA-Sichuan: Paß zw. Jiushaigou u. Zhangla ca. 3500m, 30.6.96, Erber" (CAH); 3 exs.: same, "3400-3500m, 30.VI.1996, W. Heinz leg." (2 CSO, 1 NMW); 1 ex.: "CHINA: W-Sichuan (11) Daxue Shan, 5 km W Tsheto-La Pass, 3900-4000m 30.04.20N, 101.46.39E 26.05.1997, M. Schülke" (CSB); 1 ex.: "Ch-NW Sichuan, 20/7. 31.46N 99.32E 1995 pass 20km NW Rongbaca picea forest 4091 m Jaroslav Turna leg." (CSB); 1 ex.: "Kan-ssu 1885 G. Patanin \ c.Eppelsh. Steind.d." (NMW); 1 ex.: "CHINA, Gansu, Mts. 10 km S Xiahe, 3100-3200 m, 4.VIII.1994 A. Smetana [C29]" (CSO); 1 ex.: "CHINA, Gansu, Mts. 25 km S Xiahe, 3000 m, 5.VIII.1994 A. Smetana [C30]" (CSO); 1 ex.: "CHINA, Gansu, Dalijia Shan, 46 km W Linxia 2980m, 10.VII.1994 A. Smetana [C5]" (CSO); 1 ex.: "China (Gansu) Xinglongshan b. Yuzhong 2500 – 3000 m (loc. Yangshai) 22.-26.VII.1993 Heinz leg." (CSO); 1 ex.: "China, E Qinghai prov. Qingshuihe 1.-5.7.1992, 4200 m" (NMW); 5 exs.: "CHINA-C. Tibet Shugela Valley [sic], 4600 m 40 km E Yanbajing [sic] 30.5.1997 leg. A. Wrzecionko" (3 CKP, 2 NMW); 4 exs.: "Tibet (Lhasa) Shagu-la ca. 40km sw. Yangpachen 4600 m 23.VI.1996 Heinz leg." (CSO).

DESCRIPTION: 6.0 – 10.0 mm long (3.7 – 4.4 mm, abdomen excluded). – Black, exceedingly shiny; elytra with inconspicuous to more distinct dark metallic greenish hue; tarsi usually reddish-brown with basal one or two segments darker; bases of antennal segments narrowly reddish; palpi dark brown.

Head rounded quadrangular, 1.11 – 1.14 times as wide as long; eyes 1.16 – 1.31 times as long as evenly rounded tempora; distance between medial interocular punctures about 2.5 times distance between medial and lateral interocular punctures; antennae with segment 4 inconspicuously oblong, segments 5 and 6 about as long as wide, segments 8 – 10 distinctly transverse, proportions of segments slightly variable; surface of head with variably developed micropunctation, rarely without discernable micropunctation; tempora with weak microsculpture of oblique meshes, if extending on dorsal face of head (very rare) then confined to area along medial margin of eyes; temporal setation dark; pronotum 1.06 – 1.07 times as wide as long, sides weakly convex or even subparallel, with slight sinuate emargination in front of base; dorsal rows each with four usually equidistant punctures, subhumeral group with four punctures in rhombic arrangement; surface without any traces of microsculpture except for exceedingly fine micropunctation, usually finer than on head, frequently also lacking; elytra rather densely punctate, punctures separated by 1.5 – 2 puncture diameters in transverse direction; pubescence dark; scutellum densely, slightly asperately punctate; first four visible abdominal tergites with two basal lines, second basal line on fourth visible tergite usually somewhat irregular; elevated area

between basal lines punctate and pubescent, less dense to very sparse on first visible tergite; remaining portion of tergites uniformly, moderately densely punctate, surface between punctures with dense and fine microstriae causing slight iridescence; male sternite VIII: Fig. 28; female tergite X: Fig. 35; gonocoxites of female genital segment: Fig. 41.

Aedeagus (Figs. 24, 25) similar to that of *P. rotundicollis* but much smaller; paramere (Figs. 24c, 25c) slender, variably long, sometimes slightly dilated apically, peg setae arranged in irregular subapical cluster.

DISTRIBUTION: The species is at present known only from China (Sichuan, Gansu, Qinghai, Tibet). The majority of specimens was collected at very high altitudes of 3000 – 4600 m.

ETYMOLOGY: The species is named in honor of Jaroslav Turna who collected part of the type series.

Philonthus kiangsiensis BERNHAUER

Philonthus kiangsiensis BERNHAUER 1933: 30

TYPE MATERIAL: **Holotype** ♀: "Kiang–Si Chang-tsin-cheng \ S.O.China don. DG Hauser \ kiangsiensis Brnh. Typus \ 335 \ kiangsiensis Brnh. Typus unic. \ Chicago NHMus M.Bernhauer Collection" (FMC).

DESCRIPTION: 8.0 – 13.2 mm long (5.0 – 5.6 mm, abdomen excluded). – Black, very shiny; head and pronotum with slight, elytra with more distinct metallic greenish hue; anterior margin of pronotum usually paler medially; antennae with reddish bases of segments, palpi brown, last segment of maxillary palpi markedly paler, usually bright reddish; tarsi bright reddish, basal segments of middle and hind tarsi usually distinctly darker.

Head subcircular, 1.06 – 1.07 times as wide as long; tempora long, about as long as eyes; medial interocular punctures widely separated, distance between medial interocular punctures more than 3 times distance between medial and lateral interocular punctures; surface with inconspicuous micropunctation, temporal area densely punctate and with microsculpture of oblique meshes; antennae with segments 4 – 7 (males) or 4 – 6 (females) markedly oblong, segments 8 – 10 about as long as wide; pronotum slightly wider than long (w/l ratio 1.02 – 1.06), distinctly wider than head (ratio about 1.4); sides slightly convex or subparallel in basal third, always more distinctly narrowed toward anterior margin than toward base; dorsal rows with four punctures; subhumeral group with four punctures in rhombic arrangement; surface with variably developed micropunctation, without any traces of meshed microsculpture; elytra very densely punctate, punctures separated by about one puncture diameter in transverse direction; punctures somewhat asperate at base of elytra; setae of ground pubescence reddish-golden with darker bases; scutellum densely, slightly asperately punctate; first three visible abdominal tergites with two basal lines, elevated area between basal lines densely, rather irregularly punctate (less so on first visible tergite), remaining portion of tergites densely, rather uniformly punctate; female tergite X: Fig. 34; gonocoxites of female genital segment: Fig. 42.

Aedeagus (Fig. 26) with median lobe similar to those of remaining species, but paramere (Fig. 26c) long and very slender; peg setae irregularly arranged in distal half of apical portion.

ADDITIONAL MATERIAL EXAMINED:

C H I N A: SICHUAN: Abazhou: Nanping, Jiuzhaigou, 2000 m, 8. – 13.VI.1991, leg. C. Holzschuh (NMW); GANSU: "Kan-ssu 1885 G.Patanin \ c.Eppelsheim Steind.d." (NMW); 120 km SW Lanzhou, Ponggartang, 30.VI. – 2.VII.1992, leg. J. Turna (NMW); 120 km S Lanzhou, Guanghe Xian Mai Jia, 2300 m, 8.VII.1994, leg. A. Smetana (CSO); 25 km E Xiahe, 3000 m, 5.VIII.1994, leg. A. Smetana (CSO); Xiahe (Labrang), 3300 – 3700 m, 1. – 15.VI.1998, leg. V. Major (CSB, CKC); SHANXI: Lishi, Guandi mts., 2. – 3.VII.1990, leg. J. Moravec (NMB); Wutaishan, 4. – 5.VI.1993, leg. de Rougemont (CRL, NMW); BEIJING: Xiaolongmen, 28. –

29.VI.1993, leg. de Rougemont (CRL); HEIBEI/NEI MONGOL: Pass Chengde – Chifeng 41.6N 118.2E 30. - 31.V.2002 leg. J. Turna (NMW).

R U S S I A: "Nikols-Ussurijsk Ussurigeb. Mandl" (NMW); Ussurijsk, 21.VIII.1969, leg. Kryzhanovskiy (ZIS); Vladivostok, Botanical Garden, 2.VII.1991, leg. Schröder & Kriska (CSB); 50 km N Vladivostok, Statio "30.0km", 3.VII.1991, at light, leg. Schröder & Kriska (CSB); Barabasch-Lewada, 30.VII. – 1.VIII.1991, ca. 40 km WNW Kamen Rybolow, leg. F. Hieke (HUB); "Russia, Far East, Hanka lake region, Barabash-Levada vill. 28.VI.2002" (CST).

DISTRIBUTION: The species is at present known only from China (Sichuan, Gansu, Shanxi, Beijing, Hebei, Nei Mongol) and Russian Far East (Ussuri Region).

The *Philonthus sanguinolentus* species group

The *P. sanguinolentus* species group has been sufficiently characterized by SMETANA (1995). This characterization also works well for the species included here. Therefore it is sufficient to summarize the main diagnostic features and to add a few comments.

DIAGNOSIS: Small to medium sized species; black or with characteristic markings on elytra; pronotum with dorsal rows of five punctures; abdominal segments covered by exceedingly fine and dense, almost tomentose pubescence, with punctures almost contiguous in transverse direction; front tarsi equally dilated in both sexes; male sternite VIII with two large macrosetae on each side of disc (medial one lacking); paramere entire or bifurcate.

The species of this group may be recognized at once by the characteristic abdominal pubescence. However, there are a few species of other species groups with a similarly dense pubescence, e.g. *P. subtilepunctatus* SCHEERPELTZ, 1965 (*P. convalescens* species group), but in this species the punctures of the abdomen are clearly separated by more than a puncture diameter in transverse direction, the elevated area between basal lines on first three visible tergites is much more sparsely punctate, and the aedeagus looks very different.

The shape of the aedeagus of the species with entire paramere closely resembles those of the *nigrita* and/or *spadiceus* groups. In these groups, however, the parameres are completely devoid of any peg setae (in addition to numerous external differences).

The character states of entire vs bifurcate paramere might raise doubts about the monophyly of this group but as long as there is no different concept disapproving the present one, I will treat the current assemblage as a monophylum.

Key to species of the *Philonthus sanguinolentus* species group

1 Elytra black, suture sometimes narrowly, obscurely reddish 2

- Elytra black or dark brown with red or yellowish markings, or red or yellow with dark markings, or entirely red 7

2 Second basal lines on at least second and third visible tergites angulately extended posteriad medially 3

- Second basal lines straight or weakly sinuately extended medially 4

3 Second basal lines on first three visible tergites with sharp, acutangular medial extension ..... ***schuhi***

- Second basal lines on second and third visible tergites with short, angulate extension medially, extension truncate ..... ***idiocerus***

4 Larger (3.7 – 3.9 mm, abdomen excluded); exceptional specimens with dark elytra; distribution: West Palaearctic ..... ***sanguinolentus***

- Smaller (3.0 – 3.5 mm, abdomen excluded); distribution: Himalaya and China 5

5 Pronotum parallel-sided, strongly iridescent ..... ***densus***

- Pronotum subparallel-sided or narrowed toward anterior margin, not iridescent 6

6 Larger (3.3 – 3.5 mm, abdomen excluded); pronotum about as long as wide, much wider than head (ratio head/pronotum 0.69 – 0.73), sides distinctly narrowed toward anterior margin; elytra entirely black ..... ***amplicollis***

- Smaller (3.0 – 3.3 mm, abdomen excluded); pronotum slightly wider than long, less distinctly wider than head (ratio head/pronotum 0.78 – 0.90), sides subparallel; elytra with suture obscurely reddish ..... ***beesoni***

7 Eyes small, about as long as tempora; elytra entirely red, or with blackened areas at shoulders and deflexed portions 8

- Eyes larger, longer than tempora, elytra otherwise 9

8 Abdominal tergites with fasciae of silvery pubescence; elytra entirely red ..... ***fasciventris***

- Abdominal tergites without fasciae of silvery pubescence; elytra usually with shoulders and deflexed portions blackened, rarely entirely reddish ..... ***mercurii***

9 Abdominal tergites entirely black; elytra black, suture and a longitudinal spot behind shoulders bright reddish, sometimes only suture reddish, sometimes patches confluent, rarely only suture reddish or elytra entirely black; distribution: West Palaearctic ..... ***sanguinolentus***

- Posterior margins of abdominal tergites reddish; elytra otherwise 10

10 Larger species (3.6 – 4.2 mm, abdomen excluded) from Taiwan ..... ***smetanai***

- Smaller species (2.7 – 3.5 mm, abdomen excluded) from continental Asia and Japan 11

11 Distribution: Nepal Himalaya 12

- Distribution: China, Russian Far East and Japan 13

12 Parameral lobes parallel; antennae shorter, segments inconspicuously oblong ..... ***arunensis***

- Parameral lobes slightly divergent; antennae longer, segments markedly oblong..... ***flavohumeralis***

13 Basal depression of elytra reddish yellow; China ..... ***schuelkei***

- Basal depression of elytra dark 14

14 Eyes larger, 1.57 – 2.10 as long as tempora; yellow markings of elytra sharply delimited, deflexed portions of elytra mostly dark; China ..... ***ildefonso***

- Eyes smaller, 1.35 – 1.53 as long as tempora; yellow markings of elytra diffusely delimited, deflexed portions of elytra mostly pale; Russian Far East, NE-China, Japan ..... ***virgatus***

Philonthus sanguinolentus (GRAVENHORST)

Staphylinus sanguinolentus GRAVENHORST 1802: 36
Philonthus contaminatus (GRAVENHORST 1802): 174
Philonthus aciculatus STEPHENS 1832: 238
Philonthus s. var. *unicolor* SEIDLITZ 1875: 276
Philonthus s. var. *ater* RAGUSA 1892: 167

TYPE MATERIAL: For lectotype designation see SMETANA (1995: 253).

DESCRIPTION: 6 – 10 mm long (3.7 - 3.9 mm, abdomen excluded). – Black, moderately shiny; elytra usually with a bright reddish spot along suture, somewhat widening posteriad, and with longitudinal humeral spot; frequently sutural and humeral spots fairly extended and confluent, or humeral spot missing, very rarely elytra entirely black; antennae black, bases of segments narrowly reddish proximally, more broadly reddish toward apex of antenna; palpi piceous to dark

brown with last segment of maxillary palpi usually markedly paler than penultimate segment; legs dark yellowish-brown to reddish brown, medial faces of hind tibiae infuscate.

Head rounded quadrangular, 1.28 – 1.33 times as wide as long, narrower than pronotum (ratio 0.80 – 0.85); eyes large, 1.35 – 1.37 (males) or 1.57 – 1.66 (females) times as long as tempora (females with shorter tempora); medial interocular punctures rather widely separated, distance between medial interocular punctures more than three times distance between medial and lateral interocular puncture; antennae with segments 4 – 9 markedly longer than wide, segment 10 inconspicuously oblong; pronotum about as long as wide, sides subparallel or slightly narrowed anteriad; head and pronotum with fine and very dense microsculpture of transverse and oblique waves, forming somewhat irregular meshes medially; scutellum large, densely and uniformly punctate, surface with fine, rather short-meshed microsculpture; elytra along suture about as long as pronotum, densely punctate, punctures slightly asperate, separated by 1 – 2 puncture diameters in transverse direction, pubescence dark at base of setae, distal portion yellowish; first three visible abdominal tergites with two basal lines (rarely with a rudimentary second basal line on fourth visible tergite), elevated area between basal lines very densely and finely punctate on second and third visible tergites, with an irregular double row of fine setiferous punctures on first visible tergite; second basal lines of second and third visible tergites usually slightly arcuately extended posteriad medially; surface of tergites with exceedingly dense ground punctation and pubescence, punctures almost confluent in transverse direction; male sternite VIII (Fig. 61) with deep, rather narrow medio-apical emargination, partly filled by well developed semi-membranous extension; male sternite IX: Fig. 68.

Aedeagus (Fig. 43) with median lobe moderately long, slender, slightly widened before apex or almost parallel-sided, apex more or less obtusely pointed; paramere (Fig. 43c) bilobed, face adjacent to median lobe with dense cluster of peg setae extending from apex along medial margin; with three pairs of setae along medial margins, apical pair very short and fine.

DISTRIBUTION: The species is distributed throughout the western portion of the Palaearctic Region as far east as the river Ob. It has been introduced to North America (SMETANA 1995).

Philonthus idiocerus KRAATZ

Philonthus idiocerus KRAATZ 1859: 85

TYPE MATERIAL: **Lectotype** ♂ (present designation): "Ceylon J. Nietner \ Syntypus \ Coll. Kraatz \ DEI Eberswalde \ LECTOTYPUS Philonthus idiocerus Kraatz des. Schillhammer 2002" (DEI). – **Paralectotypes**: 4 ♀♀ with more or less same data as lectotype (DEI). – One specimen in NMW might belong to the type series ("typ." mentioned on the label), but since there is no certainty, no paralectotype label has been attached (for data see "Additional material examined").

DESCRIPTION: 7.8 – 10.0 mm long (4.0 – 4.5 mm, abdomen excluded). – Black to piceous, moderately shiny, antennae black with variably reddish bases of segments, first segment light brown to reddish, markedly paler than remaining segments; palpi dark brown to reddish-brown, last segment of maxillary palpi usually paler than penultimate segment; legs reddish-brown to yellowish-brown, tibiae sometimes insignificantly darker than femora, medial faces of hind tibiae infuscate.

Head rounded quadrangular, 1.22 – 1.26 times as wide as long, slightly narrower than pronotum (ratio 0.82 – 0.88); eyes very large, 2.21 – 2.63 times as long as tempora; medial interocular punctures very widely separated, distance between medial interocular punctures about five times distance between medial and lateral interocular puncture; antennae with all segments distinctly oblong; pronotum subparallel-sided, usually slightly longer than wide (ratio 1.03 – 1.08, very rarely 1.0); head and pronotum with exceedingly fine and dense microsculpture, rather short-

meshed, transverse and irregular on head and medial portions of pronotum, more long-meshed, almost wavy and oblique on lateral portions of pronotum; scutellum large, uniformly and very densely, slightly asperately punctate; elytra along suture about as long as pronotum, finely and densely, almost asperately punctate, punctures separated by a puncture diameter or less; pubescence entirely black; first three visible tergites with two basal lines, elevated area between basal lines almost as densely punctate as remaining portion of tergite, less densely punctate on first visible tergite; second basal lines on second and third visible tergites extended posteriad medially, extension usually truncate posteriorly, very rarely arcuate; surface of tergites exceedingly densely and very finely punctate and pubescent, appearing almost tomentose; male sternite IX: Fig. 69; female tergite X: Fig. 75; gonocoxites of female genital segment: Fig. 83.

Aedeagus (Fig. 44) with moderately slender, rather flat (lateral view) apical portion of median lobe, apex rounded or subtruncate; paramere (Fig. 44c) bilobed, lobes long and slender, slightly divergent apically, face adjacent to median lobe with large number of peg-setae occupying almost entire apex, extending in increasingly narrowing band along medial margins of lobes toward base of furcation; with a larger pair of normal setae subapically at medial margins of lobes and two pairs of shorter setae more basally at lateral confines of peg-setae cluster.

DIAGNOSIS: In addition to the genital characters, *P. idiocerus* may be separated from dark specimens of *P. sanguinolentus* by the longer antennal segments, the much larger eyes and the more conspicuous medial extensions of the second basal lines on the second and third visible tergites. Also, according to our current knowledge, the distributional areas of both species do not overlap. *Philonthus idiocerus* differs from the following species (*P. schuhi* sp.n.), by the larger eyes and by the shape of the medial extensions of the second basal lines on the second and third visible tergites (see there).

ADDITIONAL MATERIAL EXAMINED:

A F G H A N I S T A N: "Afghanistan: Nuristan Bashgultal, 1100 m 6.5.53 J. Klapperich" (NMW); "Afghan. Nurestan Waygol 2000m 23.6.1972 Kabakov" (CKP).

I N D I A: "N. Garhwal, U.P. 22.IX.1921 \ M.Cameron. Bequest. B.M.1955-147" (NHML); "India: Poona. 3.IX.1944. \ D. Leston. B.M.1946-365." (NHML); "Haldwani Dist. Kumaon, India. H.G.C. \ H.G.Champion Coll. B.M. 1953-156" (NHML); "Nedungadu Tanjore Distr. India orientalis Coll. Mus. Pragae \ coll. Hromadka" (CHP); "INDIA 45 Madras Coimbatore 440 m, 22-XI-72 Besuchet, Löbl, Mussard" (MHNG).

S R I L A N K A: "idiocerus Kr. typ. Ceylon. ded. Kraatz \ c. Epplsh. Steind. d." (NMW).

N E P A L: "Nepal centr. Sauraha 20. – 25.5.1992 leg. I. Jenis" (NMW); "NEPAL (Prov. Bagmati) below Tarke Ghyang 2600 m, 25.IV.81 Löbl & Smetana 458" (CSO); "NEPAL (Prov. Bagmati) NE Barahbise, 2500 m 2.V.81 Löbl & Smetana" (CSO).

C H I N A: "423 3/11/52 \ China \ Bowring 63.47*" (NHML); same but "423 34/5/52" (FMC); same but "652 16/2/57" (NHML).

DISTRIBUTION: The species is at present known only from the Asian mainland, where it mainly occupies the transitional area between the Palaearctic and Oriental Regions (Afghanistan, N-India, Nepal), but it also extends to more tropically influenced areas like S-India and S-China (the Bowring specimens from China most likely refer to Hongkong).

LECTOTYPE: As the original description did not mention the number of specimens included in the type series and specimens labeled "*idiocerus*" from virtually all sources in fact turned out as belonging to at least two different species it was necessary to tie the name to a single reference specimen.

Philonthus schuhi sp.n.

Holotype ♂: "N-VIETNAM Yenbai 11.5. leg. J. Horak" (NMW).

Paratypes (28 exs.): 1 ex.: "India \ Bowring. 63.47*" (NHML); 2 exs.: "Dehra Dun. Dr. M. Cameron 11.10.1921. \ M.Cameron. Bequest. B.M.1955-147." (NHML); 1 ex.: same but "16.1.1921" (NHML); 1 ex.: same but "15.10.1921." (NHML); 3 ex.: same but "22.10.1921." (1 NHML, 2 CSO); 1 ex.: "Naga Hills Assam 22/3/24(28) \ M.Cameron. Bequest. B.M.1955-147." (NHML); 1 ex.: "NE-INDIA: Assam, 100m Kaziranga wild life, Pan Bari res. for., 12.-21.XI.1997, 26°45'N, 93°10'E Siniaev, V.; S.; M. Murzin" (CSB); 1 ex.: "H.L.Andrewes Nilgiri Hills \ M.Cameron. Bequest. B.M.1955-147." (NHML); 1 ex.: "Nedungadu Tanjore Distr. India orientalis Coll. Mus. Pragae" (CRL); 1 ex.: "INDIA: W.Almora, Kumaon. \ H.G.Champion Coll. B.M. 1953-156" (NHML); 1 ex.: "INDIA: Kerala Cardamom Hills Periyar Nat. Park 900m, 12.10.1991 leg. R. SCHUH" (NMW); 1 ex.: "NEPAL: Annapurna: Pokhara Umg., \ 800m, 26.-28.II.1994, leg. Ahrens" (DEI); 1 ex.: "E. NEPAL: KOSI Kuwapani-Chichila 2300-2100 m, 24.IV.Löbl – Smetana 1984" (MHNG); 1 ex.: "Ceylon. G. Lewis. 1910-320. \ Dikoya. 3,800-4,200 ft. 6.XI.81-16.I.82. \ P. idiocerus Kr." (NHML); 1 ex.: "idiocerus Kr. \ Bandarawella W.Horn 1899" (DEI); 1 ex.: "850 \ A K. Weld Downing. Burma \ M.Cameron. Bequest. B.M.1955-147." (NHML); 1 ex.: "BURMA: Mishmi Hills. 1935. M.Steele. \ Brit. Mus. 1935-312 \ P. idiocerus Kr." (NHML); 1 ex.: "Birmania Shwego-myo Fea. Ottobre 1885 \ idiocerus Kr. ded. Kraatz det. Bernhauer" (FMC); 1 ex.: "THAILAND Jan 1989 240 km nw. Bangkok 110m, leg. Thielen \ 25 km nw. Lan-Sak Lichtfang" (NMW); 1 ex.: same, but Feb. 1989 (NMW); 2 exs.: "12/12 \ Thailand Pattaya 1979 T. Palm" (ZML); 1 ex.: "Laos Song Hae le 2-XII.1919 R. Vitalis de Salvaza \ Brit.Mus. 1937-363" (NHML); 1 ex.: "S-LAOS: Champasak ca. 50 km S Pakse Umg. Ban Phatoumphone 23./24.5.1996, 50 – 100 m leg. Schillhammer (1a)" (NMW); 1 ex.: "Malaysia, Penang 6.I. – 1.II.1981 leg. T. Palm, B. Ferringhi" (ZML).

DESCRIPTION: Measurements: 7.5 – 10.2 mm long (4.0 – 4.9 mm, abdomen excluded); head 1.18 – 1.35 times as wide as long, ratio between head width and pronotum width 0.87 – 0.96; eyes 1.42 – 1.96 times as long as tempora; pronotum 1.00 – 1.11 times as long as wide.

The species is very similar to *P. idiocerus* externally, but differs (in addition to the genital characters) by the smaller eyes, and particularly by the medial extensions of the second basal lines on first three visible tergites; extensions well developed, also on first visible tergite (!), acutangular, somewhat flattened posteriorly; female tergite X (Fig. 77) larger, with acute apex; gonocoxites of female genital segment: Fig. 85.

Aedeagus (Figs. 45, 46) much more slender then that of *P. idiocerus*, median lobe with sharply pointed apex, not as flat in lateral view; paramere (Figs. 45c, 46c) shorter, lobes not divergent apically, peg setae less numerous, occupying only apical half of each lobe, particularly along medial margin larger and cone-shaped; apical pair of normal setae situated exactly on apex of each lobe, remaining two pairs inconspicuous, situated subapically.

DISTRIBUTION: The species shares most of its distributional range with *P. idiocerus* except for Afghanistan, and it extends further south to the Malay peninsula. It is at present known from India (North and South), Nepal, Myanmar, Thailand, Laos, Vietnam and Malaysia.

ETYMOLOGY: The species is named in honour of my friend and colleague Rudolf Schuh who collected one of the paratypes. The material he usually brings back from his expeditions is characterized by a high degree of selectiveness and quality.

Philonthus sp. prope *idiocerus* KRAATZ

1 ♀: "Birmah Ruby Mes \ Doherty \ Fry Coll. 1905.100 \ P. idiocerus Kr." (NHML). - This single female specimen from Myanmar differs so conspicuously from the two preceding species that it might belong to a yet undescribed species: second basal lines on first three visible tergites straight, suture of elytra and hind margins of tergites markedly reddish, pronotum paler than head and elytra (teneral?), antennal segments inconspicuously more oblong; female tergite X (Fig. 76) with distinct apical emargination; gonocoxites of female genital segment: Fig. 84.

1 ♀: "J.B. CORPORAAL JAVA-Preanger 8 Tjigembong '15 \ idiocerus Kr. det. Bernhauer \ Chicago NHMus M.Bernhauer Collection" (FMC). – This single female specimen resembles *P. idiocerus* very closely but has a slightly different tergite X.

1 ♀: "Balbalan Luzon \ Philippinen coll. Boettcher don. Staudacher \ idiocerus Kr ? det. Bernhauer \ Chicago NHMus M.Bernhauer Collection" (FMC); 1 ♀: "Imugan Luzon \ Philonthus idiocerus Kr. \ idiocerus Kr. \ leg.

Böttcher 1.Los; Staudinger \ ex coll. Scheerpeltz" (NMW). – Both female specimens are probably conspecific but they certainly do not belong to *P. idiocerus*. Their description as a separate taxon has to be postponed until male specimens are discovered.

1 ♀: "MAL., Sarawak 1993 Kelabit HL, 5km E Bario Pa Ukat, 27.2., 1000m leg. M. Jäch (15)" (NMW). – This specimen doubtlessly belongs to a new species, also not described here due to the lack of males. If it were not for the tomentose pubescence of the abdomen, the assignment to this species group would even be quite doubtful (quadrate head with long tempora, transverse antennal segments 7 – 10).

Philonthus smetanai sp.n.

Holotype ♂: "TAIWAN, Taichung Hsien, Anmashan 2225 m 11-15.V.92 A. Smetana [T122]" (CSO).

Paratypes (12 exs.): 1 ex.: "TAIWAN Kaohsiung Hsien, Tengchih 1610 m 24.IV.1990 A. Smetana [T20]" (CSO); 1 ex.: "TAIWAN Nantou Hsien, Shanlinchi 1650 m 16.V.1990 A. Smetana [T60]" (CSO); 4 exs.: same data as holotype (3 CSO, 1 NMW); 3 exs.: same data as holotype but "11.V.1992 [T123]" (2 CSO, 1 NMW); 1 ex.: same data as holotype but "14.V.92 [T130]" (NMW); 1 ex.: "TAIWAN Taitung Hsien Hsinkangshan above Chengkang, 800 m 17.IV.1998, A. Smetana & Lise Robillard [T180]" (CSO); 1 ex.: "TAIWAN Taitung Hsien Hsinkangshan above Chengkang, 900 m 19.IV.1998 A. Smetana [T184]" (CSO).

DESCRIPTION: 6.5 – 9.1 mm long (3.6 – 4.2 mm, abdomen excluded). – Black to dark brown, rather shiny; pronotum with black disc, margins markedly paler, especially anterior and posterior margins; elytra dark brown with weakly delimited reddish markings: entire posterior margin, narrow, posteriad widened spot along suture and posterior half of scutellum and a large humeral spot; frequently, elytra almost entirely reddish with darker shades postero-laterally; posterior margins of tergites distinctly reddish; antennae black, basal two segments brightly reddish to pale reddish-brown, distal half of segment 2 frequently darkened; sometimes two outer segments reddish as well; labrum and palpi uniformly reddish-brown to brownish, segment 3 of maxillary palpi sometimes slightly darkened; legs pale yellowish-brown, medial faces of hind tibiae infuscate.

Head rounded quadrangular, 1.15 – 1.23 times as wide as long, markedly narrower than pronotum (head width/pronotum width = 0.76 – 0.78); eyes large, 1.73 – 1.78 times as long as tempora; medial interocular punctures very widely separated, distance between medial interocular punctures about five times distance between medial and lateral interocular puncture; antennae with all segments markedly oblong; pronotum about as long as wide or inconspicuously oblong (l/w ratio 1.0 – 1.04), sides almost straight or slightly convex, narrowed anteriad; head and pronotum with dense and fine microsculpture of transverse and oblique waves, slightly more profound on head; scutellum large, moderately densely, very finely punctate; elytra moderately densely (compared to preceding species), rather coarsely punctate, punctures separated by about two puncture diameters in transverse direction; elytral pubescence short, greyish-yellow; abdominal tergites less densely but more finely punctate as in preceding three species, punctures not confluent, separated by at least one puncture diameter; with exceedingly fine, short, silvery pubescence; first three visible tergites with two basal lines, elevated area between basal lines punctate and pubescent, as fine and dense as remaining portion of tergites, elevated area on first visible tergite with almost regular, single row of punctures (equally fine as on following tergites); transverse row of large setae at half-length of tergites more sparse, consisting of only six setae; male sternite VIII: Fig. 62; male sternite IX: Fig. 71; female tergite X (Fig. 80) with deep apical emargination; gonocoxites of female genital segment: Fig. 86.

Aedeagus (Fig. 47) voluminous; median lobe broad, apical portion sinuately narrowed toward rounded apex; paramere (Fig. 47c) bilobed; lobes long, divergent, each lobe furnished with a moderately large number of irregularly arranged peg-setae in distal half; with two apical pairs of setae and two pairs of setae situated far more basally.

DISTRIBUTION: The species is at present known only from the island of Taiwan

ETYMOLOGY: Named in honour of my friend and colleague Aleš Smetana. His extensive collections in Taiwan have been among the major contributions to our knowledge of the staphylinid diversity of this highly interesting island.

Philonthus flavohumeralis sp.n.

Holotype ♂: "328 Panchthar Dist. Paniporua, 2300 m mixed broadleaved forest 16. - 20.4.1988 leg. J. Martens & W. Schawaller \ Nepal-Expeditionen Jochen Martens" (SMNS).

Paratypes (32 exs.): 4 exs.: same data as holotype (3 SMNS, 1 NMW); 2 exs.: "319 Ilam Distr., Mai Pokhari 2100-2200 m, Castanopsis forest remnants, 9.-10.April 1988, J. Martens & W. Schawaller leg." (SMNS); 2 exs.: "NEPAL Khandbari Distr. Induwa Khola Valley 2300 m, 6.IV.84 Löbl & Smetana" (MHNG); 3 exs.: same, but "2000m 14.IV.84" (1 MHNG, 2 CSO); 1 ex.: same, but "16.IV.84" (MHNG); 3 exs.: same, but "2100 m, 17.IV.84" (2 MHNG, 1 NMW); 1 ex.: same, but "2100m, 18.IV.84" (CSO); 4 exs.: "NEPAL (Prov. Bagmati) Dobate Ridge NE Barahbise, 2700 m, 7.V.81 Löbl & Smetana" (2 CSO, 1 MHNG, 1 NMW); 2 exs.: "NEPAL (Prov. Bagmati) Pokhare NE Barahbise 2800 m, 2.V.81 (MHNG); 1 ex.: "NEPAL Rasuwa Dis. Langtang Kh. Vall. Forest Camp, 1950 m, 13.IV.85 A. Smetana" (CSO); 1 ex.: "NEPAL Lalitpur Distr. 2km S Godawari 1700m 12.IX.83 Smetana & Löbl" (MHNG); 1 ex.: "NEPAL Annapurna Mts. Sokung 2500-2550m 29.4.1999 leg. C. Krüger, G. Hirthe" (CHK); 1 ex.: "NEPAL HIMALAYA 20km w Pokhara Mt. Panchase \ 2300 mNN, sec. forest, by traps 22.V.1997, Jäger" (SMT); 1 ex.: "Mongshong 1350m 23.XI. \ Darjeeling Distr. India Bhakta B." (NMB); 1 ex.: "Lopchu Ghum 2100m 9.5.1975 \ Distr. Darjeeling India, W. Wittmer" (NMB); 2 exs.: "INDIA W. Bengal Darjeeling distr. Tigerhill 2200-2300m Besuchet - Löbl 13.X.78" (MHNG, NMW); 1 ex.: "INDIA W. Bengal Darjeeling distr. Algarah 1800m 9.X.78 Besuchet – Löbl" (MHNG); 1 ex.: "INDIA W. Bengal Darjeeling distr. Algarah – Labha 1900m 2.X.78 Besuchet – Löbl" (MHNG).

DESCRIPTION: 5.2 – 7.7 mm long (2.7 – 3.5 mm, abdomen excluded). – Dark brown to piceous, rather shiny; head piceous with anterior margin of clypeus paler reddish-brown, reddish-brown color frequently extending to entire clypeus and frons; pronotum dark brown, all margins to a various extent reddish-brown; elytra dark brown with suture and posterior margin narrowly, markedly reddish, shoulders with conspicuous reddish-yellow spot, frequently occupying entire base of elytra, including scutellum; abdominal tergites dark brown (most specimens) to reddish-brown, posterior margins of first four visible tergites rather broadly reddish-brown to reddish (well delimited), anterior margin of respective tergites obscurely reddish-brown; posterior margin of tergite VII more broadly yellowish (indistinctly delimited), tergite VIII gradually becoming paler toward apex; antennae reddish yellow, in darker specimens with darkened middle segments, basal segment always bright reddish-yellow; palpi usually reddish-yellow, in dark specimens with partly darkened segments 1 – 3 of maxillary palpi; legs yellow, medial faces of middle and hind tibiae to various extent infuscate, in very pale specimens even hind tibiae not infuscate.

Head variably shaped, either rounded quadrangular or rounded trapezoid, 1.14 – 1.21 times as wide as long, markedly narrower than pronotum (head width/pronotum width = 0.75 – 0.79); medial interocular punctures very widely separated, distance between medial interocular punctures about five times distance between medial and lateral interocular puncture; frons frequently with slight depression; eyes moderately large, 1.33 – 1.50 times as long as tempora; shape of tempora fairly variable, subparallel, inconspicuously convergent, in some specimens (e.g. holotype) even slightly protruding laterally; macrosetae on head very long; antennae with all segments markedly oblong; pronotum slightly oblong, 1.02 – 1.06 times as long as wide, widest approximately at midlength, sides subparallel or (more often) slightly narrowing anteriad; head and pronotum with dense and fine microsculpture of rather short, transverse and oblique meshes, becoming more wave-like on lateral portions of pronotum, and particularly short-meshed and irregular on disc of head; scutellum finely, moderately densely punctate; elytra along suture

shorter than pronotum along midline; comparatively sparingly punctate, punctures separated by 2 – 3 puncture diameters in transverse direction; with moderately long, yellowish ground pubescence; abdominal tergites exceedingly finely, densely punctate but punctures not contiguous, separated by 1 – 2 puncture diameters in transverse direction; punctation on first visible tergite less dense; first three visible tergites with two basal lines, elevated area between basal lines with punctation similar to that of remaining tergite, on first visible tergite forming a single row; male sternite VIII: Fig. 63; male sternite IX: Fig. 70; female tergite X: Fig. 79.

Aedeagus (Fig. 49) small; median lobe slender, apical portion narrowed toward rather acutely pointed apex in almost straight line, in lateral view distinctly curved dorsad; paramere (Fig. 49c) deeply bifurcate, lobes slender, slightly divergent; each lobe furnished with 10 – 11 peg setae, arranged in irregular, longitudinal cluster along apico-medial margins; four pairs of normal setae, two situated around apex, two more subapically at lateral margin.

DISTRIBUTION: The species is at present known only from the Nepal Himalaya and from northern India (Darjeeling).

ETYMOLOGY: The name of the species refers to the reddish-yellow color of the humeral spot.

Philonthus arunensis sp.n.

Holotype ♂: "412 Sankhua Sabha Dist. Arun Valley betw. Mure – Hurure, mixed broadleaved forest, 2050 – 2150 m, 9.-17.6.1988, leg. J. Martens & W. Schawaller" (SMNS).

Paratype: 1 ♂ with same data as holotype (NMW).

DESCRIPTION: Measurements: 6.0 – 6.8 mm long (2.80 – 2.95 mm, abdomen excluded); head 1.14 – 1.20 times as long as wide, narrower than pronotum (head width/pronotum width = 0.78 – 0.79); eyes 1.33 – 1.46 times as long as tempora; pronotum 1.03 – 1.05 times as long as wide.

The species is very similar to *P. flavohumeralis* and differs only by the shorter antennal segments (segment 9 inconspicuously oblong, segment 10 as long as wide) and by the shape of the aedeagus (Fig. 50); paramere (Fig. 50c) with parallel lobes, peg-setae less numerous (9 pegs), arranged in roundish cluster at apex of lobes.

Female unknown.

DISTRIBUTION: The species is at present known only from the type locality.

ETYMOLOGY: The species is named after Arun Valley in the East of Nepal in which the type locality is situated.

Philonthus schuelkei sp.n.

Holotype ♂: "CHINA (W-Hubei) Daba Shan creek vall. 8 km NW Muyuping 31°29'N / 110°22'E, 1540 m (edge of small creek) 18.VII.2001 Wrase [16]" (NMW).

Paratype: 1 ♀: "CHINA (W-Hubei) Daba Shan creek vall. 8 km NW Muyuping 31°29'N, 110°22'E, 1550 - 1650 m, 18.VII.2001 leg. M. Schülke [C01-16A] \ creek valley, deciduous forest, moss (sifted) [C01-16A]" (CSB).

DESCRIPTION: Measurements: 7.3 – 7.6 mm long (3.35 – 3.45 mm, abdomen excluded); head 1.12 – 1.18 times as wide as long, distinctly narrower than pronotum (head width/pronotum width = 0.77 – 0.81); eyes 1.61 – 1.66 times as long as tempora; pronotum 1.04 – 1.05 times as long as wide.

The species is also very similar to *P. flavohumeralis* and differs mainly by the slightly longer eyes (eyes/tempora = 1.61 – 1.66), the smaller distance between the medial interocular punctures

(about 2.5 times distance between medial and lateral interocular puncture), the better delimited reddish color on elytra, resulting in a U-shaped dark macula (similarly as in *P. ildefonso*) and by the shape of the aedeagus (Fig. 48): median lobe with longer, flame-shaped apical portion, distinctly widened at level of apex of paramere; paramere (Fig. 48c) also bilobed, but lobes slightly convergent, bearing 15 – 16 peg-setae arranged in longitudinal cluster from apex along medial margins of lobes; with three pairs of normal setae, lateral setae widely separated. From *P. ildefonso* it differs (in addition to the genital characters) by the paler antennae (segment 1 bright reddish) and by the extension and shape of the reddish humeral spot which includes the entire humeral area – if the humeral spot in *P. ildefonso* is as short as in *P. schuelkei* (about half length of elytra) it becomes very narrow, and the shoulders always remain black. Female tergite X: Fig. 78; gonocoxites of female genital segment: Fig. 87.

DISTRIBUTION: The species is at present known only from the type locality.

ETYMOLOGY: The species is named in honour of Michael Schülke who collected the paratype and generously donated the holotype to the NMW.

Philonthus densus CAMERON

Philonthus densus CAMERON 1926: 355

TYPE MATERIAL: **Lectotype** ♂ (present designation): "Syntype [round, blue-margined label] \ TYPE \ Chakrata Dist. Chulli Khud 8000' \ Dr. Cameron 17.v. 22. \ Philonthus densus Cam. \ M.Cameron. Bequest. B.M.1955-147." (NHML). – **Paralectotypes** (3 exs.): 2 exs. with same data as lectotype, but "14.v.22." (NHML); 1 ex.: "Chakrata Dist. Sainj Khud 6500' \ Dr. Cameron. 27.v.22. \ M.Cameron Bequest. B.M. 1955-147." (NHML) – this specimen belongs to *P. beesoni*.

DESCRIPTION: 6.8 – 7.3 mm long (3.0 – 3.2 mm, abdomen excluded). – Black, moderately shiny; elytra along suture narrowly obscurely, rarely more brightly reddish; mandibles dark reddish-testaceous, palpi brown to blackish, last segment of maxillary palpi inconspicuously paler; antennae black, outer one or three segments often dark reddish-brown in basal half; legs reddish brown to reddish-yellow, medial faces of hind tibiae infuscate (in Chinese specimens even middle tibiae), first segment of middle and hind tarsi usually darker than remaining segments; pronotum with very distinct iridescence, at least in basal half.

Head rounded quadrangular, 1.13 – 1.24 (Himalaya) or 1.27 – 1.32 (China) as wide as long, slightly (China, ratio 0.92 – 0.96) or distinctly (Himalaya, ratio 0.80 – 0.87) narrower than pronotum; eyes large, 1.66 – 1.80 (Himalaya) or 1.20 (China, tempora much longer) as long as tempora; distance between medial interocular punctures about 2.5 times distance between medial and lateral interocular puncture; antennae with segments 4 – 7 inconspicuously oblong, segments 8 – 10 about as long as wide; pronotum subparallel-sided, rarely slightly narrowed toward base; 1.08 – 1.11 as long as wide; head and pronotum with dense and distinct microsculpture of transverse and oblique waves; elytra along suture slightly shorter than pronotum, densely and rather coarsely, slightly asperately punctate; pubescence rather long, greyish; first three visible abdominal tergites with two basal lines, second basal lines on second and third visible tergites inconspicuously sinuately extended posteriad medially; elevated area between basal lines densely punctate on second and third visible tergites, less densely on first visible tergite, pubescence grey to yellowish-grey (depending on angle of lighting); surface of tergites with fine and dense microreticulation; male sternite VIII: Fig. 64; male sternite IX: Fig. 72.

Aedeagus (Figs. 52, 53) small; median lobe very slender, rod-like, either parallel-sided or slightly widened subapically, apical portion gradually narrowed toward obtusely pointed apex; paramere (Figs. 52c, 53c) very narrow, bearing two contiguous, subapical rows, each with three peg-setae, with three pairs of normal setae, situated subapically along lateral margin.

DIAGNOSIS: *Philonthus densus* may be readily recognized among the dark species with entire paramere, by the almost parallel-sided, strongly iridescent pronotum and by the much larger eyes (except specimens from China).

REMARK: The Chinese specimens, which differ from the Himalayan specimens not only by the much longer tempora, but also by the fact that they were collected at a much lower elevation (Xishuangbanna is tropical lowland forest), probably represent a distinct subspecies, but for reasons mentioned above (see *rotundicollis* group) I will refrain from naming it.

ADDITIONAL MATERIAL EXAMINED:

I N D I A: UTTAR PRADESH: "In dung \ Chakrata Dist. Kanasar 7050' \ Dr. Cameron. 14.-22.v.22. \ M.Cameron. Bequest. B.M.1955-147." (NHML); "Chakrata Dist. Bodiyar, 8300' \ Dr. Cameron. 3-12.V.22" (NMW); "Woodstock Falls, Mussoorie. \ Dr. Cameron. 27.III.1921." (NMW); ASSAM: "Shugnu 3000 Assam [handwritten] \ M.Cameron. Bequest. B.M.1955-147." (NHML).

N E P A L: KASKI: Annapurna, Sikles range, upp. Garlang, S Sikles, 1900 – 2500 m, 19./20.IV. 1998, leg. Schmidt (DEI); Annapurna, Mt. Panchhase W Pokhara, 2000 – 2300 m, 18.V.1997, leg. J. Schmidt (DEI); KATHMANDU: Phulcoki, 2500 m, 28. – 29.IV.1984, leg. Löbl & Smetana (MHNG); ILAM: Mai Pokhari, 2150 – 2250 m, 23. – 25.VIII.1983, leg. J. Martens & B. Daams [254] (SMNS); Mai Pokhari, 2100 - 2200 m, Castanopsis forest remnants, 9. - 10.IV 1988, leg. J. Martens & W. Schawaller [319] (SMNS); SANKHUA SABHA: Forest NE Kuwapani, 2500 m, 11. - 15.IV.1982, leg. A. & Z. Smetana (CSO).

C H I N A: YÜNNAN: Xishuangbanna, 22.I.1993, leg. G. de Rougemont (CRL, NMW); Ruili, 4.II.1993, leg. G. de Rougemont (CRL).

DISTRIBUTION: The species is at present known from the Himalaya (NW-India, Nepal) and from southern China (Yünnan: Xishuangbanna).

LECTOTYPE: As the type series of *P. densus* was composed of two different species it was necessary to tie the name to a single reference specimen to ensure taxonomic stability.

Philonthus beesoni CAMERON

Philonthus beesoni CAMERON, 1926: 357.

Lectotype ♂ (present designation): "Gahan 7000' Simla Hills. Dr. Cameron. IX. 1921. \ M.Cameron Bequest. 1955-147." (NHML). – **Paralectotypes** (6 exs.): 3 exs.: "Matiana 7900' Simla Hills. \ Dr. Cameron. IX.1921 \ C.E. Tottenham collection. B.M. 1974-587." (NHML); 1 ex.: "Theog 7600' Simla Hills \ Cameron. IX.1921 \ C.E. Tottenham collection. B.M. 1974-587." (NHML); 1 ex.: "Fagu 8000' Simla Hills \ Dr. Cameron 9.IX.1921" (NMW); 1 ex.: "Chakrata Dist. Binal Gad 7-8000' \ Dr. Cameron. 24.V.22." (NMW).

DESCRIPTION: 6.1 – 7.4 mm long (3.0 – 3.3 mm, abdomen excluded). – Black, moderately shiny; elytra along suture narrowly reddish, reddish color usually more evident than in *P. densus*, in many cases even very conspicuous, bright reddish; posterior margins of abdominal tergites very narrowly obscurely reddish-brown; antennae black, basal two segments frequently dark brown, outer one or two segments often inconspicuously paler than middle segments; legs dark reddish brown, medial faces of hind tibiae infuscate.

Head rounded quadrangular, 1.16 – 1.27 times as wide as long, narrower than pronotum (head width/pronotum width = 0.78 – 0.90); eyes moderately large, 1.06 – 1.38 times as long as tempora; tempora subparallel or slightly convergent; distance between medial interocular punctures about two times distance between medial and lateral interocular puncture; antennae with segments 4 – 9 markedly oblong, segment 10 weakly oblong; pronotum 1.02 – 1.06 times as long as wide, sides subparallel or slightly convex or slightly narrowing anteriad; head and pronotum with dense and very profound microreticulation of transverse and oblique waves, pronotum not iridescent; scutellum finely and moderately densely punctate and pubescent; elytra along suture inconspicuously shorter than pronotum along midline, densely, rather coarsely, slightly asperately punctate, punctures separated by about a puncture diameter in transverse direction; abdominal tergites with punctation finer and pubescence finer and shorter than in *P.*

densus, particularly elevated area between two basal lines on first three visible tergites with much finer and less dense punctation.

Aedeagus (Fig. 51) very similar to that of *P. densus* but larger, paramere (Fig. 51c) slightly broader at base.

DIAGNOSIS: The species is exceedingly similar to *P. densus* with which it occurs sympatric in parts of NW-India and Nepal. It may be easily recognized by the longer tempora (at least in the area of sympatric occurence), the wider pronotum, the lack of iridescence on the pronotum and by the more distinctly oblong antennal segments.

ADDITIONAL MATERIAL EXAMINED:

P A K I S T A N: "PAKISTAN: Hazara s/Naran 2600 m 1.VI.1983 Besuchet – Löbl" (MHNG); "PAKISTAN: Swat s/Utrot; 13.V.1983 2500-2600 m Besuchet – Löbl" (MHNG, NMW); "PAKISTAN: Swat Kalam 2100 m 12.V.1983 besuchet Löbl" (MHNG); "PAKISTAN: Swat Malam Jabba; 9.V.1983 2300-2400 m; Besuchet – Löbl" (MHNG); "Kashmir, Aru lg. H. Franz, Okt. 1977" (NMW).

I N D I A: "Deoban, 9331; Chakrata, U.P. \ Dr. Cameron. 3.5.21. \ C.E. Tottenham collection. B.M. 1974-587" (NHML); "Chakrata Dist. Konain 8000' \ Dr. Cameron. 24-30.V.22 \ M.Cameron Bequest. B.M. 1955-147." (NHML); "Chakrata Dist. Sainj Khud 6500' \ Dr. Cameron. 27.v.22. \ M.Cameron Bequest. B.M. 1955-147." (NHML – paralectotype of *P. densus*); "Dhauli Ganga Almora 9250' \ M.Cameron Bequest. B.M. 1955-147." (NHML); "Kotgarh 7000' Simla Hills. \ Dr. Cameron. 17.IX.1922 \ M.Cameron Bequest. B.M. 1955-147." (NHML); "Narkanda 9230' Simla Hills. \ Dr. Cameron. 15.IX.1921" (NMW); "Narkanda, 15.-20.IX.1951. \ Punjab, India 9100 ft. F.A. Kincl leg. \ collectio M. Fassati" (NMW); "INDE Garhwal (UP) 2 km E. de Dhanolti 2250 m I. Löbl 21.X.79" (MHNG, NMW); "INDE Garhwal (UP) 10 km E. de Dhanolti 2450 m I. Löbl 5.X.79" (MHNG).

N E P A L: "Umg. Jarkot, Nepal Thakolagebiet 4000-4300m, lg. H. Franz" (NMW); "NEPAL (Prov. Bagmati) Pokhare NE Barabhise 2700 m, 7.V.81 Löbl & Smetana" (MHNG); "NEPAL (Prov. Bagmati) Kutumsang 2500-2700 m, 7.IV.81 Löbl & Smetana" (MHNG); "NEPAL (Prov. Bagmati) below Thare Pati 3300 m, 10.IV.81 Löbl & Smetana" (MHNG); "NEPAL (Prov. Bagmati) Malemchi, 2900 m, 14.IV.81 Löbl & Smetana" (MHNG); same, but "2800 m, 26.IV.81" (CSO, NMW); "NEPAL (Prov. Bagmati) aboe Shermathang, 2900 m, 26.IV.81 Löbl & Smetana" (CSO); "NEPAL (Prov. Bagmati) Tarke Ghyang 2650 m, 19.IV.81 Löbl & Smetana" (MHNG); "NEPAL, Kathmandu District \ Phulcoki 2600m 20.IV.1982 A. & Z. Smetana" (CSO); same, but "2550m, 21.IV.1982" (CSO); "NEPAL Lalitpur Distr. Phulcoki 2650m, 13.X.83 Smetana & Löbl" (CSO, NMW); same, but "2600m 14.X.83" (MHNG, CSO, NMW); same, but "2700m, 15.X.83" (MHNG); same, but "2700m, 16.X.83" (CSO); same, but 2550m, 17.X.1983" (MHNG); same, but "2550m, 28.IV.1984" (CSO); same, but "29.IV.1984" (CSO, NMW); "NEPAL Lalitpur Distr. Phulcoki N slope 2600 m 16.X.1983 Smetana & Löbl" (MHNG); "NEPAL: distr. Kathmandu: Phulcoki 2500 m, 28-29.IV.84 Löbl – Smetana" (MHNG); "NEPAL Parbat Distr. Ghoropani Pass N slope 2700m 6.X.1983 Smetana & Löbl" (MHNG, CSO, NMW); same, but "2750m, 5.X.1983" (CSO); same, but 2800m, 5.X.1983" (CSO); "NEPAL Rasuwa Distr. 1.5km NE Bhargu 2000m 12.IV.85 A. Smetana" (CSO); "NEPAL Manang Distr. 4 km SE Pisang 3050m 26.IX.83 Smetana & Löbl" (MHNG); "NEPAL Manang Distr. For. W Bagarchhap 2250m 22.IX.83 Smetana & Löbl" (CSO); "NEPAL Dhaulagiri 1998 upp. Myagdi Khola valley bef. Italy Camp 34-3500m 4.7., lg. Bernd & Schmidt" (SMT, NMW); "NEPAL Annapurna '97 13.6. Telbrung Danda 26-2800m l. Schmidt" (SMT); "Nyauli Kharka S Sikles 2400m 21.-24.4.1996 \ NEPAL Annapurna Sikles range 1996 lg. Schmidt" (DEI); "NEPAL Annapurna Mts. Bagarchhap-Temang 2400-2700m, 17.4.99 leg. C. Krüger, G. Hirthe" (CHK); "C-Nepal, Manaslu massif Barapokhari Lekh 12 km NE Besisahar vill. 28°18'N, 84°28'E, 10.IX.2000, leg. A. Hetzel \ 3100m, lake Barapokhari env. sieved from moss" (CFeM); "NEPAL 14./15.9.1999 Rolwaling vall. 3600-4000m, Beding to Na leg. J. Schmidt" (SMT); "Nepal Umg. Sete 27.04.1993 leg. A. Kleeberg" (CKB); "Jumla-Padmara 2300-2750m 27.V. \ Nepal, 1977 W. Wittmer" (NMB); "NEPAL Prov. Karnali, Distr. Humla 18km WNW Simikot Chumsa Khola (Bridge) 2950m, 20.-22.06.2001 30°02'25"N, 81°39'06"E leg. A. Kopetz, river valley" (NME); "NEPAL Prov. Karnali, Distr. Humla, 20km W Simikot, 2km SE Chala, 3500m 29°58'49"N, 81°39'30"E 27.-28.06.2001 leg. A. Kopetz KF/HF juniper meadow-coniferous wood" (NME, NMW).

DISTRIBUTION: The species is at present known from the western portion of the Himalayan range: N-Pakistan, NW-India, Nepal (as far east as Solukhumbu District).

LECTOTYPE: The original description did not mention an exact number of specimens included in the type series. This species and the preceding have been repeatedly confused, thus it was necessary to designate a lectotype to ensure taxonomic stability.

Philonthus amplicollis sp.n.

Holotype ♂: "NEPAL (Prov. Bagmati) above Tarke Ghyang 3000-3400 m, 20.IV.81 Löbl & Smetana" (CSO).

Paratypes (14 exs.): 1 ex.: "Gori Valley, Kumaon, India. 7000 ft. H.G.C. \ H.G.Champion Coll. B.M. 1953-156" (NHML); 1 ex.: same data as holotype, but "3300 m, 24.IV.81" (MHNG); 1 ex.: "NEPAL (Prov. Bagmati) Malemchi, 2900 m 14.IV.81 Löbl & Smetana" (MHNG); 2 exs.: "NEPAL (Prov. Bagmati) below Thare Pati 3300 m, 9-13.IV.81 Löbl & Smetana (MHNG, NMW); 1 ex.: same, but "10.IV.81" (NMW); 2 exs.: same, but "12.IV.81" (CSO, NMW); 1 ex.: "NEPAL Parbat Distr. Ridge E Ghoropani Pass 3150m 7.X.1983 Smetana & Löbl" (CSO); 1 ex.: "NEPAL: Annapurna: Krapa Danda, 2500m, 30.V.1997, leg. J. Schmidt" (DEI); 1 ex.: "NEPAL, Annapurna South Himal, 2800 – 3200mNN, Gorepani 30./31.V.2002 leg. J. Schmidt" (NME); 1 ex.: "Nepal Helambu, camp before Kutumsang 85°29'E 27°55'N 2500 m 31.8.-2.9.97 lg. Fabrizi & Ahrens" (SMT); 1 ex.: "NEPAL N. Pohara Berthanti – Tukche 1500-2500 m. IX.1987 P. Morvan" (CRL); 1 ex.: "NEPAL Kathmandu Dis. Siwapuri Dara 2520m 1.V.85 A. Smetana" (CSO).

DESCRIPTION: 6.0 – 7.7 mm long (3.3 – 3.5 mm, abdomen excluded). – Black, rather shiny; mandibles reddish-testaceous, mandibular furrow and lateral face black; palpi dark brown to piceous, tips of segments somewhat paler; antennae black, one or two outer segments sometimes inconspicuously dark reddish; legs dark brown to black-brown (incl. tarsi), medial faces of at least middle and hind tibiae strongly infuscate.

Head almost subcircular, 1.06 – 1.10 times as wide as long, markedly narrower than pronotum (head width/pronotum width = 0.69 – 0.73); distance between medial interocular punctures more than twice distance between medial and lateral interocular puncture; all antennal segments distinctly oblong, two outer segments rather depressed, thus segment 10 at certain angles of view appearing about as wide as long; segment 11 with large membranous terminal area; pronotum about as wide as long or inconspicuously longer than wide, usually distinctly narrowed toward anterior margin; dorsal rows each with five punctures; head and pronotum with dense and rather profound microsculpture of transverse and oblique waves, very irregular on disc of head, frequently fragmented or obsolete on disc of head and along midline of pronotum; scutellum moderately densely, rather finely punctate; elytra along suture shorter than pronotum along midline (ratio about 0.92), moderately densely (compared to other species of the group), slightly asperately punctate, punctures separated by about 1.5 – 2.0 puncture diameters in transverse direction; first three visible abdominal tergites with two basal lines, elevated area between basal lines finely, moderately densely punctate, pubescence black to rust-red (depending on lighting angle); setae in transverse rows at midlength of tergite and along sides of abdomen very long and unusually stout, black; male sternite VIII: Fig. 65; female tergite X: Fig. 81.

Aedeagus (Fig. 54) much larger than that of *P. densus* and *P. beesoni*, paramere (Fig. 54c) longer, normal setae extending more distinctly basad beyond peg setae.

DIAGNOSIS: *Philonthus amplicollis* may be easily recognized among the black species with entire paramere, by the small head and wide pronotum, the entirely black elytra and the long and stout abdominal macro-setae.

DISTRIBUTION: The species is at present known only from the Nepal Himalaya and from one specimen from NW-India (Kumaon).

ETYMOLOGY: The name of the species refers to the very broad pronotum.

Philonthus virgatus SHARP

Philonthus virgatus SHARP 1889: 38
Philonthus nigrolineatus BERNHAUER 1913: 130
Spathulonthus nigrolineatus: COIFFAIT 1974: 316
Philonthus ussuriensis COIFFAIT 1974: 202

TYPE MATERIAL: *Philonthus virgatus*: **Lectotype** ♂ (present designation): "Chiuzenji. Japan. 22.9.81. Lewis. Philonthus virgatus Type D.S." (written on card with specimen) \ Type (round label) \ Japan G. Lewis. \ Sharp Coll. 1905-313." (NHML). - **Paralectotypes** (2 ♂♂): 1 ex. with same data as lectotype but written on separate labels; 1 ex.: "Nikko. Japan. 25.8.81. Lewis. Philonthus virgatus D.S." remaining labels as in lectotype (NHML).

Philonthus nigrolineatus: **Holotype** ♂: "B. v. Bodemeyer Sibiria orient. Sotka-Gora \ nigrolineatus Brh. Typus \ Chicago NHMus M.Bernhauer Collection \ Philonthus virgatus SHP. det. Schillhammer 2002" (FMC). – **Paratype** (♂): "B. v. Bodemeyer Sibiria orient. Schipka-Gora \ nigrolineatus Brh. Cotypus \ Chicago NHMus M.Bernhauer Collection \ Philonthus virgatus SHP. det. Schillhammer 2002" (FMC).

Philonthus ussuriensis: **Holotype** ♂: "Shkotovo, Pejtula, Ussuri, 15.8.71" (CKE). - **Paratypes**: 1 ex.: same data as holotype, but 13.8.71 (CKE); 2 exs.: Ussurijsk, Zuputinsk s., 3. and 10.8.71 (CKE).

DESCRIPTION: 5.8 – 7.6 mm long (3.0 – 3.5 mm, abdomen excluded). – Dark brown to piceous, moderately shiny, pronotum sometimes a bit paler than head; elytra dark brown to black-brown with black basal depression; suture, posterior margin and deflexed portion (incl. shoulder) yellowish, with a large humeral yellow spot, extending posteriad to posterior fourth of elytral length, dark color appearing as a U-shaped marking; borders between yellow and dark color somewhat diffuse, frequently yellow color occupying almost entire elytra with dark markings very indistinct; abdominal tergites dark brown to black-brown, posterior margins of tergites and most of paraterga reddish-testaceous; basal two segments of antennae brightly reddish, middle segments dark, apical 2 – 4 segments to various extent reddish; palpi pale reddish-yellow; legs entirely pale yellowish, medial faces of hind tibiae infuscate.

Head rounded quadrangular with variably marked angles, 1.19 – 1.27 times as wide as long, narrower than pronotum (head width/pronotum width = 0.81 – 0.85); eyes moderately large, 1.35 – 1.53 times as long as tempora, tempora inconspicuously convergent; distance between medial interocular punctures less than two times distance between medial and lateral interocular puncture; antennal segments 4 – 9 oblong, segment 10 as long as wide; pronotum 1.03 – 1.09 times as long as wide, widest in basal third, sides narrowed toward anterior margin in straight line or slightly convex arc; head and pronotum with very fine and dense microsculpture of transverse and oblique waves, surface of pronotum usually iridescent at least latero-basally; elytra along suture about as long as pronotum, rather densely punctate, inconspicuously asperate; punctures separated by 1 – 2 puncture diameters in transverse direction; setae of ground pubescence golden-yellow to pale greyish; first three visible tergites with two basal lines, elevated area between basal lines punctate and pubescent, on third visible tergite as fine and dense as on remaining portion of tergites, on first and second visible tergites less dense; remaining surface of tergites with dense and fine punctation, punctures separated by about a puncture diameter in transverse direction or even contiguous; pubescence dark grey to golden-yellow (depending on angle of lighting), setae markedly shorter than those of elytra; long setae in transverse row at midlength of tergite numerous (6 – 10), inconspicuous due to same color as ground pubescence; male sternite VIII: Fig. 66; male sternite IX: Fig. 73; female tergite X: Fig. 82; gonocoxites of female genital segment: Fig. 88.

Aedeagus (Figs. 55, 56) very variable; median lobe almost parallel-sided or dilated apically, flat in lateral view; paramere (Figs. 55c, 56c) entire, apical portion short, slender, with two subapical, contiguous rows each with three peg-setae, with three or four pairs of normal setae, surrounding rows of peg-setae, apical pair frequently missing; basal portion of paramere forming distinct angle with median lobe, lateral lobes of basal portion reaching very close to dorsal outline of median lobe (lateral view).

ADDITIONAL MATERIAL EXAMINED:

J A P A N: HONSHU: Nikko N.P., Lake Chuzenjiko, Chisan-Shukuhakusho, 1300 m, 15.VII.1980, leg. A. & Z. Smetana (NMW); Nikko N.P., Senjugahara, 1400 m, 15.VII.1980, A. & Z. Smetana (CSO); Gumma Pr., 4 km

NW Onioshidashi, Rock Gdn., 18. – 21.VII.1980, leg. A. & Z. Smetana (CSO); Yamanashi Pref., Hacchoudaira, Sudama-cho, 22. – 26.VII.2001, leg. T. Ueno (CSB, NMW).

R U S S I A: KHABAROVSKIY KRAY: SE Boitsovo, 12 km NE Bikin, 26.V. – 4.VI.1990, 250 – 350 m, leg. W. Schawaller (SMNS, NMW); Biotsovo, 20 km N Bikin, forest Pinus/Abies, 47.02 N 134.21 E, 25.V.1993, 250 m, leg. L. Zerche (DEI); Bolshe-Khekhtsyrsky Reserve, 6. – 10.VI.1990, 400 – 450 m, leg. W. Schawaller (SMNS, NMW); PRIMORSKIY KRAY: Arsenev env., 27.V. – 5.VII.1991, leg. O. Šauša (NMW); Tschernye Gory, Venedivnovo, 1. – 3.VIII.1990, leg. A. Pütz (CPE); Tschernye Gory, Gryaznaya River, 13. – 19.VIII.1992, leg. J. Farkač (NMB); Partisanskiy Distr., Alexeyevskiy Khr., 20 km E Sergeyevka, forests nr. Andreyevka riv., 400 - 800 m, 26. - 29.VII.1993, leg. Pütz & Wrase (CSB, CPE, NMW); Partisanskiy Distr. Olkhovy River, 15. – 17.V.1995, leg. Y. Sundukov (CPE); Sichote-Alin Biol. Station, 30 km SE Chuguyevka, 44.05 N 134.12 E, 1.VI.1993, 650 m, leg. L. Zerche (DEI); Sichote-Alin Reserve, mouth of Jasnaya, 26.VI. - 4.VII.1998, leg. Y. Sundukov [S7/11] (CSB, NMW); Lazowskiy Reserve, Kordon Prosjolotshnyi, 1. – 5.V.1997, leg. Y. Sundukov [S34] (CSB); Lazowskiy Reserve, Kordon Benevka, 7. - 11.V.1997, leg. Y. Sundukov [S24] (CSB); Lazowskiy Reserve, Lazo, valley of Lazowka, 1. - 12.VI.1998, leg. Y. Sundukov [S12] (CSB); Lazowskiy Reserve, Kordon Petrova, 22. - 24.VIII.1997, leg. Y. Sundukov [S16] (CSB, NMW); same, 16. – 17.IX.1998, leg. B. Kataev (NMW); same, 42°52'14"N 133°47'55"E, 19. - 20.IX.1999 (CSB); Lazowskiy Reserve, Kordon Amerika, 43°16'16"N 134°03'01"E, 14. - 17.V.1998, leg. Y. Sundukov (CSB); same, 24. – 28.IV.1998, [S39] (CSB); 5 km S Ussuriyskiy Zapovednik, 43.42 N 132.01 E, 10.VI.1993, 150 m, leg. L. Zerche (DEI); Ussuriyskiy Zapovednik, Kamenushka, 21./22.VII.1990, leg. A. Pütz (CPE, NMW); Ussuriyskiy Zapovednik, 33 km SE Ussuriysk, 43.37 N 132.18 E, 14.VI.1993, 300 m, leg. L. Zerche (DEI); Ussuriyskiy Zapovednik, 30 km SE Ussuriysk, 43.3 N 132.0 E, 200 m, 28.VII. – 1.VIII.1993, leg. E. Groll & C. Kutzscher (DEI, NMW); Ussurijskiy Reserve, Komarovo-Zapovednoe, 43°38'48"N 132°20'40"E, 21. – 27.V.1999, leg. Y. Sundukov (CSB); same, 20. - 29.VII.1999 (CSB); Ussurijskiy Distr., Kajmanovka, 43°38'14"N 132°14'00"E, 31.VII.1999, leg. Y. Sundukov (CSB); Khasanskiy Distr., Gryaznaya riv., 43°21'30"N 131°36'00"E, 3. – 6.VIII.1999, leg. Y. Sundukov (CSB); Sevemaya inlet, 9 km N Slavyanka, 42.9 N 131.5 E, 12. – 15.VIII.1993, leg. E. Groll & C. Kutzscher (DEI); SAKHALIN: Korsakov Distr., 3 km W Kirillovo vill., Uryun riv., 22. - 23.VII.1993, leg. Pütz & Wrase (CSB).

C H I N A: "Chikuanshan S. Mandschur \ 455 \ Philonthus nigrolineatus Bernh. \ ex. coll. Scheerpeltz" (NMW).

DISTRIBUTION: The species is at present known from Japan, Russian Far East and northeastern China.

LECTOTYPE: As the original description did not mention an exact number of specimens included in the type series and due to the fact that more than one species might be hidden among what is now named *P. virgatus*, it was necessary to designate a single name bearer to ensure taxonomic stability.

Philonthus ildefonso sp.n.

Holotype ♂: "CHINA – Yunnan 8.-9.7. Lugu Lake – Luo Shui 27°45'N 100°45'E leg. E. Jendek 1992" (NMW).

Paratypes (44 exs.): 4 exs.: "CHINA: Yunnan Kunming 9:X:1985 Rougemont" (CRL); 2 exs.: "CHINA X.1986 Yunnan: Kunming G. de Rougemont" (CRL); 1 ex.: "CHINA X.1986 Yunnan: Dali G. de Rougemont" (NMW); 1 ex.: same but "10.11.1993" (CRL); 1 ex.: "CHINA: Yunnan 1992 35km N Lijiang Heishui, 1.-19.7. leg. S. Becvar" (NMW); 1 ex.: "YUNNAN, 24-26 May Yulong Mts., 1993 27.01N 100.12E Bolm lgt. 3200m" (NMB); 1 ex.: "YUNNAN 3300m 27.07N 100.14E Yulongshan Mts. 28/5. Vít Kubáň leg. 1993" (NMW); 1 ex.: "CHINA, Yunnan Dali, Cangshan mts. 5.VI.1993 Bolm lgt." (NMB); 1 ex.: "YUNNAN, 30May- 3Jun Jizu Mts., 1993 25.58N 100.21E Bolm lgt., 2800m" (NMB); 1 ex.: "Wolung 2000 m Wassuland 7.-10.1934 \ W.Szechuan, China Sankiangkou leg. Friedrich" (NMW); 1 ex.: "China, pr. Sichuan Emei Mt. 1000 m \ 4.-20.5.1989 Vít Kubáň Leg." (NMB); 1 ex.: "China, W-Sichuan, 2000-3500m, Mts. ca. 20km NNW Sabdé, J. Kaláb leg., 18-20.6.1994, forest" (NMW); 2 exs.: "China: W Sichuan 20km N Sabdé, 3200m 29°35N 102°23E, 13.VII.1998, A. Smetana [C80] \ 1998 China Expedition J. Farkač, D. Král, J. Schneider & A. Smetana" (CSO, NMW); 1 ex.: same but "14.VII.1998 [C81]" (CSO); 2 exs.: same but "15.VII.1998 [C83]" (CSO); 1 ex.: "CHINA S Sichuan Luojishan 2200-2800m 16-25.VII.1998 leg. S. Kasantsev" (NMB); 1 ex.: "China (Sichuan) Umg. Kangding 3000-3100 m 21./22.VII.1994 Heinz leg." (CSO); 2 exs.: "CHINA (W Sichuan) (6) Daxue Shan W env. Kanding [sic!] 2600-2700 m 30.03 N / 101.57E 22./24.V.1997 Wrase" (CSB, NMW); 5 exs.: "CHINA: W-Sichuan (7) Daxue Shan, W Kangding 30.03.13N, 101.57.11E 2700-2800m 24.05.1997, M. Schülke" (4 CSB, 1 NMW); 1 ex.: "CHINA: W-Sichuan (4) Daxue Shan, 2500-2800m Bachtal 5 km E Kangding 30.03.28N, 102.00.15E 20.05.1997, M. Schülke" (CSB); 1 ex.:

"CHINA Sichuan, Kangding (formerly Tatsienlu) 2900m, 2.VII.1998 30°03N 102°02E C48 \ collected by A. Smetana, J. Farkač and P. Kabátek" (CSO); 1 ex.: "CHINA: Sichuan (17) Qingcheng Shan NW Chengdu, 650-700m 30.53.57N 103.32.23E 3./4.06.1997, M. Schülke" (CSB); 1 ex.: "CHINA: Guizhou, Leishan Co. SE Kaili, NE Leishan Leigong Shan E – slope 28°22.56'N 108°13.40'E \ ca. 300 m S of pass 14./16.6.2001 ca. 1700 m leg. Schillhammer (5)" (NMW); 1 ex.: "China: Shaanxi, Qin Ling Shan 107.56E, 33.45N Autoroute km 93 S of Zhouzhi, 108 km SW Xian Mountain Forest, sifted 1650m 1.-2.09.1995, leg. M. Schülke" (CSB); 1 ex.: same but leg. A. Pütz (CPE); 3 exs.: "CHINA Shaanxi Qinling Shan pass rd. Zhouzhi Foping 105km SW Xi'an \ N-slope 1990m 33°44'N 107°59'E 4.VII.2001 A. Smetana [C93]" (CSO); 3 exs.: "CHINA: W-Hubei Daba Shan pass E Mt. Da Shennongjia 12km \ NW Muyuping 31°30'N 110°21'E 1950m 19.7.01 A. Smetana [C111]" (2 CSO, 1 NMW); 1 ex.: same, but "leg. M. Schülke [C01-13E] \ dry creek valley, mixed deciduous forest, dead wood, mushrooms, moss, 1950 – 2050 m (sifted)" (CSB).

DESCRIPTION: Measurements: 5.5 – 6.8 mm long (3.0 – 3.3 mm, abdomen excluded); head very variably shaped, 1.20 – 1.58 times as wide as long, narrower than pronotum (head width/pronotum width = 0.82 – 0.93), eyes 1.57 – 2.10 times as long as tempora, pronotum 1.05 – 1.10 times as long as wide.

The species resembles *P. virgatus* very closely externally as well as in genital characters. The main differences are 1) coloration of elytra generally darker, deflexed parts (incl. shoulders) dark, yellow humeral spot generally less extended, frequently reduced to a very narrow line; borders between yellow and dark color usually sharp; 2) eyes markedly bigger (no overlap); 3) aedeagus (Figs. 57, 58); median lobe as variable as in *P. virgatus* and of more or less same shape, but basal portion of paramere forming no or hardly an angle with basal portion of median lobe, lateral lobes of basal portion of paramere remaining distant from dorsal outline of median lobe (lateral view, Figs. 57b, 58b); paramere: Figs. 57c, 58c.

DISTRIBUTION: The species is obviously wide-spread in China, where it is known from Yünnan, Sichuan, Guizhou, Shaanxi, and Hubei.

ETYMOLOGY: "Ildefonso" is the brand name of a very tasty chocolate product famous for its several layers of dark and light nougat, similar to the color pattern of the elytra of this new species.

Philonthus mercurii TIKHOMIROVA

Philonthus mercurii TIKHOMIROVA 1973: 169

TYPE MATERIAL: I have studied the holotype (ZIS) on an earlier occasion but unfortunately made no notes on the label data. The type series consists of seven specimens collected in Russian Far East, Primorskiy Kray, Zupudinskiy Zapovednik, mainly from gravel of small rivers; two specimens were collected in wet forest leaf litter.

DESCRIPTION: 8.5 – 10.6 mm long (3.9 – 4.6 mm, abdomen excluded). – Black, moderately shiny to shiny; elytra reddish-testaceous to brick-red, base (mostly impunctate basal depression) black, deflexed lateral portion to various extent black or dark brown; specimens from China either with entirely red elytra (W-Hubei), or displaying both variants (Beijing), one doubtful specimen from Sichuan even with entirely black elytra; antennae entirely black (W-Hubei) or with basal two and outer two segments to various extent reddish; legs dark reddish-testaceous, usually medial faces of all tibiae infuscate.

Head of subcircular shape, slightly wider than long (w/l ratio 1.02 – 1.07), exceptionally also inconspicuously longer than wide (ratio 1.02), markedly narrower than pronotum (head width/pronotum width = 0.67 – 0.83); eyes rather small, variably sized, shorter or longer than tempora (length eyes/tempora = 0.81 – 1.09); tempora almost evenly rounded; antennae usually with segments 4 – 9 markedly oblong, segment 10 about as long as wide, but length of antennal segments slightly variable; distance between medial interocular punctures about two times distance between medial and lateral interocular puncture; pronotum about as wide as long, widest

almost at base, narrowed toward anterior margin in slightly convex arc; head and pronotum with fine and dense microsculpture of transverse and oblique waves, becoming quite irregular on disc of head and obsolete along midline of pronotum; scutellum finely and densely punctate and pubescent; elytra along suture slightly shorter than pronotum, finely and very densely punctate, distance between punctures hardly exceeding a puncture diameter in transverse direction; pubescence pale reddish to yellowish; first three visible abdominal tergites with two basal lines, elevated area between basal lines densely punctate (even on first visible tergite), pubescence uniformly black to dark rust-red (depending on angle of lighting), larger setae forming transverse row at midlength of tergite numerous, rather irregular; male sternite VIII: Fig. 67; male sternite IX: Fig. 74.

Aedeagus (Fig. 59) long and slender; apical portion of median lobe very flat in lateral view, in ventral view either parallel-sided or slightly spoon-like dilated; paramere (Figs. 59c) long and slender, with two subapical rows of 6 – 7 peg-setae each; with four pairs of normal setae, two apically and two basad of peg-setae; most apically situated pair of setae usually exceedingly short.

REMARK: The variability of this species shows a certain geographical trend. Especially the specimens from W-Hubei are somewhat deviant because of their entirely blood-red elytra and the entirely black antennae. In addition, they are significantly smaller. The specimens from Russian Far East have the typical brick-red elytra with blackish base and sides, and antennae with paler two basal segments and two outer segments. The basal segments are in most cases darkened to a certain extent. The specimens from Beijing are more variable in having the elytra both entirely red or with blackish base and sides. The antennae of this population, however, have the two basal segments brightly reddish with hardly any indication of darkening. They do not differ in size from the specimens from Russian Far East. One female specimen from Sichuan (Daxue Shan, Hailuogou Glacier Park, Camp 1, 2100 m, 29.36.00N, 102.03.35E, 27.-31.V.1997, leg. M. Schülke; in coll. CSB) has entirely black elytra, but otherwise it does not differ from the typical specimens. As long as male specimens are not available, I will refrain from attempting to interpret the status of that specimen.

ADDITIONAL MATERIAL EXAMINED:

R U S S I A: FAR EAST: Arsenev env., VII.1991, leg. O. Šauša (NMW); Lazowskiy Reserve, Kordon Sokolowka, 24. - 28.X.1997, leg. Y. Sundukov [S28] (CSB); Lazowskiy Reserve, Lazo, valley of Lazowka, 1. – 12.VI.1998, leg. Y. Sundukov [S12] (CSB); Lazowskiy Reserve, Kordon Petrova, 42°52'14"N 133°47'55"E, 19. - 20.IX.1999, leg. Y. Sundukov (CSB, NMW); same but 16./17./18.IX.1998, leg. B. Kataev (NMW); Sichote-Alin Reserve, mouth of Jasnaya, 26.VI. – 4.VII.1998, leg. Y. Sundukov [S7/11] (CSB, NMW); Ussurijskiy Reserve, Kordon Peishula, 13. - 20.VIII.1998, leg. Y. Sundukov [S3/4] (CSB); Ussurijskiy Reserve, Komarovo-Zapovednoe, 43°38'48"N 132°20'40"E, 21. - 27.V.1999, leg. Y. Sundukov (CSB); same, 20. – 29.VII.1999 (CSB); Ussuriyskiy Zapovednik, Kamenushka, 22.VII.1990, leg. A. Pütz (CPE); Vladivostok, 26.VII.1990, leg. A. Pütz (CPE); Ussuriyskiy Zapovednik, 30 km SE Ussuriysk, 43.3 N 132.0 E, 200 m, 28.VII. – 1.VIII.1993, leg. E. Groll & C. Kutzscher (DEI); 70 km E Vladivostok, Anisimovka, 43.11N 132.41E, 250 m, 5.VI.1993, leg. L. Zerche (DEI); Sichote-Alin Biol. Station, 30 km SE Chuguyevka, 44.05 N 134.12 E, 1.VI.1993, 650 m, leg. L. Zerche (DEI).

C H I N A: BEIJING: Yanshan, Dongling Mts., Xiaolongmen, 1400 m, 15. – 16.VI.2001, leg. Hlaváč & Cooter (CHB, NMW); same, but 28. – 29.VI.1993, leg. G. de Rougemont (CRL); HUBEI: Dashenongjia Mts., 2100 – 2900 m, 10. – 14.VI.2002, 31.5N 110.3E, leg. J. Turna (NMW); pass E Mt. Dashenongjia, 12 km NW Muyuping, 31°30'N 110°21'E, 1950 m, (dry creek vall./ mix. decid. forest), 16. - 22.VII.2001, leg. Wrase [13] (CSB); SHAANXI: Qinling Shan, 105km SW Xi'an, pass rd. Zhouzhi – Foping, N-slope, 1990 m, 33°44'N 107°59'E, 2.VII.2001, leg. A. Smetana [C89] (CSO); same, but 1700 m, 33°46'N 107°58'E, 3.VII.2001, leg. M. Schülke, small creek valley, mixed deciduous forest, moss [C01-02] (CSB); GANSU: Meijishan, VIII.1986, leg. G. de Rougemont (CRL).

DISTRIBUTION: The species is at present known from Russian Far East, north-eastern and north-central China.

Philonthus fasciventris sp.n.

Holotype ♂: "CHINA Shaanxi Qinling Shan pass rd. Zhouzhi Foping 105km SW Xi'an \ N-slope 1990m 33°44'N 107°59'E 2.VII.2001 A. Smetana [C89]" (CSO).

Paratypes (9 exs.): 1 ex.: "CHINA (Shaanxi) Qin Ling Shan 108.47E 33.51N / Mt. W pass autoroute km 70, 47 km S Xian 2300-2500 m 26-29.VIII.1995 Wrase" (CSB); 1 ex.: same but "sifted, leg. A. Pütz" (CPE); 1 ex.: "China: Shaanxi, Qin Ling Shan 107.58 E, 33.45 N, Autroute km 93 S of Zhouzhi, 108 km SW Xian Mountain Forest, sifted, 1650m 1.-2.09.1995, leg. M. Schülke" (CSB); 1 ex.: "CHINA (Shaanxi) Qin Ling Shan 110.06E 34.25N, Hua Shan 118 km E Xian, S. top 1950-2000m, mix. wood 19.VIII.1995 Wrase" (CSB); 1 ex.: China: Shaanxi, Qin Ling Shan 110.06E 34.27N, Hua Shan Mt. N Valley, 1200-1400m 118 km E Xian, sifted 18./20.08.1995, leg. A. Pütz (NMW); 2 exs.: "CHINA (S-Shaanxi) Qinling Shan pass on rd. Zhouzhi-Foping 105 km SW Xi'an, N-slope 1990 m, 33°44'N/107°59'E (small creek vall./mix.decid. for./bamboo/small meadows) 2./4.VII.2001 Wrase [01]" (CSB, NMW); 1 ex.: "CHINA: S-Shaanxi (Qinling Shan) mountain range W pass on rd. Xi'an – Shagoujie, 45 km SSW Xi'an 33°52'N, 108°46'E, 2675 m, leg. M. Schülke [C01-20A] \ 26.VII.2001, N-slope, Abies, Betula, Rhododendron, subalpine meadows (sifted) [C01-20A]" (CSB); 1 ex.: "China, N-Sichuan 30 km W Nanping 13.-15.VI.1992 Jiuzhaigou, 3100 m. Jaroslav Turna leg." (NMW).

DESCRIPTION: Measurements: 6.5 – 8.5 mm long (3.5 – 3.9 mm, abdomen excluded); head as wide as long or slightly wider than long (w/l ratio 1.0 – 1.06); eyes about as long as tempora (length tempora/eyes 0.97 – 1.06); pronotum variably shaped (ratio length/width 0.95 – 1.05).

The species hardly differs from *P. mercurii* except for the distinct silvery pubescence on the tergites, entirely covering the first visible tergite, forming fasciae at the bases of the remaining tergites.

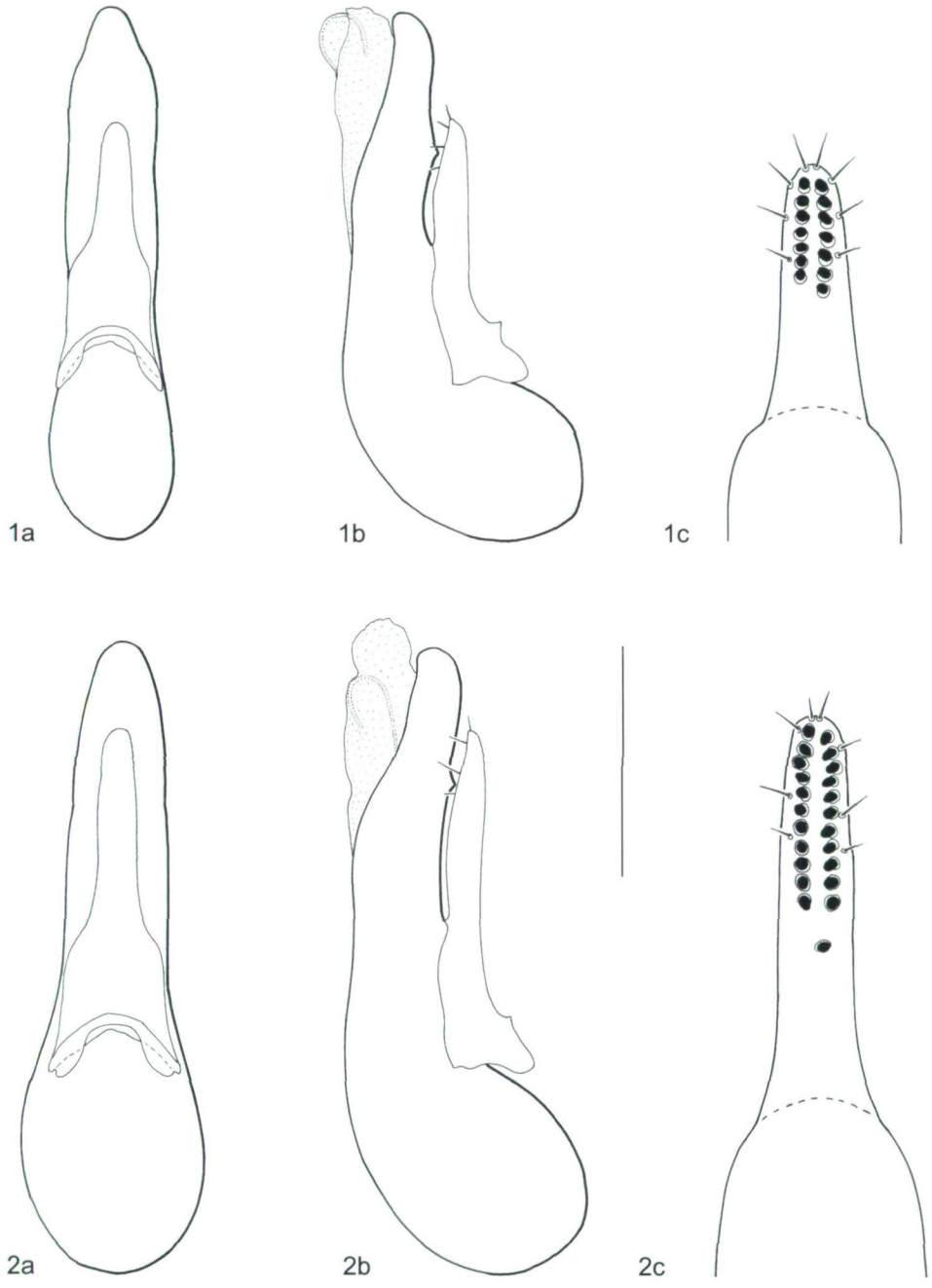
Aedeagus (Fig. 60) of similar shape as in *P. mercurii* but shorter; paramere (Fig. 60c) markedly longer.

DISTRIBUTION: The species is at present known only from China (Shaanxi and Sichuan).

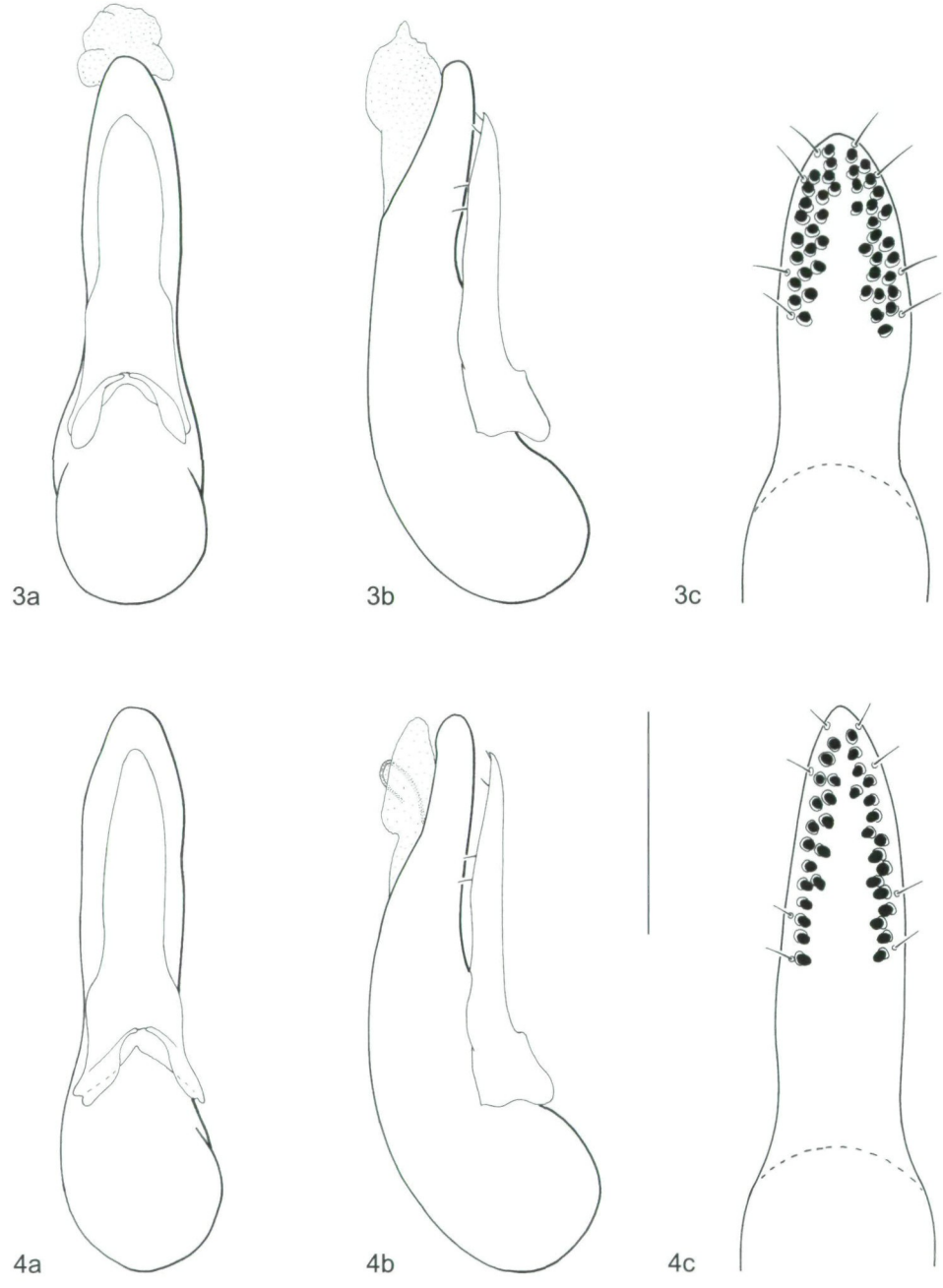
ETYMOLOGY: The name refers to the silvery fasciae of the abdominal segments.

Zusammenfassung

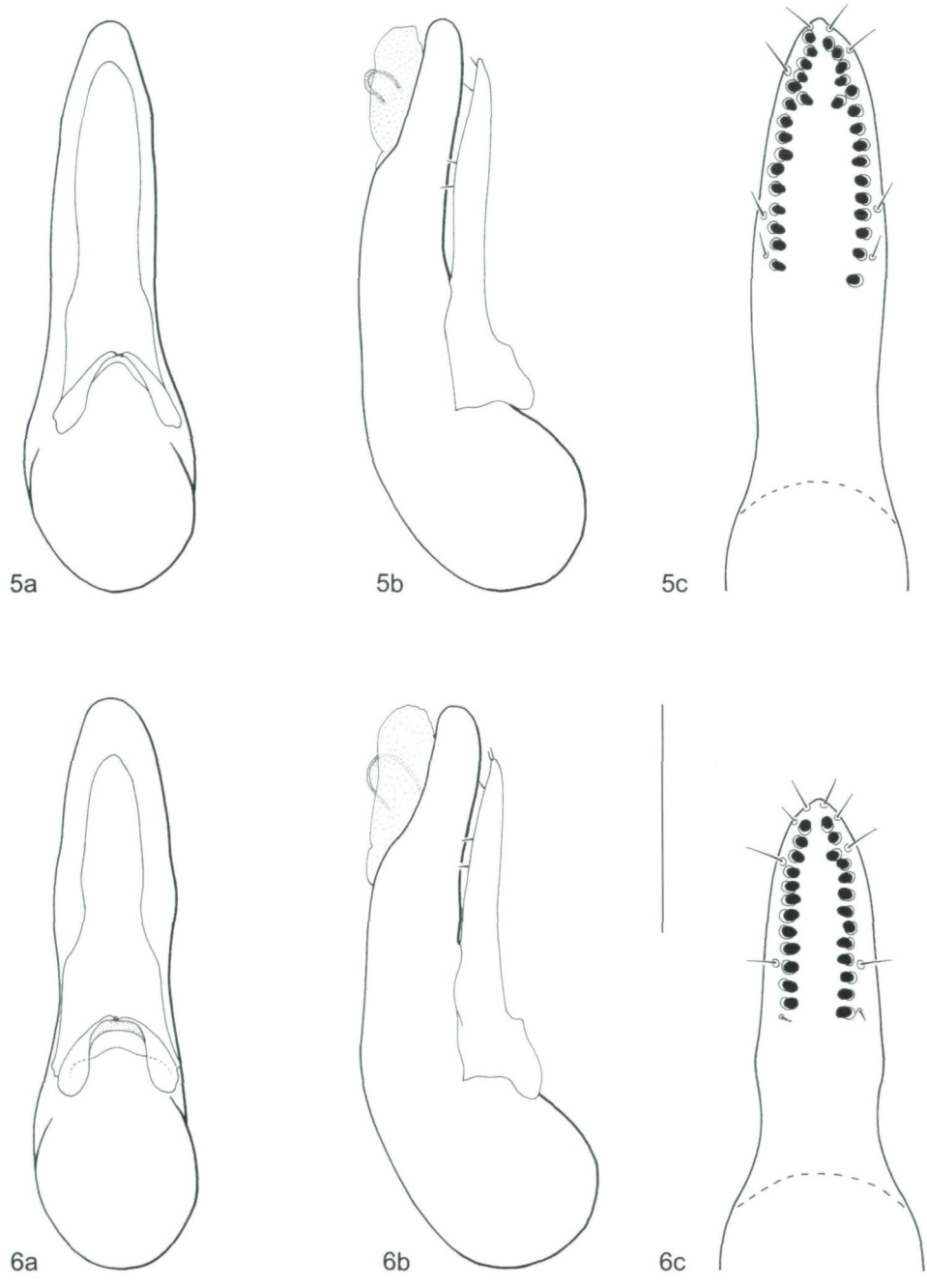
Die *Philonthus rotundicollis* und *sanguinolentus* Gruppen sind Gegenstand des fünften Teils der Revision der ostpaläarktischen und orientalischen Arten der Gattung *Philonthus* STEPHENS, 1829. Neun Arten werden als neu für die Wissenschaft beschrieben: *P. turnai* (China), *P. schuhi* (Indien, Nepal, Myanmar, Thailand, Laos, Vietnam, Malaysia), *P. smetanai* (Taiwan), *P. flavohumeralis* (Nepal, Indien), *P. arunensis* (Nepal), *P. schuelkei* (China), *P. amplicollis* (Nepal, Indien), *P. ildefonso* (China) und *P. fasciventris* (China). *Philonthus picimanus* (MÉNÉTRIÉS, 1832) und *P. sinuatocollis* MOTSCHULSKY, 1860 werden aus der Synonymie von *P. rotundicollis* (MÉNÉTRIÉS, 1832) entfernt und wieder in den Rang einer validen Art erhoben. Neotypen werden designiert für *P. rotundicollis* und *P. sinuatocollis*; Lectotypen werden designiert für *P. idiocerus* KRAATZ, 1859, *P. densus* CAMERON, 1926, *P. beesoni* CAMERON, 1926 und *P. virgatus* SHARP, 1889. *Philonthus rotundicollis* ssp. *nigropolitus* BERNHAUER, 1916 und *P. rotundicollis* ssp. *inopinatus* SMETANA, 1963 werden mit der Nominatunterart synonymisiert, *P. formaneki* ROUBAL, 1911 und *P. formaneki* var. *incompletus* ROUBAL, 1911 werden mit *P. picimanus* synonymisiert. Die Artengruppen werden kurz charakterisiert und Bestimmungsschlüssel sollen die Identifikation der Arten ermöglichen. Die männlichen Genitalien aller Arten sowie morfologische Details der meisten Arten werden abgebildet.



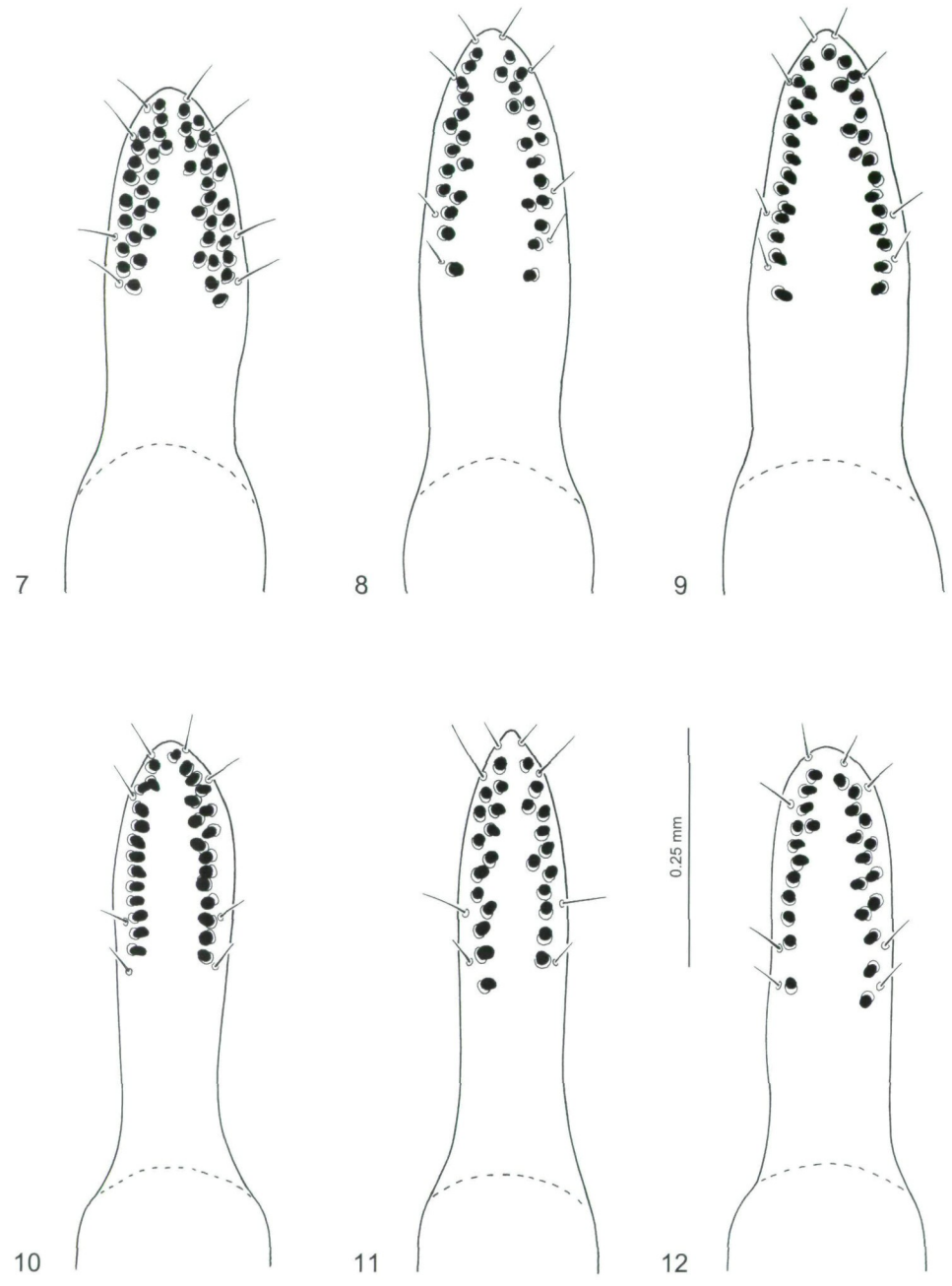
Figs. 1 – 2: Aedeagus of 1) *Philonthus intermedius*; 2) *P. laminatus*; a) ventral view, b) lateral view, c) paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c).



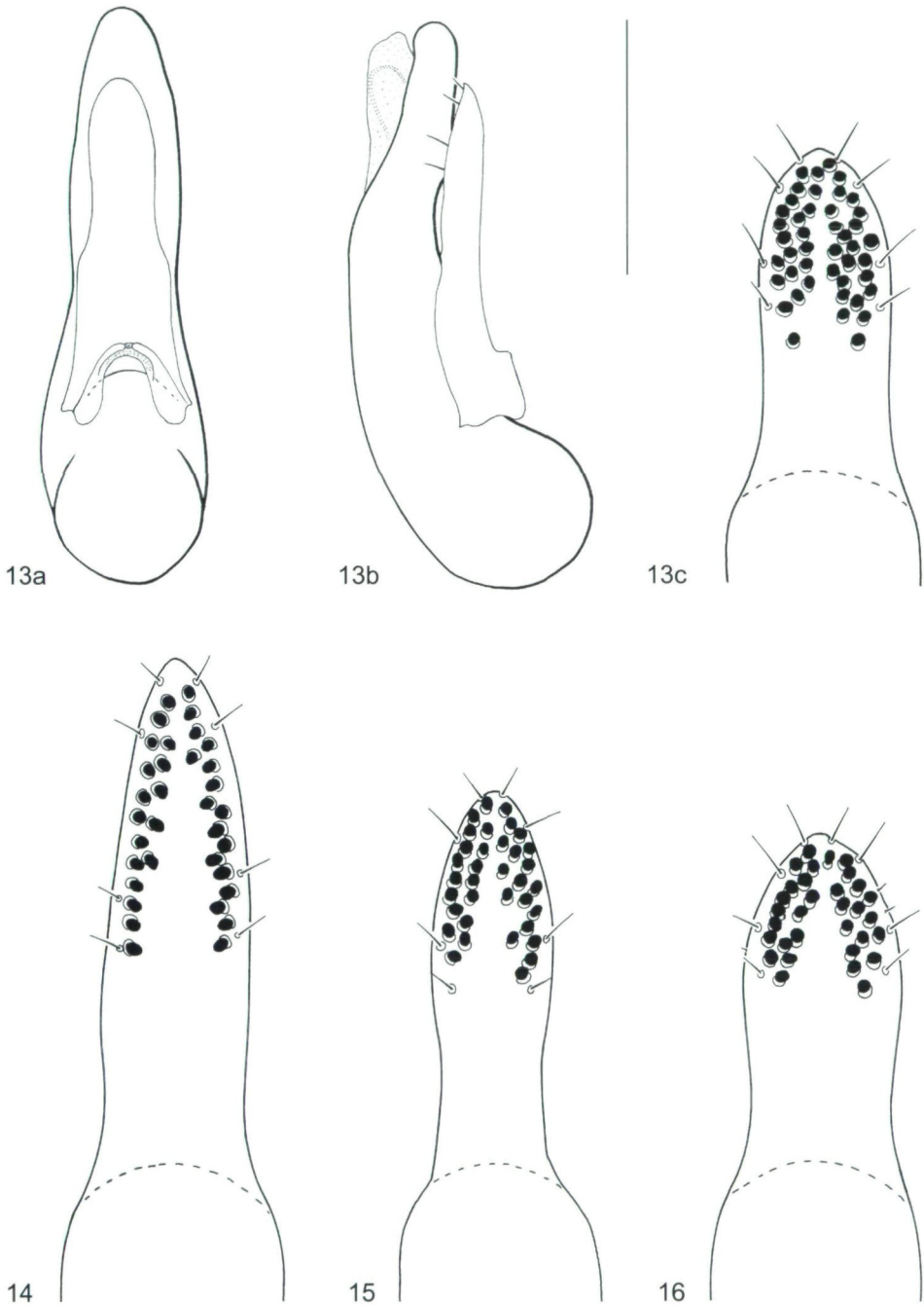
Figs. 3 – 4: *Philonthus rotundicollis*; 3) type locality; 4) N-Korea; aedeagus in a) ventral view, b) lateral view, c) paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c).



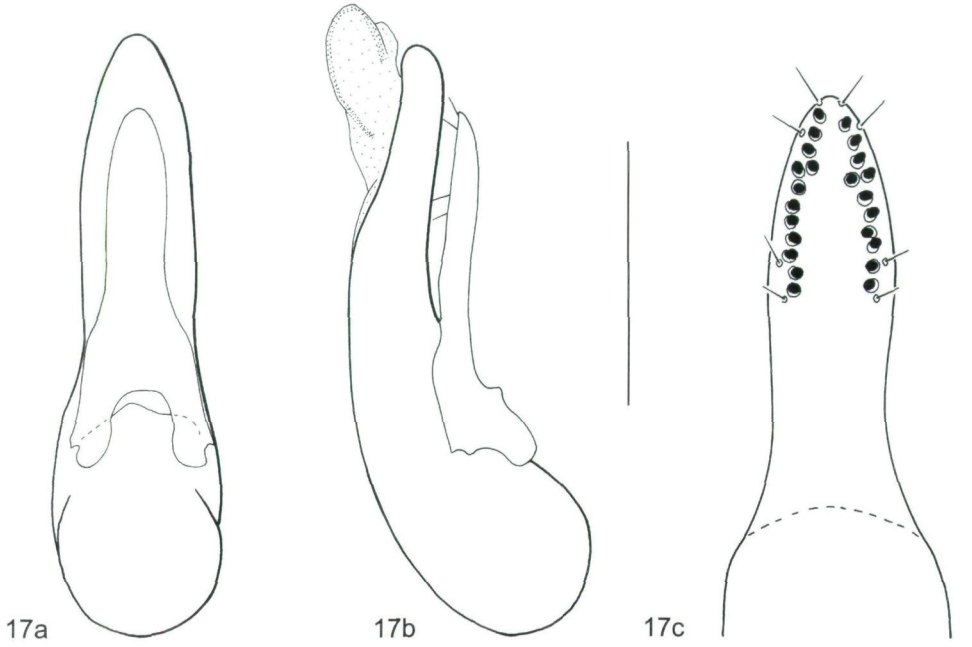
Figs. 5 – 6: *Philonthus rotundicollis*; 5) Kyrgyzstan; 6) Pakistan; aedeagus in a) ventral view, b) lateral view, c) paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c).

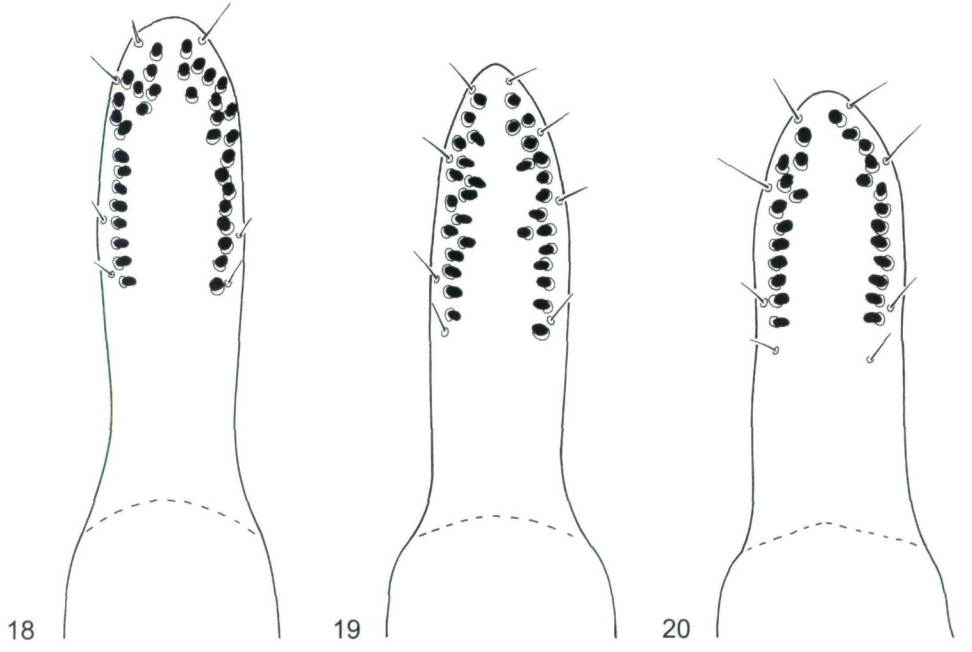


Figs. 7 – 12: *Philonthus rotundicollis*, parameres; 7 - 9) Caucasus; 10) Iran; 11) Tadzhikistan; 12) Xinjiang.

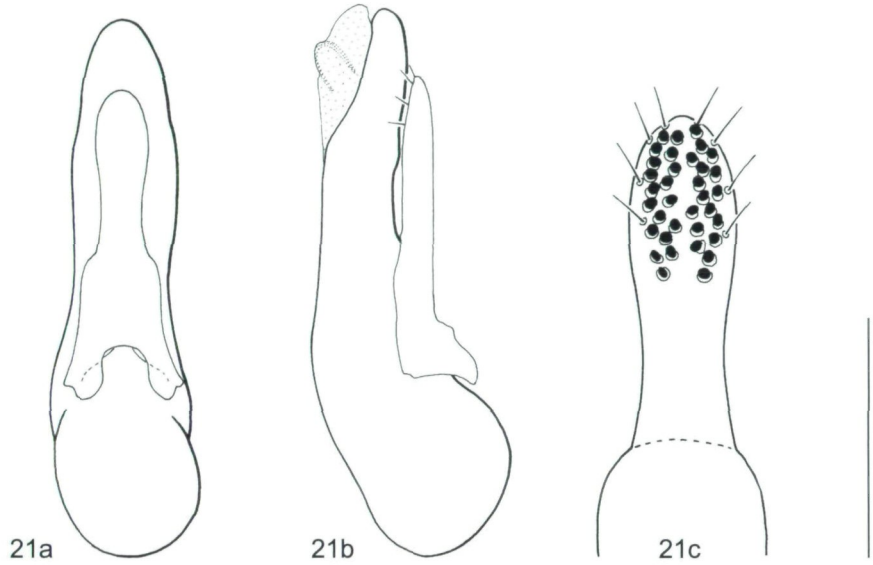


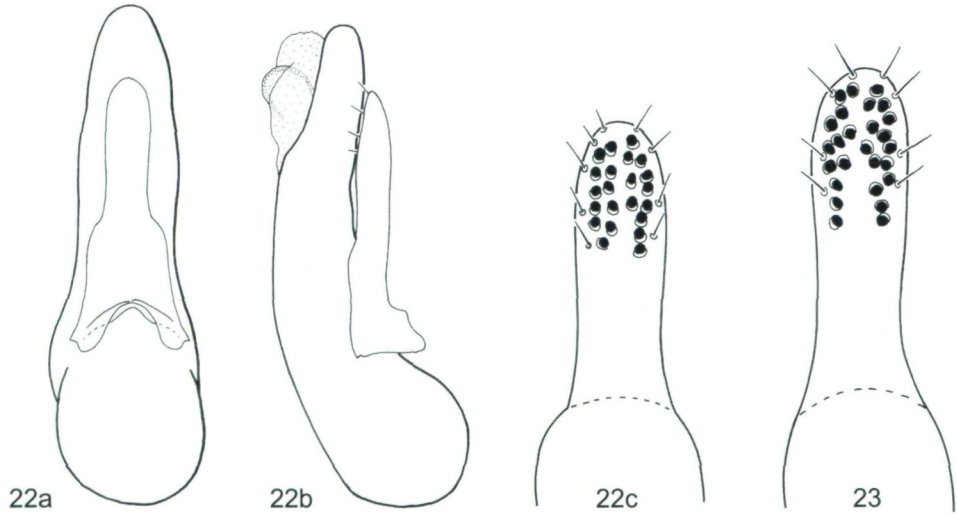
Figs. 13 – 16: *Philonthus rotundicollis*; 13) Japan, aedeagus in a) ventral view, b) lateral view, c) paramere; 14 – 16) parameres, N–Korea. Scale bar = 0.5 mm (13a, b), 0.25 mm (13c, 14 – 16).



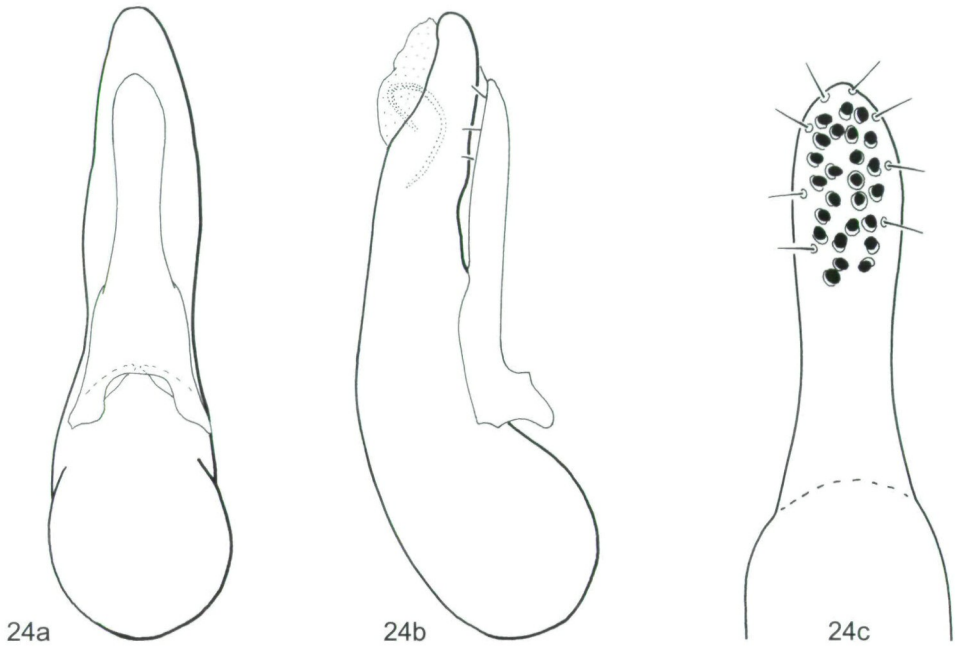


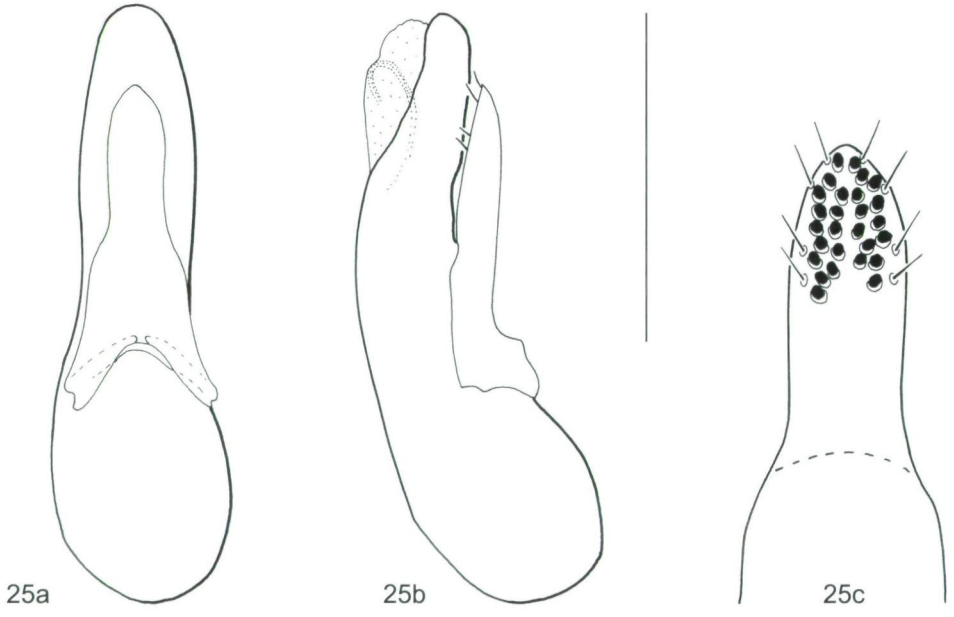
Figs. 17 – 20: *Philonthus picimanus*; 17) aedeagus in a) ventral view, b) lateral view, c) paramere; 18 – 20) parameres. Scale bar = 0.5 mm (17a, b), 0.25 mm (17c, 18 - 20).



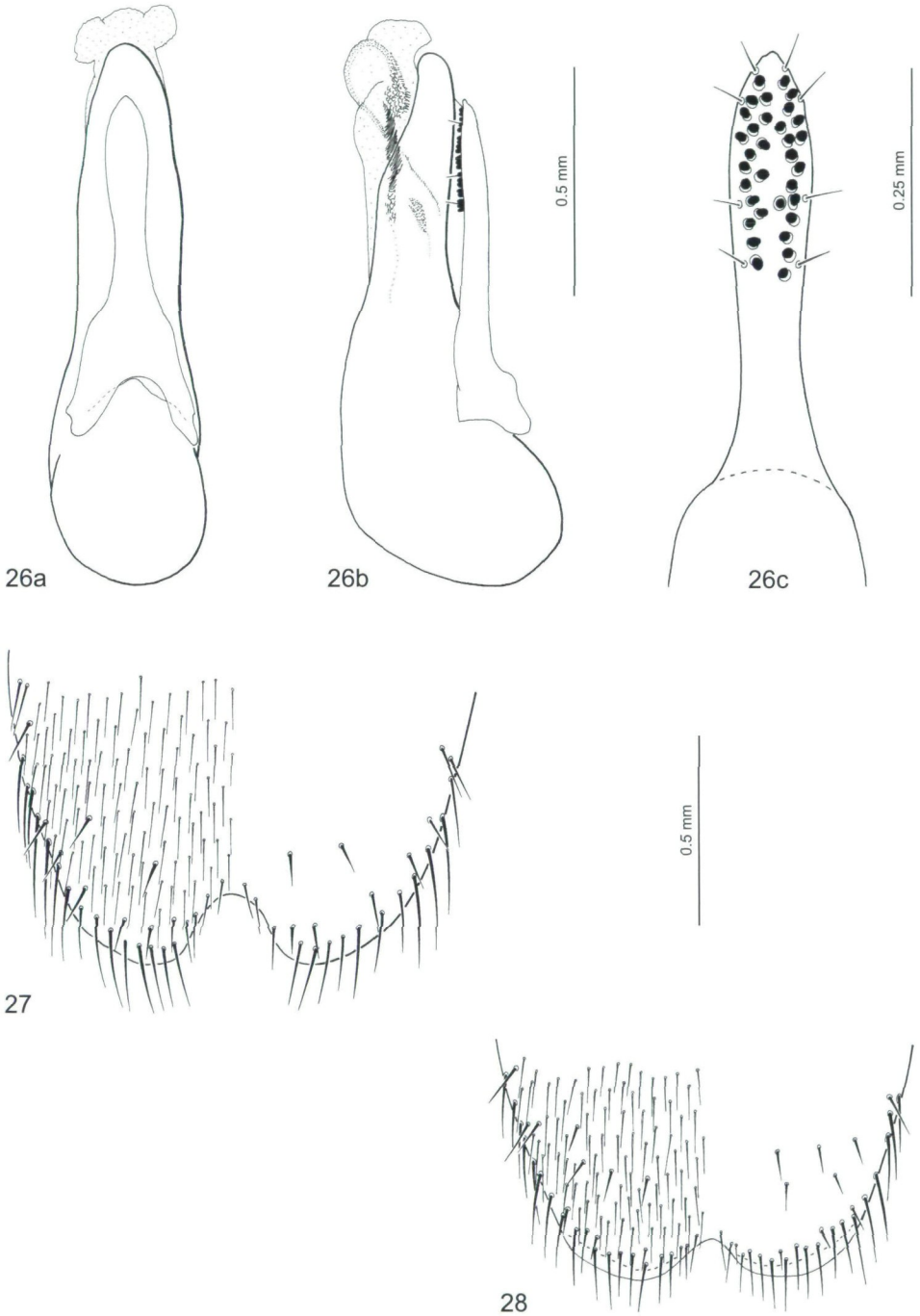


Figs. 21 – 23: *Philnothus sinuatocollis*; 21) Primorskiy Kray, 22) NE-China; aedeagus in a) ventral view, b) lateral view, c) paramere; 23) NE–China, paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c, 23).

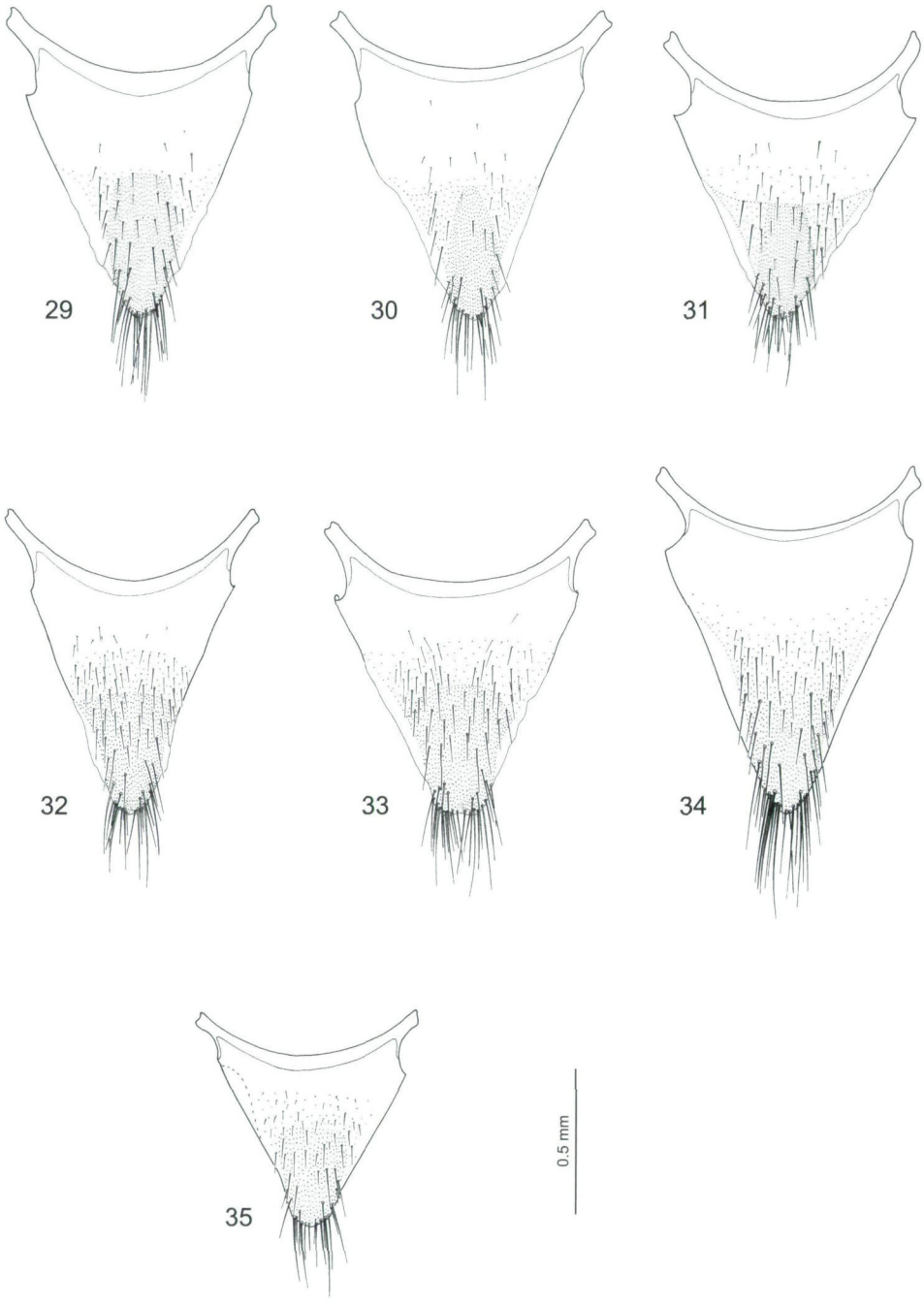




Figs. 24 – 25: *Philonthus turnai*; aedeagus in a) ventral view, b) lateral view, c) paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c).

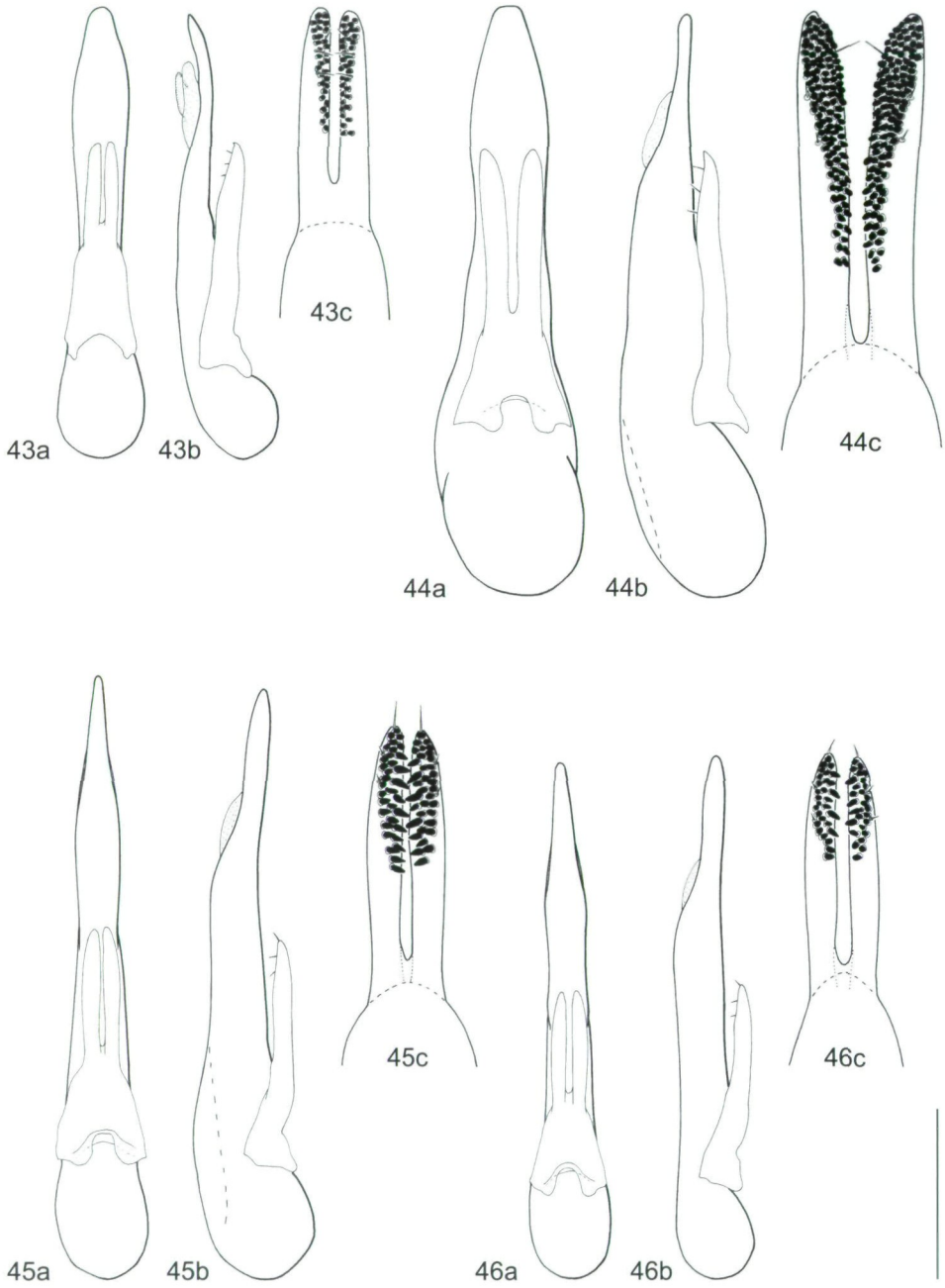


Figs. 26 – 28: 26) *Philonthus kiangsiensis*; aedeagus in a) ventral view, b) lateral view, c) paramere; 27) *P. rotundicollis*, male sternite VIII; 28) *P. turnai*, male sternite VIII.

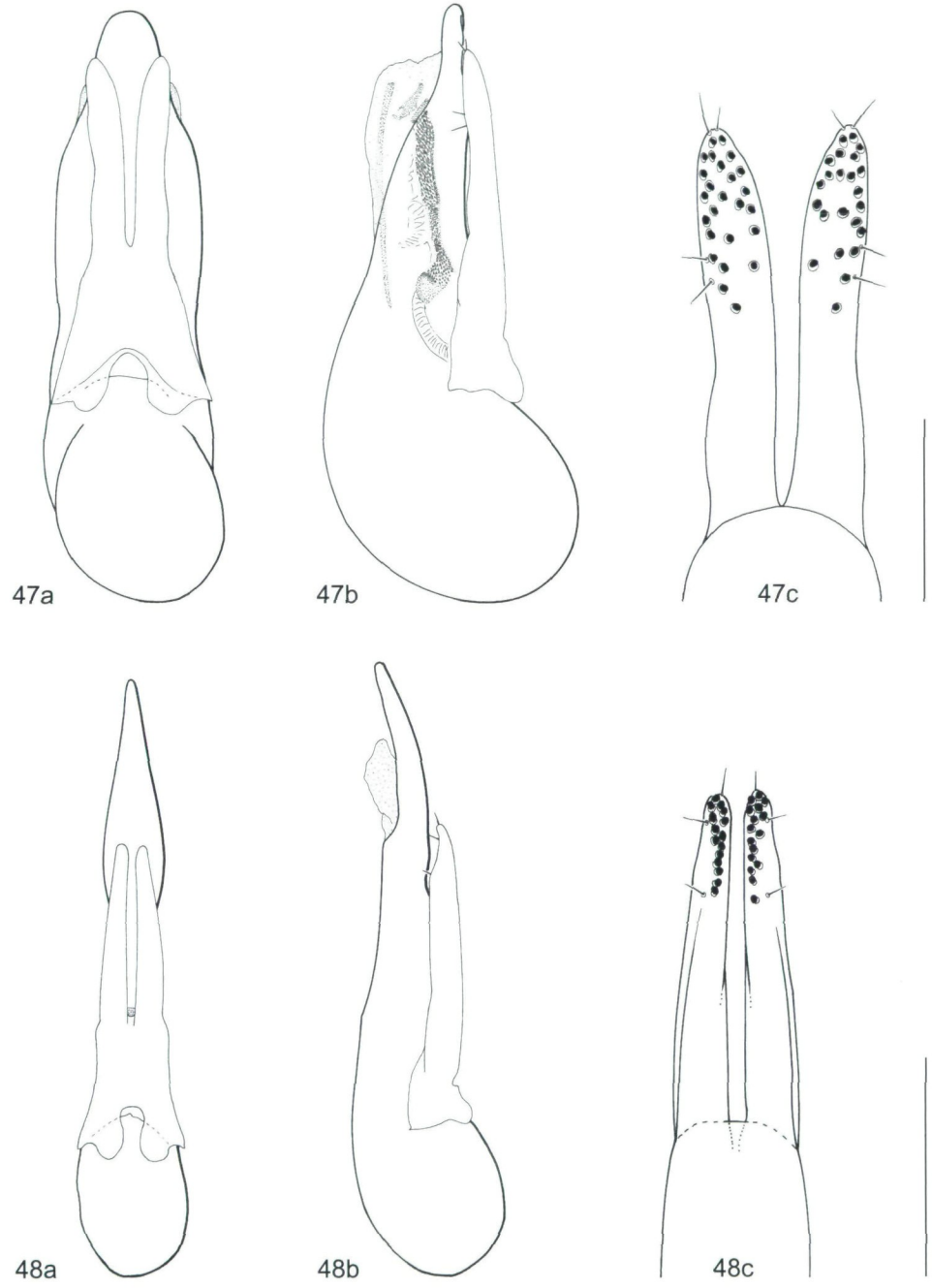


Figs. 29 – 35: Female tergites X of 29) *Philonthus rotundicollis*; 30, 31) *P. picimanus*; 32, 33) *P. sinuatocollis*; 34) *P. kiangsiensis*; 35) *P. turnai*.

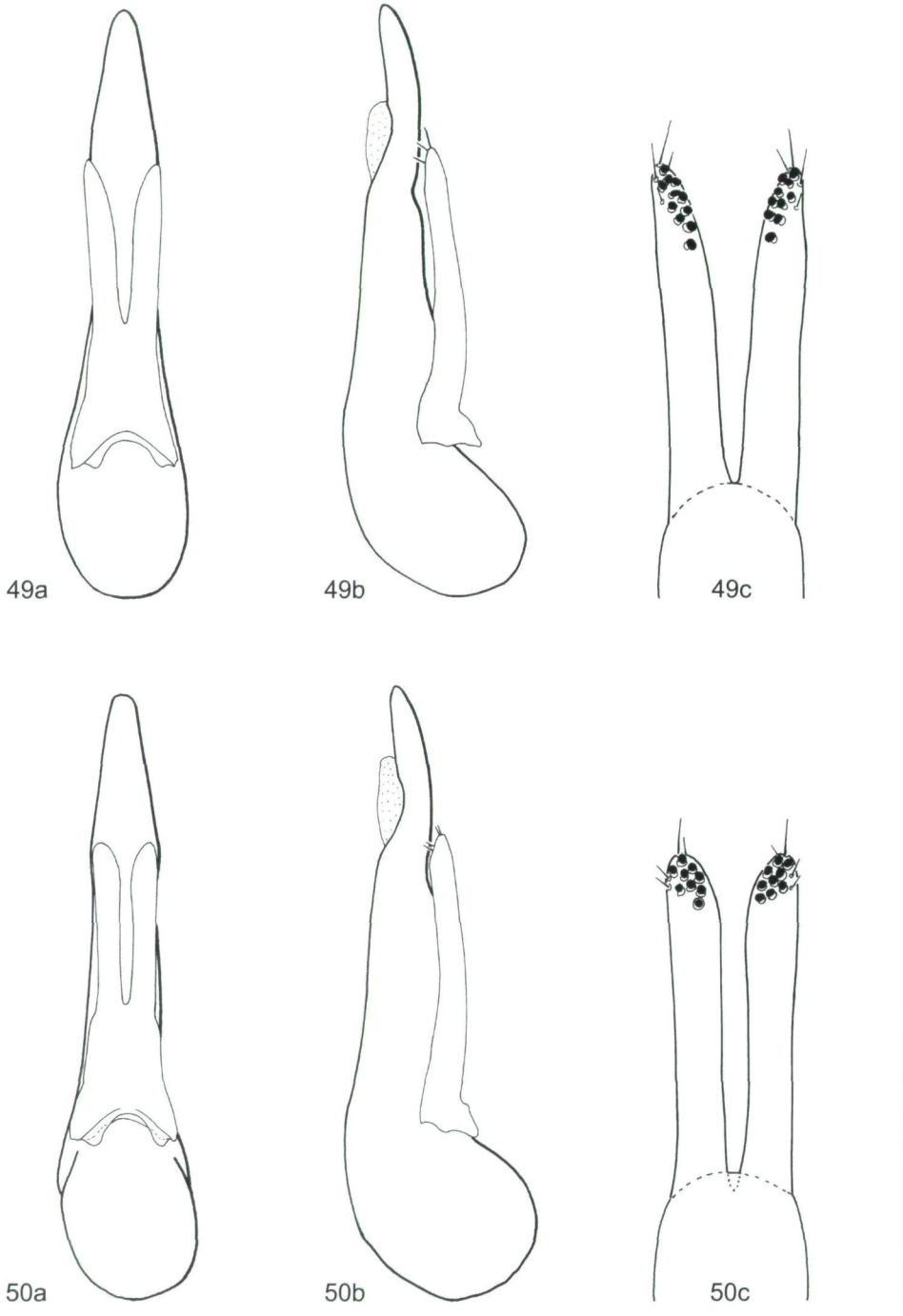
Figs. 36 – 42: Gonocoxites of female genital segment of 36, 37) *Philonthus rotundicollis*; 38, 39) *P. picimanus*; 40) *P. sinuatocollis*; 41) *P. turnai*; 42) *P. kiangsiensis*.



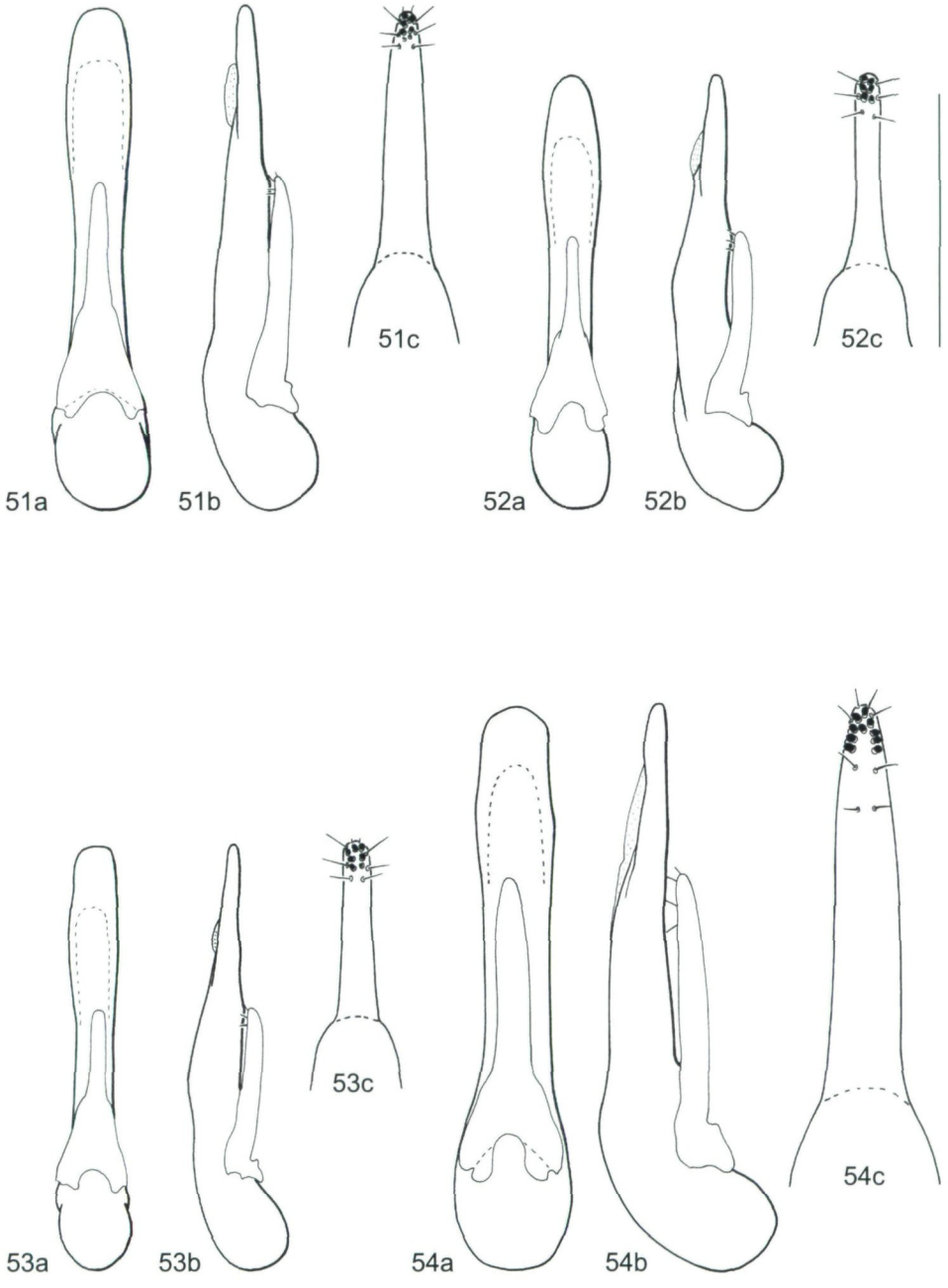
Figs. 43 – 46: Aedeagus of 43) *Philonthus sanguinolentus*; 44) *P. idiocerus*; 45) *P. schuhi* (HT, Vietnam); 46) *P. schuhi* (India, Kerala); a) ventral view, b) lateral view, c) paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c).



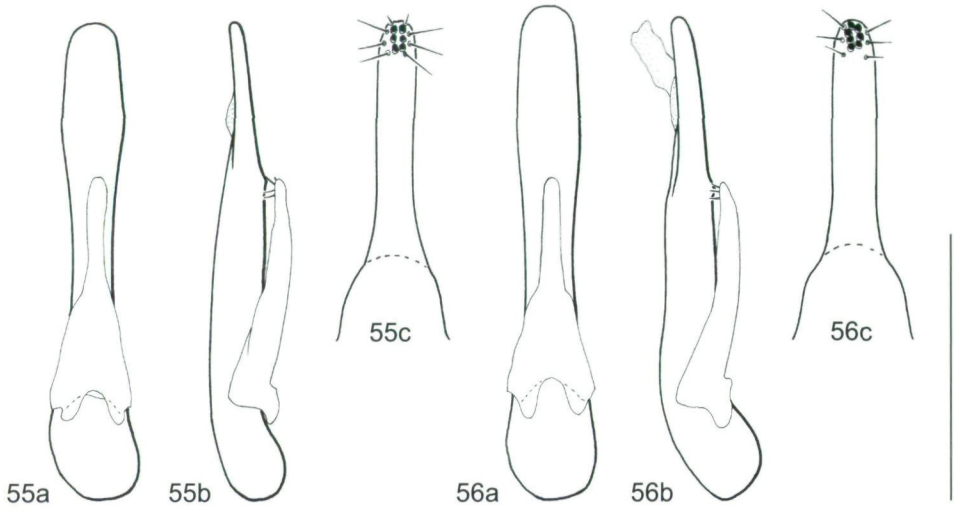
Figs. 47 – 48: Aedeagus of 47) *Philonthus smetanai*; 48) *P. schuelkei*; a) ventral view, b) lateral view, c) paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c).

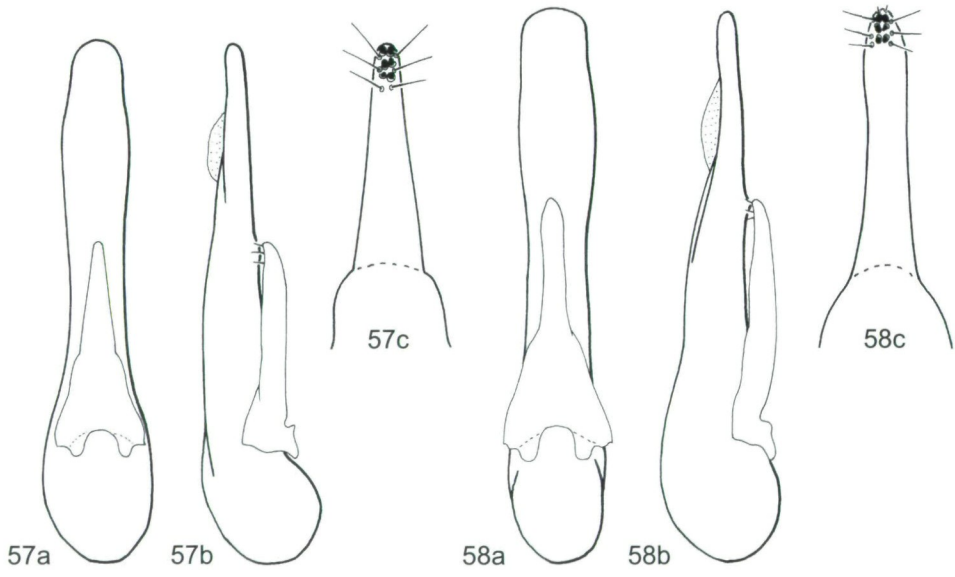


Figs. 49 – 50: Aedeagus of 49) *Philonthus flavohumeralis*; 50) *P. arunensis*; a) ventral view, b) lateral view, c) paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c).

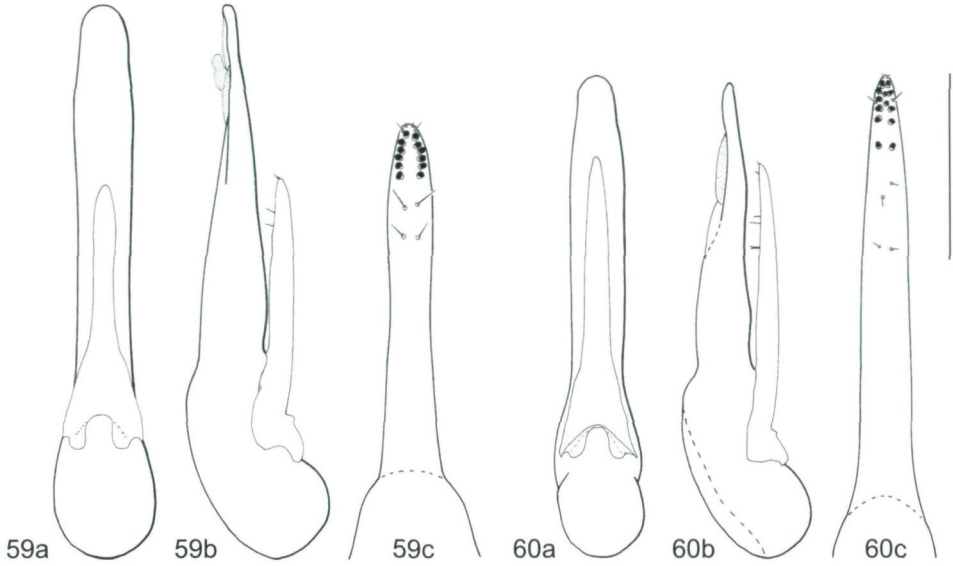


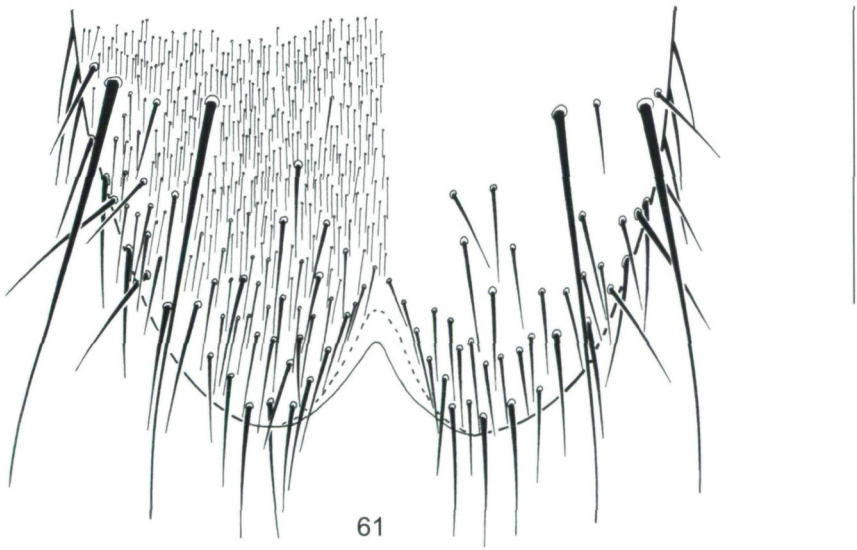
Figs. 51 – 54: Aedeagus of 51) *Philonthus beesoni*; 52, 53) *P. densus*; 54) *P. amplicollis*; a) ventral view, b) lateral view, c) paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c).



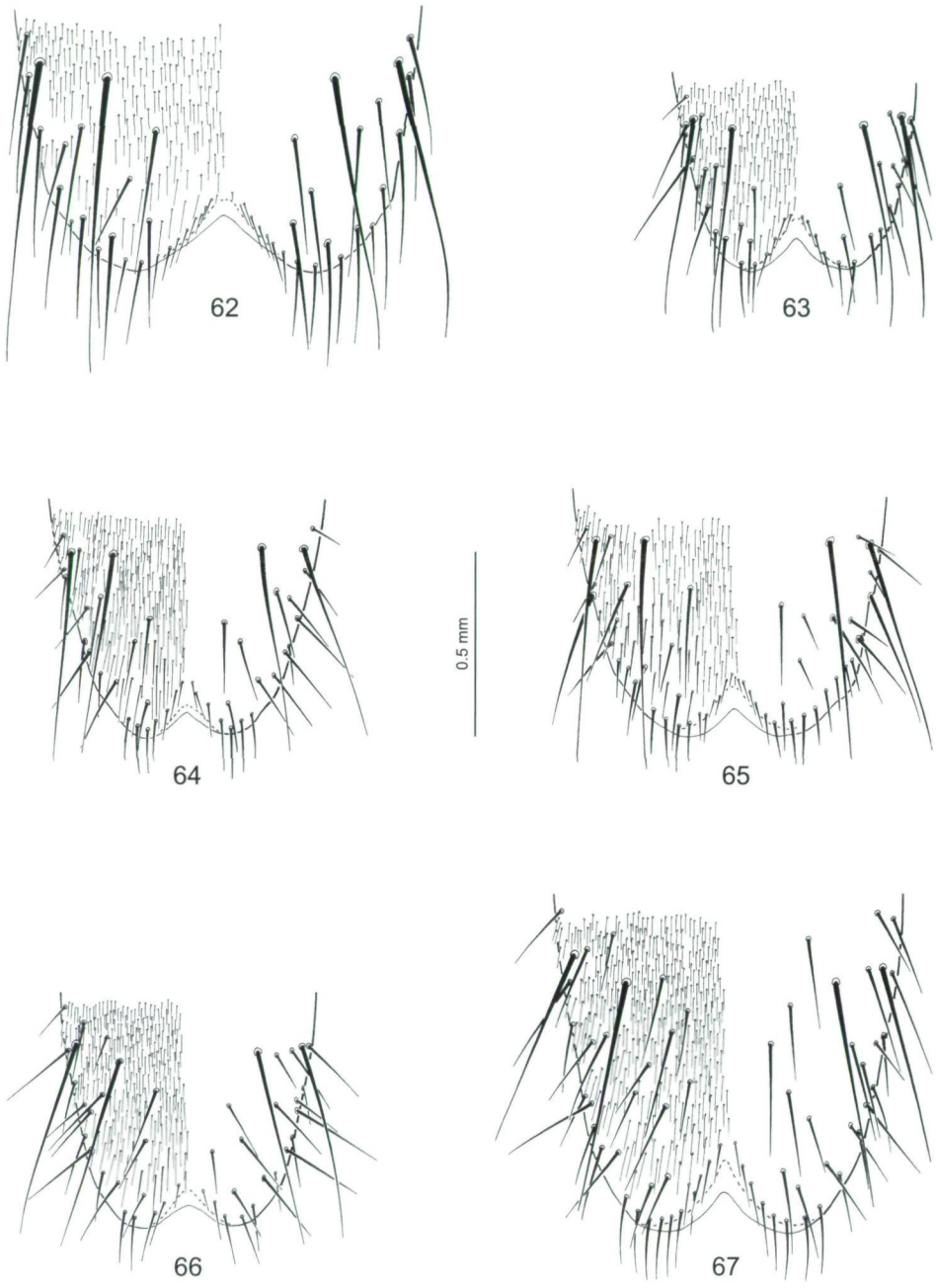


Figs. 55 – 58: Aedeagus of 55, 56) *Philonthus virgatus*; 57, 58) *P. ildefonso*; a) ventral view, b) lateral view, c) paramere. Scale bar = 0.5 mm (a, b), 0.25 mm (c).

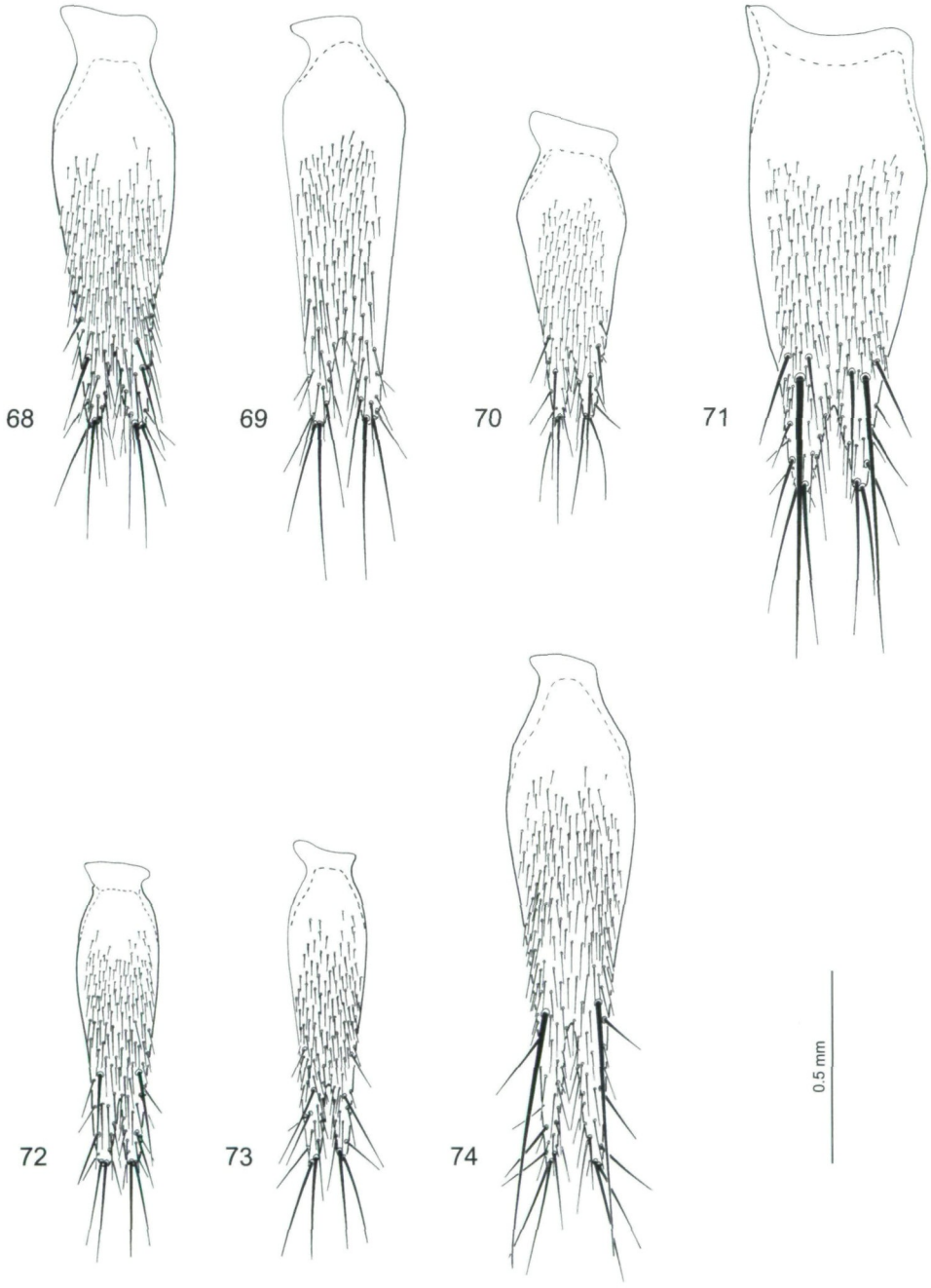




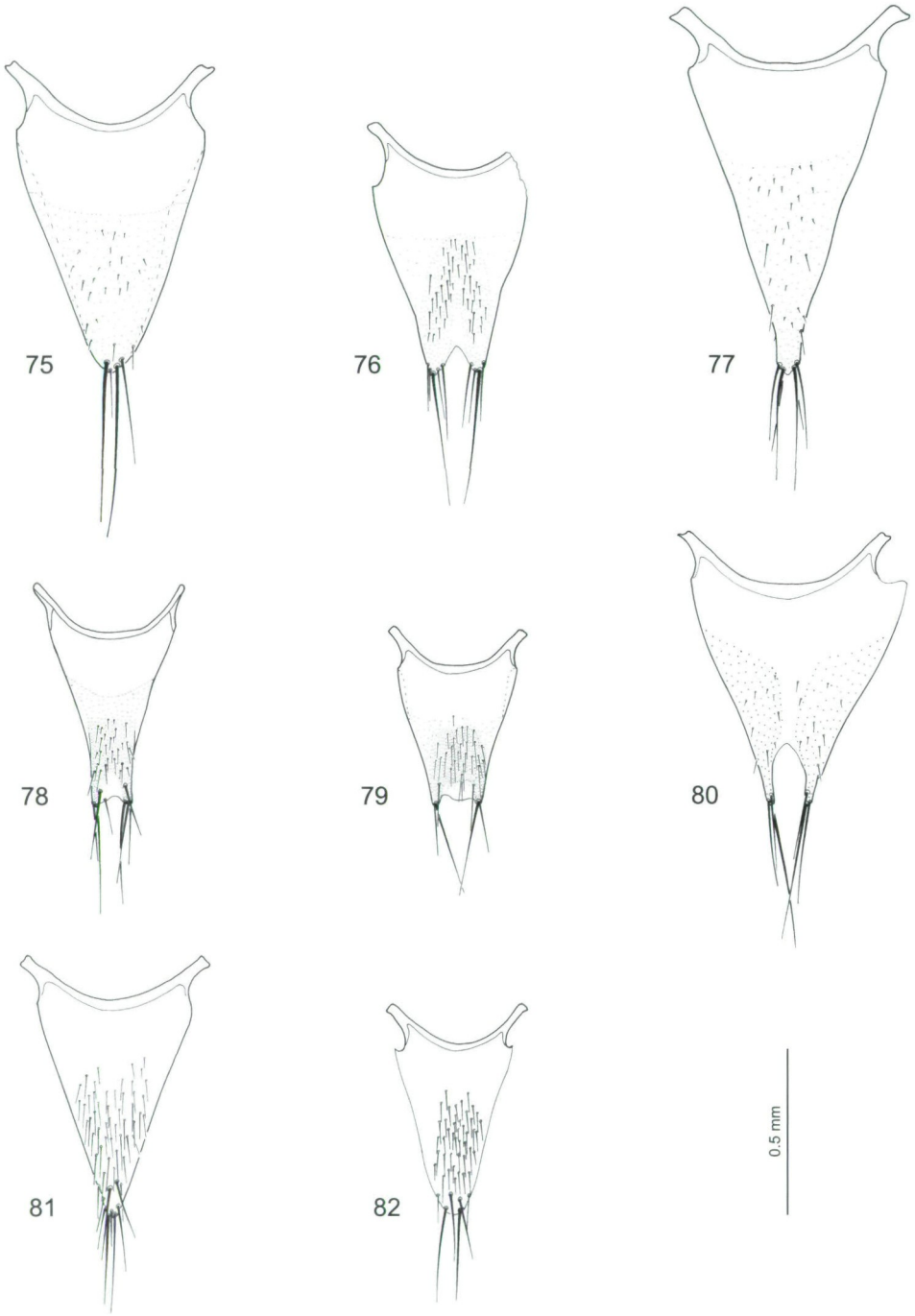
Figs. 59 – 61: 59) *Philonthus mercurii*; 60) *P. fasciventris*; aedeagus in a) ventral view, b) lateral view, c) paramere; 61) *P. sanguinolentus*, male sternite VIII. Scale bar = 0.5 mm (a, b; 61), 0.25 mm (c).



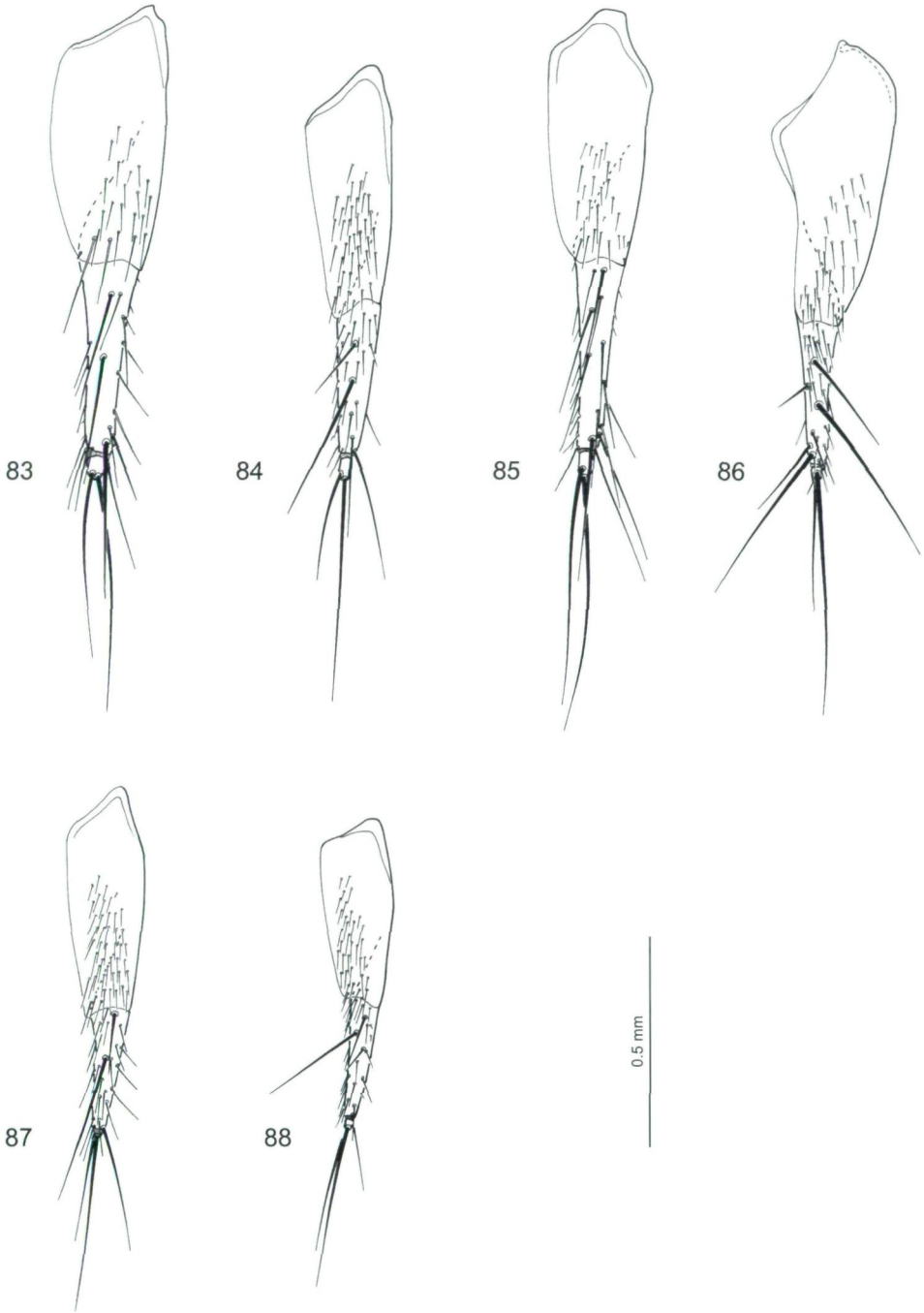
Figs. 62 – 67: Male sternite VIII of 62) *Philonthus smetanai*; 63) *P. flavohumeralis*; 64) *P. densus*; 65) *P. amplicollis*; 66) *P. virgatus*; 67) *P. mercurii*.



Figs. 68 – 74: Male sternite IX of 68) *Philonthus sanguinolentus*; 69) *P. idiocerus*; 70) *P. flavohumeralis*; 71) *P. smetanai*; 72) *P. densus*; 73) *P. virgatus*; 74) *P. mercurii*.



Figs. 75 – 82: Female tergite X of 75) *Philonthus idiocerus*; 76) *P.* cf. *idiocerus* (Myanmar); 77) *P. schuhi*; 78) *P. schuelkei*; 79) *P. flavohumeralis*; 80) *P. smetanai*; 81) *P. amplicollis*; 82) *P. virgatus*.



Figs. 83 – 88: Gonocoxites of female genital segment of 83) *Philonthus idiocerus*; 84) *P.* cf. *idiocerus* (Myanmar); 85) *P. schuhi*; 86) *P. smetanai*; 87) *P. schuelkei*; 88) *P. virgatus*.

References

(References of strictly W-Palaearctic species are ommitted)

BERNHAUER, M. 1916: Neue Staphyliniden der palaearktischen Fauna. – Neue Beiträge zur systematischen Insektenkunde 1: 26-28.

BOHAČ, J. 1988: Noviye i maloisvyestniye schuki-Stafilinidi podsem. Staphylininae (Coleoptera, Staphylinidae). - Entomologicheskoye Obosreniye (Revue d'Entomologie de l'USSR) 67 (3): 549-557 [in Russian].

COIFFAIT, H. 1967: Tableau de détermination des *Philonthus* de la région paléarctique occidentale (Col. Staphylinidae). – Annales de la Société Entomologique de France (N.S.) 3: 381-450.

COIFFAIT, H. 1974: Coléoptères Staphylinidae de la région paléarctique occidentale II. Sous famille Staphylininae, Tribus Philonthini et Staphylinini. – Supplement à la Nouvelle Revue d'Entomologie, Tome IV, fascicule 4, Toulouse, 593 pp.

CAMERON, M. 1926: New species of Staphylinidae from India. Part II. – Transactions of the Entomological Society of London 1925: 341-372.

CAMERON, M. 1932: The Fauna of British India, including Ceylon and Burma. Coleoptera – Staphylinidae, Vol. III. – London: Taylor & Francis, XIII+443 pp., 4 pls.

HERMAN, L. 2001: Catalog of the Staphylinidae (Insecta: Coleoptera). 1758 to the end of the second millenium. V. Staphylinine Group (part 2). Staphylininae: Diochini, Maorothiini, Othiini, Platyprosopini, Staphylinini (Amblyopinina, Anisolinina, Hyptiomina, Philonthina). – Bulletin of the American Museum of Natural History 265: v+2441-3020.

KIRSHENBLAT, J. 1933: Neue und wenig bekannte palaearktische Staphyliniden (Coleoptera) I. – Entomolgicheskoye Obozreniye (Revue d'Entomologie de l'USSR) 25 (1-2): 101-103.

MÉNÉTRIÉS, E. 1832: Catalogue raisonné des objects de zoologie recueillis dans un voyage au Caucase et jusqu'aux frontier de la Perse entrepris par ordre de S.M. l'Empereur. – Académie Impériale des Sciences, St. Pétersbourg, 271+XXIV pp.

MOTSCHULSKY, M.V. 1860a: Énumération des nouvelles espèces de Coléoptères rapportées de ses voyages. 3-ième article. IV. Staphylinides de Russie. – Bulletin des la Société impériale des Naturalistes de Moscou 33: 539-575.

MOTSCHULSKY, M.V. 1860b: Coléoptères de la Sibérie orientale et an paticulier des rives de l'Amur. – In L. Schrenk: Reisen und Forschungen im Amurlande, St Petersburg, Kaiserliche Akademie der Wissenschaften, Vol. II: 77-257.

MOTSCHULSKY, M.V. 1862: Entomologie spéciale. Insectes du Japon. – Etudes Entomologiques 9 (1860): 4-39.

ROUBAL, J. 1911: Koleopterologické vysledkymé cesty na Kavkas v cervenci r. 1910. - Acta Societatis Entomologicae Bohemiae 8: 1-8.

SCHILLHAMMER, H. 1999b: Nomenclatoral and distributional notes on the subfamily Staphylininae. - Entomological Problems 30 (1): 61-62.

SCHILLHAMMER, H. 2000: Revision of the East Palaearctic and Oriental species of *Philonthus* Stephens Part 3. The *politus* complex. - Koleopterologische Rundschau 70: 113-176.

SCHILLHAMMER, H., GUSAROV V.I. & UHLIG, M. 2003: *Philonthus moldavicus* Wendeler, 1924, a new synonym of *P. intermedius* (Lacordaire, 1835). – Koleopterologische Rundschau 73: 83-84.

SMETANA, A. 1963: Beitrag zur Kenntnis der Staphyliniden-Fauna der Mongolei. – Acta Entomologica Musei Nationalis Pragae 35: 291-302.

SMETANA, A. 1995: Rove beetles of the subtribe Philonthina of America north of Mexico (Coleoptera: Staphylinidae), Classification, phylogeny and taxonomic revision. – Memoirs on Entomology, International; Associated Publishers, Gainesville, Florida; Vol. 3, X+946 pp.

TIKHOMIROVA, A.L. 1973: In Kryzhanovskiy, O.L., Tikhomirova, A.L. & Filatova, L.D.: Staphylinidi (Coleoptera, Staphylinidae) yuzhnovo primorya. – In Ghilyarov, M.S. (ed.): Ekologiya pochvennykh bezpozvonochnykh, Moscow: 144-173 [in Russian].

Dr. Harald SCHILLHAMMER
Naturhistorisches Museum, Burgring 7, A-1014 Wien, Austria (harald.schillhammer@nhm-wien.ac.at)