Koleopterologische Rundschau	68	101 - 118	Wien, Juni 1998

Revision of the East Palaearctic and Oriental species of *Philonthus* STEPHENS - Part 1. The *cyanipennis* group (Coleoptera: Staphylinidae, Staphylininae)

H. SCHILLHAMMER

Abstract

The *cyanipennis* group is subject of the first part of a comprehensive revision of the genus *Philonthus* STEPHENS, 1829 (Coleoptera: Staphylinidae) from the East Palaearctic and Oriental regions. The group comprises nine species. Four species and one subspecies are described as new: *Philonthus emas* (Sabah), *P. franzi* (Sumatra), *P. kerinciensis* (Sumatra), *P. lan* (China) and *P. caeruleipennis* ssp. *laterangulus* (Russia Far East). *Philonthopsis antennalis* var. *aeneipennis* CAMERON is placed in synonymy with *P. distincticornis* CAMERON. *Philonthus caeruleipennis* MANNERHEIM is removed from synonymy with *P. cyanipennis* FABRICIUS. A lectotype is designated for *Staphylinus caeruleipennis* MANNERHEIM. A key to the species of the *cyanipennis* group is provided. Morphological details of some species and aedeagi of all species are figured.

Key words: Coleoptera, Staphylinidae, Staphylininae, Staphylinini, Philonthina, *Philonthus*, *cyanipennis* group, new species, new subspecies, new synonymy, lectotype designation, systematics, taxonomy, zoogeography.

Introduction

This is the first part of a taxonomic revision of the East Palaearctic ond Oriental species the genus *Philonthus* STEPHENS, 1829. Preliminary studies on this genus revealed a big mess among the hitherto described East and Southeast Asian species, thus, a modern revision had to be initiated before the whole situation becomes incomprehensible. Furthermore, the only two comprehensive works on the Palaearctic and Orierital species of *Philonthus* (CAMERON 1932, COIFFAIT 1974) turned out to be fairly inadequate to serve as a reliable basis for subsequent studies.

General remarks on the genus *Philonthus* STEPHENS

The genus *Philonthus* is by far the largest genus within the subtribe Philonthina, at the present state of knowledge comprising some 1200 species in all zoogeographical regions. Approximately half of these species are described from the Palaearctic and Oriental regions. However, it must be assumed that the presently known number of species is only the tip of the iceberg.

The genus *Philonthus* was sufficiently characterized by SMETANA (1995). Therefore, for detailed information concerning this genus I refer the reader to this marvelous book. Smetana's generic diagnosis works well for the Holarctic fauna, but has to be slightly modified when the Oriental fauna is included. Due to the large number of taxa which have to be studied, an improved generic diagnosis, as well as a classification at the subgeneric and species group level will be possible only at a very advanced state of the revision.

Geography

The geographical areas which are covered in this and all subsequent parts of the revision are the eastern portion of the Palaearctic region (in the west delimited approximately at 65° of longitude) and the entire Oriental region. Species from the Papuan fauna are only exceptionally included. Additionally, all West Palaearctic species will at least be mentioned to accommodate them in the respective species groups.

Methods

The methods do not appreciably differ from those mentioned under "Techniques" in the "Revision of the Oriental species of *Gabrius* STEPHENS" (SCHILLHAMMER 1997), except for one important matter. The treatment in lactic acid to make aedeagi transparent has a negative side effect in species with rather thick parameres. When placed too long in the acid the parameres often burst, causing considerable deformations. In this case one would do better to use ammonia instead of lactic acid.

Acknowledgement and abbreviations

The material treated in this work was made available by the following institutions and private collectors. Their cooperation is kindly appreciated.

CASS Chinese Academy of Sciences, Institute of Applied Ecology, Shenyang (L. Ji)
CGO Coll. V. Gollkowski, Oelsnitz
CGu Coll. V. Gusarov, St. Petersburg
CKP Coll. K. Kucera, Praha
CPE Coll. A. Pütz, Eisenhüttenstadt
CSB Coll. M. Schülke, Berlin
CSO Coll. A. Smetana, Ottawa
CTB Coll. H. Terlutter, Billerbeck
DEI Deutsches Entomologisches Institut, Eberswalde (L. Zerche)
FMC Field Museum of Natural History, Chicago (A. Newton, M. Thayer, P. Parillo)
HUB Museum der Alexander-Humboldt-Universität, Berlin (M. Uhlig)
MHNG Museum d'Histoire naturelle, Genéve (I. Löbl)
NHML The Natural History Museum, London (M. Brendell)
NMB Naturhistorisches Museum Basel (M. Brancucci)
NMW Naturhistorisches Museum Wien
ZAS Zoological Institut, Academy of Sciences, St. Petersburg (V. Gusarov)
ZML Zoological Museum, Lund (R. Danielsson)

Additionally, I thank Alfred Newton (Chicago) for the lingual correction of the manuscript and Manfred A. Jäch for criticism in general.

The *Philonthus cyanipennis* group

DIAGNOSIS: Moderately large to large species, 9 - 16 mm long; black, elytra brilliant metallic blue, violaceous-blue or greenish-blue; shape of head from trapezoid to subrectangular, always wider than long; posterior portion of eyes often slightly shifted toward dorsal face of head (especially in large ♂♂); mandibles stout and moderately long in small ♂♂ and most ♀♀, long and almost falciform in large ♂♂; antennae sexually dimorphic, markedly longer in ♂ than in ♀; palpi long and slender (length depending on sex and size of specimen), last segment often almost subuliform in large ♂♂ (similar to *Hesperus* FAUVEL); pronotum variably shaped, lateral margins either regularly rounded, almost straight or slightly emarginate posteriorly in front of base; dorsal rows each with four punctures, sublateral rows each with two punctures; inferior lateral line often

flattened or even obsolete toward anterior margin, thus appearing as if not meeting superior lateral line; elytra with simple punctation; abdomen with first three visible tergites with two basal lines, posterior basal line on 3rd visible tergite often crenulate; punctation of tergites variable, either uniform or much reduced; posterior margin of tergite VIII simply arcuate; male sternite VIII (Figs. 17 - 19) with 3 - 4 large setae, posterior margin deeply emarginate, with semi-membranous extension (very small in *P. cyanipennis* and *P. caeruleipennis*); male sternite IX (Figs. 20, 21) with deeply emarginate apex, bearing two long preapical setae; 2nd gonocoxite of female genital segment (Fig. 22) with minute stylus; aedeagus with median lobe simple, usually with tooth on ventral face; paramere entire, symmetrical, with two longitudinal rows of peg setae; first four segments of front tarsi subbilobed, only weakly dilated in both sexes (except ♂ of *P. taiwanensis* with distinctly dilated front tarsi).

REMARKS: SMETANA (1995) placed *P. cyanipennis* in the *furvus* group. Most characters correspond with the concept of this group. Some characters that at the first view seemed to be of importance for the characterization of the *cyanipennis* group (*Hesperus*-like palpi and mandibles, lateral lines of pronotum not conspicuously meeting) are also developed in some species of the *furvus* group. However, by the apparent phenetic similarity (blue metallic elytra), the sexual dimorphism of the antennae (not developed in any of the neighbouring groups) and the specialized habitat requirement (the species are found in forested areas, where they are preferably associated with mushrooms) the species of the *cyanipennis* group form a differentiated unit and therefore justify a separation from the *furvus* group.

List of species

Philonthus caeruleipennis MANNERHEIM
Philonthus caeruleipennis laterangulus ssp.n.
Philonthus cyanelytrius KRAATZ
Philonthus cyanipennis FABRICIUS
Philonthus distincticornis CAMERON
Philonthus emas sp.n.
Philonthus franzi sp.n.
Philonthus kerinciensis sp.n.
Philonthus lan sp.n.
Philonthus taiwanensis SHIBATA

Key to species of the *Philonthus cyanipennis* group

1 Four outer segments of antennae creamy white (Himalaya) ..... *P. distincticornis*

- Antennae unicolorous, last segment sometimes more or less reddish 2

2 Head and pronotum without even finest traces of transverse, wavy microsculpture (Borneo: Sabah) ..... *P. emas*

- Head and pronotum with at least traces of transverse, wavy microsculpture 3

3 First three visible tergites densely and uniformly punctate 4

- First three visible tergites sparsely punctate, punctures forming regular or irregular transverse rows 6

4 Head usually with 4 interocular punctures* 5

- Medial pair of interocular punctures lacking (Palaearctic)* ..... *P. cyanipennis*

5 Median lobe of aedeagus with rounded ventro-lateral protuberances approximately at level of ventral tooth (Japan, Kuril Islands, New World) ..... *P. caeruleipennis*

- Median lobe of aedeagus with angulate ventro-lateral protuberances (Russia Far East, Sachalin) ..... *P. caeruleipennis* ssp. *laterangulus*

* For exceptions see descriptions of *P. cyanipennis* and *P. caeruleipennis*

6 Head with 4 interocular punctures 7
- Medial interocular punctures lacking (species from Sumatra)..... 10
7 Punctures of scutellum large, almost pit-like..... 8
- Punctures of scutellum fine, not pit-like 9
8 Species from Taiwan; front tarsi of ♂ distinctly dilated, segments 1 - 3 almost as wide as tibia..... *P. taiwanensis*
- Himalayan species; front tarsi of ♂ inconspicuously dilated, segments 1 - 3 not as wide as tibia..... *P. cyanelytrius*
9 Sides of pronotum straight and parallel in basal 2/3 (China: Yünnan, Sichuan)..... *P. lan*
- Sides of pronotum distinctly narrowed toward base in slight or conspicuous concave arc ..... *P. taiwanensis*
10 Median lobe of aedeagus narrowed toward top in concave arc ..... *P. kerinciensis*
- Median lobe of aedeagus narrowed toward top in almost straight line ..... *P. franzi*

Philonthus cyanipennis (FABRICIUS)

Staphylinus cyanipennis FABRICIUS 1792: 525.
Staphylinus amoenus OLIVIER 1794: 26.

TYPE MATERIAL: I have made no attempt to study the original material of *P. cyanipennis*, which was described from Paris. The conspecifity of the type specimens with the available West Palaearctic material was presumed.

DESCRIPTION: 10 - 14 mm long. Black, elytra brilliant metallic blue or greenish-blue, frequently with distinct purplish reflex; abdomen usually iridescent (iridescence often inconspicuous or lacking in old or maltreated material); apices of palpi and tarsi sometimes slightly paler.

Head variably shaped, either rounded quadrangular, moderately wider than long (ratio 1.25 in ♀♀ and small ♂♂) and slightly narrower than pronotum, or trapezoid and distinctly transverse (ratio up to 1.6 in large ♂♂), in this case about as wide as pronotum; temples convergent, about as long as eyes; disc very flat, shallow depression on frons sometimes extending toward posterior portion of head; medial interocular punctures usually lacking, rarely one fine puncture developed (I have even seen specimens with both medial interocular punctures developed; in this very rare case they are very difficult to distinguish from the following species, when the specimens are from a locality where both species occur); antennae of ♂ with segment 4 conspicuously oblong, segments 5 and 6 slightly oblong, distally gradually decreasing in length, segments 7 and 8 as long as wide, segments 9 and 10 inconspicuously transverse; antennae of ♀ with segments 4 and 5 slightly oblong, segment 6 as long as wide, segments 7 - 10 transverse (7 and 8 slightly, 9 and 10 conspicuously). Pronotum about as long as wide, regularly convex; widest near base, distinctly narrowed toward anterior margin, sides almost evenly rounded (giving the pronotum an almost *Quedius*-like appearance); punctures of dorsal row rather fine, weakly impressed. Microsculpture of head and pronotum consisting of very fine and dense, transverse waves. Elytra slightly dilated toward apex, about as long as pronotum; punctation quite dense, punctures separated by 1.0 - 1.5 times a punctures diameter (in transverse direction); pubescence black. Abdominal tergites uniformly and quite densely punctate; elevated area between two basal lines on 2nd and 3rd visible tergites distinctly punctate; posterior basal line on 2nd visible tergite almost straight; posterior basal line on 3rd visible tergite often crenulate; male sternite VIII: Fig. 17; male sternite IX: Fig. 20.

Aedeagus (Figs. 1, 2) rather small compared with the size of the beetle; median lobe elongate, almost parallel-sided, slightly concavely narrowed toward obtusely pointed or even subtruncate top; with distinct median tooth on ventral face; paramere (Figs. 1c, 2c) long, almost parallel, with two apico-lateral rows of densely arranged peg setae of variable number (10 - 13).

MATERIAL EXAMINED (Far East Asian localities only):

R U S S I A: BAIKAL REGION: "Kulusutaij Sabaikale Radde" (ZAS). FAR EAST (Primorskiy Kray, Khabarovskiy Kray): Snjeschnaja riv., Sljugjanskij rajon, 2.VII.1974, leg. Schilenkov (HUB); Arsenev env., 27.V. - 5.VII.1991, leg. O. Sausa (NMW); Pidan Mts., Anisimovka vill., 18. - 25.VI.1990, leg. Plutenko (CGO); ca. 30 km SE Ussurijsk, Kamenushka, 22.VII.1990, leg. A. Pütz (CSB); same locality, 24. - 28.VII.1989, leg. M. Nikodym (NMB); same locality, 29.VIII.1987, leg. V. Gusarov (CGu); Ussurijsk, Kajmanovka, 1. - 4.VIII.1990, leg. Snizek (CSB); same locality, 31.VII. - 2.VIII.1990, 15.VII.1992 (NMB), 2. - 9.VII.1992, leg. Smrz (CGO); same data, leg. Snizek (NMW); Kraskino, Azajzanovka env., 13. - 16.VIII.1992, leg. Snizek (NMW); Partisansk, 19. - 21.VIII.1992, leg. Snizek (NMW); Novocugujevka, 16. - 18.VII.1990, leg. Snizek (CSB); same locality, 15. - 20.VII.1990, leg. D. Boukal (CGO), 26. - 31.VII.1992, leg. Snizek (NMW); Kamen Rybolov, 22. - 26.VII.1991, leg. J. Farkac (NMB); Juzno-Morskij, 30.VII. - 3.VIII.1991, leg. J. Farkac (NMB); Black Mts., Grjaznaja riv., 13. - 19.VI.1992, leg. J. Farkac (NMB); 33 km SE Ussurijsk, 11. and 13.VI.1993, 300 m, leg. L. Zerche (DEI, NMW); Ryzanovka, 20 km SW Slavjanka, 50 m, 17.VI.1993, leg. L. Zerche (DEI); Ussuri reg., Oblachnaja Mt., 800 m, 13. - 16.VII.1989, leg. M. Nikodym (NMB); Ussuri reg., Yasnoe, 400 m, 12. - 19.VII.1989, leg. M. Nikodym (NMB); Ussuri, Maritime Terr., Blue Mts., 30 km S Spassk-Dalnij, 16. - 18.VI.1990, leg. S. Kasantsev (NMB); Ussurijskij Sapovednik, 19.VII.1990, leg. A. Pütz (CPE); same locality, 19.V. and 22.VIII.1990, leg. Kusnezow (HUB); 30 km SE Ussurijsk, 28.VII. - 1.VIII.1993, leg. E. Groll & C. Kutzscher (CSB); 30 km NE Vladivostok, Tajvaza, 29.VII. - 5.VIII.1992, Flight Intercept Trap, leg. B. D. Gill (CNC); Vladivostok, Okeanskaja, 6.VII.1993, leg. Kusnezow (HUB); SE Boitsovo, 12 km NE Bikin, 26.V. - 4.VI.1990, leg. W. Schawaller (SMNS, NMW). SACHALIN: Kalinino vill., 4. - 20.VII.1992, leg. Plutenko (CGO, NMW); Kalinino env., 4. - 9.VII.1992, leg. J. Farkac (NMB, NMW); Juzno-Sachalinsk env., 1. - 3.VII.1992, leg. J. Farkac (NMB); same locality, 23.VIII.1992, leg. V. Gusarov (CGu); Aniva Dist, pr. Kirillovo, 1.-10.VIII.1990, leg. S. Kasantsev (NMB); Aniva dist., Zunajiskij Khrebet, Mt. Tshekhov, 600 - 1000 m, 13.VII.1993, leg. Pütz & Wrase (CSB).

S - K O R E A: Mt. Kyeroung, Dong Haksu, leg. Kwang Seob Lee (CSB); Mt. Tae baek san, 1.VIII.1986, leg. Kwang Seob Lee (CSB); Mt. Jirisan, 2. - 3.X.1987, leg. Kwang Seob Lee (CSB).

C H I N A: LIAONING: Shenyang ("Kaisergräber b. Mugden"), VII.1912 (HUB).

DISTRIBUTION: Occuring all over the temperate zones of the Palaearctic region, but (except for Sachalin Island) restricted to the continent. There are as yet no records from the middle portion of Russia except one specimen from "Usnjesja na Katuni, Altaj, 15.VIII.1909, leg. Gortschakovskiy" (ZAS). All previous records from Japan and the New World refer to the following species.

Philonthus caeruleipennis s.str. (MANNERHEIM) species propria

Staphylinus caeruleipennis MANNERHEIM 1830: 441.
Staphylinus cyanipennis: GRAVENHORST 1802: 168; 1806: 86.
Philonthus caeruleipennis was formerly treated as synonym of *P. cyanipennis*.

TYPE MATERIAL: **Lectotype** ♂ (present designation): "6031 \ Am. spt. Kn. \ Hist.-Coll. (Coleoptera) Nr. 6031 (1. Ex.) Philonthus spec. Americ. sept., Knoch Zool. Mus. Berlin [green label]". - **Paralectotypes** (1♂, 3♀♀): bearing only green labels with same data as lectotype but enumerated (2. - 5. Ex.). The entire type series is deposited in HUB.

DESCRIPTION: Size and coloration identical with that of *P. cyanipennis*, but sometimes with slight purplish hue on head and pronotum. In shape almost identical with *P. cyanipennis*, but differing as follows: Head usually with four interocular punctures, postocular region very often more densely punctate, disc of head less flat, depression confined to frontal region; pronotum with sides almost subparallel or at least less regularly rounded than in *P. cyanipennis* (most specimens from Japan), only in Nearctic specimens often similarly shaped as in *P. cyanipennis*; punctures of dorsal rows more deeply impressed. Abdominal tergites punctate as in *P. cyanipennis* (North American specimens). Majority of specimens from Japan and Kuril Islands, with posterior basal line on 3rd visible tergite distinctly crenulate, often weakly developed, frequently even reduced. Additionally, punctation of abdominal tergites somewhat stronger, often even slightly asperate; male sternite VIII as in *P. cyanipennis*.

Aedeagus (Figs. 6, 7) shorter than in *P. cyanipennis*, median lobe at level of base of paramere much narrower, entirely covered by base of paramere, parallel or widened toward apex; apical portion of median lobe with two ventro-lateral, rounded protuberances; apical portion of paramere (Figs. 6c, 7c) distinctly shorter than in *P. cyanipennis*; peg setae on underside of paramere similarly arranged as in *P. cyanipennis*, but in average less numerous (8 - 11).

MATERIAL EXAMINED (East Asian material only):

J A P A N: "Hokkaido, Bokusanai - Atsuta, 7.VI.1987, leg. M. Kawata" (CSB); "Mt. Koshinsan, Tochigi Pref., 8.VI.1975, S. Morita" (DEI); "Mt. Hotaka, Gunma Pref., 27.VII.1987, S. Ohmomo" (DEI); "1982.6.20. Minami-Aizu, Fukushima Pref. Col. S.Ohmomo" (DEI); "Iritono, Fukushima Pref., 6.VIII.1987" (DEI); "Mt. Watamuki, Shiga, 11.VII.1987, N.Ito" (DEI); "Mt. Koya, Kii, 5.VIII.1989, N. Ito" (DEI); "Odaigahara, Yamato, 18.VII.1981, K. Ando" (DEI); "Mt. Inamuradake, Yamato, 6.VIII.1988, K. & M. Ando" (DEI); "Jozankei, Hokkaido, 21.VI.1986, M. Hirano" (DEI); "Koike Lake, Hyuga, 22.X.1987, K. Ando" (DEI).

R U S S I A: KURIL ISLANDS: Iturup Isl., Atsunaruri, 21.VIII.1975, leg. Kusnetsov (DEI); Kunashir Island, pr. Tretyakovo, 14. - 19.VII.1990, leg. S. Kasantsev (NMB, NMW).

DISTRIBUTION: Japan, Kuril Islands, North America (for Nearctic data see SMETANA 1995, p. 119), Venezuela (doubtful, probably mislabelled: 1 ex. each in NMW and FMC).

Philonthus caeruleipennis laterangulus ssp.n.

Holotype ♂: "USSR, Primorskij Kraj, Arsenev env., 27.V. - 5.VII.1991, leg. O. Sausa" (NMW).

Paratypes (82 exs.): R U S S I A: FAR EAST (Primorskiy Kray, Khabarovskiy Kray): 4 exs.: same data as holotype (NMW); 1 ex.: "Amur (Christoph.) Faust" (NMW); 1 ex.: "Amur XIII 1878.3" (NMW); 1 ex.: "r. Botci, Sichota - Alin, Prim. obl. Emeljanov 5.VIII.924" (ZAS); 1 ex.: "Vladivostok Christof IX76" (ZAS); 3 exs.: "Suputinskij Zapov. Primor. 14 IX Kryzhanovskij 969" (ZAS); 1 ex.: "Prim. Kraj Spasskij r-n s. Tatmovka listv. les 19.VII.70 Kusnetzov" (ZAS); 2 exs.: "Iman. u. Prim. o. Schingar. 10.VIII.911" (ZAS); 2 exs.: Nikolsk Ussurijskij (Taiga) Vjelitschkovskij V.924" (ZAS); 4 exs.: Ussurijskij Sapovednik, 19.VII.1990, leg. A. Pütz (CPE); 1 ex.: same locality, 22.VIII.1990, leg. Kusnezow (HUB); 1 ex.: Partisanskij rajon, Mt. Olchowaja, 25. - 27.VII.1993, leg. Kusnezow (HUB); 1 ex.: 20 km E Sergejevka, forests near Andrejevka river, 400 - 800 m, 26. - 29.VII.1993, leg. Pütz & Wrase (CSB); 8 exs.: Vladivostok, 16.VII.1990, leg. Pütz (CSB, DEI, NMW); 1 ex.: Novovarvarovka, 6. - 10.VII.1989, leg. Becvar (CSB); 1 ex.: Chernigovka, 30 km SE Hanka-Lake, 2.VIII.1995, leg. V. Kusnezov (CSB); 1 ex.: Black Mts., Grjaznaja riv., 20.(VII.?) - 5.VIII.1977, leg. Plutenko (CGO); 6 exs.: 33 km SE Ussurijsk, 200 m, 12.VI.1993, leg. L. Zerche (DEI); 16 exs.: same locality, 300 m, 13.VI.1993 (DEI, NMW); 1 ex.: 30 km SE Chugujevka, 650 m, 1.VI.1993 (DEI); 7 exs.: Kamenuschka, 22.VII.1990, leg. Pütz (DEI); 1 ex.: Nadeschdinskij rajon, riv. Eldugor, 10.VII.1989, leg. Kusnezov (DEI); 3 exs.: "Roschdestwenka rajon Schkotowsk Ussuri-Gebiet" (HUB); 6 exs.: Zanadvorovka env., 4. - 8.VIII.1992, leg. P. Ivanov (NMB); 2 exs.: Ussuri, Maritime Terr., Blue Mts., 30 km S Spassk Dalnij, 16. - 18.VI.1990, leg. S. Kasantsev (NMB); 1 ex.: "Primorje r. Bikin VII.71 Pukinsk" [in Russian] (HUB); 2 exs.: Bikinsk, Birskol, 28.VI.1958" (NMW); SACHALIN: 2 exs.: Kalinino, 30 km S Cholmsk, 24. - 27.VII.1990, leg. V. Skoupy (CTB); 1 ex.: "Aniva distr., pr. Kirillovo, 27. - 28.VII.1990, leg. S. Kasantsev" (NMB).

DESCRIPTION: In all respects identical with specimens of nominate form from Japan, but ventro-lateral protuberances of median lobe of aedeagus forming conspicuous angle (Figs. 3 - 5). Additionally, punctation on elevated area between two basal lines on 2nd and 3rd visible tergites less dense. Pronotum almost always with distinct purplish hue; sides less rounded, almost subparallel, punctures of dorsal rows rather deeply impressed.

REMARKS: As already mentioned in *P. cyanipennis* the character of the interocular punctures is not always constantly developed. Since *P. cyanipennis* and *P. caeruleipennis* ssp. *laterangulus* occur sympatric, this fact might pose difficulties in identification of such aberrant specimens, especially in females. However, the two species differ considerably in the shape and punctation of the pronotum.

DISTRIBUTION: At present known only from Russia Far East (including Sachalin Island); most likely also in north-eastern China and the Korean peninsula, but as yet no data exist.

ETYMOLOGY: Named for the distinctly angulate protuberances of the median lobe.

Philonthus lan sp.n.

Holotype ♂: "China Yunnan 1. - 19.VII. HEISHUI 35 km N Lijiang 27°13'N 100°19' E.Jendek leg. 1992" (NMW).

Paratypes (56 exs.): YÜNNAN: 2 exs.: same data as holotype (NMW); 2 exs.: 35 km N Lijiang, Heishui 1. - 19.VII.1992 (NMW); 14 exs.: 50 km N Lijiang, Yulongshan Nat.Res., 24. - 29.VI.1993 (NMW, CASS, CSO, FMC, MHNG); 1 ex.: Yulongshan, 9.VII.1995, 3300 m, 27°07'N 100°14'E, leg. Bolm (NMB); 2 exs.: Lugu Lake, Luo Shui, 27°45'N 100°45'E, 8. - 9.VII.1992 (NMW); 2 exs.: Dali, 1600 - 2000 m, 5. - 8.VII.1990 (NMB); 5 exs.: Dali, 16.VI.1993 (NMW, NHML); 4 exs.: Dali, 6.VII.1993 (NMW, ZML); 3 exs.: Dali, 28.V. - 9.VI.1994 (CKP); 1 ex.: Habashan, E slope, 3000 - 3800 m, 27°20'N 100°09'E, 13. - 17.VII.1992 (NMB); 1 ex.: Habashan, SE slope, 27°20'N 100°11'E, 3. - 6.VI.1995, 2500 - 3800 m (NMW). SICHUAN: 1 ex.: 280 km SW Ya'an, Liziping env., near Shimian, 27.VI. - 3.VII.1991 (NMW); 1 ex.: Gongga Shan, Hailuoguo Glacier Park, Camp 1, 2100 m, 27. - 31.V.1997 (CSB); 1 ex.: Gongga Shan, Hailuoguo Glacier Park, above Camp 2, 2800 m, 26.VII.1994 (CSO); 18 exs.: Gongga Shan, Hailuoguo Glacier Park, above Camp 3, 3000 m, 30.V.1997 (CPE, NMW).

DESCRIPTION: 11 - 16 mm long. Black; claws and large apical spines of tibiae testaceous; elytra brilliant metallic blue, violaceous blue or very rarely greenish blue; pronotum with violaceous and head with dark blueish reflex; scutellum black.

Head distinctly transverse, 1.27 (♀) - 1.66 (large ♂) times as wide as long; with 4 interocular punctures, medial interocular punctures distinctly finer than outer ones; eyes about as long as (♂) or 1.2 - 1.4 times (♀) as long as tempora; tempora narrowed toward neck in almost regular arc; palpi of ♂ distinctly longer than those of ♀; antenna of ♂ with segment 4 distinctly oblong, toward outer segments gradually becoming shorter, segments 5 and 6 slightly oblong, segments 7 - 9 about as long as wide, segment 10 slightly transverse; antenna of ♀ with segment 4 inconspicuously oblong, segments 5 - 7 about as long as wide, segments 8 - 10 slightly transverse; surface of head with distinct microreticulation of dense, rather short-meshed, transverse waves; microreticulation of pronotum denser and much finer. Pronotum inconspicuously (ratio: 1.01 - 1.09) longer than wide, slightly variable in shape, usually parallel-sided in basal half or basal 2/3, slightly arcuately narrowed toward anterior margin. Elytra about as long as wide, as long as or slightly longer than pronotum; densely and coarsely punctate, interstices not exceeding a puncture's diameter; scutellum of ♂ more densely punctate than that of ♀. Abdominal tergites sparsely punctate; 1st visible tergite with only a few scattered punctures, frequently almost impunctate; 2nd and 3rd visible tergites with 2 or 3 rather irregular transverse rows of punctures; especially antero-lateral and preapical portions almost impunctate; apical tergites with slightly denser and more uniform punctation; elevated area between two basal lines on 2nd and 3rd visible tergites almost impunctate, with a few very fine, scattered punctures only; posterior basal line on 2nd visible tergite distinctly bent apicad laterally; posterior basal line on 3rd visible tergite only exceptionally slightly crenulate; male sternite VIII: Fig. 19.

Aedeagus (Figs. 9, 10) very variably shaped; somehow similar to that of *P. caeruleipennis*, but with apical portion of median lobe slightly different, especially dorso-ventral extension much wider; paramere (Figs. 9c, 10c) with distinctly wider base, peg setae less numerous (8 -11 in each row).

DISTRIBUTION: China - at present known only from the provinces of Yünnan and Sichuan.

ETYMOLOGY: The word "lan" (Chinese) means "blue".

Philonthus distincticornis CAMERON

Philonthus distincticornis CAMERON 1932: 87.
Philonthopsis antennalis CAMERON 1932: 262; SCHILLHAMMER 1994: 74.
Philonthopsis antennalis var. *aeneipennis* CAMERON 1932: 262 (= **syn.n.**).
Philonthus cyaneonitens SCHILLHAMMER 1991: 51; SCHILLHAMMER 1994: 74.

TYPE MATERIAL: *Philonthus distincticornis*: **Holotype** ♀ (by monotypy): "Sikkim / Tonglo 13.-16.6.1920, H. Stevens" (NHML).

Philonthopsis antennalis: **Holotype** ♂: "Ghum distr., Tigerhill, 8500 - 10000 ft., V.-VI.31, Dr. Cameron \ M.Cameron Bequest. B.M. 1955-147" (NHML). - **Paratype**: 1 ex. with identical label data (NHML).

Philonthopsis antennalis var. *aeneipennis*: **Holotype** (by monotypy): "Tonglu, 10.074 ft. H. Stevens, Nepal-Sikkim Frontier VII.-VIII.1919" (NHML).

Philonthus cyaneonitens: **Holotype** ♂: "NEPAL, Manang Distr., forest w Bagarchhap, 2200 m, 21.9.1983; leg. Smetana & Löbl" (CSO). - **Paratypes**: 43 specimens from various localities in Nepal. For the precise data see original description of *P. cyaneonitens*.

DESCRIPTION: 10 - 13 mm long. Black; elytra brilliant metallic blue or greenish-blue; head and pronotum with weaker, more violaceous lustre; abdomen black, iridescent; antennae black, four outer segments creamy white, top of last segment blackish; palpi dark brown; legs black with red claws.

Head distinctly transverse (ratio 1.30 - 1.41 in ♂♂ and 1.28 - 1.34 in ♀♀), widest above eyes; shape not appreciably differing from that of *P. cyanelytrius*; eyes 1.0 - 1.16 times as long as tempora; tempora narrowed toward neck in almost regular arc; sexual dimorphism in antennae not as conspicuous as in the other species of the group; antennae of ♂ with segments 4 - 6 distinctly oblong, segment 6 sometimes only slightly oblong; antennae of ♀ with segments 4 and 5 only slightly oblong. Pronotum variably shaped, usually almost parallel-sided in posterior half, distinctly narrowed toward anterior margin, slightly transverse, 1.06 - 1.11 times as wide as long. Elytra distinctly longer than pronotum, considerably variable in punctation and structure of surface; usually strongly, densely and uniformly punctate, slightly less dense than in *P. lan*; punctures sometimes forming small rugulae; in big ♂♂ elytra more or less distinctly keeled laterally in posterior half. First four visible abdominal tergites with transverse row of irregular punctures, additionally, with a row of coarse punctures situated in slight basal impression on 2nd and 3rd visible tergites; remaining surface, except for posterior margin, impunctate; punctation of tergites similar to that of *P. lan*, but on tergites VI - VIII even sparser; posterior basal line on 2nd visible tergite only weakly bent apicad laterally, posterior basal line on 3rd visible tergite not crenulate; anterior tarsi only very inconspicuously dilated.

Aedeagus (Fig. 11) variably shaped; median lobe also similar to that of *P. caeruleipennis*, but with ventro-lateral protuberance less distinct; tooth on ventral face very indistinct; paramere (Fig. 11c) also very variable, but generally rather large and very long, usually reaching top of median lobe; peg setae more numerous (11 - 14) and less densely arranged, rows occupying half of length of apical portion of paramere.

DIAGNOSIS: From all other members of the group readily distinguishable by the color pattern of the antennae.

ADDITIONAL MATERIAL EXAMINED:

N E P A L: Myagdi District: Ghorepani, 2800 - 3000 m, 11.VI.1986, leg. Holzschuh (NMB); same locality, 2800 - 3200 m, 6.VI.1992, leg. Moravec (NMB); Langtang National Park, Sing Gompa, 3000 m, 7. - 9.VI.1990, leg. Bily (NMB).

DISTRIBUTION: At present known only from Nepal and the North Indian districts of West Bengal and Sikkim.

Philonthus cyanelytrius KRAATZ

Philonthus cyanelytrius KRAATZ 1859: 80.
Hesperus gridellii CAMERON 1926: 360; SCHILLHAMMER 1994: 74.

TYPE MATERIAL: *Philonthus cyanelytrius*: **Holotype** ♂ (by monotypy): "Ostindien \ Philonthus cyanelytrius Kraatz \ Coll. Kraatz \ Holotypus (red label) \ DEI Eberswalde" (DEI).

Hesperus gridellii: **Holotype** ♂ (by monotypy): "Type (round red label) \ Kali V. 9000' Almora U.P. VII.1923 \ Fungus \ M. Cameron. Bequest. B.M. 1955-147 \ Type Hesperus gridellii Dr. Cameron \ Philonthus cyanelytrius Kraatz det. Schillhammer '95" (NHML). There is a ♀ with identical label data, but it is not indicated as type and

also not mentioned by CAMERON (1926) in his description.

DESCRIPTION: 11.0 - 12.5 mm long. Black; claws and large apical spines of tibiae testaceous; elytra brilliant metallic blue, rarely violaceous blue or greenish blue; pronotum and head with slight, sometimes even inconspicuous violaceous or (especially head) dark blueish reflex; scutellum black.

Head distinctly transverse, 1.4 (♀♀ and small ♂♂) - 1.5 (large ♂♂) times as wide as long; with 4 interocular punctures, medial punctures not finer than outer ones; tempora narrowed toward neck in almost regular arc, eyes 1.6 - 1.8 (♂) or 2 times (♀) as long as tempora; palpi of ♂ slightly longer than those of ♀; antenna of ♂ with segments 4 - 9 oblong, segment 4 approximately 1.5 times as long as wide, remaining segments gradually becoming shorter toward outer segments, segment 10 about as long as wide; antenna of ♀ with segment 4 inconspicously oblong, segments 5 - 7 about as long as wide, segments 8 - 10 slightly transverse; microreticulation dense and very fine on head, pronotum with exceedingly fine, almost inconspicuous striae. Pronotum about as long as wide, as wide as (♂) or slightly wider (♀) than head; sides of pronotum very variably shaped, usually subparallel, weakly rounded, sometimes slightly concavely narrowed toward base, slightly arcuately narrowed toward anterior margin. Elytra about as long as pronotum, coarsely punctate, punctures separated by 1.5 - 2.0 times their diameter; scutellum with moderately dense, but deep, almost pit-like punctation. Front tarsi hardly dilated in both sexes. Abdominal tergites with punctation similar to that of *P. distincticornis*, but punctures slightly more numerous (except on 1st visible tergite) and distinctly stronger, almost pit-like on first three visible tergites.

Aedeagus (Fig. 8) similar to that of *P. caeruleipennis*, but median lobe distinctly wider with more acutely pointed top (also in lateral view); ventral area confined by ventro-lateral protuberances almost disc-like flattened; paramere (Fig. 8c) almost conically narrowed toward top; underside with two apico-lateral rows of peg setae (8 - 11 in each row).

ADDITIONAL MATERIAL EXAMINED:

I N D I A: "India or." without further indication (NMB); UTTAR PRADESH: "Gahan 7000' Simla Hills \ Dr. Cameron 25.IX.1921" (NHML); "Kotgarh 7000' Simla Hills \ Dr. Cameron 20.IX.1921" (NHML); "Nainital Divn., Kumaon, U.P., Sept.'17, HGC" (NHML); "W.Almora, Kumaon, India, H.G.C." (NHML); "India: U.P., Chakrata Divn., Jaunsar. 13-V-1929. 7000 H.G.Champion." (NHML); "Chakrata Dist. Sainj Khud 6500' \ Dr. Cameron 29.V.22." (NMW); Mussoorie, 1300 m, 9. - 10.VII.1989, leg. A. Riedel (NMW); KASHMIR: "Kashmir Rost 1905" (FMC).

N E P A L: "Godawari, 16. - 17.V.1992, leg. I. Jenis" (CKP).

DISTRIBUTION: At present known only from the western portion of the Himalaya (Northwest India, Nepal).

Philonthus taiwanensis SHIBATA

Philonthus taiwanensis SHIBATA 1993: 54 (nom.n.).
Philonthus formosae CAMERON 1949: 176 (nec BERNHAUER 1922).

TYPE MATERIAL: **Holotype** ♀ (by monotypy): "Type \ Toroen, near Mt. Ari, Formosa. V-17 1938 Coll. Yoshio Yano \ M.Cameron. Bequest. B.M.1955-147. \ No. 2583 \ P. formosae Cam. Type" (NHML).

DESCRIPTION: 9 - 12 mm long. Black, elytra brilliant metallic blue, head and pronotum with distinct blueish reflex; abdomen iridescent; legs black with red claws.

Head distinctly transverse, 1.3 - 1.4 times as wide as long in ♀♀ and small ♂♂, in large ♂♂ up to 1.62 times as wide as long; length of tempora very variable, eyes 1.4 - 2.0 times as long as tempora, in specimens with very large head tempora form conspicuous angle with straight base of head; sexual dimorphism in antennae well developed; segments 4 - 6 of ♂ conspicuously oblong, in ♀ segment 4 inconspicuously oblong, segments 5 and 6 as long as wide. Pronotum 1.00 - 1.05 times as wide as long, widest a short distance anteriad of middle, distinctly narrowed toward

base; sides slightly emarginate near base; head and pronotum with very dense and fine microsculpture of transverse waves. Elytra slightly longer than pronotum, coarsely and densely punctate, similar to that of *P. distincticornis*; postero-laterally not carinate, even in very large ♂♂; scutellum with rather coarse, almost pit-like punctation, only slightly less coarse than that of *P. cyanelytrius*. Front tarsi of ♂ distinctly dilated, segments 1 - 4 slightly transverse, segments 1 - 3 almost as wide as tibia. Abdomen with punctation on first three visible tergites slightly denser than in *P. cyanelytrius*, but punctures finer, not pit-like; punctation on tergites VI - VIII conspicuously denser than in preceding species, punctures more uniformly distributed; male sternite VIII: Fig. 18; male sternite IX: Fig. 21; stylus of female tergite IX and female genital segment: Fig. 22.

Aedeagus (Figs. 13, 14) with median lobe flame-shaped, top very acutely pointed (also in lateral view); tooth on ventral face very distinct; paramere (Figs. 13c, 14c) with rather narrow basal portion, apical portion conically narrowed toward variably (generally more obtusely) pointed top; shape of paramere as in *P. cyanelytrius*, but larger and with larger apical portion; peg setae of similar arrangement and number as in *P. cyanelytrius*, but each peg seta conspicuously larger.

ADDITIONAL MATERIAL EXAMINED:

T A I W A N: "Nantou Hsien, Maifeng, 2130 m, 3.V.1991, A. Smetana (T 62)" (CSO, NMW); "Nantou Hsien, Meifeng, 2130 m, 12.V.1991, A. Smetana (T 78)" (CSO); "Pingtung Hsien, Peitawushan, Kuai-Ku Hut, 2325 m, 21.V.1991, A. Smetana (T88)" (CSO); "Pingtung Hsien, Peitawushan trail at 2000 m, 23.V.1991, A. Smetana (T91)" (CSO); "Pingtung Hsien, Peitawushan, trail at 1500 m, 1.V.1992, A. Smetana (T110)" (CSO); "Taichung Hsien, Anmashan, 2120 m, 13.V.1992, A. Smetana (T 128)" (CSO, NMW); "Taichung Hsien, Anmashan, 2220 m, 14.V.92, A. Smetana (T131)" (CSO); "Kaohsiung Hsien, Peinantashan trail, 2020 m, 7.VII.1993, A. Smetana (T143)" (CSO); "Kaohsiung Hsien, Peinantashan trail, 1950 m, 8.VII.1993, A. Smetana (T 145)" (CSO, NMW); "Kaohsiung Hsien, Kuanshan trail above Kaunshanchi River, 2550 m, 22.VII.1993, A. Smetana (T160)" (CSO).

DISTRIBUTION: Known only from the island of Taiwan.

Philonthus kerinciensis sp.n.

Holotype ♂: "SUMATRA: Jambi Mt. Kerinci, 1900 m, 13.I.1989 \ Agosti, Löbl, Burckhardt # 15a" (MHNG).

Paratypes (3 ♀♀): 1 ex.: same data as holotype (MHNG); 2 exs.: same locality, "1750 - 1850 m, 11. - 12.XI.1989 \ Agosti, Löbl, Burckhardt # 11" (MHNG, NMW).

DESCRIPTION: 10.0 - 10.5 mm long. Black, elytra brilliant metallic blue, head and pronotum with distinct violaceous reflex; scutellum black.

Head trapezoid, 1.5 times as wide as long in ♂ holotype, 1.31 - 1.39 times as wide as long in ♀♀; tempora slightly arcuately narrowed toward base, forming obtuse, but conspicuous angle with base of head; eyes 1.45 (♂) - 1.80 (♀) as long as tempora; antennae of ♂ with segments 4 and 5 conspicuously oblong, segment 6 slightly oblong, remaining segments as long as wide; antennae of ♀ with segment 4 inconspicuously oblong, segments 5 and 6 as long as wide, penultimate segments slightly transverse. Pronotum about as long as wide, parallel-sided; head and pronotum with very faint traces of microsculpture. Elytra slightly longer than pronotum, very shining, rather sparsely punctate, punctures separated by 2 - 4 times a puncture's diameter (in transverse direction). Abdominal tergites exceedingly sparingly punctate; first four visible tergites with group of a few punctures medio-basally; additionally, with a few (2 - 8) setiferous punctures, equidistant between basal and apical margin; tergites VII and VIII with two transverse, slightly irregular rows; elevated area between two basal lines on first three visible tergites impunctate or with a few inconspicuous punctures laterally; second basal line on first three visible tergites conspicuously bent anteriad, medially distinctly narrowing elevated area to approximately half of lateral width.

Aedeagus (Fig. 16) very small; median lobe concavely narrowed toward sharply pointed top; tooth on ventral face inconspicuous; paramere (Fig. 16c) very slender, with two contiguous,

longitudinal rows of 5 - 6 peg setae, situated medio-apically.

DISTRIBUTION: Known only from the type locality.

ETYMOLOGY: Named after the type locality, Mt. Kerinci, the highest peak of Sumatra.

Philonthus franzi sp.n.

Holotype ♂: "Medan, - O.Küste v. Sumatra. - leg. Dr. L. Fulmek" (NMW).

DESCRIPTION: 10 mm long. In color and shape almost identical with *P. kerinciensis*, but with head of ♂ distinctly more transverse, 1.8 times as wide as long (due to the limited number of specimens in this and the preceding species, and considering the variability, this character might be of less importance); antennae of ♂ very short, segment 4 inconspicuously oblong, segments 5 and 6 as long as wide, penultimate segments slightly transverse, altogether shaped as in ♀ of *P. kerinciensis*; pronotum slightly wider, 1.06 times as wide as long. Abdominal tergites as in *P. kerinciensis*, but elevated area between two basal lines on first three visible tergites not as distinctly narrowed medially (note: first visible tergite in the single specimen of *P. franzi* is missing).

Aedeagus (Fig. 15) similar to that of *P. kerinciensis*, but median lobe less concavely narrowed to less sharply pointed top; more slender in lateral view; tooth on ventral face distinct; paramere (Fig. 15c) with apical portion slightly shorter and wider; peg setae slightly differently arranged, normal setae conspicuously longer.

DISTRIBUTION: Known only from the type locality in North Sumatra.

ETYMOLOGY: Dedicated to Prof. DI DDr. h.c. Herbert Franz in admiration for his long enduring worldwide entomological activity.

Philonthus emas sp.n.

Holotype ♂: "E-MALAYSIA: Sabah Crocker Range, 6.-18.6. Gg. Emas, 1500-1700m leg. Kodada 1996 (2b)" (NMW).

Paratypes (13 exs.): 9 exs.: same data as holotype (NMW); 2 exs.: same locality, 16. - 27.IV.1993, leg. I. Jenis (NMW); 2 exs.: Mt. Kinabalu Nat. Park, HQ, Silau-Silau Tr., 1550 m, 2.IX.1988, leg. A. Smetana (B171) (CSO).

DESCRIPTION: 11 - 13 mm long. - Black, head, pronotum and elytra brilliant metallic blue to violaceous-blue, exceedingly shining due to total lack of microsculpture; scutellum black.

Head trapezoid, 1.60 - 1.75 times as wide as long in large ♂♂, 1.35 - 1.37 times as wide as long in small ♂♂ and ♀♀; tempora narrowed toward base in almost straight line, forming obtuse, but conspicuous angle with base of head; eyes 1.42 - 1.65 times as long as tempora; antennae of ♂ with segments 4 and 5 slightly oblong, segments 6 and 7 as long as wide, penultimate segments inconspicuously transverse; antennae of ♀ with segment 4 very short, as long as wide, penultimate segments conspicuously transverse. Pronotum 1.03 - 1.07 times as wide as long, distinctly narrowed toward base, sides slightly concavely emarginate in front of base; head and pronotum with scattered micropunctation in addition to setiferous punctures. Elytra inconspicuously longer than pronotum, punctation as in *P. kerinciensis* and *P. franzi*. Abdominal tergites with punctures more numerous than in preceding two species; punctation on 1st visible tergite either confined to basal depression or basal half more or less irregularly but still sparingly punctate; 2nd and 3rd visible tergites with transverse row of 10 - 15 punctures, quite irregularly arranged; tergites VI - VIII sparingly, rather irregularly punctate, tergites VI and VII with very fine punctures at base; elevated area between two basal lines on first three visible tergites only slightly narrowed medially, with punctation more distinct than in preceding two species, especially on 3rd visible tergite.

Aedeagus (Fig. 12) with median lobe slender, apical portion narrowed toward acutely pointed top in long concave arc, medio-ventral tooth not developed; paramere (Fig. 12c) long, parallel, rather broad, with almost regularly rounded top; peg setae arranged in two longitudinal preapical groups (8 - 9 peg setae in each group).

DISTRIBUTION: Known only from the mountainous parts (Crocker Range and Mt. Kinabalu) of Sabah (E-Malaysia).

ETYMOLOGY: Named after the type locality, Gunung Emas (Malaysian: Mount Gold).

Zusammenfassung

Die *cyanipennis*-Gruppe ist Gegenstand des ersten Teils einer umfangreichen Revision der Gattung *Philonthus* STEPHENS (Coleoptera, Staphylinidae). Zur Zeit umfasst die Gruppe neun Arten. Vier Arten und eine Unterart werden neu beschrieben: *Philonthus emas* (Sabah), *P. franzi* (Sumatra), *P. kerinciensis* (Sumatra), *P. lan* (China) and *P. caeruleipennis* ssp. *laterangulus* (Russia Far East). *Philonthopsis antennalis* var. *aeneipennis* CAMERON wird als neues Synonym zu *Philonthus distincticornis* CAMERON gestellt. *Philonthus caeruleipennis* MANNERHEIM wird aus der Synonymieliste von *P. cyanipennis* gestrichen und als eigenständige Art betrachtet. Für *Staphylinus caeruleipennis* MANNERHEIM wird ein Lectotypus designiert. Ein Bestimmungsschlüssel für die Arten der *cyanipennis*-Gruppe ist beigefügt. Morphologische Details einiger Arten und die Aedeagi aller Arten sind abgebildet.

References

BERNHAUER, M. 1922: Sauter's Formosa-Ausbeute: Staphylinidae. 1. Teil. - Archiv für Naturgeschichte (A), 88 (7): 220-237.

CAMERON, M. 1926: New Species of Staphylinidae from India; Part II.- Transactions of the Entomological Society of London 1925, Parts III, IV. (Feb. 1926): 341-372.

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

CAMERON, M. 1949: New species of Staphylinidae (Col.) from Formosa. - Proceedings of the Royal Entomological Society, London, (B), 18: 175-176.

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 IV (4), Toulouse, 593 pp.

FABRICIUS, J.C. 1792: Entomologiae systematicae emendatae et auctae, Tome 1, Pars 2 (s.n.). - Hafniae, 538 pp.

GRAVENHORST, J.L.C. 1802: Coleoptera Microptera Brunsvicensia nec non Exoticorum. - Carolus Reichard, Brunsuigae, LXVI + 206 pp.

GRAVENHORST, J.L.C. 1806: Monographia Coleopterorum Micropterorum. - H. Dieterich, Gottingae, XVI + 236 + 13 pp.

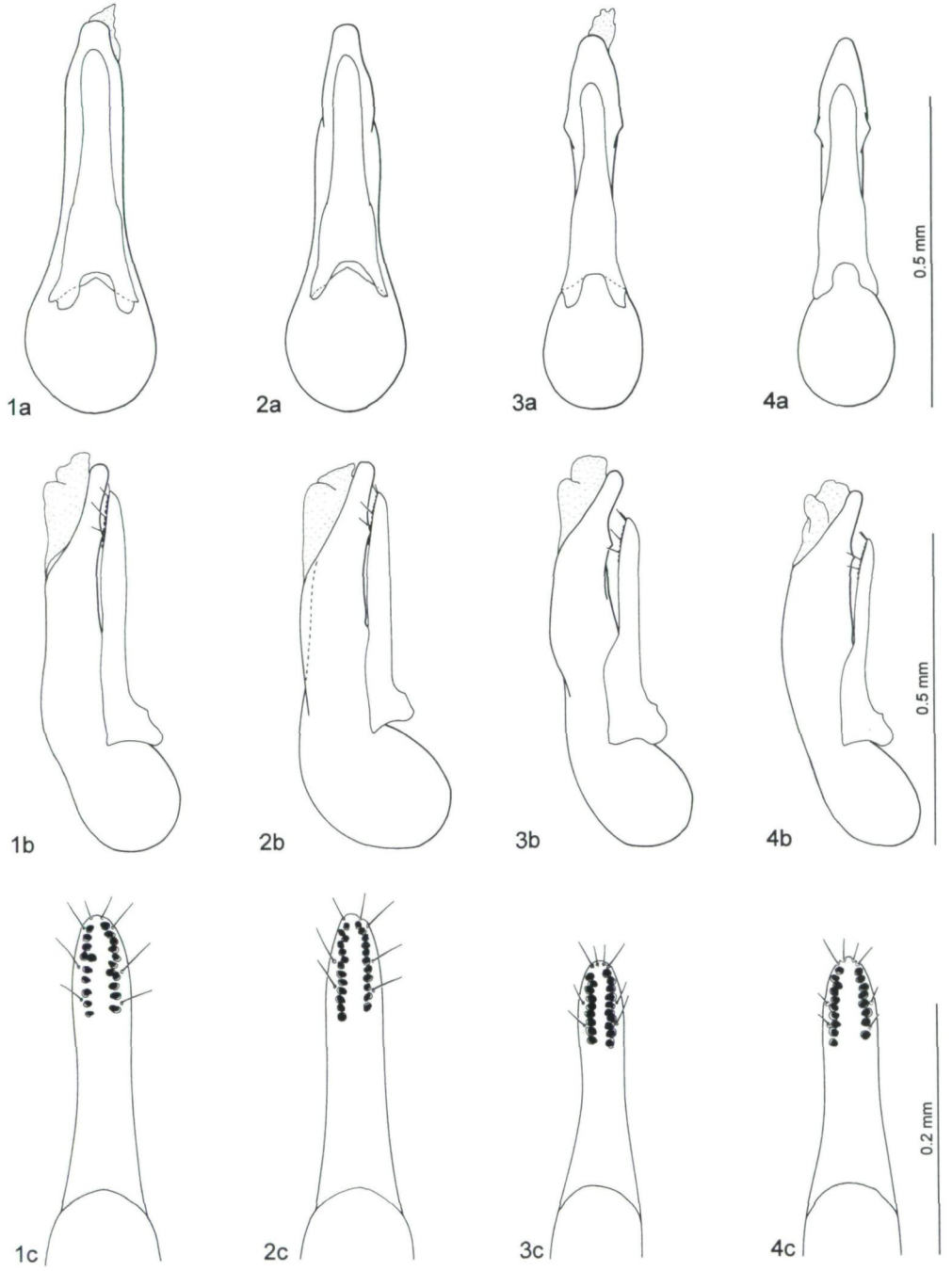
KRAATZ, H. 1859: Die Staphylinen-Fauna von Ostindien, insbesondere der Insel Ceylon. - Archiv für Naturgeschichte 25: 1-193, 3 pl.

MANNERHEIM, C.G. 1830: Précis d'un nouvel arrangement de la famille des brachélytres de l'ordre des insectes coléoptères. - Mémoires de l'Académie Impériale des Sciences de St. Pétersbourg, 1: 415-501 (87 pp.).

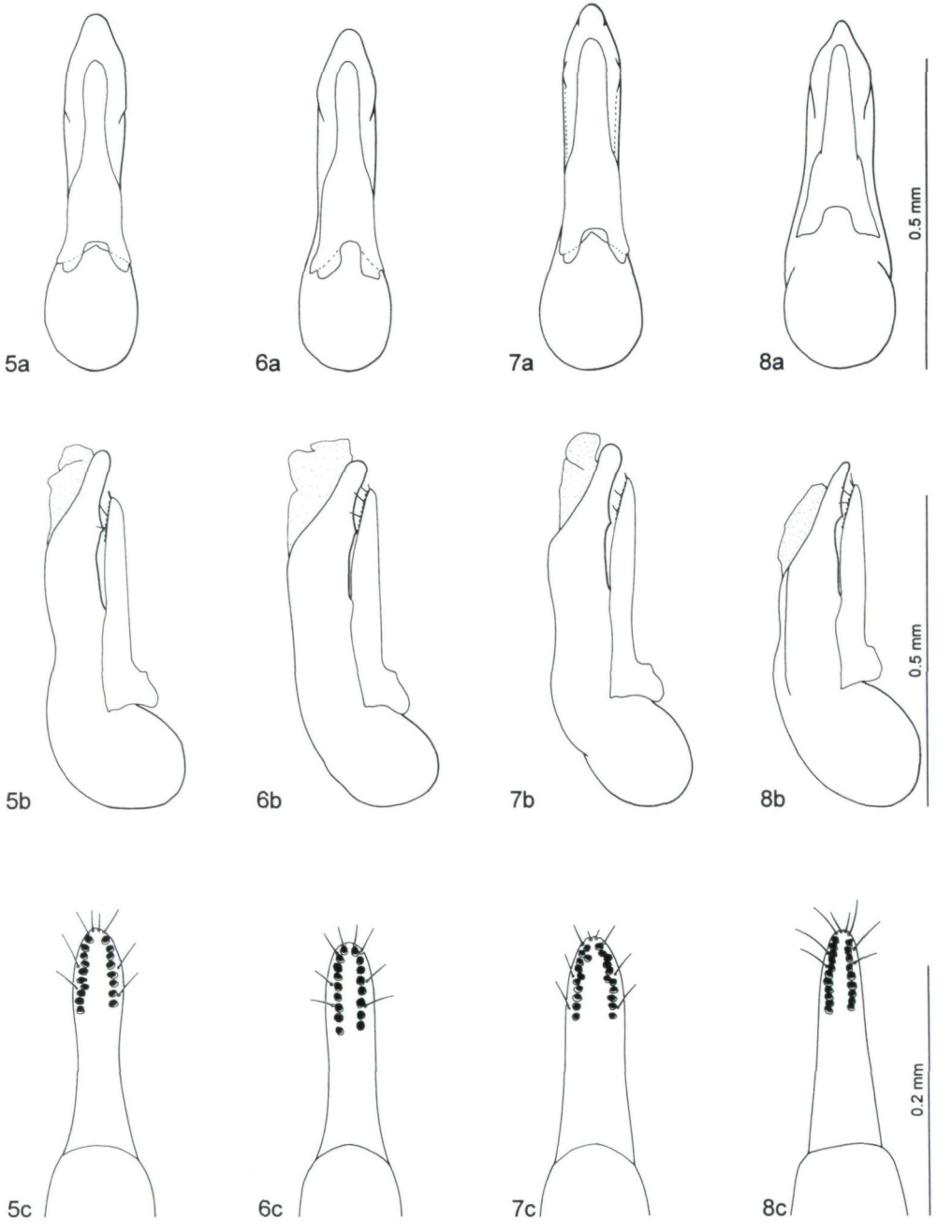
OLIVIER, A.G. 1794: Entomologie ou Histoire naturelle des Insectes, Coléoptères, Paris, II, 485 pp. 63 pl.

SCHILLHAMMER, H. 1991: Four new Philonthini from Asia and synonymical notes on the genus *Philonthus* Curtis (Coleoptera: Staphylinidae). - Koleopterologische Rundschau 61: 51-56.

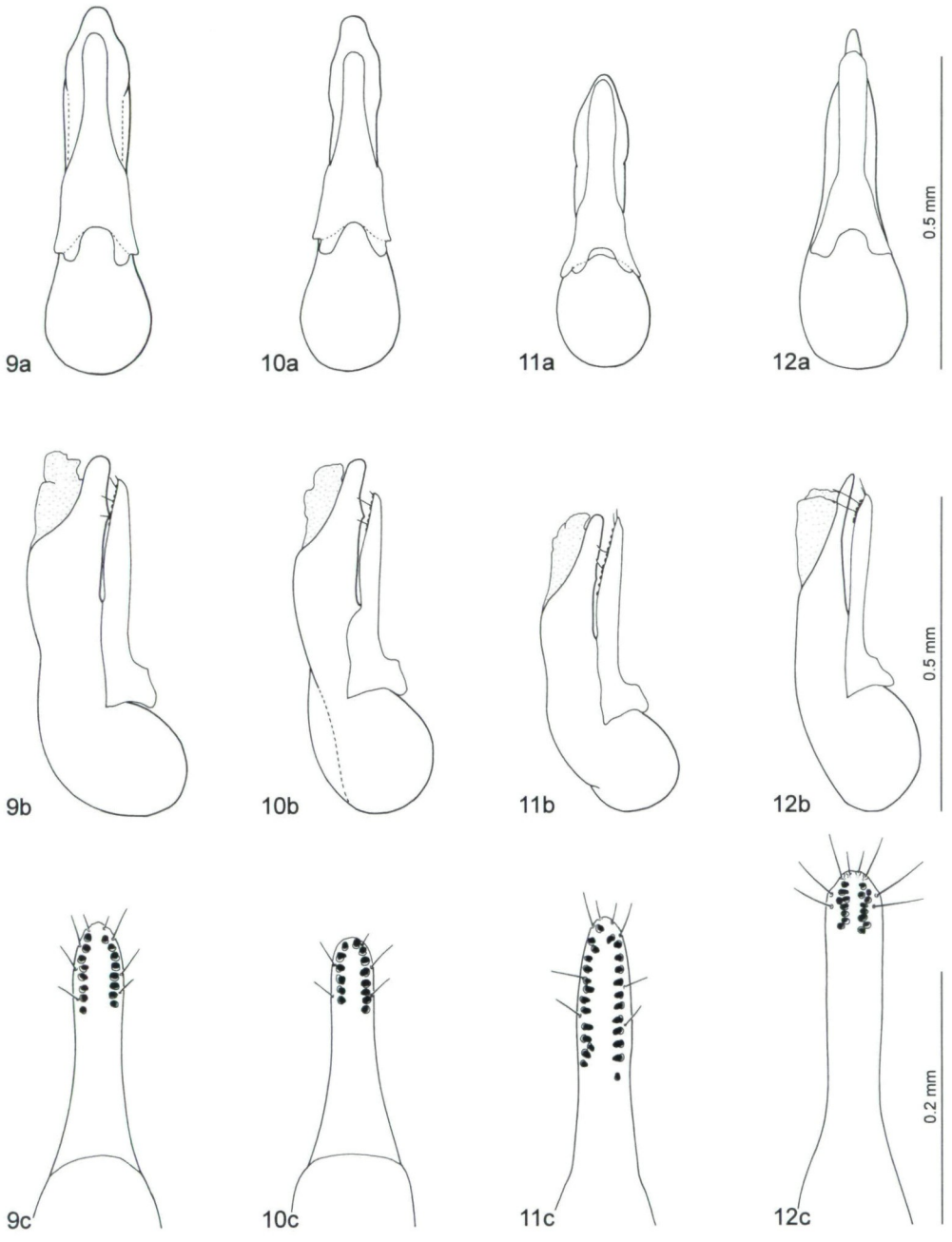
SCHILLHAMMER, H. 1994: New Synonymies in the subfamily Staphylininae. - Entomological Problems 25 (2): 73-75.



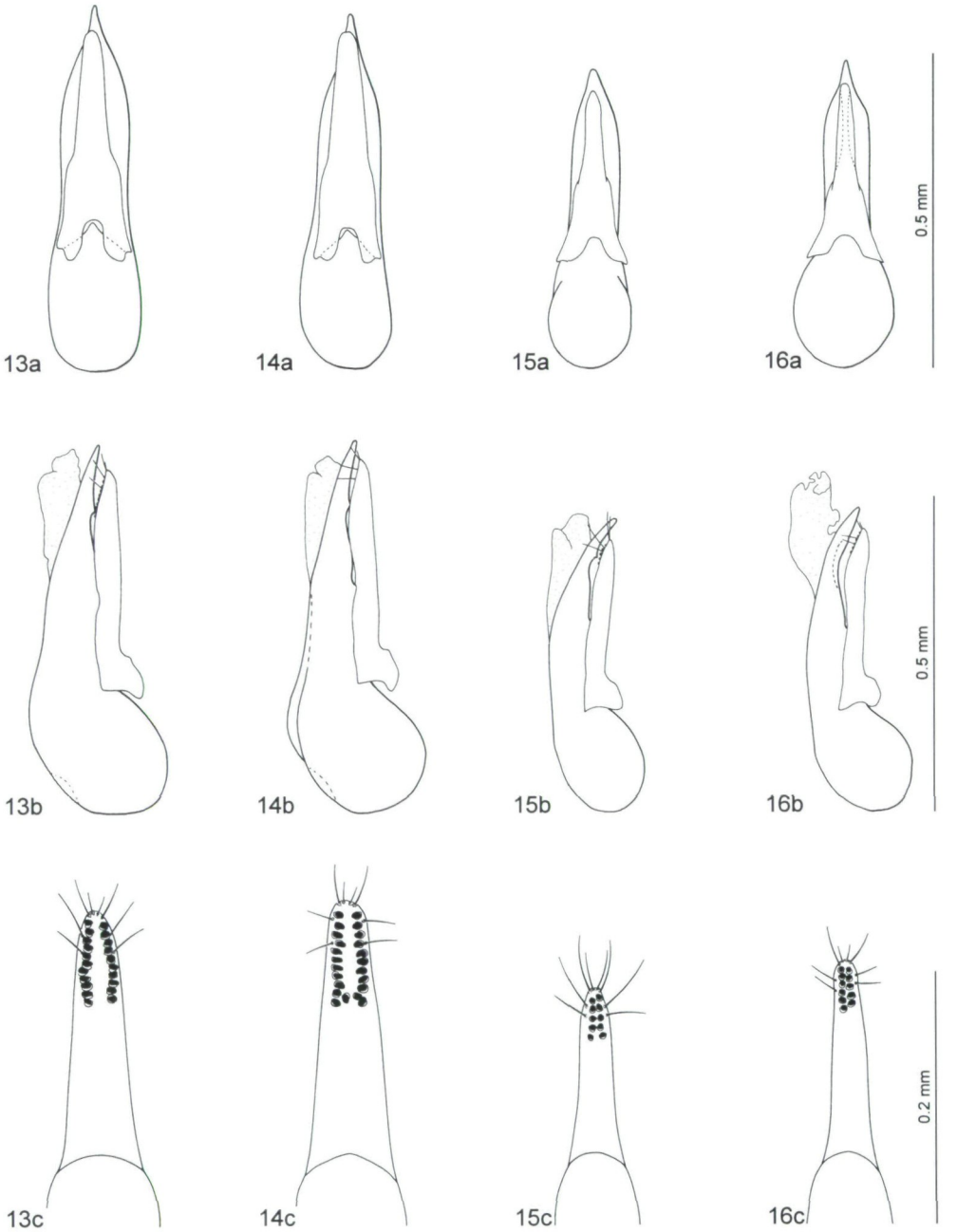
Figs. 1 - 4: 1, 2) *Philonthus cyanipennis*; 3, 4) *P. caeruleipennis laterangulus*. - a) aedeagus, ventral view; b) aedeagus, lateral view; c) underside of paramere.



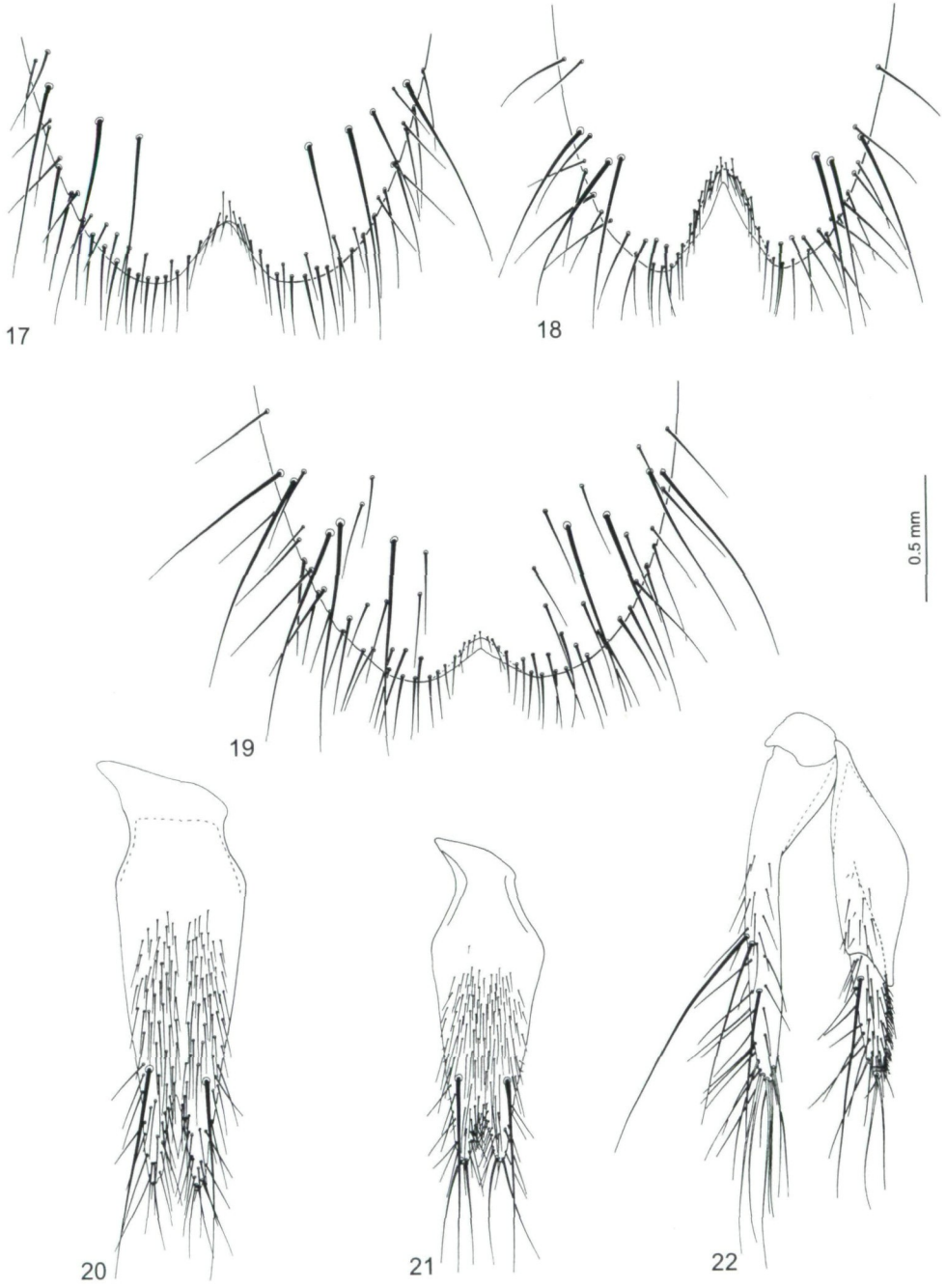
Figs. 5 - 8: 5) *Philonthus caeruleipennis laterangulus*; 6) *P. caeruleipennis caeruleipennis* (Japan); 7) *P. caeruleipennis caeruleipennis* (Canada); 8) *P. cyanelytrius*. - a) aedeagus, ventral view; b) aedeagus, lateral view; c) underside of paramere.



Figs. 9 - 12: 9, 10) *Philonthus lan*; 11) *P. distincticornis*; 12) *P. emas*. - a) aedeagus, ventral view; b) aedeagus, lateral view; c) underside of paramere.



Figs. 13 - 16: 13, 14) *Philonthus taiwanensis*; 15) *P. franzi*; 16) *P. kerinciensis*. - a) aedeagus, ventral view; b) aedeagus, lateral view; c) underside of paramere.



Figs. 17 - 22: 17) *Philonthus cyanipennis*, ♂ sternite VIII; 18) *P. taiwanensis*, ♂ sternite VIII; 19) *P. lan*, ♂ sternite VIII; 20) *P. cyanipennis*, ♂ sternite IX; 21) *P. taiwanensis*, ♂ sternite IX; 22) *P. taiwanensis* ♀, stylus of tergite IX and gonocoxites of genital segment.

SCHILLHAMMER, H. 1997: Taxonomic Revision of the Oriental Species of *Gabrius* Stephens. - Monographs on Coleoptera 1, 139 pp.

SHIBATA, Y. 1993: New Name for *Philonthus formosae* Cameron. - Elytra 21 (1), Tokyo: 54.

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.

STEPHENS, J.F. 1829: The nomenclature of British insects. - Baldwin & Cradock, London, 68 columns.

Harald SCHILLHAMMER
Naturhistorisches Museum, Burgring 7, A - 1014 Wien, Austria
E-mail: heinrich.schoenmann@nhm-wien.ac.at