Koleopterologische Rundschau	61	51 - 56	Wien, Juli 1991

Four new Philonthini from Asia and synonymical notes on the genus *Philonthus* CURTIS (Coleoptera: Staphylinidae)

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Abstract

Four new species of the Staphylinid tribe Philonthini are described: *Philonthus cyaneonitens* sp. nov. (Nepal), *Hesperus holzschuhi* sp. nov. (Nepal), *Gabrius ussuriensis* sp. nov. and *Gabrius incubens* sp. nov. (both from E-Siberia). Three new synonymies are established: *Philonthus protenus* SCHUBERT = (*Ph. signifrons* SCHUBERT syn. nov.), *Philonthus obsoletus* EPPELSHEIM = (*Ph. frontalis* SCHUBERT syn. nov.), *Philonthus erythropus* KRAATZ = (*Ph. kuluensis* SCHUBERT syn. nov.)

During the last years a huge material of Oriental Philonthini has become available through several expeditions to SE-Asia by I. Löbl, A. Smetana, J. Martens and W. Schawaller, containing a lot of new species of *Philonthus* CURTIS and *Gabrius* STEPHENS. While the species of *Gabrius* will be treated in a comprehensive work in the near future, there is one species of *Philonthus* (*Ph. cyaneonitens* sp. nov.) which could easily be identified as new and which is described herein. Another new species was obtained by C. Holzschuh (*Hesperus holzschuhi* sp. nov.), whom I warmly thank for donating the type specimen to the collection of the NMW. Finally two new species of *Gabrius* STEPHENS from the E-Siberia material collected by the late Prof. Mandl are described. Part of this material has already been determined by the late Prof. Scheerpeltz but never has been published.

The material treated in this work was borrowed from the following institutions:

CNC Canadian National Collection, Ottawa (A. Smetana)
MHNG Muséum d'Histoire Naturelle, Genève (I. Löbl)
HUB Museum der Alexander Humboldt Universität, Berlin (M. Uhlig)
NMW Naturhistorisches Museum, Wien
MNS Staatliches Museum für Naturkunde, Stuttgart (W. Schawaller)[1]

I am indebted to all persons mentioned above for sending the material that made this work possible.

Philonthus cyaneonitens sp. nov.

Holotype: ♂, NEPAL, Manang Distr., forest w Bagarchhap, 2200 m, 21.9.1983; leg. Smetana & Löbl (CNC).

Paratypes: 1♀, NEPAL, Parbat Distr., Ghoropani Pass, n slope, 2800 m, 5.10.1983; leg. Smetana & Löbl (MHNG). 1♀, NEPAL, Parbat Distr., Ghoropani vic., 2700-3100 m, 5.-9.10.1983; leg. Smetana & Löbl (MHNG). 2 ♂♂, 2♀♀, same data as holotype, 21.-24.9.1983, (MHNG). 1 ♂, 2♀♀, same data as holotype, 2250 m, 22.9.1983, (MHNG). 5 ♂♂, 9♀♀, NEPAL, Lalitpur Distr., Phulchoki, 2650 m, 14.10.1983; leg. Smetana & Löbl (MHNG). 1 ♂, 2♀♀, same data (NMW). 2 ♂♂, 3♀♀, same data, 2600 m, 13.10.1983 (MHNG). 2 ♂♂, 1♀, same data (NMW). 1 ♂, 2♀♀, same data, 2600-2700 m, 15.10.1983 (MHNG). 1 ♂, NEPAL (305), Kathmandu Distr., Sheopuri Mt., degraded forest, bushes, 1700-2100 m, 25.6.1988; leg. Martens & Schawaller (MNS). 1 ♂, NEPAL (356), Taplejung

[1]Results of the Himalaya Expeditions of J. MARTENS, No. 166--No. 165: Stuttgarter Beitr. Naturk., (A) 461: 1-17, 1991.-J.M. sponsored by Deutscher Akademischer Austauschdienst and Deutsche Forschungsgemeinschaft.

Distr., Omje Kharka nw Yamputhin, mature mixed broad leaved forest, 2300-2500 m, 1.-6.5.1988; leg. Martens & Schawaller (NMW). 2 ♂♂, 1♀, NEPAL (403), Sankhua Sabha Distr., Pahakhola, cultural land, bushes, 2550 m, 30.-31.5.1988; leg. Martens & Schawaller (MNS). 1 ♂, NEPAL (404), Sankhua Sabha Distr., above Pahakhola, 2600-2800 m, *Quercus semecarpifolia*, Rhododendron, 31.5.-3.6.1988; leg. Martens & Schawaller (MNS).

DESCRIPTION: 10 - 13 mm long.- Black, shining. Elytra brilliant metallic blue (the more greenish colour of some of the paratypes is due to the hot water treatment during repreparation). Head and pronotum with a weaker, more violet metallic lustre. Abdomen black, iridescent. Antennae black, the last four joints creamy white, the top of the last joint blackish. Palpi dark brown. Legs black with red claws.

Head of variable shape, almost similar to the Palaearctic *Ph. cyanipennis* F. Males usually with a strongly transverse head, smaller ♂♂ tend to have a much less transverse head similar to the♀♀. Mandibles falciform, palpi long (*Hesperus*-like). Antennal joints 1 - 6 distinctly longer than broad, joint 7 a little longer than broad and the rest of the joints as long as broad. Inner interocular punctures widely separated. Eyes and temples of nearly equal length, the latter with three setiferous punctures, one beneath the posterior margin of the eye, one above the angle between neck and temple and the third one equidistant between the other two.

Pronotum also variable in shape and puncturation. Normally of more or less pentagonal shape, but sometimes with more rounded angles. Dorsal series with four punctures, accessory punctures rarely developed.

The elytra also display a considerable variability in puncturation and structure of the surface. Usually strongly, densely and uniformly punctured, sometimes the punctures form small rugulae. The shape varies from flat to irregularly convex and in big ♂♂ the lateral margins may form a keel in the posterior half (like *Ph. cephalotes* GRAVENHORST or *Ph. protenus* SCHUBERT).

First four visible abdominal tergits with a transverse row of irregular punctures, additionally (except the first tergit) with a basal row of rough punctures filling up a slight basal impression on the 2nd and 3rd tergit. The rest of the surface, except for the posterior margin, is unpunctured. The 5th and 6th tergit with a few transverse rows of very fine punctures. Posterior margin of the 5th tergit with a small white membran.

Legs long and slender. Tarsi of the middle and posterior legs as long as the tibiae. Anterior tarsi of the ♂♂ are simple.

Aedeagus (Fig. 1 - 3) very similar to that of the European *Philonthus tenuicornis* MULSANT et REY, but with a longer paramere which is reaching the distal end of the median lobe.

DIAGNOSIS: In its general appearance quite similar to *Philonthus cyanipennis* F., to distinguish by its distinctly smaller size, colouration of the antennae and the foreparts (which are not metallic in *cyanipennis*) and less dense puncturation of elytra and abdomen.

Hesperus holzschuhi sp. nov.

Holotype: ♂, E-Nepal, Koshi, Basantapur, 2300 m, 30.5.-2.6.1985; leg. C. Holzschuh (NMW).

DESCRIPTION: 8.5 mm long.- Black, pronotum and neck red, elytra brilliant metallic blue with a very narrow reddish basal part. Scutellum dark brown. Palpi and legs red. Abdomen iridescent. Antennae red, the 9th and 10th joint creamy white, the 11th joint blackish with a narrow creamy basal part.

Head ovoid. Temples much longer than the eyes, forming a continuous curve, strongly narrowing the head towards the tight neck, with a few punctures bearing long black setae. Head and pronotum shining, without any trace of microsculpture. Antennae long and slender. All joints longer than broad. Third joint much longer than the 4th, from the 4th joint on gradually decreasing in length. Palpi and mandibles unusually short and stout.

Pronotum oblong, with concave lateral contour, distinctly narrowed from the anterior angles towards the base. Dorsal rows with two punctures, not counting the punctures on the anterior margin, which are part of a group of sixteen more or less equidistant punctures along the pronotal margins, also bearing long black setae.

Scutellum sparingly punctured, with distinct microreticulation.

Elytra coarsly but not densely punctured, the punctures separated by two or five times their diameter. Shoulders hardly developed. The lateral margins are diverging towards the apex and are again deflexed shortly before reaching the posterior angles.

Abdomen as broad as the elytra at the shoulders. From the 1st to the 4th visible tergit only in the basal impression with a dense and coarse puncturation, the rest of the surface unpunctured with the exception of a few setiferous punctures. These setae are very long and, if bent back, reach far beyond the posterior margin of the following tergit. Fifth and 6th tergit with a few fine scattered punctures besides the big setiferous ones.

Legs as usual in the genus *Hesperus* very long and slender. First joint of the posterior tarsi longer than the last. Anterior tarsi of the ♂ dilated.

Aedeagus (Fig. 9, 10) long and cylindrical, with a broad and flat paramere which carries rather long bristles at its distal end.

DIAGNOSIS: because of its colouration easily to recognize among the Asian species of *Hesperus*. Though it is questionable if this species really belongs to *Hesperus* the creation of a new genus would not be justified as long as the genus *Hesperus* is not revised thoroughly. In fact, the Oriental species of *Hesperus* are more related to a lot of species of *Philonthus*, which becomes obvious in the Papuan region, where it is quite difficult to assign certain species either to *Hesperus* or *Philonthus* or other related genera such as *Leucitus* FAUVEL (e.g.: *Ph. albertisi* FAUVEL has been transfered between the mentioned genera several times). On the other hand the W-Palaearctic *Hesperus rufipennis* FAUVEL has its next relatives in the Aethiopean region.

Gabrius ussuriensis sp. nov.

Holotype: ♂, USSR, Nikolsk Ussurijsk, Ussurigebirge; leg. Mandl (NMW).

DESCRIPTION: 4.9 mm long.- In colouration and shape this species is so similar to *Gabrius pennatus* SHARP, that it seems sufficient to list up the most important differences. Externally *G. ussuriensis* differs from *pennatus* mainly in the morphology of the antennae. In *ussuriensis* the antennae are shorter and stouter. The 5th joint is as long as broad (still oblong in *pennatus*), the 6th is already slightly transverse. There are no remarkable differences in the measurements of head and pronotum, the latter seems to be a little bit broader in *ussuriensis*, but this may be variable like in *pennatus*. In *pennatus* the whole abdomen is narrowed conically towards the apex (which manifests itself in convergent lateral margins of the last tergits), while in *ussuriensis* the abdominal sides are more or less parallel down to the 5th visible tergit.

Aedeagus (Fig. 7, 8) similar to that of *pennatus*, but with a differently shaped distal part and much longer parameral branches.

Gabrius incubens sp. nov.

Holotype: ♂, USSR, Tschita, Transbaikalien; leg. Mandl (NMW)

Paratypes: 1 ♂, USSR, Seitengraben des Perwaja Rjetschka Flußes bei Wladiwostok, 1918-1920; leg. H. Frieb (NMW). 2♀♀, USSR, Transbaikalien, Pjestschanka 8 km E Tschita, 1918-1920; leg. H. Frieb (NMW).

DESCRIPTION: 6.5 - 7.5 mm long (depends on the state of extension of the abdomen; normally the length is about 7 mm).- Black or black brown, often with testaceous elytra. Antennae dark with reddish basal joints. Legs yellow, interior parts of the posterior tibiae infuscate. Posterior margins of the tergits reddish-testaceous.

Head subquadrate with rounded temples which are longer than the eyes (index 47:37). Between the widely separated interior interocular punctures there is a slight impression. Third joint of the antennae longer than the 2nd. Fourth and 5th joint longer than broad, 6th - 10th as long as broad.

Pronotum parallel-sided, oblong, sometimes slightly narrowed towards the anterior margin. Dorsal rows with six punctures. Head and pronotum with distinct transverse microsculpture.

Elytra finely and densely punctured. At the shoulders broader than the pronotum, the sides divergent. As long as broad measured at the posterior margin.

First three visible abdominal tergits with a basal impression. All tergits uniformly, finely and densely pubescent, with the exception of the 6th visible tergit, where the pubescence is less dense.

Aedeagus (Fig. 4 - 6) with a median lobe similar to that of *astutus* NORDMANN, but with a totally different paramere which is rounded at the top. At the base of this rounded part there is a small lateral lobe on each side.

DIAGNOSIS: Externally and especially in its aedeagal build pointing to the relationship of *tirolensis* LUZE and *astutus* NORDMANN. From *tirolensis* it differs by its smaller size and less flattened head and pronotum, as well as by its shorter and more rounded temples. Externally not easily to distinguish from *astutus*, but with a totally different aedeagus (paramere!). *Gabrius incubens* sp. nov. belongs to a species group with numerous species (many of them not yet described) mainly occuring in the northwestern part of the Oriental region and the bordering parts of the Palaearctic region (NW-India, N-Pakistan, NE-Afghanistan, etc.), where the shape of the paramere becomes more or less trilobed, when the lateral lobes are becoming more prominent (e.g. *Gabrius caporiaccoi* GRIDELLI).

Synonymical notes on *Philonthus* CURTIS

During the study of some type material from the Schubert collection (HUB) some of his species turned out as junior synonyms:

Philonthus protenus SCHUBERT = *(Philonthus signifrons* SCHUBERT syn. nov.)- *Ph. protenus* has a dorsal row of four punctures, *signifrons* has five punctures, which is the only difference between the two species. At least a look at the aedeagus of both species proves their identity. Two other species, *Philonthus friebi* BERNHAUER and *Philonthus parcus* SHARP should also be included in this consideration, because it seems nearly impossible to distinguish *protenus*, *friebi* and *parcus* by their aedeagi although they show quite typical external features.

Philonthus obsoletus EPPELSHEIM = *(Philonthus frontalis* SCHUBERT syn. nov.)

Philonthus erythropus KRAATZ = *(Philonthus kuluensis* SCHUBERT syn. nov.)

Zusammenfassung:

Vier neue Arten aus der Tribus Philonthini (Coleoptera, Staphylinidae) werden beschrieben: *Philonthus cyaneonitens* sp. nov. (Nepal), *Hesperus holzschuhi* sp. nov. (Nepal), *Gabrius ussuriensis* sp. nov. und *Gabrius incubens* sp. nov. (O-Sibirien). Folgende neue Synonymien werden hergestellt: *Philontus protenus* SCHUBERT = *(Ph. signifrons* SCHUBERT syn. nov.), *Philonthus obsoletus* EPPELSHEIM = *(Ph. frontalis* SCHUBERT syn. nov.), *Philonthus erythropus* KRAATZ = *(Ph. kuluensis* SCHUBERT syn. nov.).

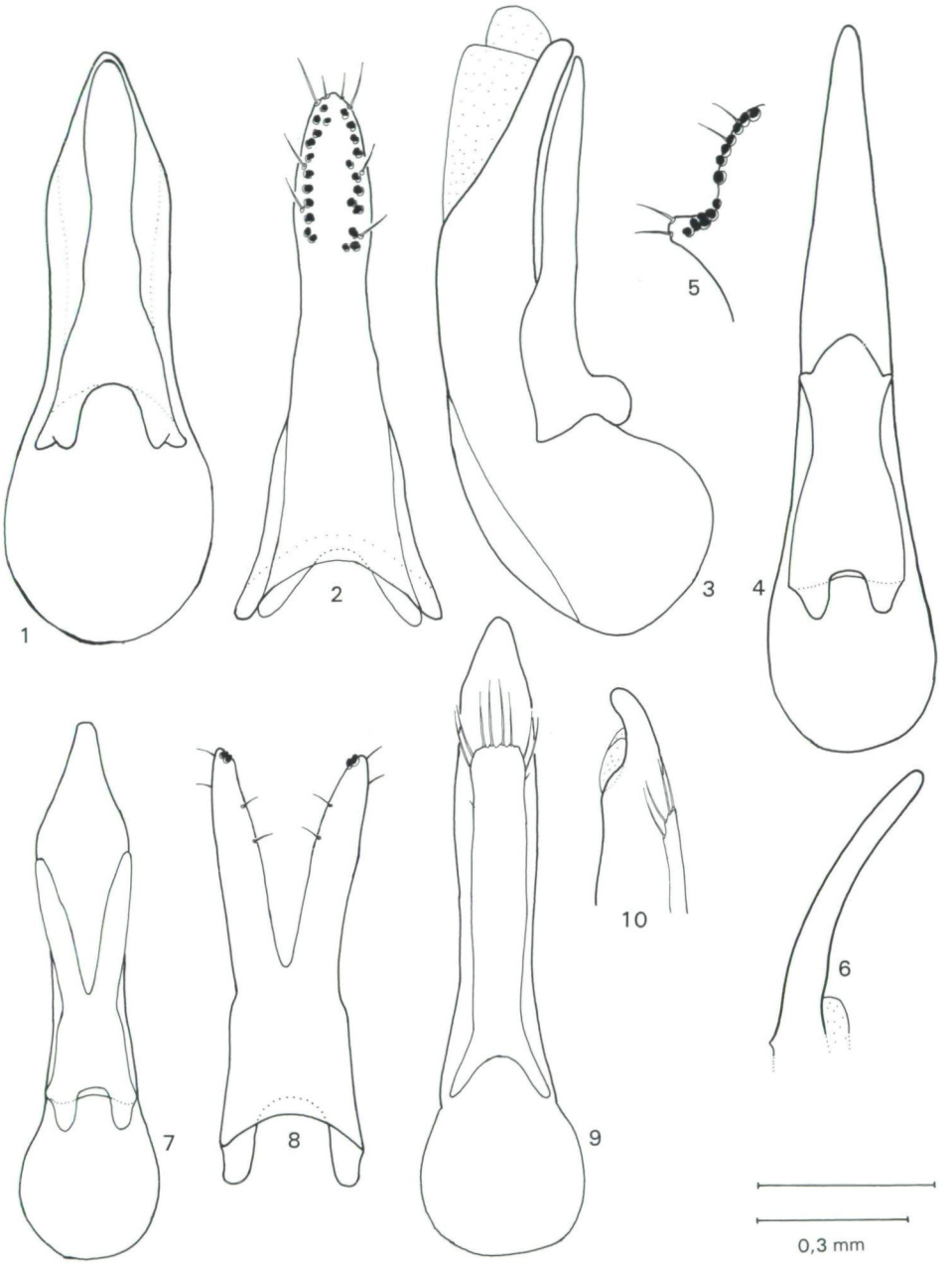

Fig. 1 - 3: *Philonthus cyaneonitens* n.sp.; 1) aedeagus - ventral view; 2) paramere - inner face; 3) aedeagus - lateral view
Fig. 4 - 6: *Gabrius incubens* n.sp.; 4) aedeagus - ventral view; 5) apical part of paramere - inner face; 6) apical part of aedeagus - lateral view
Fig. 7 -8. *Gabrius ussuriensis* n.sp.; 7) aedeagus - ventral view; 8) paramere - inner face
Fig. 9 -10: *Hesperus holzschuhi* n.sp.; 9) aedeagus - ventral view; 10) apical part of aedeagus - lateral view (larger scale: Fig. 4, 6, 7; smaller scale: Fig. 1, 3, 9, 10)

References

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

COIFFAIT, H., 1974: Coléoptères Staphylinidae de la region paléarctique occidentale II. Sous famille Staphylininae, Tribus Philonthini et Staphylinini. - Suppl. à la Nouv. Rev. Ent., Tome IV, fasc. 4, Toulouse, 593 pp.

COIFFAIT, H., 1977: Ergebnisse der Bhutan-Expedition 1972 des Naturhistorischen Museums in Basel; Coleoptera-Staphylinidae; Subfam. Xantholininae et Staphylininae. - Entomologica Basiliensia 2: 205-242.

COIFFAIT, H., 1981: Staphylinides noveaux du Nepal. - Nouvelle Revue d'Entomologie 11: 323-335.

COIFFAIT, H., 1982a: Contribution à la connaissance des Staphylinides de l'Himalaya; Insecta: Coleoptera-Staphylinidae. - Senckenbergiana Biologica 62 (1-3): 21-179.

COIFFAIT, H., 1982b: Staphylinides de la région himalayenne et de l'Inde (I. Xantholininae, Staphylininae et Paederinae). - Entomologica Basiliensia 7: 231-302.

COIFFAIT, H., 1983: Staphylinides du massif du Ganesh Himal (Nepal Central); récolté par Th. Deuve et E. Queinnec; descriptions de nouvelles espèces et d'un nouveau genre Himalayens. - Nouvelle Revue d'Entomologie 13: 161-179.

SCHEERPELTZ, O., 1976a: Wissenschaftliche Ergebnisse der von Prof. Dr. H. Janetschek im Jahre 1961 in das Mt. Everest-Gebiet Nepals unternommenen Studienreise. - Khumbu Himal; Innsbruck: 3-75.

SCHEERPELTZ, O., 1976b: Wissenschaftliche Ergebnisse entomologischer Aufsammlungen in Nepal. - Khumbu Himal; Innsbruck: 77-173.

SCHUBERT, K., 1906: Einige neue paläarktische Staphyliniden aus Kashmir. - Deutsche Entomologische Zeitschrift: 378-383.

SCHUBERT, K., 1908: Beitrag zur Staphylinidenfauna Ostindiens (West-Himalaya). - Deutsche Entomologische Zeitschrift: 609-625.

SMETANA, A., 1960: Monographische Bearbeitung der paläarktischen Arten der Gattung *Gabrius* CURTIS aus der nigritulus-Gruppe. - Dtsch. ent. Z., N.F., 7(IV/V): 295-356.

SMETANA, A., 1984: Review of the Japanese Species of the Genus *Gabrius* STEPH. (Coleoptera-Staphylinidae). - Pan-Pacific Entomologist 60(2): 122-150.

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