

Notes on the Species of Staphylinidae
from Japan, VI
(Coleoptera)

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Abstract A new species named *Hesperus ignoratus* sp. nov. is described from Japan and Taiwan, and the aedeagus of *Philonthus frater* BERNHAUER is firstly figured.

Hesperus ignoratus sp. nov. (Figs. 1-2)

Body robust but variable in size, pitchy black, mouth parts reddish brown, tibiae and tarsi dark brown, apex of last and base of 2nd antennal segments pale yellow (sometimes dark brown); head and pronotum with a silky reflection of waved microsculpture, abdomen feebly iridescent, pubescence yellowish brown to blackish brown.

Length: 7.5-11.5 mm.

Head transversely quadrate (1.32: 1), a little narrowed behind from the widest point at eyes, slightly and longitudinally depressed from vertex to frons, the depression widened toward frons and somewhat asymmetrical in shape; numerous, setiferous and irregularly sized punctures sparsely arranged except widely impunctate frons and vertex, a pair of punctures situated between two umbilicate original large punctures in front of the middle along inner sides of eyes, the four punctures nearly equidistant from each other, silky reflection of waved microsculpture scarcely perceptible, the microsculpture consisting of distinct, irregularly undulating and fine furrows, vertex slightly evenly convex, mandibles rather short, robust and each with a basal molar tooth, eyes

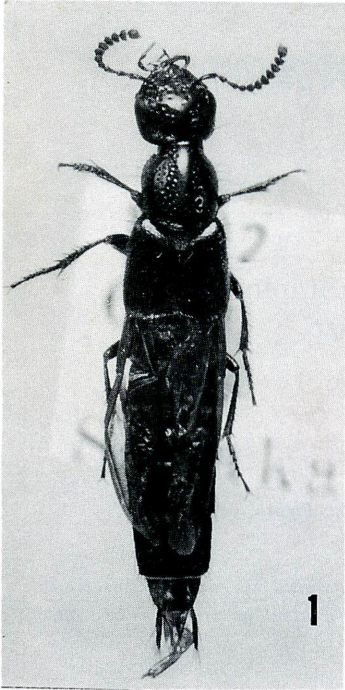


Fig. 1. *Hesperus ignoratus* sp. nov.

large and prominent, each longitudinal diameter a little longer than postgena, antennae robust, very thickened distally, hardly reaching the middle of pronotum, 1st segment large, cylindrical, widened apically and nearly equal in length to the following two segments together, 2nd and 3rd more than twice as long as wide, 4th slightly longer than wide, 5th to 10th transverse, 7th to 10th subequal in length to each other and each segment about twice as wide as long, 11th as wide as and about twice as long as 10th. Ventral surface of head almost impunctate, distinctly and obliquely rugulose on outsides of gular plate; gular sutures convergent toward neck but not joining each other, penultimate segment of maxillary palpus rather robust, clearly thickened toward apex, much shorter than slender and long ultimate one, penultimate segment of labial palpus scarcely longer than preceding one, and shorter than slender ultimate one, mentum smooth, slightly depressed

and unisetose at sides.

Pronotum horseshoe-shaped, fairly convex, a little longer than wide (1.11 : 1), a little narrower than head (0.93 : 1) and slightly narrowed behind; lateral margins considerably thick throughout, wholly rounded basally with base, when viewed from above invisible in apical third owing to superior lateral lines being slightly deflexed; disc coarsely and sparsely punctate except for median line widely impunctate from base to apex, the punctures a little various in size and more or less irregular in arrangement, becoming rather sparse and fine laterally, an anterior setiferous puncture slightly detached from each lateral margin, silky reflection of microsculpture as on head. Scutellum linguiform, distinctly and rather closely punctate except basal side.

Elytra subquadrate, slightly widened behind, wider than long at the widest point near apex, wider (1.35 : 1) and longer (1.13 : 1) at shoulders than pronotum; surface with coarse and sparse punctures and without any perceptible microsculptures. Wings fully developed.

Prosternum rather smooth, mesosternum without a distinct transverse bound as in *Philonthus*, finely rugged at base, its process slightly

uneven, wide and subtruncate at apex, mesocoxae widely separated from each other.

Abdomen subparallel-sided, with punctures of 3rd to 5th tergites distinct, coarse and rather close at base, lessened in density toward apex, those of 6th and 7th tergites elongate in shape and close on basal half, but on apical half not elongate and sparse, and those of 8th rather fine and sparse throughout, punctures of sternites generally arranged in the same manner as on tergites but distinctly closer.

Legs with protarsi moderately dilated in both sexes.

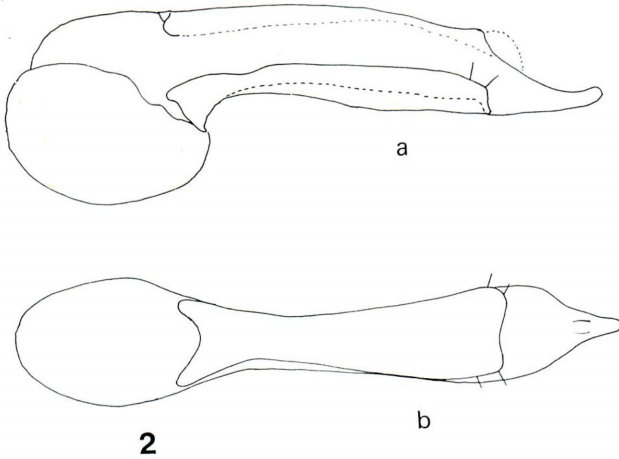


Fig. 2. Aedeagus of *Hesperus ignoratus* sp. nov.
a, in lateral view; b, in ventral view.

Male. The 8th abdominal sternite widely and shallowly excised; aedeagus rather sclerotized, almost symmetrical, median lobe in ventral view narrowed at basal third, gradually increasing in width to apical eighth, then rather suddenly convergent toward blunt tip, outline of apical part drawing in an ogee arch, lateral lobe semitransparent, not beyond apex of median lobe, slightly constricted at basal fourth, then gradually increasing in width near to the widest point of median lobe, subtruncate at apex, bisetose at each apico-lateral side, apical margin weakly sinuate in the middle.

Holotype: ♂, Ogoshi, Kyoto Pref., 25. X. 1992, S. TAKAHASHI leg. (T. SHIBATA coll.). Paratypes: 4 ♂♂, 3 ♀♀, same data as holotype; 1 ♂, same locality as holotype, 24. VII. 1992, S. TAKAHASHI leg.; 1 ♂, Gozaishi Spa, Yamanashi Pref., 26. IV. 1991, K. HOSODA leg.; 1 ♂, 1 ♀, Oda, Ehime Pref., 27. VII. 1993, E. YAMAMOTO leg.; 6 ♂♂, 9 ♀♀, Mt. Odami, Ehime Pref., 9. IX. 1993, E. YAMAMOTO leg.

Specimen examined: 1 ♂, Fenchifu, Formosa (=Taiwan), 19. VIII. 1969, T. KOBAYASHI leg.

Although the present species is apparently nearer to *Philonthus* than *Hesperus* only in character of the mouth parts, it is categorized into *Hesperus* in structure of the pronotum and mesosternum. The present species is similar in general appearance to *H. modestus* BERNHAUER from Sumatra and Java, but is separable from the latter in having the head and pronotum with a distinct microsculpture, the eyes comparatively larger, the postgenae scarcely narrowed behind, the body robuster and larger in size. And the present species is easily distinguishable from the known species of the genus from Japan in having the antennae relatively short and strongly thickened distally, the 6th to 10th segments distinctly transverse, the pronotum very coarsely punctate except median line, and the body shiny black and unicolorous. A specimen from Taiwan bears more visible silky reflection on head and pronotum owing to clearer microsculpture as compared with those from Japan, but there is no difference between specimens from the two localities with exception of varying degrees of reflection caused by microsculpture. All specimens from Yamanashi and Kyoto Prefs. have been captured by the bate traps (benzyl acetate) set at pine tree forests and those from Ehime Pref. have been caught by the bate trap (rotten bananas).

Philonthus frater BERNHAUER (Figs. 3-4)

Philonthus frater BERNHAUER, 1907, Verh. Zool.-Bot. Ges. Wien, 57: 387.

Philonthus frater: BERNHAUER et SCHUBERT, 1914, Coleopt. Cat., Pars 57 (Staphy-



Fig. 3. Holotype of *Philonthus frater* BERNHAUER and the labels attached to the type specimen.

linidae IV): 339; SMETANA, 1965, Ann. Hist. Nat. Mus. Nat. Hung., 57:256; SHIBATA, 1983, Ann. Bull. Nichidai Sanko, (21): 101.

Philonthus (Philonthus) frater: SCHEERPELTZ, 1933, Coleopt. Cat., Pars 129 (Staphylinidae VII-Supplementum I): 1343 ; ADACHI, 1967, J. Toyo Univ., (11):184.

Specimens examined: 1 ♂ (holotype), Kamakura Meer, Japan, H. SAUTER leg.; 2 ♀ ♀, Maruno-cho, Yamanashi Pref., 2. VII. 1991 & 25. VI. 1993, K. HOSODA leg.; 1 ♂, Daibosatsu, Yamanashi Pref., 11. VI. 1980, M. SAWAI leg.; 1 ♂, 1 ♀, Yawata, Kyoto Pref., 28. VI. 1981 & 23. IX. 1984, T. ITO leg.; 1 ♂, Riv. Yodo, Osaka Pref., 27. IX. 1981, T. ITO leg.; 1 ♂, Ikeda, Osaka Pref., 23. X. 1982, T. ITO leg.; 1 ♀, Abeno, Osaka Pref., 9. VI. 1988, M. YASUI leg.; 1 ♂, Mt. Koya, Wakayama Pref., 2. V. 1968, T. ITO leg.; 2 ♀ ♀, Tanabe, Wakayama Pref., 3. XI. 1993, K. HARUSAWA leg.; 1 ♂, Mt. Handa, Okayama Pref., 3. V. 1978, T. ITO leg.

Though the present species is apparently allied to *Philonthus micanticollis* SHARP, it is recognized from the latter by the aedeagus (Fig. 4) quite differently shaped, no silky reflection on head and pronotum due to much finer and weaker microsculpture, the apical two or three segments of antennae paler in color and the eyes pro-

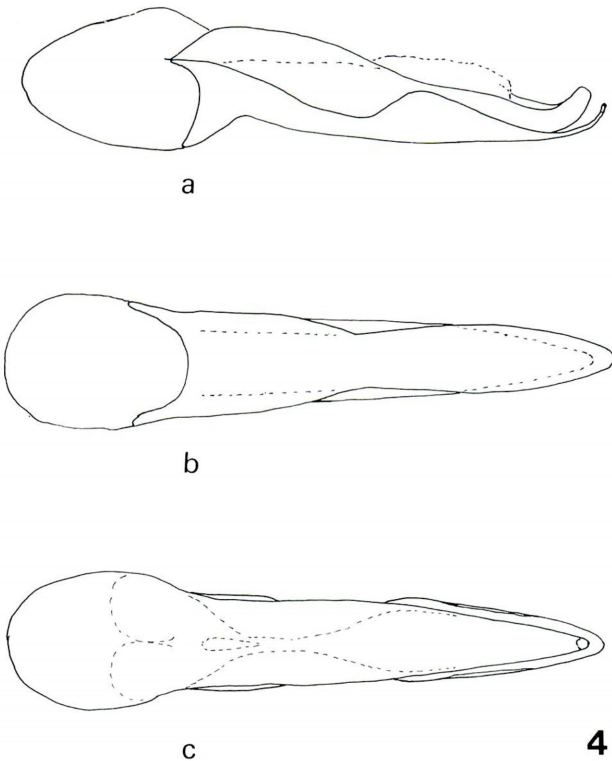


Fig. 4. Aedeagus of *Philonthus frater* BERNHAUER.

a, in lateral view; b, in ventral view; c, in dorsal view.

portionally smaller. And it is also similar to *Philonthus albilabris* NORDMANN, judging from the original description of the species, but I have not examined any specimens of *Ph. albilabris*.

I have been able to examine the holotype specimen of *Philonthus frater* preserved in the collection of the Field Museum (Chicago), through the courtesy of Dr. A. F. NEWTON, Jr.

Additional references

- BERNHAEUER, M., 1915. Neue Staphyliniden aus Java und Sumatra. Tijdschr. Ent., 58: 213-234.
- DVOŘÁK, R., 1957. Troisième contribution à la connaissance des Staphylinidae (Col.) japonais. Bull. Soc. Ent. Mulh.: 9-10.
- GRIDELLI, E., 1924. Sesto contributo allo studio degli Staphylinini. Appunti di morfologia e sistematica del genere *Hesperus* FAUVEL. Ann. Mus. Civ. Stor. Nat. Giacomo Doria, 51: 170-202.
- HAYASHI, Y., 1993. Studies on the Asian Staphylinidae, I. (Coleoptera, Staphylinidae). Elytra, Tokyo, 21: 281-301.
- NORDMANN, A. VON, 1837. Symbolae ad monographiam Staphylinorum. Petropoli, 167 pp, 1 pl.
- SCHERPELTZ, O., 1971. Studien an den Arten der Gattung *Hesperus* FAUVEL (Col., Staphylinidae). Ent. Arb. Mus. Frey, 22: 150-197.
- SHIBATA, Y., 1973. On the genus *Hesperus* and one allied new genus from Taiwan, with descriptions of two new species (Col., Staphylinidae). Ent. Rev. Japan, 25: 21-27.
- 1985. Provisional check list of the family Staphylinidae of Japan, III. Ann. Bull. Nichidai Sanko, (21): 67-140.
- 1986. A list of genera and species new to Taiwan and new data on distribution of the Staphylinidae discovered from Taiwan since 1973 (Insecta: Coleoptera) Ann. Bull. Nichidai Sanko, (24): 109-128.
- 1990. A new species of the genus *Hesperus* (Coleoptera, Staphylinidae) from Taiwan. Elytra, Tokyo, 18: 209-214.
- SMETANA, A., 1965. Zur Kenntnis einiger *Philonthus*- und *Gabrius*-Arten aus der REITTER-Sammlung (Coleoptera, Staphylinidae). Ann. Hist. Nat. Mus. Nat. Hung., 57: 253-258.

Correction

The following prefectural name should be amended.

Hachimantai, Aomori Pref. (T. ITO, 1993, Ent. Rev. Japan, 48 (2): 144)=Hachimantai, Akita Pref.

Notes on the Chinese Elateridae, I*

(Coleoptera)

By TAKASHI KISHII¹⁾ and SHI-HONG JIANG²⁾

Abstract Two new species are described from China under the names of *Lacon (Alaotypus) rotundicollis* and *Pectocera jiangxiana*. *Neopectocera* (subgenus of *Pectocera*) is revised to the genus *Ceroleptus* as a synonym.

In this series, we would like to report a memoir of the elaterid-beetles from many localities in China and to describe new taxa.

In the autumn of 1992, KISHII, one of the authors, received a lot of interesting elaterids collected from many localities in China and was requested to examine and identify through JIANG, another of the authors. After that, in early December, as an agreement on some examination on the treatment, we concluded to publish under the KISHII's management a taxonomical research work on the elaterid collection of Huazhong Agricultural University in Wuhan City of Hubei Province, China, as shown below.

Generally speaking, the elaterid fauna of the Asian region was studied in detail by many authors, however, the number of species recorded from China proper is unexpectedly scant, and the most part of the works on the Chinese elaterids is usually nothing but a fragmental report in the early time, such as CANDÈZE, FAIRMAIRE, HEYDEN, MOTSCHULSKY, REITTER, SCHWARZ, SOLSKY, etc. And, according to the catalogue of LIU (1933) only 173 species were known as of 1930 for the Chinese elaterid fauna from such an extensive and various natural environment.

After that, FLEUTIAUX (1931-1947), JAGEMANN (1934) and ÔHIRA (1970-1973) described newly some taxa and added several species to the fauna as new record, respectively. Furthermore, STIBICK (1976-1980) on the subfamily Hypnoidinae from Tibet, GURJEVA (1972-1989) in her splendid papers on the Russian fauna, KISHII and LI (1988-1990) in the reports of elaterids from Yingkou district and Mt. Chang-pei Shan (or Changbai) and JIANG (1991) on the genus *Campsosternus* from S. China had also described newly or recorded firstly not a few species to the fauna.

Moreover, recently, PLATIA and SCHIMMEL (1991-) published an excellent work on the Asian *Silesis*, and are ready for press on the Asian *Melanotus* with the close relatives. According to private letters to KISHII, they may be described newly a

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number of species from South China through these studies.

On the elaterid-fauna of Taiwan, there are a lot of reports and studies by BATES (1866), SCHWARZ (1898-1902), MATSUMURA (1910-1911), MIWA (1927-1934), ÔHIRA (1966-1978), W. SUZUKI (1978-1987), KISHII (1989-), etc. In round numbers about 300 species have been recorded from Taiwan up to date, and the most part is indigenous to Taiwan.

Nevertheless, in our interpretation, there are only less than 500 species in a grand total from all of the references stated above. So that, the fauna of elaterid beetles in China is in a relatively little known state in proportion of a grand scale in the territory as compared with the faunae of the Indochina Peninsula and Japan.

The material used in this report is mainly preserved in the collection of Huazhong Agricultural University, and some specimens including several paratypes are deposited in the private collection of KISHII. More, the examples marked by the asterisk are without exact habitat, date and/or collector.

Before going further, we wish to express our sincere gratitude to many collaborators for the collecting of valuable elaterid examples from the extensive fields in China.

I. Subfamily **Oxynopterinae** CANDÈZE

Tribe Campsosternini FLEUTIAUX

1. *Campsosternus auratus* (DRURY, 1773) (Figs. 2 & 18)

Elater auratus DRURY, 1773, Illustr. exot. Ins., 2: 65, t. 65, f. 3 (China).

Elater fulgens OLIVIER, 1790, Ent. hist. nat. Ins., Col. 2 (31), Paris: 12, t. 4, f. 43 (China).

1 ♀*, Mt. Heng in Hunan Prov., 1955; 1 ♂*, Wangmo in Sichuan Prov., 18. VI, 1986; 1 ♀* (fig. 2), Wuhan in Hubei Prov., 15. VII, 1986; 1 ♀*, Guizhou Prov., 1987; 1 ♀, Puqi in Hubei Prov., 15. VIII, 1991, SHI-HONG JIANG leg.; 1 ♀, ditto, 19. VIII, 1991, ZHONG-BING OUYANG leg.

Distr.: Japan (Is. Okinawa?), China (incl. Taiwan) & Indochina.

2. *Campsosternus fruhstorferi* SCHWARZ, 1902 (Fig. 3)

Campsosternus Fruhstorferi SCHWARZ, 1902, Dt. ent. Ztg., 2: 318 (Tonkin, Montres Mauson).

Campsosternus fruhstorferi: WANG, 1987, Yunnan Sci. Technol. Press: 599 (Mt. Gong in Yunnan).

1 ♀ (fig. 3), Fengxin in Jiangxi Prov., IX, 1975, GUANG-PU SHEN leg.; 1 ♀, Mt. Dahong in Hubei Prov., 3. VI, 1980, SHI-HONG JIANG leg.

Distr.: China & Indochina.

3. *Campsosternus gemma gemma* CANDÈZE, 1857 (Figs. 4 & 19)

Campsosternus gemma CANDÈZE, 1857, Mon. Elat., 1: 344 (Shang-Hai).

1 ♂*, Mt. Wudang in Hubei Prov., 12. VIII, 1984; 1 ♀*, Yicang, ditto, 29. VII, 1986; 1 ♀* (fig. 4), Mt. Emei in Sichuan Prov.; 1 ♀*, Sichuan Prov.; 3 ♂♂*, 2 ♀♀*, without labels.

Distr.: China.

4. *Campsosternus dohrni* WESTWOOD, 1848

Campsosternus Dohrni WESTWOOD, 1848, Cab. orient., Ent.: 71, t. 35, f. 2 (Assam).

Campsosternus Mouhoti CANDÈZE, 1874, var. *fairmairei* FLEUTIAUX, 1918, Ann. Soc. ent. France: 199 (Haut Tonkin; Ha Lang).

Campsosternus dohrni: ÔHIRA, 1970, Ann. hist.-nat. Mus. natn. hung., 62, pars zool.: 219-220, fig. 2, A, pl. 3, fig. G (Yunnan).

1 ♂, Longzhou in Guangxi Prov., 13. V, 1980, ZHU-YIN WANG leg.

Distr.: S. China, Indochina, Malaysia & Assam.

II. Subfamily **Pyrophorinae** CANDÈZE

Tribe Adelocerini DU BUYSSON

5. *Lacon (Alaotypus) rotundicollis* KISHII et JIANG, sp. nov.

(Fig. 1)

Female, 18.85 × 6.10 mm. Oblong, distinctly robust, plainly convex above roundly at pronotum and evenly at elytra as well as below longitudinally, parallel-sided and rather opaque entirely. Brownish red wholly with antennae reddish completely. Scale-like pubescence long, slightly curved, recumbent, rather tender, remarkably dense and clothed mingledly by greyish and brownish hairs with clear luster.

Head not so broad with an obvious deep medio-longitudinal canalication between eyes only, abruptly declivous antero-inferiorly at frons, which is widely, shallowly concave; relative distance across eyes and each eye breadth at dorsal appearance as 106:26 (ca. 4 times); frontal margin of frons conspicuous and roundly elevated at bases, transversely limited upon labrum, without frontal groove at the middle entirely, but antennal sulci broad, circular and rather shallow. Labrum oblong transversely, faced ahead, rather flattened, with rugose punctures. Vertical surface scabrous with punctures evidently dense, large, entirely ocellated, deeply hollowed, and uneven in size.

Antennae not attaining at bases of pronotal hind angles and more or less massive; relative length and width from basal joint to 5th as

55/19, 14/13.5, 22/16, 21/18 and 20/18, respectively (length/width) (fig. 1-C); basal joint robust, voluminous, a little sinuated and feebly broadened apically, 2nd globular, 3rd to 10th well-definedly serrated and 11th oval with an emargination at antero-lateral side near apex.

Pronotum (fig. 1-D) quadrate, broad, weakly expanded medio-laterally, exceedingly convex above dome-likely, with a shallow median longitudi-

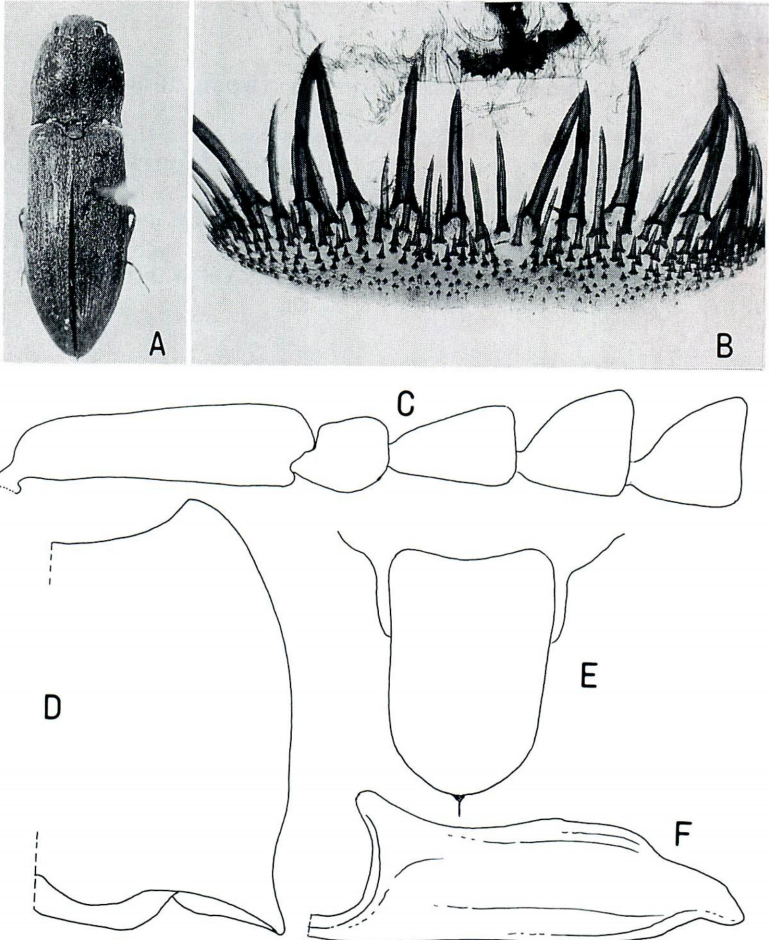


Fig. 1. *Lacon (Alaotypus) rotundicollis* KISHII et JIANG, sp. nov.
 A, Holotype, ♀, 18.9 mm.; B, sclerotic formation in bursa copulatrix; C, antenna, 5 basal joints; D, right half outline of pronotum; E, scutellum; F, prosternal process in profile.

nal impression through total length and a little broadened at posterior slope; relative median length and width as 85: 100; anterior side roundly emarginated clearly, with fore angles broadly depressed and protruding ahead; hind angles feebly constricted at bases, shortly triangular, with apices rather obtusely pointed and slightly divergent, having no carination; lateral margins in profile weakly sinuated near hind angles; punctures more or less similar to vertical ones, partly reticulated mutually at lateral borders.

Scutellum (fig. 1-E) quadrate or subshield-shaped, rather flattened, a little declining obliquely ahead; relative median length and width as 58: 43; lateral sides a trifle narrowed near the middle; rear edge rounded; punctures generally large and dense, but rather weakly impressed.

Elytra massive, well elevated, a little expanded behind the middle, then gently roundly convergent back; striae absent entirely; punctures single, distinctly sparser and finer than those of pronotum; elytral and sutural ends ordinary.

Prosternum oblong, plainly convex underwards longitudinally, slightly widened antero-laterally; frontal lobe crescent-formed, narrowly impressed transversely at base with frontal edge definitely marginated; punctures a little sparser than pronotal ones at the middle. Prosterno-pleural sutures linear, single at bases only, progressively becoming canaliculated from behind the middle to anterior ends. Prosternal process in profile (fig. 1-F) horizontal, straightly extending rearwards, not so slender, feebly emarginated at hind apex, which is acutely pointed. Propleural punctures single, plainly denser and smaller than prosternal ones. Propleuron with hind border glabrous and deeply, broadly concave along posterior edge. Mesosternal groove oblong, parallel-sided, a little declivous postero-inferiorly. Metasternal punctures evidently sparser and finer than prosternal ones. Legs moderate. Sclerotic formation in bursa copulatrix as figured (fig. 1-B).

Male unknown.

Holotype (fig. 1-A): ♀, Gangu in Gangu Province, N. China, 13. VI, 1981, MANG-KU Guo leg.

Distr.: N. China.

The present species is closely allied to *Lacon* (*Alaotypus*) *maeklinii* (CANDÈZE, 1865) from Japan and to *L. (A.) yayeyamanus* (MIWA, 1934) from the Nansei Archipelago, but can be easily distinguished from the latter by the quadrate pronotum, remarkably dense and long scale-like pubescence and plainly serrated 3rd to 10th antennal joints.

According to the literature, it somewhat resembles *Alaotypus tonkinensis* FLEU-TIAUX, 1927 in the outline as compared with his photograph (Faune des colonies françaises: pl. 2, photo 39), but the latter is larger, nearly parallel-sided at bases of pronotal hind angles and entirely black in the body and antennae.

6. *Danosoma fasciata* (LINNAEUS, 1758) (Fig. 5)

Elater fasciatus LINNAEUS, 1758, Syst. Nat. ed. 10, 1: 406 (Europe).

Elater inaequalis DE GEER, 1774, Mém. serv. l'hist. Ins., 4:148, No. 6, part. (Europe).

Adelocera angustata SAHLBERG, 1903, Col. medit. ros.-asiat. nov. min. cog., max. exp. itin. ann. 1895-1896 et 1898-1899 coll. Ofvers. finska Vetensk Soc. Förh., 45 (10): 25 (Jeniseisk), nec PHILIPPI, 1861.

Adelocera sahlbergi SCHWARZ, 1907, In WYTSMAN, Gen. Ins. 46 A-C, Col. Elat.: 315, replacement name for *Adelocera angustata* SAHLBERG, 1903.

Adelocera sachalinensis MIWA, 1927, Ins. Mats., 2 (1): 13, pl. 1, f. 1 (Nairo in Saghalien).

Adelocera fasciata: GURJEVA, 1971, Faun. Abhandl. Mus. Tierk. Dresden, 3 (8): 83 (Mongolia).

1 ♀ (fig. 5), Aletai in Xingjiang Prov., V, 1991, JIAN-XIN KAN leg.

Distr.: Europe to Primorskij in Russia, Saghalien, Japan (Hokkaidó?), Korea & N. China.

Tribe Chalcolepidiini LACORDAIRE

7. *Anthracalaus moricei* FAIRMAIRE, 1888 (Figs. 6 & 20)

Anthracalaus Moricei FAIRMAIRE, 1888, Ann. Soc. ent. France, 1888: 349 (Cochinchine et Yunnan); FLEUTIAUX, 1947, Notes d'Ent. chin., 11 (8): 325 (Yunnan et Kiangsu).

1 ♀ (fig. 6), Beibei, Chongqin in Sichuan Prov., 5. V, 1991, XIAO-HUI YAO leg. Distr.: S. China & Indochina.

8. *Cryptalaus berus* (CANDÈZE, 1865) (Fig. 7)

Alaus berus CANDÈZE, 1865, Elat. nouv. I, Mém. Acad. Belg.: 15 (Japon: Nagasaki); FLEUTIAUX, 1947, Notes d'Ent. chin., 11 (8): 304-305 (Yunnan).

1 ♀ (fig. 7), Zhaoping in Guangxi Prov., 29. IV, 1985, SHI-ZHAO LING leg. Distr.: Japan, Korea, China & Indochina.

9. *Cryptalaus sordidus* (WESTWOOD, 1848) (Fig. 8)

Alaus sordidus WESTWOOD, 1848, Cab. orient., Ent., 72: t. 35, f. 9 (Inde); FLEUTIAUX, 1947, Notes d'Ent. chin., 11 (8): 298 (India, Burma, Yunnan).

1 ♂ (fig. 8), Sichuan Prov. (alt. 1,300 m), 7. VIII, 1981, JUN HE leg. Distr.: S. China, Indochina & Burma.

10. *Cryptalaus larvatus larvatus* (CANDÈZE, 1874) (Fig. 9)

Alaus larvatus CANDÈZE, 1874, Rev. Mon. Élat., Mém. Soc. roy. Sci. Liège, (2) 4:121 & 141 (Chine: Shanghai).

1 ♀* (fig. 9), Fenyi in Jiangxi Prov., 4. V, 1980; 1 ♂*, Mt. Jouliau (alt. 1,850 m), ditto, 2. IX, 1992.

Distr.: Japan (Iss. Ishigaki, Iriomote & Yonaguni), China (incl. Taiwan & Is. Lan-yu), Indochina, Malaysia, Kalimantan & Java.

Tribe Tetralobini CASTELNAU DE LAPORTE

11. *Tetralobus perroti* FLEUTIAUX, 1940 (Figs. 10 & 17)

Tetralobus Perroti FLEUTIAUX, 1940, Rev. franç. d'Ent., 7:107, fig. (Tonkin).

Tetralobus perroti: JIANG, 1990, Sichuan Jour. Zool., 9(1):42 (Honqin & Bazhong in Sichuan).

1 ♂* (fig. 10), Wuyan in Jiangxi Prov., 30. VII, 1980.

Distr.: S. China & Indochina.

Tribe Hemirhipini CANDÈZE

12. *Tetrigus lewisi* CANDÈZE, 1873 (Fig. 11)

Tetrigus Lewisi CANDÈZE, 1873, Mém. Soc. roy. Sci. Liège, (2) 5:6 (Japon, Chine: Amoy et Shanghai).

Tetrigus grandis LEWIS, 1879, Ent. monthl. Mag., 16:155 (Nagasaki).

1 ♀*, Mt. Luoja, Wuhan in Hubei Prov., 17. VII, 1953; 1 ♂* (fig. 11), Zhejiang Prov., VII, 1982; 1 ♂, Taipingliao in Fujian Prov., 20. VI, 1989, LAI-YAN CHENG leg.

Distr.: Japan, Korea, China (incl. Taiwan) & Indochina.

III. Subfamily Conoderinae FLEUTIAUX

Tribe Conoderini FLEUTIAUX

13. *Heteroderes albicans* CANDÈZE, 1878 (Fig. 12)

Heteroderes albicans CANDÈZE, 1878, Élat. nouv., 2:83 (Siam); MIWA, 1929, Trans. nat. Hist. Soc., Formosa, 19(102):214 (Formosa); MIWA, 1934, Fauna Elat. Jap. Emp.: 194-195 (Siam, Indochina, Formosa & Hainan).

1 ♀* (fig. 12), Kaiyuan in Yunnan Prov., 4. VI, 1950.

Distr.: S. China (incl. Taiwan? & Hainan), Indochina & Thailand.

14. *Heteroderes macroderes* CANDÈZE, 1859 (Fig. 13)

Heteroderes macroderes CANDÈZE, 1859, Mon. Élat., 2: 352 & 358-359 (Hindoustan);
FLEUTIAUX, 1928, Encycl. ent., Col., 3: 25 (Tonkin, Laos, Hindoustan, Birma,
Assam et Chine centrale).

1 ♀* (fig. 13), Jinghong in Yunnan Prov., 29. VI, 1979.

Distr.: S. China, Indochina, Burma, Assam & Hindoustan.

15. *Prodrasterius brahminus* (CANDÈZE, 1859)

Drasterius brahminus CANDÈZE, 1859, Mon. Élat., 2: 422 & 426 (Himalaya).

Drasterius Fouqueti FLEUTIAUX, 1918, Ann. Soc. ent. France: 212 (Hanoi & Tonkin).

Prodrasterius brahminus: MIWA, 1929, Trans. nat. Hist. Soc., Formosa, 19 (102):
245 (Rônô in Formosa); MIWA, 1934, Fauna Elat. Jap. Emp.: 195 (Rônô in
Formosa); KISHII, 1990, Trans. Essa ent. Soc., Niigata, (70): 17-18, figs. 29 &
53 (Liu-kuei in Taiwan).

1 ♀, Nanlin in Guangxi Prov., 14. V, 1985, ZHU-YIN WANG leg.

Distr.: Japan (Is. Ishigaki-jima & Is. Iriomote-jima), S. China (incl. Taiwan),
Indochina & S. E. Asia.

16. *Aeoloderma agnatum* (CANDÈZE, 1873)

Aeolus agnatus CANDÈZE, 1873, Mém. Soc. roy. Sci. Liège, (2) 5: 8 (Japon).

Aeoloderma agnatum: KISHII et LI, 1990, Gekkan-Mushi, (233): 30, fig. 3 (China :
Yingkou).

1 ♀*, Nanhu, Wucang in Hubei Prov., 1960; 1 ♀*, Fangxian in Hubei Prov., 29.
VI, 1980.

Distr.: Japan, Korea & China.

17. *Aeoloderma brachmana* (CANDÈZE, 1859)

Aeolus brachmana CANDÈZE, 1859, Mon. Élat., 2: (283) & 345 (Hindoustan & Ceylan).

Aeolus pardus CANDÈZE, 1859, ibid.: (283) & 345, t. 6, f. 34 (Birma).

Aeolus tessellatus MOTSCHULSKY, 1860, In SCHRENCK's Reis. Fors. Amurlande, 2:
518 (C. Asia).

Heteroderes multilineatus CANDÈZE, 1878, Ann. Soc. ent. Belg. (Bull.), 21: 118
(Celebes).

Heteroderes ancoralis SCHWARZ, 1901, Dt. ent. Ztg., 1901: 24 (Ceylon).

Aeolus vittatus MATSUMURA, 1911, Mém. Soc. ent. Belg., 18: 144 (Formosa), nec
CANDÈZE, 1859.

Aeoloderma brachmana: MIWA, 1929, Trans. nat. Hist. Soc., Formosa, 19 (102):
243 (Taichu, Nanto & Taihoku in Formosa); MIWA, 1934, Fauna Elat. Jap.
Emp.: 192-193 (Taichiu, Nanto & Taihoku in Formosa); ÔHIRA, 1970, Ann.

hist.-nat. Mus. natn. hung., 62:211, pl. 2, f. F (Kosempo in Formosa); ÔHIRA, 1972, Pac. Ins., 14(1):5 (Taipei & Kwantzing in Formosa); ZHAO, 1981, Fujian Sci. Technol. Press: 119 (Putian in Fujian, China); KISHII, 1990, Trans. Essa ent. Soc., Niigata, (70):18, fig. 58 (Liu-kuei in Taiwan).

1 ♀*, Tongshan in Hubei Prov., 14. VII, 1960; 1 ♀*, Huanggang in Hubei Prov., 1960.

Distr.: Japan, S. China (incl. Taiwan), Indochina & S.-E. Asia.

IV. Subfamily **Pityobiinae** HYSLOP

Tribe Pectocerini GURJEVA

18. *Pectocera fortunei* CANDÈZE, 1873 (Figs. 14 & 26)

Pectocera Fortunei CANDÈZE, 1873, Mém. Soc. roy. Sci. Liège, 2 (5):6-7 (Chine: Chusan et Japon: Hiogo), part.

1 ♂, Shangang in Fujian Prov., 29. VI, 1982, FAN JIANG leg.; 1 ♂* (fig. 14), Shennongjia in Hubei Prov., 14. VI, 1985; 1 ♂* (fig. 26-A), Mt. Wuyi (alt. 1,820 m) in Jiangxi Prov., 8. VI, 1991.

Distr.: China.

According to KISHII's examination, Japanese population is quite different from Chinese *fortunei*, and it is a good independent species indigenous to Japan. In the near future it shall be described newly to science by KISHII.

More, Indochinese *P. tonkinensis* FLEUTIAUX, 1918 is clearly allied to the Chinese *fortunei* in many diagnoses, though the former is definitely distinguishable from the latter by the shape of apico-lateral expansion of each paramere in male genitalia (see figs. 23-B, 24-B & 26-B).

In 1971, ÔHIRA had created newly a subgenus *Neopectocera* under the genus *Pectocera* (type-species: *Pectocera nivea* FLEUTIAUX, 1918, from Madura). He divided these subgenera by the structures of male antennae and of the 3rd tarsal joint, and noticed relating to some resemblance between the genus *Ceroleptus* FLEUTIAUX, 1927, however, he discriminated from the latter by having a deep crevice to separate between meso- and metasternum. Although, judging from FLEUTIAUX's description of the key to the genera as follow as (pp. 109-110): Métasternum et mésosternum distinctement séparés par une suture les hanches intermédiaires. Antennes longues, comprimées subseriformes (♂); Troisième et quatrième articles des tarsi légèrement dilatés. *Ceroleptus*. More, in the description (p. 121) he stated on the structures of meso- and metasternum as "Mésosternum nettement séparé du métasternum. Celui-ci au niveau des hanches intermédiaires", and on the characteristics of antennae and tarsal joints used the same expression. Therefore *Neopectocera*, we think, is undoubtedly synonymous with the *Ceroleptus*, and it is an independent genus as the treatment by FLEUTIAUX in having the peculiar diagnosis in antennae and tarsal joints as follow as.

Ceroleptus FLEUTIAUX, 1927, Faun. colon. franç.: 110 et 121. Type-species: *Pectocera sulcata* FLEUTIAUX, 1902, Ann. Soc. ent. France: 573 (Tonkin).

Neopectocera ÔHIRA, 1971, Ann. hist.-nat. Mus. nation. hung., 63:207, as a

subgenus of *Pectocera* HOPE, 1842. Type-species: *Pectocera nivea* FLEUTIAUX, 1918, Bull. Mus. nat. Paris, 24: 213 (Madura). **syn. nov.**

19. *Pectocera tonkinensis* FLEUTIAUX, 1918 (Figs. 23 & 24)

Pectocera tonkinensis FLEUTIAUX, 1918, Ann. Soc. ent. France: 202 (Tonkin, Laos); FLEUTIAUX, 1927, Faun. colon. franç.: 118-119 (Tonkin, Laos, Annam & Yunnan).

1 ♂ (fig. 24-A), Mt. Mogan in Zhejiang Prov., 11. VI, 1992, QING-XI LI leg.
Distr.: China & Indochina.

As compared with the examples of *tonkinensis* from North Viet Nam, the present Chinese specimen is a little slender and apico-lateral expansion of each paramere is clearly narrower (see figs. 23-B & 24-B), though in the most principal diagnoses, both materials are closely allied mutually.

Hitherto, the Chinese pectocerine-species had been known 4 species: *fortunei* CANDÈZE, 1873, *messi* CANDÈZE, 1874, *brevicollis* CANDÈZE, 1878 and *tonkinensis* FLEUTIAUX, 1918. Among them *messi* and *brevicollis* were revised the combination to the genera *Ceropectus* and *Ceroleptus*, respectively by FLEUTIAUX in 1927. Because of our samples consist apparently of 4 species, of which two species were plainly identified to *fortunei* and *tonkinensis* severally, there are two undescribed species.

At the general external appearance the present 4 species are distinctly near each other, but may be easily distinguishable by the characteristics of antennae, head and pronotum (see the table shown below and figs. 23-A to 27), in particular the shape of apico-lateral expansion of paramere in male genitalia may be established by evidence (see figs. 23-B to 26-B).

tonkinensis (N. Viet Nam) (fig. 23-A): v/e, 1.8 times; f/j, 3 times.

tonkinensis (China) (fig. 24-A): v/e, 1.9 times; f/j, 3 times.

jiangxiana sp. nov. (fig. 25-A): v/e, 1.6 times; f/j, 3.6 times.

fortunei (fig. 26-A): v/e, 1.6 times; f/j, 4.5 times.

sp. (fig. 27-A): v/e, 1.8 times; f/j, 7.5 times.

(v/e: vertical breadth/eye width in dorsal views; f/j: flabellum length/joint length in 3rd antennal joint).

20. *Pectocera jiangxiana* KISHII et JIANG, sp. nov.

(Figs. 25 & 28)

This new *Pectocera*-beetle may not be distinct from *P. fortunei* and *P. tonkinensis*, although from them and the known species from the adjacent area it could be distinguished by the combination of the continuing structures.

Male, 28.3×7.3 mm (holotype) and 29.6×8.05 mm (paratype). Dusky chocolate brown wholly with legs somewhat paler. Pubescence tender, short, distinctly dense, a little curled and greyish with silver tint, and forming indistinct marmoreal maculae on pronotum and elytra like *tonkinensis* or *fortunei*. Eyes large, well prominent spherically outwards.

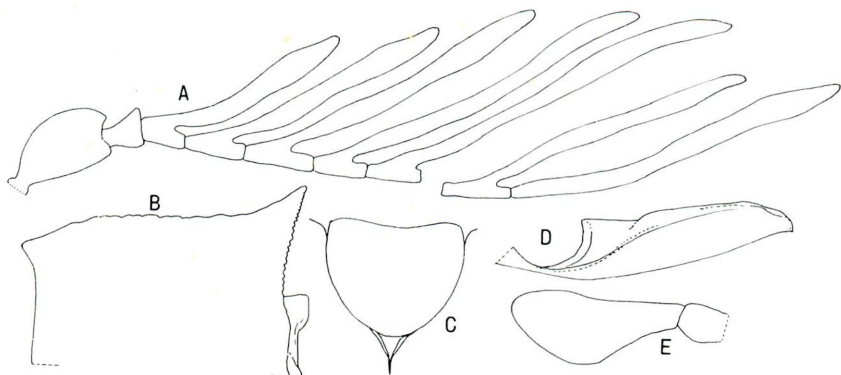


Fig. 28. *Pectocera jiangxiana* KISHII et JIANG, sp. nov.

A, Antenna, 7 basal and 2 apical joints; B, right half outline of pronotum; C, scutellum; D, prosternal process in profile; E, maxillary palpus.

Head strongly excavated medio-longitudinally between eyes, evidently projected above as nodule-like upon antennal sulci; relative distance across eyes and each eye breadth in dorsal appearance as 52:82 (ca. 1.6 times). Maxillary palpus (fig. 28-E) elongate triangular. Antennae plainly elongate, exceeding a little beyond the elytral middle; relative length and apical width from basal joint to 5th excepting of flabella as 75/40, 30/29, 48/25, 62/23 and 70/21, respectively (fig. 28-A). Pronotum (fig. 28-B) subtrapezoid, subparallel-sided at the middle, clearly narrowed at front angles, distinctly divergent postero-laterally, with a narrow and shallow medio-longitudinal furrow and a pair of distinct round foveae transversely before the middle; punctures irregular in density and size, generally not so sparse, gently becoming smaller and denser laterally; hind angles obviously acuminate without carination; posterior margin nearly transverse with small crenatures. Scutellum (fig. 28-C) semicircular, declivous and flattened. Prosternal process in profile as figured (fig. 28-D). Male genitalia similar to *tonkinensis*, but apico-lateral expansion of paramere plainly protruded acutely (fig. 25-B), and basal piece moderate.

Female unknown.

Holotype: ♂ (fig. 25-A), Mt. Wuyi (alt. 930 m), Jiangxi Prov., 16. V, 1991, DONG-SUN DIN leg. Paratype: 1 ♂*, Ciping (alt. 840 m), ditto, 11. VI, 1983, without collector's name.

Distr.: China.

21. *Pectocera* sp. (Fig. 27)

1 ex. (may be male in the 3rd to 11th flabellate antennal joints), Wanxian in Sichuan Prov., 14. V, 1981, LING-LIN MU leg.

In the remarkably elongate flabella of 3rd antennal joint of this example is unique without doubt among the Chinese pectocerine-species, and some diagnoses are also different from 3 species reported above. Perhaps, it may be an undescribed species, though we regret to say that the only example from Sichuan cited above lacks the genital organ. We have particular to say when we obtain the fresh material.

V. Subfamily **Hypnoidinae** SCHWARZ

Tribe Hypnoidini SCHWARZ

19. *Homotechnes corymbitoides* CANDÈZE, 1882 (Figs. 15 & 21)

Homotechnes corymbitoides CANDÈZE, 1882, Élat. nouv. 3, Mém. Soc. roy. Sci. Liège, (2) 9: 71-72 (Chine centrale; Moupin).

1 ♀* (fig. 15), Fengxin, Jiangxi Prov.

Distr.: China.

20. *Belninelsonius hyperboreus* (GYLLENHAL, 1827)
(Figs. 16 & 22)

Elater hyperboreus GYLLENHAL, 1827, Col. Eleut. Scar.: 35 (Lapland).

Hypolithus planatus ESCHSCHOLTZ, 1829, In THON, Ent. Arch., 2(1): 34.

Belninelsonius hyperboreus: LESEIGNEUR, 1970, Suppl. Bull. mensuel Soc. Linn. 41, Lyon: 20; STIBICK, 1979, Eos, 53: 227-228 (Europe, Asia: Manchuria & Mongolia, & N. America).

1 ♀* (fig. 16), Wenquan of Mt. Changbai in Jilin Prov., 15. VII, 1979.

In 1970, LESEIGNEUR had described newly a hypnoidine genus *Belninelsonius* for only this species. According to the latest examination of KISHII, however, both species *hyperboreus* and *corymbitoides* reported above are quite congeneric in many principal diagnoses, and the most species of Japanese *Hypolithus* are also joint in the majority of main characteristics to those of *Homotechnes corymbitoides*. On this problem KISHII would like to express in full through the other paper at an early date.

Distr.: Northern Eurasia, Japan (?), N. China & Alaska.

References

- CANDÈZE, E. C. A., 1859. Monographie des Élatérides 2. Mém. Soc. roy. Sci. Liège, 12: 1-543.

- 1860. Monographie des Élatérides 3. *Ibid.*, 14: 1-512.
- 1865. Élatérides nouveaux 1. *Mém. cour. Acad. roy. Sci. Belg.*, 17 (1): 1-63.
- 1873. Insectes recueillis au Japon par Mr. G. LEWIS. Élatérides. *Mém. Soc. roy. Sci. Liège*, (2) 5: 1-32.
- 1878. Élatérides nouveaux 2. *Ann. Soc. ent. Belg. (Bull.)*, 21: 51-199.
- 1879. Élatérides de l'Amur. *Dt. ent. Zeit.*, 23: 281 & 282.
- 1882. Élatérides nouveaux 3. *Mém. Soc. roy. Sci. Liège*, (2) 9: 1-117.
- FAIRMAIRE, L., 1878. Coléoptères de la Chine centrale. *Ann. Soc. ent. France*, 8: 108-120.
- FLEUTIAUX, M. E., 1918. Nouvelles contributions à la faune de l'Indochine française. *Ann. Soc. ent. France*, 71 (1902): 175-288.
- 1927. Les Élatérides de l'Indochine française (Catalogus raisonné). *Faune colon. franç.*: 53-122.
- 1928. Les Élatérides de l'Indochine française (Cat. rais.). *Encycl. ent., Col.*, 3: 1-75.
- 1933. Les Élatérides de l'Indochine française, cinquième partie. *Ibid.*, 102: 205-235.
- 1934. Descriptions d'Élatérides nouveaux. *Bull. Soc. ent. France*, 1934: 178-185.
- 1936. Les Élatérides de l'Indochine française, 6^e part. *Ann. Soc. ent. France*, 105: 279-300.
- 1939. Les Élatérides de l'Indochine française, 9^e part. *Ibid.*, 108: 121-148.
- 1940. Élatérides nouveaux. *Ex. Bull. Ann. Soc. ent. Belg.*, 80, Bruxelles: 89-104.
- 1947. Révision des Élatérides (Coléoptères) de l'Indochine française. *Notes d'Ent. chin., Mus. Heude*, 11 (8): 232-420.
- GURJEVA, E. L., 1972. The click-beetles (Coleoptera, Elateridae) of the Mongolian People's Republic. *Zool. Inst. Acad. Nauka USSR*, Leningrad: 455-474 (in Russian).
- 1979. Fauna of USSR, Coleoptera, 12 (4), Elateridae, Leningrad: 1-787 (in Russian).
- 1989. Fauna of USSR, Coleoptera, Elateridae. Subfamily Athoinae, Tribe Ctenicerini. *Nauka*, 12 (3), Leningrad: 1-293 (in Russian).
- HAYEK, C. M. F. VON, 1973. A reclassification of the subfamily Agrypninae (Coleoptera: Elateridae). *Bull. Br. Mus. nat. Hist. (Ent.)*, 20: 1-309.
- HEYDEN, L. VON, 1879. Die coleopterologische Ausbeute des Prof. Dr. REIN in Japan 1874-1875. *Dt. ent. Zeit.*, 23 (2): 348-350.
- 1887. Verzeichniss der von Herrn OTTO HERZ auf der chinesischen Halbinsel Korea gesammelten Coleopteren. *Horae Soc. ent. ross.*, 21: 243-273.
- HOPE, F. W., 1842. A monograph on the coleopterous family Phyllophoridae. *Proc. zool. Soc. London*, (4): 73-79.
- JIANG, S., 1990. New record of the genus *Tetralobus* LEPELETIER and the species *T. perroti* FLEUTIAUX from China (Coleoptera: Elateridae). *Sichuan Jour. Zool.*, 9 (1): 42.
- 1991. Notes on the Chinese click beetles of the genus *Campsosternus* LATREILLE (Coleoptera: Elateridae), with descriptions of two new species. *Entomotaxono-*

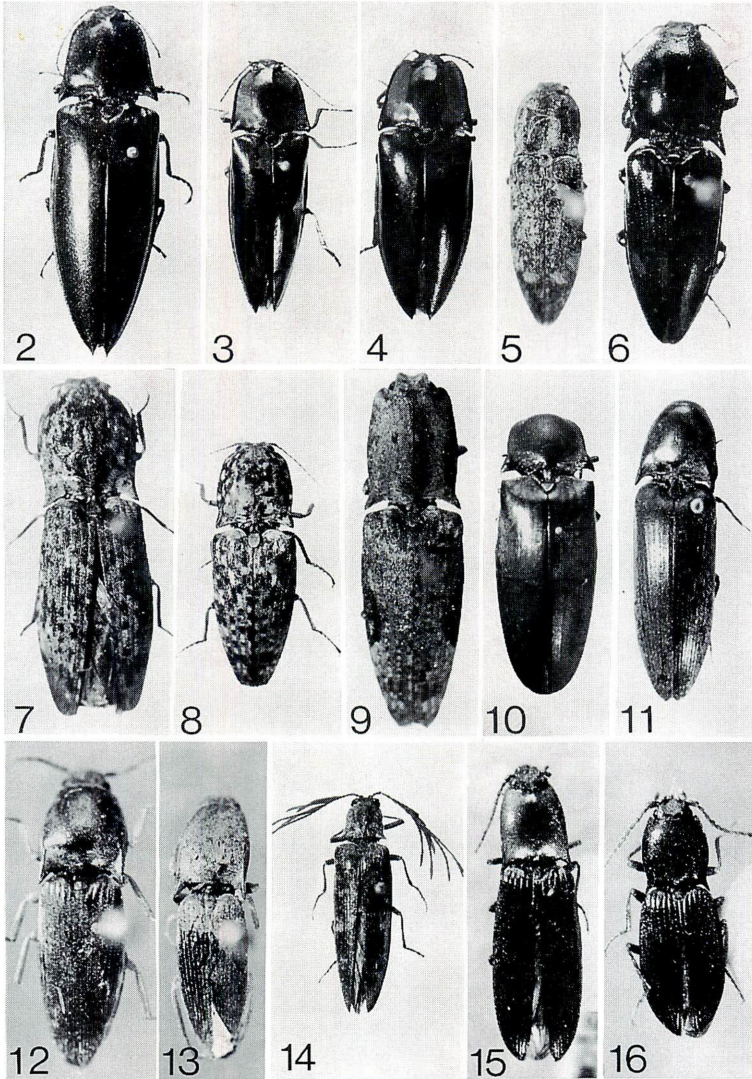
- mia, 13 (4): 275-280 (in Chinese with English summary).
- KISHII, T., 1987. A taxonomic study of the Japanese Elateridae (Coleoptera), with the keys to the subfamilies, tribes and genera, Kyoto: 1-262. 12 figs.
- KISHII, T. & J. LI, 1989. Elaterid beetles of Mt. Chang-pei Shan in China (Coleoptera, Elateridae). *Gekkan-Mushi*, (223): 20-21 (in Japanese).
- 1990. Elaterid-beetles of Yingkou District in China (Coleoptera, Elateridae) (2). *Ibid.*, (233): 30-31 (in Japanese).
- LESEIGNEUR, L., 1972. Coléoptères Élatérides de la faune de France continentale et de Corse. *Suppl. au Bull. mensuel Soc. Linn.*, 41, Lyon: 1-379.
- LEWIS, G., 1894. On the Elateridae of Japan. *Ann. Mag. nat. Hist.*, (6) 13: 26-48, 182-201, 255-266 & 311-320.
- LIU, G., 1933. Catalogue and generic synopsis of the Elateridae of China. *Lingnan Sci. Journal*, 11 (2): 211-247.
- MIWA, Y., 1934. The fauna of Elateridae in the Japanese Empire. *Rep. Dept. Agr. Govt res. Inst. Formosa*, 65: 1-289.
- ÔHIRA, H., 1966. A list of the Elaterid-beetles from South Asia preserved in the Hungarian Natural History Museum (Coleoptera). Parts I-V. *Ann. hist.-nat. Mus. nation. hung.*, 62: 207-243.
- 1971. A list of the Elaterid-beetles from South Asia preserved in the Hungarian Natural History Museum, Part VI. (Coleoptera). *Ibid.*, 63: 205-216.
- PLATIA, G. & R. SCHIMMEL, 1991. Il genere *Silesis* CANDÈZE nella regione Indiana e Cinese (Coleoptera, Elateridae, Adrastini). *Fragm. ent. Roma*, 23 (1): 101-177.
- REITTER, E., 1889. Übersicht der mir bekannten *Elater*-Arten der palaearktischen Fauna. *Ent. Nachr.*, 15: 1-260.
- 1900. Coleoptera, gesammelt im Jahre 1898 in Chin. Centrale-Asien von Dr. HOLDERER in Lahr. *Wien. ent. Ztg.*, 19: 153-166.
- SCHENKLING, S., 1925. Coleopterorum catalogus, auspicious et auxilio W. JUNK. 80, Elateridae 1, Berlin: 1-263.
- 1927. *Ibid.* 88, Elateridae 2, Berlin: 265-636.
- SCHIMMEL, R. & G. PLATIA, 1991. Revision des Subtribus Dimina CANDÈZE, 1863, aus den Himalaya, mit Bestimmungstabellen der Gattungen und Arten (Coleoptera: Elateridae). *Ent. Basil.*, 14: 261-382.
- SCHWARZ, O., 1898. Beschreibung neuer Elateriden. *Dt. ent. Ztg.*, 1898: 129-156.
- 1900. Neue paläarktische Elateriden. *Ibid.*, 1900: 98-112.
- 1902. Neue Elateriden. *Stettin. ent. Ztg.*, 63: 194-316.
- 1902. Neue Elateriden aus dem tropischen Asien, den malayischen Inseln und den Inseln der Südsee. *Dt. ent. Ztg.*, 1902: 305-350.
- 1906-1907. In WYTSMAN, *Genera Insectorum*. Fasc. 46 A-C, Coleoptera, Fam. Elateridae, Bruxelles: 1-370.
- SOLSKY, S., 1870. Coléoptères de la Sibérie orientale. *Horae. Soc. ent. ross.*, 7: 334-406.
- STIBICK, J. N. L., 1978. A revision of the Hypnoidinae of the world. 2 (Col. Elateridae). *Eos*, 52: 309-386.
- 1979. Ditto. 3. The Hypnoidinae of Eurasia. *Ibid.*, 53: 223-307.
- SUZUKI, W., 1976. A new elaterid beetle of the genus *Plectocera* from the Ryukyu Islands. *Kontyû*, 44 (3): 263-266.

- WANG, S.-Y., 1987. Yunnan forestry insects (Elateridae). Yunnan Sci. Technol. Press: 1-599.
- ZHAO, X.-F., 1981. The insect list of Fujian (Elateridae). Fujian Sci. Technol. Press: 119-120.

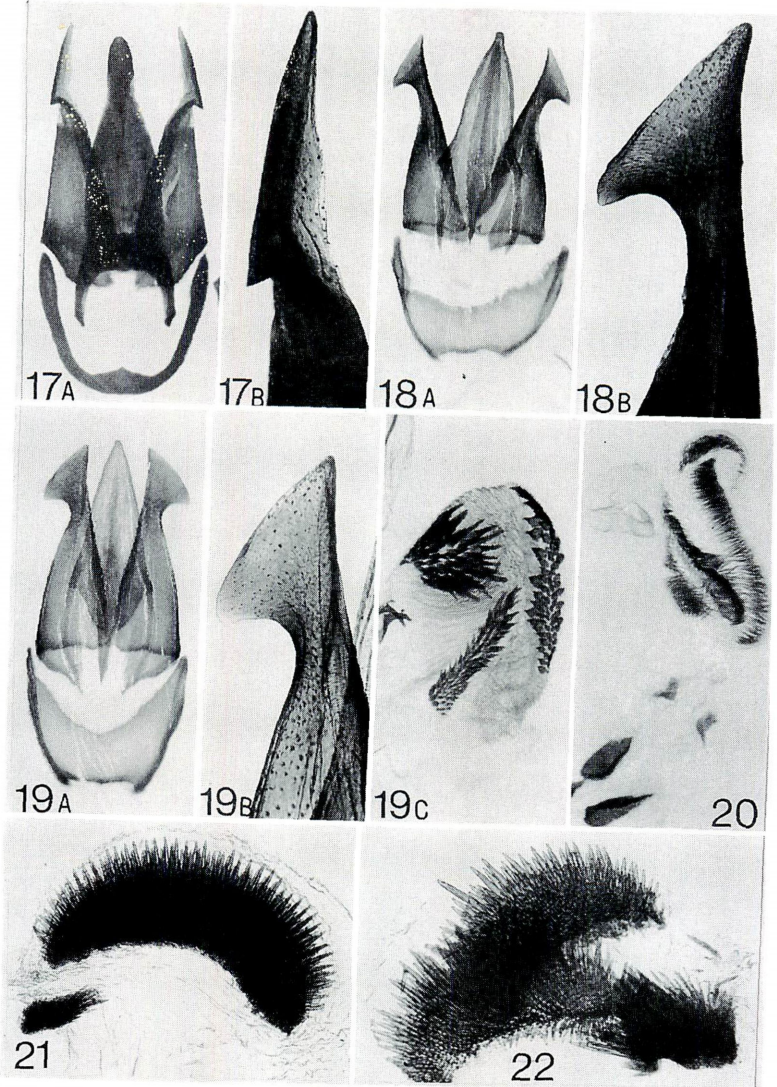
Explanation of plates 8-10

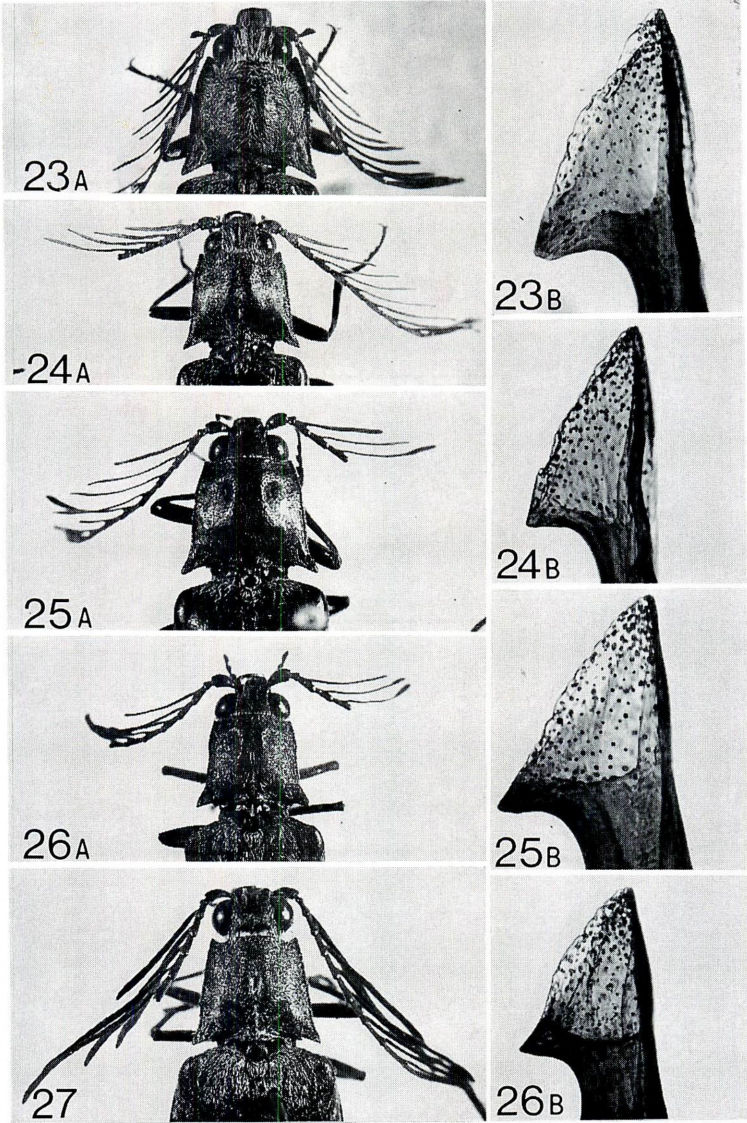
- Pl. 8, fig. 2. *Campso sternus auratus* (DRURY, 1773), ♀, Wuhan in Hubei, 15. VII, 1986, 47.0 mm.
3. *Campso sternus fruhstorferi* SCHWARZ, 1902, ♀, Fengxin in Jiangxi, IX, 1975, G.-P. SHEN leg., 35.5 mm.
4. *Campso sternus gemma gemma* CANDÈZE, 1857, ♀, Mt. Emei in Sichuan, 37.5 mm.
5. *Danosoma fasciata* (LINNAEUS, 1758), Aletai in Xingjing, V, 1991, J.-X. KAN leg., 16.5 mm.
6. *Anthracalaus moricei* FAIRMAIRE, 1888, ♀, Beibei in Chongqin, 5. V, 1991, X.-H. YAO leg., 22.5 mm.
7. *Cryptalaus berus* (CANDÈZE, 1865), ♀, Zhaoping in Guangxi, 29. IV, 1985, S.-Z. LING leg., 22.5 mm.
8. *Cryptalaus sordidus* (WESTWOOD, 1848), ♂, Sichuan, 7. VIII, 1981, J. He leg., 34.5 mm.
9. *Cryptalaus larvatus larvatus* (CANDÈZE, 1874), ♀, Fenyi in Jiangxi, 4. V, 1980, 24.5 mm.
10. *Tetralobus perroti* FLEUTIAUX, 1940, ♂, Wuyan in Jiangxi, 30. VII, 1980, 52.5 mm.
11. *Triglus lewisi* CANDÈZE, 1873, ♀, Zhejiang, VII, 1982, 34.5 mm.
12. *Heteroderes albicans* CANDÈZE, 1878, ♀, Kaiyuan in Yunnan, 4. VI, 1950, 13.0 mm.
13. *Heteroderes macroderes* CANDÈZE, 1859, ♀, Jinghong in Yunnan, 29. VI, 1979, 11.5 mm.
14. *Pectocera fortunei* CANDÈZE, 1873, ♂, Shennongjia in Hubei, 14. VI, 1983, 24.0 mm.
15. *Homotechnes corymbitoides* CANDÈZE, 1882, ♀, Fengxin in Jiangxi, 15.5 mm.
16. *Belinelsonius hyperboreus* (GYLLENHAL, 1827), ♀, Wenquan in Jilin, 15. VII, 1979, 7.8 mm.
- Pl. 9, fig. 17. *Tetralobus perroti* FLEUTIAUX, 1940. A, male genitalia; B, apex of paramere.
18. *Campso sternus auratus* (DRURY, 1773). A, male genitalia; B, apex of paramere.
19. *Campso sternus gemma gemma* CANDÈZE, 1857. A, male genitalia; B, apex of paramere; C, sclerotized formation in bursa copulatrix.
20. *Anthracalaus moricei* FAIRMAIRE, 1888, sclerotized formation in bursa copulatrix.

21. *Homotechnes corymbitoides* CANDÈZE, 1882, sclerotized formation in bursa copulatrix.
 22. *Belninelsonius hyperboreus* (GYLLENHAL, 1827), sclerotized formation in bursa copulatrix.
- Pl. 10, figs. 23-26. A, head and prothorax; B, apico-lateral expansion of paramere in male genitalia.
23. *Pectocera tonkinensis* FLEUTIAUX, 1918, ♂, North Viet Nam, 3-11. VI, 1985, NAVLÁTIL leg.
 24. Ditto, ♂, Mt. Mogan in Zhejiang Prov., 11. VI, 1992, Q.-X. LI leg.
 25. *Pectocera jiangxiana* KISHII et JIANG, sp. nov., holotype, ♂, Mt. Wuyi, Jiangxi Prov., 16. V, 1991, D.-S. DIN leg.
 26. *Pectocera fortunei* CANDÈZE, 1873, ♂, Mt. Wuyi in Jiangxi Prov., 8. VI, 1991.
 27. *Pectocera* sp. ♂, Wanxian in Sichuan Prov., 14. V, 1981, L.-L. MU leg.



(T. KISHII photo.)





The Genus *Haplosomoides* DUVIVIER from Malaysia (Coleoptera, Chrysomelidae, Galerucinae)

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Abstract The genus *Haplosomoides* is represented by four species in Malaysia, including one new species, *Haplosomoides sarawakianus* n. sp. A key to the species is provided.

Introduction

Presently, the genus *Haplosomoides* DUVIVIER is represented by one species in Malaysia. The species, *Haplosomoides plicatus* (ALLARD), which is common in Peninsular Malaysia, recently has been recorded to occur in Thailand (KIMOTO, 1989). This paper reports the addition of another three species of the genus *Haplosomoides* for Malaysia, including a new species. The new species is described from the state of Sarawak. All the specimens, including the types are deposited in the Centre for Insect Systematics, Universiti Kebangsaan Malaysia, Bangi (UKM). A key to the species and illustrations are provided.

The genus *Haplosomoides* can be separated from the other genera in the subfamily Galerucinae by the following combination of characters: Elytra longitudinally carinate behind humerus, with grooves separating carinae posteriorly; maxillary palpi swollen; anterior coxal cavities opened posteriorly; tarsal claws appendiculate.

Systematics

Key to the species of *Haplosomoides*

1. Elytra entirely brownish. 2
- Elytra not entirely brownish, at least partly blackish. 4
2. Eyes smaller in both male and female, with interocular space twice as broad as the transverse diameter of each oculus. 3
- Eyes larger in male than in female, the former with interocular space less than the transverse diameter of each oculus. In male, the apical sternite (Fig. 1) feebly emarginate at apex; aedeagus (Fig. 5) narrowed, not triangulate at apex. Length 5.7-6.3 mm. *flavus* LABOISSIERE

3. In male, apical sternite broadly and deeply emarginate at apex (Fig. 4); pygidium deeply emarginate at apex; aedeagus (Fig. 9) triangulate at apex. Length 5.5-8.5 mm (Java). *serenus* (BOHEMAN)
- In male, apical sternite (Fig. 2) moderately, deeply emarginate at apex; pygidium sinuate at apex; aedeagus (Fig. 7) not triangulate at apex. Length 7.2-8.5 mm.
..... *sarawakianus* n. sp.
4. Elytra black, except the extreme basal and sutural margins yellowish. Head, pronotum, scutellum and legs yellowish. Ventral surfaces black. Length 6.7-7.0 mm.
..... *costatus* (BALY)
- Elytra black on basal half, the rest brownish. Head, pronotum, scutellum, legs and ventral surfaces black. Length 6.5-9.0 mm. *plicatus* (ALLARD)

Haplosomoides costatus (BALY)

Mimastra costata BALY, 1878, Ann. Mag. Nat. Hist., (5) 2: 415 (China).

Haplosomoides costata: LABOISSIERE, 1930, Ann. Soc. Ent. France, 99: 325 (Tonkin, Kweichow).

Haplosomoides costatus: KIMOTO, 1989, Esakia, Kyushu Univ., 27: 76.

Specimen examined. **Sabah**. Gunung Kinabalu, Sayap, 3-8. vi. 1992, ZAIDI, ISMAIL & RUSLAN, 1 (female).

Remarks. This is a new record for Borneo.

Haplosomoides flavus LABOISSIERE

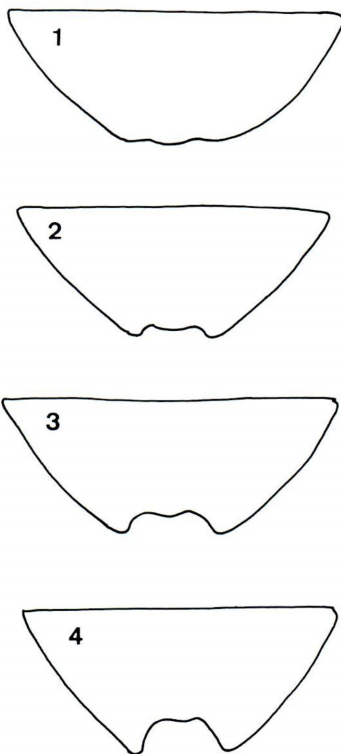
(Figs. 1, 5)

Haplosomoides flava LABOISSIERE, 1930, Ann. Soc. Ent. France, 99: 326 (Tonkin).—GRESSITT & KIMOTO, 1963, Pac. Ins. Mon., 1B: 520 (Vietnam).

Haplosomoides flavus: KIMOTO, 1989, Esakia, Kyushu Univ., 27: 76 (Thailand, Laos, Vietnam).

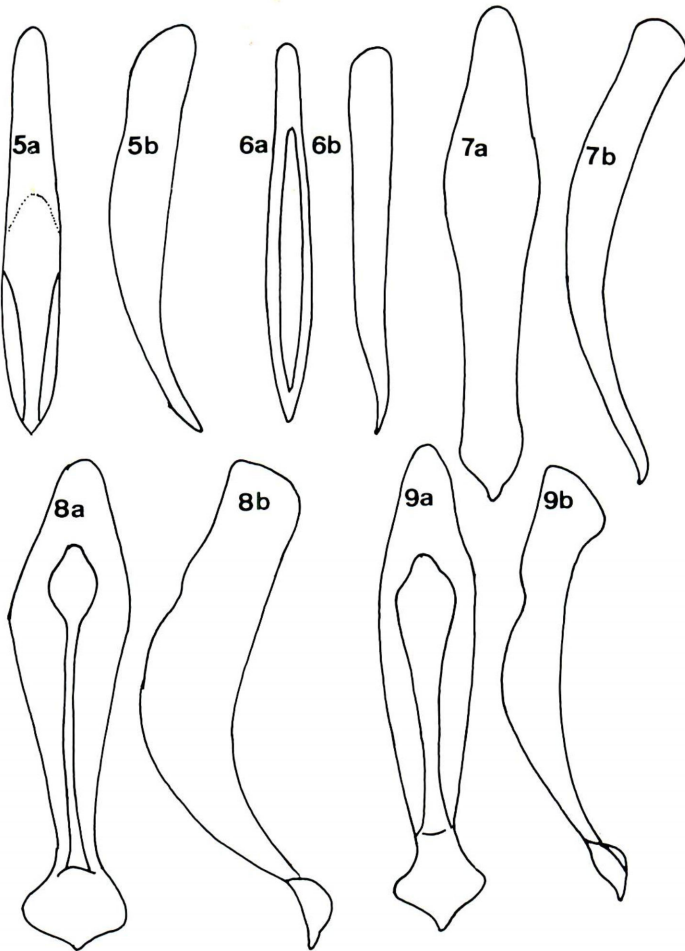
Specimens examined. **Pahang**. Cameron Highlands, G. Berembun, 13. ix. 1983, MARYATI, 7, ISMAIL, 1. **Perak**. Lenggong, 4. xi. 1991, ISMAIL, RUSLAN & JAINUDDIN, 10.

Remarks. This is a new record for Peninsular Malaysia.



Figs. 1-4. Male apical sternites of *Haplosomoides* spp.

- 1, *H. flavus* LABOISSIERE;
2, *H. sarawakianus* n. sp.;
3, *H. plicatus* (ALLARD);
4, *H. serenus* (BOHEMAN).



Figs. 5-9. Aedeagi of *Haplosomoides* spp.

- 5, *H. flavus* LABOISSIERE; 6, *H. annamitus* (ALLARD);
 7, *H. sarawakianus* n. sp.; 8, *H. plicatus* (ALLARD);
 9, *H. serenus* (BOHEMAN).

Haplosomoides plicatus (ALLARD)

(Figs. 3, 8)

Pseudocophora plicata ALLARD, 1887, Ann. Soc. Ent. France, (6) 7: 201 (Malacca);
 1888 (1889), *ibid.*, (6) 8: 325 (Malacca).

Haplosomoides plicata: DUVIVIER, 1890, C. R. Soc. Ent. Belgique, 34: 35 (Malacca).

Haplosomoides plicatus: KIMOTO, 1989, Esakia, Kyushu Univ., 27: 76 (Thailand).

Specimens examined. **Johor.** Gunung Ledang, 19-23. 1993, YUSUF, SAIFUL & MEOR, 5. **Kelantan.** K. Ringit, Fort Brooke, Ulu Kelantan, 20. vi. 1962, KJK, 1. **Melaka.** Tangkak, Sg. Udang, 17. vi. 1988, ISMAIL, RUSLAN & NOR, 2. **Negeri Sembilan.** Gemencheh, 23-24. i. 1993, ISMAIL & RUSLAN, 1. **Lenggeng,** Kg. Semenong, 17-22. v. 1993, SHAM, SAIFUL & YUSUF, 2; Linggi, 6-8. xi. 1990, ZAIDI, ISMAIL & RUSLAN, 1; Pasoh, 20. ii. 1988, BADRUL, 1; Port Dickson, 16. vi. 1988, ISMAIL & NOR, 1; ditto, 23. i. 1989, ISMAIL & NOR, 9; Tampin, 1-3. iii. 1991, ISMAIL & RUSLAN, 1. **Pahang.** Bukit Fraser, 8. vii. 1989, ISMAIL & NOR, 1; Bukit Rengit, 24-27. i. 1992, SHARIFUDDIN, 1; Cameron Highlands, 15-17. ii. 1991, ISMAIL & RUSLAN, 33; ditto, 12. iii. 1993, ISMAIL, SHAM & RAZALI, 6; Kuala Lompat, 7-9. ii. 1990, ISMAIL & RUSLAN, 2; ditto, 21-22. iii. 1990, SALLEH, ISMAIL & ZAIDI, 1; Tasik Bera, Kg. Lenek, 4-8. v. 1993, SHAM, RAZALI & SAIFUL, 2. **Perak.** Bukit Larut, 4-6. xi. 1991, ISMAIL & RUSLAN, 1; Pengkalan Hulu, 3. xi. 1991, ISMAIL, RUSLAN & JAINUDDIN, 5; Pondok Tanjong, 12. vi. 1991, ISMAIL & YUSUF, 2; Tanjong Malim, 27. xii. 1980, ROHANI HAMID, 1; Tapah, Kuala Woh, 16. ii. 1991, SALLEH & ISMAIL, 1; Lata Iskandar, 3. iii. 1993, ISMAIL, SHAM & RAZALI, 2; Temengor, Ekspedisi MNS-Belum, 15-20. xi. 1993, SALLEH, ISMAIL & SHAM, 1. **Selangor.** Hutan Simpan Air Hitam, 30. vi. 1987, SALLEH, ISMAIL & RUSLAN, 3; Bangi, Universiti Kebangsaan, 16. xi. 1975, RAZALI, 1; Hulu Yam Bharu, Sg. Sendat, 7. vii. 1989, ISMAIL & NOR, 3; Klang Gates, 6. x. 1974, ZALEHA YUNUS, 1; Petaling Jaya, 4. vii. 1976, ABIDIN, 1; Shah Alam, Bukit Cerakah, 15. ii. 1992, ISMAIL, 20; Semenyih, Sg. Lalang, 16. i. 1988, NORLIDA, 1; Taman Templer, 4. i. 1992, EFFENDY, 1.

Remarks. This is the most common species.

Haplosomoides sarawakianus n. sp.

(Figs. 2, 7)

Dorsal and ventral surfaces entirely brownish.

Head impunctate, smooth, shiny; frontal tubercles distinct, triangular; clypeus with transverse ridge elevated; labrum sparsely covered with long pubescence; maxillary palpi robust, with penultimate segment enlarged, cup-shaped, the terminal segment smaller, conical. Eyes small, with interocular space twice as broad as the transverse diameter of each oculus. Antennae moderately long, extended to the middle of elytra; segment 1 the longest, club-shaped; segment 2 the shortest, 1.3 times as long as broad; segment 3 twice as long as 2; segments 4-6 subequal in length, slightly longer than 3; segments 7-8 subequal in length, shorter than 6; segments 9-11 subequal in length, shorter than 8. Pronotum transverse, 1.5 times as broad as long, broadest at apical one-third; anterior border unmarginated, concaved; lateral and posterior borders marginated; disc smooth, impunctate, transversely depressed. Scutellum triangular, as long as broad, smooth. Elytra subparallel-sided, rounded at apex, covered with large punctures. Ventral surfaces densely covered

with short pubescence; apical sternite and pygidium with rows of long pubescence on apical margins. First segment of hind tarsus shorter than the rest combined. Apical sternite moderately, deeply emarginate, with the median lobe very small. Pygidium sinuate at apex. Aedeagus as in Fig. 7. Length 7.2-8.5mm.

Holotype: ♂, **Malaysia**, Sarawak, Matang, 20. xi. 1991, SALLEH, ZAIDI & ISMAIL.
Paratypes: **Malaysia**. Same data as the holotype, 6 ♂♂.

Remarks. The new species resembles *Haplosomoides serenus* (BOHEMAN) (Figs. 4, 9) described from Java, but differs in the following male characteristics, apical sternite not deeply emarginate, pygidium sinuate at apex, and aedeagus not tri-angulate at apex.

Acknowledgments

This study is supported by the IRPA Project No. 4-07-03-007, which is gratefully appreciated. The author would like to thank the following persons: Drs. ABANG HJ. KASHIM MORSHIDI, Sarawak Forestry Department for the permission to carry out sampling in Sarawak; MOHAMAD AMIR, Museum Zoologi Bogor, Indonesia, for the permission to carry out sampling in Bogor, where the author managed to collect *Haplosomoides serenus* (BOHEMAN); G. A. SAMUELSON, Bishop Museum, Honolulu, for loan of the Indochinese *Haplosomoides* specimens; and Prof. S. KIMOTO, Kurume University, Japan, for reading the manuscript.

国際動物命名委員会からのお願い (13)

Application

The following Applications were published on March 30, 1994 in Vol. 51, Part 1 of the Bulletin of Zoological Nomenclature. Comment or advice on these Applications is invited for publication in the Bulletin and should be sent to the Executive Secretary, I. C. Z. N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, United Kingdom.

Application No.

- 2889 *Mastotermes darwiniensis* FROGGATT, 1897 and *Termes meridionalis* FROGGATT, 1898 (currently *Amitermes meridionalis*; Isoptera): proposed retention of neotypes following rediscovery of syntypes.
- 2713 Colydiidae ERICHSON, 1842 (Coleoptera): proposed precedence over Cerylonidae BILLBERG, 1820 and Orthocerini BLANCHARD, 1845 (1820); and *Cerylon* LATREILLE, 1802: proposed conservation of *Lyctus historoides* FABRICIUS, 1792 as the type species.
- 2783 *Cryptophagus* HERBST, 1792, *Dorcatoma* HERBST, 1792, *Rhizophagus* HERBST, 1793 and *Colon* HERBST, 1797 (Coleoptera): proposed conservation as the correct spellings, and proposed conservation of *Lyctus bipustulatus* FABRICIUS, 1792 as the type species of *Rhizophagus*.
- 2861 Elmidae CURTIS, 1830 and *Elmis* LATREILLE, 1802 (Coleoptera): proposed conservation as correct spelling and of feminine gender respectively.
- 2858 *Hydrophoria* ROBINEAU-DESVOIDY, 1830 (Diptera): proposed designation of *Musca lancifer* HARRIS, (1780) as the type species.
- 2881 *Sicus* SCOPOLI, 1763 and *Myopa* FABRICIUS, 1775 (Diptera): proposed conservation by the designation of *Conops buccata* LINNAEUS, 1758 as the type species of *Myopa*.

Opinions

The following Opinions were published on March 30, 1994 in Vol. 51, Part 1 of the Bulletin of Zoological Nomenclature. Copies of these Opinions can be obtained free of charge from the Executive Secretary, I. C. Z. N.

Opinion No.

- 1755 *Podisus* HERRICH-SCHAEFFER, 1851 (Heteroptera): *P. vittipennis* HERRICH-SCHAEFFER, 1851 designated as the type species.
- 1756 ANTHRIBIDAE BILLBERG, 1820 (Coleoptera): given precedence over Choragidae KIRBY, 1819.
- 1757 *Cryptus* FABRICIUS, 1804 and Cryptinae KIRBY, 1837 (Hymenoptera): conserved.
- 1758 *Vipio* LATREILLE, 1804 (Hymenoptera): *Agathis longicauda* BOHEMAN, 1853 designated as the type species.
- 1759 *Acamptopoeum* COCKERELLE, 1905 (Hymenoptera): *Camptopoeum submetallicum* SPINOLA, 1851 designated as the type species.

Notes on Buprestid Beetles from Thailand, IV
A Revision of the Genus *Coraebina* OBENBERGER,
1923 from Thailand
(Coleoptera, Buprestidae)

By KÔYÔ AKIYAMA¹⁾ and SADAHIRO OHMOMO²⁾

Abstract A revisional study of the Siamese species of the buprestid genus *Coraebina* OBENBERGER, 1923 is presented. One new species, *C. komiyai*, is described and three species, *C. cambodiensis*, *C. birmanica* and *C. rondoni*, are newly recorded from Thailand.

The genus *Coraebina* OBENBERGER, 1923 is a small group distributed in the Indo-Oriental region and North Africa. Only one species, *Coraebina ikomai* DESCARPENTRIES et CHÛJÔ, 1961, has been recorded from Thailand and we also reported the species in our previous paper (OHMOMO and AKIYAMA, 1988).

Recently, we had an opportunity to examine some specimens belonging to the genus *Coraebina* caught in northern Thailand. After careful examination, we were able to recognize five species; a new species, three newly recorded and one hitherto known only from Thailand. In this paper, we review the Siamese species of the genus *Coraebina* with a description of one new species under the name of *C. komiyai* and present a key for males and females, respectively. The holotype will be deposited in the National Science Museum (Nat. Hist.), Tokyo.

We wish to express our sincere gratitude to Prof. Dr. GAYLE H. NELSON, head of the Department of Anatomy, College of Osteopathic Medicine of the Pacific, Pomona, California, for his kindness in critical reading the original manuscript and giving valuable advice, to Dr. SVATOPLUK BÍLÝ, Department of Entomology, National Museum, Prague and Dr. ROGER P. DECHAMBRE, Laboratoire d'Entomologie Muséum d'Histoire Naturelle, Paris, for their kindness in permitting us to examine the type specimens preserved in their museums, to Prof. Dr. YOSHIKI KOMIYA, Gumma University, Faculty of Medicine, Mr. MASAO ITOH, Yokohama, Mr. JUN ITOH, Tokyo, Mr. AKIRA NISHIYAMA, Saitama and Mr. AKIHIKO SEKI, Tokyo, for their kind offer of materials.

Key to the males of the genus *Coraebina* from Thailand

1) 15-10, Daidô 2-chôme, Kanazawa-ku, Yokohama, Kanagawa, 236 Japan.

2) National Grassland Research Institute, Ministry of Agriculture, Forestry and Fisheries, Nishi-nasuno, Tochigi, 329-27 Japan.

[Ent. Rev. Japan, Vol. XLIX, No. 2, pp. 109-116, Dec., 1994]

1. Pronotum green; elytra entirely black, with complex undulate markings of silver-whitish semirecumbent setae on basal half..... *C. ikomai* DESCARPENTRIES et CHÛJÔ, 1961
- Pronotum green or olivaceous; elytra green or olivaceous in basal $\frac{3}{5}$ and black in apical $\frac{2}{5}$, without undulate markings of silver-whitish semirecumbent setae on basal half..... 2
2. Pronotum and basal $\frac{3}{5}$ of elytra green; elytral apices strongly red; male genitalia as in Fig. W.....*C. cambodiensis* DESCARPENTRIES et VILLIERS, 1967
- Pronotum and basal $\frac{3}{5}$ of elytra olivaceous; elytral apices slightly red; male genitalia as in Fig. X. *C. birmanica* OBENBERGER, 1923

Key to the females of the genus *Coraeбина* from Thailand

1. Head and pronotum red or golden copper. 2
- Head copper red; pronotum black. 4
2. Elytra entirely black, with complex undulate markings of silver-whitish semirecumbent setae on basal half.....*C. ikomai* DESCARPENTRIES et CHÛJÔ, 1961
- Elytra green or olivaceous in basal $\frac{3}{5}$ and black in apical $\frac{2}{5}$, without undulate markings of silver-whitish semirecumbent setae on basal half. 3
3. Elytra green in basal $\frac{3}{5}$ and black in apical $\frac{2}{5}$
- Elytra olivaceous in basal $\frac{3}{5}$ and black in apical $\frac{2}{5}$ *C. cambodiensis* DESCARPENTRIES et VILLIERS, 1967
- Elytra olivaceous in basal $\frac{3}{5}$ and black in apical $\frac{2}{5}$ *C. birmanica* OBENBERGER, 1923
4. Body large; pronotum with three longitudinal undulate markings of silver-whitish setae; elytra with complex markings of silver-whitish semirecumbent setae, the apices armed with an acute spine; anal abdominal sternum arcuately emarginate with a blunt median tooth. *C. rondoni* BAUDON, 1965
- Body small and cylindrical; pronotum without undulate markings; elytra simply with two transverse spots at the middle and near scutellum and a transverse band at apical $\frac{2}{7}$ which are formed of silver-whitish semirecumbent setae, the apices rounded; anal abdominal sternum slightly bisinately rounded. *C. komiyai* AKIYAMA et OHMOMO, sp. nov.

Coraeбина cambodiensis DESCARPENTRIES et VILLIERS, 1967

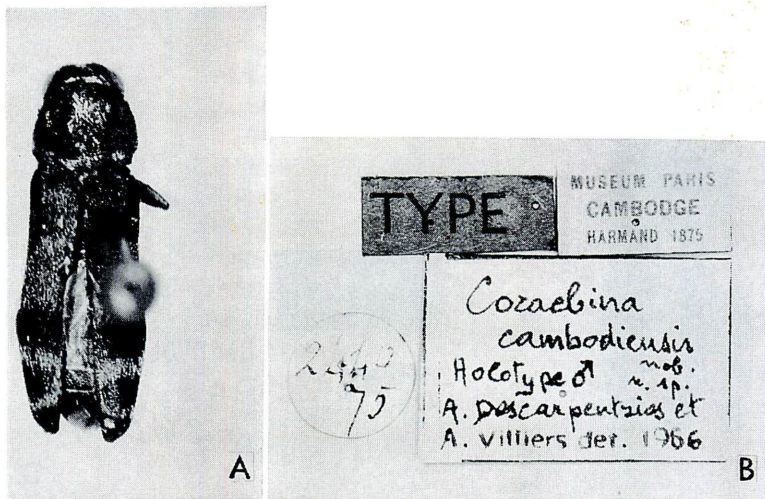
(Figs. A, B, E, K, Q, W)

Coraeбина cambodiensis DESCARPENTRIES et VILLIERS, 1967, Ann. Soc. ent. Fr. (N. S.), 3:488.

Specimen examined: Holotype, ♂. It is labelled as in Fig. B. Other specimens examined: 1 ♂, Whuay Kaeu Waterfall, Chiang Mai Prov., North Thailand, 1-2. VI. 1983, Y. KOMIYA leg.; 1 ♀, Mt. Doi Inthanon, Chiang Mai Prov., North Thailand, 15. V. 1983, A. NISHIYAMA leg.; 1 ♀, Memalo, Chiang Mai Prov., North Thailand, 15-19. V. 1990, M. ITOH leg.

New to the fauna of Thailand.

Length: ♂, 6.1-6.5 mm; ♀, 6.3-6.9 mm. Width: ♂, 1.8-1.9 mm; ♀, 1.9-2.1 mm.



Figs. A-B. Holotype of *Coraebina cambodiensis* DESCARPENTRIES et VILLIERS, ♂.
A, Dorsal view; B, four labels attached to the type specimen.

Coraebina birmanica OBENBERGER, 1923

(Figs. C, D, F, L, R, X)

Coraebina birmanica OBENBERGER, 1923, Acta ent. Mus. nat. Prague, 1:34-35.

Specimen examined: Holotype, ♂. It is labelled as in Fig. D. Other specimens examined: 1 ♂, Maekamsee Forest, Sa, Nan Prov., North Thailand, 17. V. 1985, S. OHMOMO leg.; 2 ♀ ♀, near Chiang Mai, North Thailand, 25. VI. 1988, M. ITOH leg.

New to the fauna of Thailand.

Length: ♂, 6.8-7.0 mm; ♀, 7.1-7.4 mm. Width: ♂, 1.6-2.1 mm; ♀, 2.1-2.3 mm.

Coraebina ikomai DESCARPENTRIES et CHÛJÔ, 1961

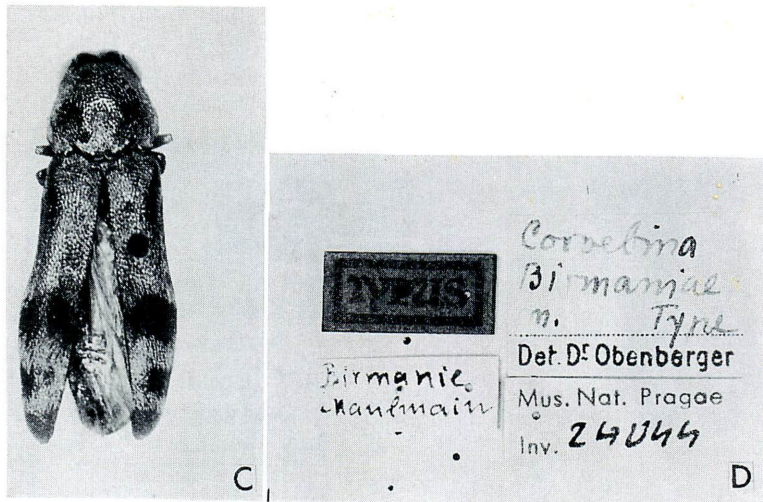
(Figs. G, M, S, Y)

Coraebina ikomai DESCARPENTRIES et CHÛJÔ, 1961, Nature life Southeast Asia, 1:325-327.

Holotype: 1 ex. (maybe ♀), Chiang Mai, North Thailand, 10. V. 1958, H. IKOMA leg. (coll. CHÛJÔ) (not examined).

Specimens examined: 1 ♂, 1 ♀, Whuay Kaeu, Chiang Mai Prov., North Thailand, 1. VI. 1983, Y. KOMIYA leg.

Length: ♂, 7.6 mm; ♀, 7.8-8.0 mm. Width: ♂, 2.2 mm; ♀, 2.3-2.5 mm.



Figs. C-D. Type of *Coraebina birmanica* OBENBERGER, ♂.
C, Dorsal view; D, four labels attached to the type specimen.

Coraebina rondoni BAUDON, 1965

(Figs. H, I, N, O, T, U)

Coraebina rondoni BAUDON, 1965, Bull. Ann. Soc. Roy. ent. Belg., 101:194-197.

Holotype: ♂, Tha-Ngon, Laos, 20. V. 1961. (coll. BAUDON) (not examined).
Allotype and paratypes are same data as the holotype.

Specimens examined: 1 ♀, Doi Suthep, Chiang Mai Prov., North Thailand, 31. VII. 1979, J. ИТОH leg.; 1 ♀, Doi Pa Muang, Hangchat, Lampang Prov., North Thailand, 19. V. 1985, S. OHMOMO leg.; 1 ♀, Phuping Palace, Doi Suthep, Chiang Mai Prov., North Thailand, 22-31. V. 1983, Y. KOMIYA leg.

New to the fauna of Thailand.

Length: ♀, 6.9-7.7 mm. Width: ♀, 2.1-2.3 mm.

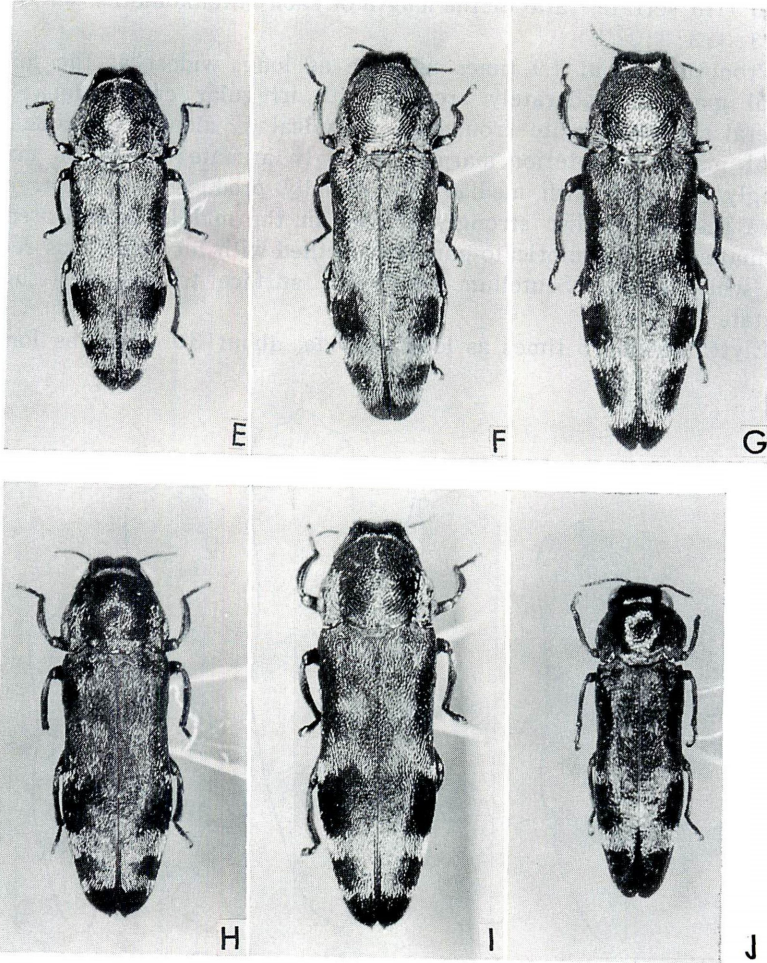
Coraebina komiyai AKIYAMA et OHMOMO, sp. nov.

(Figs. J, P, V)

Female. Body small, fairly elongate and cylindrical. Head dark copper red; pronotum and elytra entirely black; ventral surface, antennae and tarsi black with brassy tinge. Elytra ornamented with silver-whitish semirecumbent setae arranged on each elytron as follows: two transverse spots at the middle and near scutellum, a transverse wavy

band at apical $\frac{2}{7}$ (Fig. P). Each coxa with short silver-whitish recumbent scale-like setae.

Head trapezoidal, convex forward; vertex simply convex, coarsely punctate; eyes elliptical, inner margins of eyes convergent below in



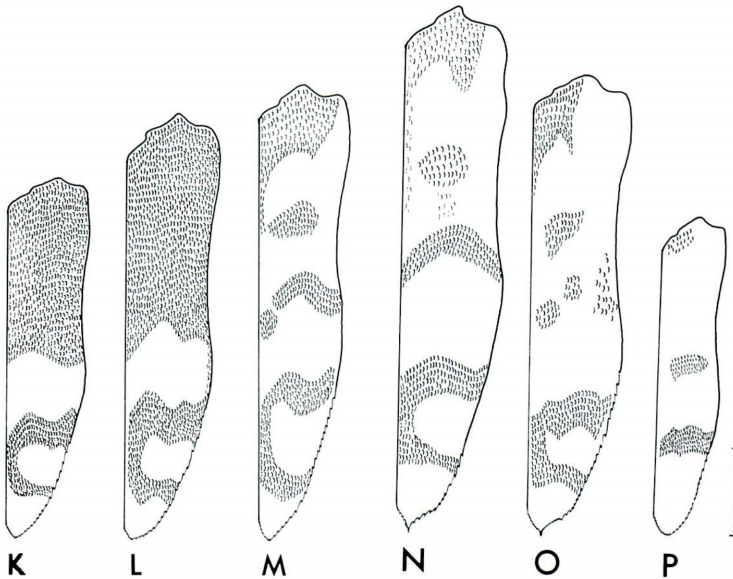
Figs. E-J. Dorsal views of *Coraebina* spp.

E, *C. cambodiensis* DESCARPENTRIES et VILLIERS, ♂;
 F, *C. birmanica* OBENBERGER, ♂; G, *C. ikomai*
 DESCARPENTRIES et CHÛJÔ, ♂; H and I, *C. roudoni*
 BAUDON, ♀; J, *C. komiyai* AKIYAMA et OHMOMO,
 sp. nov., ♀.

frontal view; clypeus rather convex, rugoso-punctate without clypeal suture, anterior margin arcuately tri-emarginate; supra-antennal groove bisinuate; antennal cavities circular, with margins distinctly raised; antennae short, clothed with semirecumbent yellowish-white setae, 1st antennomere the longest and subglobular, 2nd stout, 3rd subglobular, 4th to 11th serrate, ratio of the length of each antennomere:— 7:4:3.5:3:3:3:3:3:3:3.

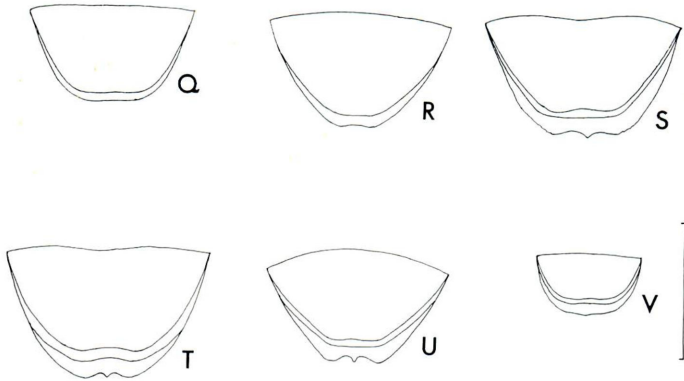
Pronotum about 1.9 times as wide as long, widest at the middle, lateral margins moderately arcuate with irregular crenulations; pre-humeral carinae arcuate from base to apical $\frac{1}{3}$ along each side near lateral margins; anterior margins strongly arcuate; posterior margin strongly bisinuate with median lobe broadly produced and subtruncate before scutellum; disc strongly convex in the middle, lateral area not explanate; surface imbricato-punctate, clothed with inconspicuous recumbent white setae. Scutellum triangular, surface transversely rugoso-punctate.

Elytra about 2.5 times as long as wide, about 3.9 times as long as



Figs. K-P. Right elytra of *Coraebina* spp.

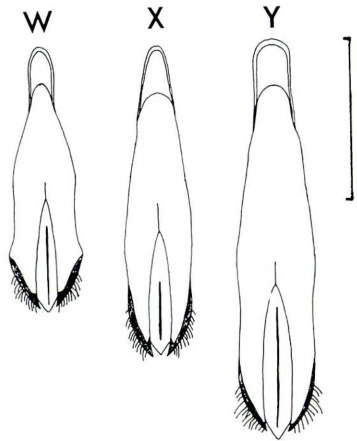
K, *C. cambodiensis* DESCARPENTRIES et VILLIERS, ♂; L, *C. birmanica* OBENBERGER, ♂; M, *C. ikomai* DESCARPENTRIES et CHÛJÔ, ♂; N and O, *C. rondoni* BAUDON, ♀; P, *C. komiyai* AKIYAMA et OHMOMO, sp. nov., ♀. Scale bar: 1 mm.



Figs. Q-V. Female last visible abdominal sterna of *Coraebina* spp. Q, *C. cambodiensis* DESCARPENTRIES et VILLIERS, ♂; R, *C. birmanica* OBENBERGER, ♂; S, *C. ikomai* DESCARPENTRIES et CHÛJÔ, ♂; T and U, *C. rondoni* BAUDON, ♀; V, *C. komiyai* AKIYAMA et OHMOMO, sp. nov., ♀. Scale bar: 1 mm.

pronotum, widest just behind humeri and the middle; lateral margins expanded behind humeri, gradually narrowed toward basal $\frac{1}{3}$, arcuately broadly expanded to the middle, then arcuately narrowed toward apices which are separately and narrowly rounded, finely serrate at apical $\frac{1}{3}$ (Fig. P); disc broadly, longitudinally flattened in the middle, feebly concave in the middle near scutellum and strongly concave near humeri; surface imbricato-punctate.

Ventral surface densely clothed with short inconspicuous silver-whitish setae; prosternum strongly convex, anterior margin abruptly depressed and arcuately emarginate; prosternal process longitudinally convex, subconical, lateral margins feebly, arcuately emarginate at anterior $\frac{2}{3}$, then moderately, arcuately emarginate toward bluntly pointed apices, surface coarsely rugoso-



Figs. W-Y. Male genitalia of *Coraebina* spp. W, *C. cambodiensis* DESCARPENTRIES et VILLIERS; X, *C. birmanica* OBENBERGER; Y, *C. ikomai* DESCARPENTRIES et CHÛJÔ. Scale bar: 1 mm.

punctate; anal abdominal sternum feebly arcuate (Fig. V).

Legs short, rugoso-punctate, clothed with inconspicuous semirecumbent white setae; protibiae almost straight, inner margin densely clothed with golden-yellow bristle-like setae along apical half, outer margin distinctly dentato-serrate; meso- and metatibiae feebly arcuate, clothed with golden-yellow bristle-like setae, outer margin distinctly dentato-serrate. Tarsi stout with ventral pulvilli. Claws double cleft with four teeth.

Male. Unknown.

Length: 4.7 mm. Width: 1.4 mm.

Holotype: ♀, Phuping Palace, Chiang Mai Prov., North Thailand, 4. V. 1980, Y. KOMIYA leg.

This new species is easily distinguished from any other described species of the genus *Coraebina* by the coloration of pronotum and elytral marking as mentioned in the key.

This species is dedicated to Prof. Dr. YOSHIKI KOMIYA, Faculty of Medicine, Gumma University, who has given us this interesting specimen.

References

- BAUDON, A., 1965. Contribution à l'étude des Buprestidae du Laos (Coleoptera) (1^{re} partie). Bull. Ann. Soc. Roy. ent. Belg., 101: 194-197.
- DESCARPENTRIES, A. & M. CHÛJÔ, 1961. Coleoptera from Southeast Asia, 10. Family Buprestidae. Nature life Southeast Asia, 1: 325-327.
- DESCARPENTRIES, A. & A. VILLIERS, 1967. Catalogue raisonné des Buprestidae d'Indochine. XIII, Coraebini (3^e partie). Ann. Soc. ent. Fr. (N. S.), 3: 471-492.
- OBENBERGER, J., 1923. Une série de nouveaux genres de Buprestides. Acta ent. Mus. nat. Prague, 1: 34-35.
- OHMOMO, S. & K. AKIYAMA, 1988. Notes on buprestid beetles from Thailand, with description of a new species. Part I. (Col.) Ent. Rev. Japan, 43 (1): 89-95.

Critical Notes on the Oriental Buprestidae, I (Coleoptera)

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Ptosima chinensis MARSEUL, 1867, is a representative of the genus *Ptosima* SOLIER, 1833, in the Continent of China, its range is covering a vast area from China to the northern Indochina Peninsula, Taiwan, Korea including Chejû Island and a part of Japan. However, it has no local variation. In Japan, this species has been regarded as an artificial invader from China during recent historical age. Its present habitat in Japan is limited to a narrow area around Nagasaki of Kyushu, which was the sole open-door trade port for a few European countries. Other than Nagasaki, this species was reported in Japan from Kagoshima and once from Tokyo. The record from Kagoshima, however, must be an immigrant from Nagasaki and that from Tokyo may be considered an accidental invader from China or Taiwan.

R. HOLYŃSKI (1993) separated the Japanese population of this species from the Chinese population as a new subspecies, *bilyi*, by the following points: 1) yellow frontal spot is mushroom-shaped, not rounded; 2) posterior elytral band broader; 3) punctures on yellow frontal spot are not appreciably finer than those on the rest of front, being decidedly finer in the Chinese population; 4) elytral striae are shallowly furrowed and consist of coarse punctures, punctulation of intervals being much finer, while in *P. c. chinensis* s. str., striae are usually completely flat and punctures on intervals nearly as coarse as those in the striae — this is, however, rather slight and not always consistent disparity. However, these characters mentioned by him are rather obscure between the populations from Japan and China. The character (1) is not so distinct. The mushroom-shaped spot on frons also appears among Chinese individuals. The yellow frontal spot is rather limited sexually to the females, and the individuals having such spot on frons also appear among the Chinese nominotypical race. Mushroom-shaped frontal spot is not monopolized by Japanese one. The characters (2) and (3) have no localization. It is strange that the characters to separate Japanese population from the Chinese one mentioned in his "Key to Oriental forms of *Ptosima* SOL." is only the (4), but the other characters such as (1)-(3) vanish and do not appear anywhere in his key. It is difficult to separate the Japanese and Chinese populations from each other as different subspecies. The new subspecific name, *bilyi*, proposed by R. HOLYŃSKI in 1993, is no

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necessity, being caused by his prepossessed idea that the Japanese population must be taxonomically different from the Chinese one.

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References

- HOLYŃSKI, R., 1993. The Japanese subspecies of *Ptosima chinensis* MARS. (Coleoptera : Buprestidae). Ann. Upper Silesian Mus., Ent., 4 : 153-155.
- DE MARSEUL, S. A., 1867. Description d'espèces nouvelles de Buprestides et d'un Histéride du genre *Carcinops*. Ann. Soc. Ent. Fr., 4 (7) : 47-56.

Study on Asian Carabidae, IX

Species of the Genus *Oxycentrus* CHAUDOIR (3)

(Coleoptera)

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Abstract The redescription of two species belonging to the genus *Oxycentrus* is given and four new species of the genus from Malaysia, Thailand, Vietnam and Taiwan are described. Also the aedeagi of two other species are illustrated.

In this paper I treat the species belonging to the subgenus *Oxycentrus* of the genus *Oxycentrus*. I redescribe two species, *Oxycentrus horni* SCHAUBERGER and *O. changi* HABU, and illustrate the aedeagi of *O. omaseoides* BATES and *O. argutoroides* (BATES). *O. argutoroides* is peculiar in the lack of any copulatory pieces in the inner sac of aedeagus. Also I describe *O. siamensis* from Thailand, *O. quadricollis* from Malaysia, *O. subdepressus* from Taiwan and *O. obtusicollis* from Vietnam (Annam). The last two species are closely related to *O. changi* HABU and *O. horni* SCHAUBERGER in the characteristic of aedeagi.

I wish to express my deep gratitude to Dr. FRITZ HIEKE of Museum für Naturkunde der Humboldt Universität zu Berlin for his giving the opportunity to examine many valuable materials. Also I heartily thank Dr. LOTHAR ZERCHE of Deutsches Entomologisches Institut and Dr. FRITZ GUSENLEITNER of Oberösterreichisches Landesmuseum in Linz for their loaning kindly many types and important specimens. Furthermore my cordial thanks are due to Dr. TAKESHI MATSUMURA and Dr. SHIN-ICHI YOSHIMATSU of National Institute of Agro-environmental Sciences in Tsukuba, Japan for the kind loan of some types.

Oxycentrus (s. str.) *omaseoides* BATES

(Pl. 11, fig. 7; Pl. 12, fig. 14)

Oxycentrus omaseoides BATES, 1892, Ann. Mus. Civ. Stor. Nat. Genova, (2) 12: 344; N. ITO, 1992, Trans. Shikoku. Ent. Soc., 20 (2): 56-58.

Male genitalia: aedeagus (Fig. 14) more or less slender, weakly tumid medially, fully constricted before apex, which is knob-shaped and reflected only above, with a comparatively small basal part; apical lamella transversely quadrate, twice as wide as long; apical orifice not large, opened only in apical half, inner sac bearing two

small spines near apex; ventral side ridged laterally in apical half, with fine serration at the ridges.

Specimen examined: ♂, holotype, Rangoon, Birmania (=Myanmar), 1887, FEA leg.

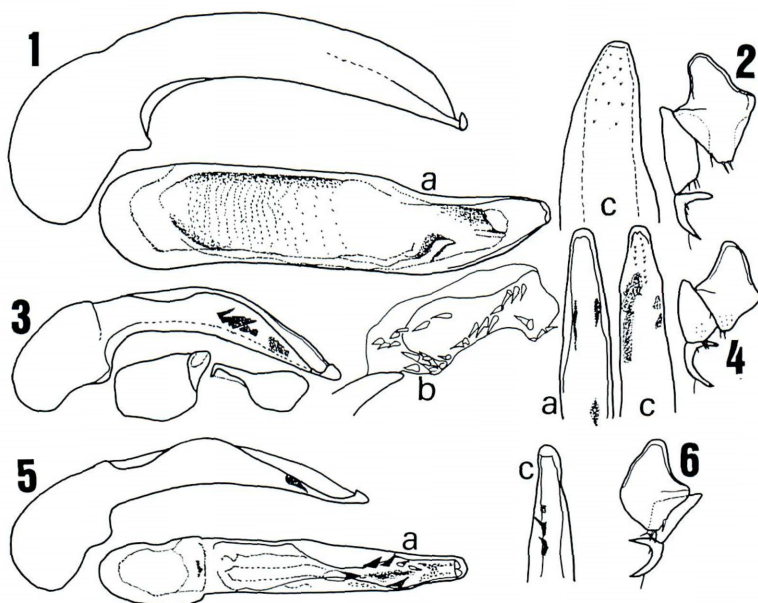
Oxycentrus (s. str.) *argutoroides* (BATES)

(Figs. 1 & 2)

Harpalus argutoroides BATES, 1873, Trans. Ent. Soc. Lond.: 261-262.

Oxycentrus argutoroides: BATES, 1876, Ibid.: 3-4; HABU, 1973, Fauna Japonica, Harpalini: Carabidae: 220-223.

Genitalia: aedeagus relatively robust and gently, regularly arcuate and rectangularly reflexed above at apex; apical lamella very thin and five times as wide as long; apical orifice wide, occupying almost wholly dorsal side of apical part, inner sac without any copulatory pieces; ventral side shallowly depressed and bearing small serration in apical sixth; stylus not slender, gently curved outwards, with one or two tiny spines on ventral outer margin and with a moderately long seta on inner margin before apex; basal segment bearing two or three spines at apex.



Figs. 1-6. Genitalia of *Oxycentrus* spp.

1, 2, *O. argutoroides* (BATES); 3, 4, *O. subdepressus* sp. nov.; 5, 6, *O. obtusicollis* sp. nov.

1, 3, 5, Male genitalia; 2, 4, 6, female genitalia. a: dorsal view; b: inner sac; c: ventral view.

The species is particular in having the inner sac of aedeagus not possessing any copulatory pieces.

Oxycentrus (s. str.) *horni* SCHAUBERGER

(Pl. 11, fig. 8; Pl. 12, figs. 15-16)

Oxycentrus horni SCHAUBERGER, 1938, Arb. Morph. Taxon. Ent. Berlin-Dahlem, 5 (1): 38-39.

Body parallel-sided and elongate, pitchy black, shiny, without any iridescent lustre even on elytra, palpi and antennae light brown, mandibles and legs blackish brown.

Head more or less wide, a little more than two-thirds times as wide as the pronotal width, uniformly and rather well convex, microscopically, very sparsely punctate over all; labrum transversely subtrapezoidal, feebly emarginate at apex; clypeus thick, clearly slant along clypeal suture, largely smooth, with one or two obscure rugosities near each side; clypeal suture clearly marked, distinctly deepened near junctions with frontal impressions, which are also deep, straightly divergent behind, and extending eyes; eyes relatively well prominent, but not hemispherical; tempora thin and very short; genuine ventral margin of eye adjoining buccal fissure; mandibles moderately long and sharp, fairly curved inwards; antennae reaching basal tenth of elytra, 3rd segment dilated distally, pubescent in apical half, one-fifth longer than 4th and about twice 2nd; labial palpi comparatively massive, 3rd segment sparsely pubescent and as long as 2nd; ligula dilated forwards, weakly biarcuate at apex; paraglossae fully prolonged forwards, fused with ligula up to just behind its apex; mentum not so transverse as in *Oxycentrus kraatzi*, median tooth wide, fully produced in front, narrowly rounded at apex, epilobes fairly widened apically; microsculpture observable as obscure transverse meshes only near supraorbital setae.

Pronotum subsquare, not more than one and one-fifth times as wide as long, fairly, uniformly convex and comparatively, steeply declivous to apical angles, punctate only on basal foveae, the punctures rather coarse and moderate in density; sides weakly contracted towards both apex and base, shallowly sinuate before base, more or less thickly bordered; apex not emarginate and clearly bordered throughout; base feebly bisinuate, almost horizontal at sides; basal angles slightly wider than rectangle and weakly rounded at tips; lateral furrows running to basal foveae from apex in a line and not widened; basal foveae small and ill-defined; front transverse impression very short and vague, but not invisible like hind one; median line fine and shallow, somewhat deepened before base, and not reaching both apex and base; microsculpture carved

here and there, detected as obscure transverse meshes and lines.

Fully winged. Elytra parallel-sided and elongate, seven-tenths longer than wide, relatively well convex and steeply declivous laterally, but flattened on disc; base subtruncate, weakly oblique at sides, with humeral angles obtuse and angulate, slightly dentate at tips; apical sinuations distinctly shallow; apices not produced, widely, weakly arcuate and not closed to each other at tips, sutural angles quite blunt; striae relatively deep even on disc, finely crenulate, scutellar striole very short; intervals rather well convex on disc as well as near base and apex, 3rd interval with two setiferous pores along 2nd stria; marginal series divided into two groups by space one-third times the elytral length in the middle, the fore group consisting of 8 umbilicate pores, the hind group of 8 to 9 pores; microsculpture mostly absent, discerned very obscure transverse lines in part.

Ventral surface almost smooth, on pre- and mesepisterna with several obscure punctures, hind coxa uni- or bisetose, 2nd and 3rd abdominal segments very sparsely ciliate medially; metepisterna steeply narrowed behind, a half longer than wide; outer margins of 6th abdominal segment in holotype quadrisetose and widely, gently arcuate.

Fore tibia rather dilated distally, clearly sulcate on dorsal side, armed with three short spines along outer margin near apex, apex clearly emarginate in outer half and triangularly protuberant at the middle, terminal spur simple, hind tibia bearing a small spine before apex on dorsal side; hind tarsi of ♀ five-sixths times as long as the width of head, 1st segment twice as long as 2nd and one-fifth longer than 2nd and 3rd together, claw joint bisetose along each ventral margin.

Aedeagus (Fig. 15) slender and uniformly, gently curved, weakly constricted before apex, which is simple and slightly tumid; apical lamella spatula-shaped and about twice as long as wide; apical orifice parallel-sided and not wide, inner sac with several long peg-shaped pieces; ventral side blunt-ridged laterally in apical third and serrulate there. Stylus (Fig. 16) small and slender, fairly curved outwards, with a long seta before apex on inner margin and with a very short seta at basal fourth on outer ventral margin.

Specimens examined: ♀, holotype; 1 ♂, cotype, both from Celebes.

Oxycentrus (s. str.) *siamensis* sp. nov.

(Pl. 11, fig. 9; Pl. 12, fig. 17)

Body rather widely oblong, somewhat similar in form to *O. subovatus* N. ITO, pitchy black, shiny, without iridescent lustre; antennae and legs reddish brown, palpi light reddish brown, mandibles dark reddish

brown.

Head uniformly, rather well convex, more or less wide, a little more than two-thirds times the pronotal width, very sparsely and minutely punctate; labrum transverse, widely rounded at apical corners; clypeus transversely depressed along truncate apex, relatively swollen behind the depression, with several short longitudinal rugosities near each side; clypeal suture more or less wide and clearly marked, even in depth throughout, from each end of the suture frontal impression running arcuately behind and reaching eye, well deepened lengthwise; eyes hemispherically prominent, about half times the interocular space; tempora short, rather abruptly contracted behind (but more gently so than in *O. subovatus*), forming an obtuse angle with neck-constriction; genuine ventral margin of eye adjoining buccal fissure; mandibles robust, long though a little shorter than in *O. subovatus*, gently curved inwards; antennae relatively slender, extending apical one-fifth of elytra, 3rd segment weakly dilated distally, one-tenth longer than 4th and twice as long as 2nd; 3rd segment of labial palpus well tumid, as long as 2nd; ligula parallel-sided, convergent in front only in portion free from paraglossae; paraglossae straightly widened forwards and arcuate before apex at sides, the arcuate area free from ligula and very narrow; mentum less transverse than in *O. subovatus*, large-toothed in a regular triangle and reaching the apical level of lateral lobes, epilobes fully widened in front; submentum bisetose at each side; microsculpture largely invisible in $\times 80$ magnification, observable as vague transverse lines only near supraorbital setae.

Pronotum subquadrate, one-third wider than long, widest at apical third, gently convex and flattened on both sides of median line, largely smooth, coarsely, not densely punctate in basal foveae and lateral furrows, with several obscure transverse rugosities on disc; sides clearly arcuately in front and weakly, somewhat arcuately narrowed behind from the widest point; apex gently, uniformly emarginate and entirely bordered; base one-tenth wider than apex, almost truncate, very weakly oblique at sides, vague and partly interrupted at border; apical angles widely rounded; basal angles wider than rectangle and angularly rounded; lateral furrows narrow from apex to apical third, then becoming gradually wider behind and linked with basal foveae; basal foveae ill-defined, small and shallow; front transverse impression shallow and vague, but not obliterated like hind one; median line fine and clear, reaching hardly both apex and base; microsculpture visible only in the rugosities and basal foveae, consisting of obscure transverse meshes and lines.

Hind wings fully developed. Elytra widely oblong, three-fifths longer

than wide and one and three-tenths times the pronotal width, evenly, rather well convex, more declivous laterally and apically than in *O. subovatus*, quite smooth; sides weakly, arcuately widened to apical third from humeri, thence gradually strongly arched behind, and shallowly sinuate before apices; apices not produced backwards, widely, gently rounded, and very narrowly separated to each other; striae more or less wide and deepened, finely crenulate, scutellar striole moderate in length; intervals uniformly, rather well convex even on middle area, fully more convex basally and apically, 3rd interval bearing a row of 3-4 setiferous pores along 2nd stria; marginal series widely interrupted medially, composed of 8+(9-10) umbilicate pores; microsculpture very obscure, hardly observable as transverse lines only near striae.

Ventral surface almost smooth, sparsely, moderately punctate partly on mesosternum, on mesepisterna, and laterally on metasternum; metepisterna not strongly contracted behind, a half longer than wide; abdomen sparsely ciliate near coxal cavities, apical margin of 6th segment in ♂ quadrisetose, widely, gently arcuate at apex.

Legs relatively long; fore tibia rather well dilated towards apex, clearly sulcate on dorsal side, and trispinous along apico-external margin, apex deeply incised in external half, terminal spur simple, hind tibia with a short subapical seta; 1st segment of mid tarsus not furnished with adhesive squamae ventrally, 2nd with biseriate squamae only on apical half area, and 3rd and 4th fully with the squamae, hind tarsi of ♂ as long as the width of head, 1st one-tenth longer than 2nd and 3rd together, 2nd one and one-third times 3rd and twice as long as 4th, claw segment bisetose along each ventral margin.

Aedeagus (Fig. 17) robust and gently arcuate, gradually tapered distally, with large basal part, apex thin and simple, rounded at tip; apical orifice widely open, inner sack bearing a small spine near apex, a large spine at the middle, and a bulk composed of many small conical pieces between both the spines; apical lamella small and transverse, twice as wide as long, widely rounded at tip; ventral side biseriate in apical third.

Length: 9.0 mm. Width: 3.0 mm.

Female unknown.

Holotype: ♂, Doi Sang, Chiang Mai, Thailand, 26. V. 1990, M. ITOH leg. (in T. SHIBATA's coll.).

The new species resembles *Oxycentrus (Oxycentropsis) subovatus* N. Iro, but is distinguished from the latter by the elytral apex not widely separated and more narrowly rounded, the hind tibia bearing an ante-apical spine near outer margin instead of having no appendixes and the aedeagus robuster and quite different in form.

Oxycentrus (s. str.) *quadricollis* sp. nov.

(Pl. 11, fig. 11; Pl. 12, figs. 18 & 19)

Body narrowly oblong, parallel-sided, with a large pronotum, pitchy black, shiny, not iridescent; 1st segments of antennae, femora, and legs dark reddish brown, palpi, the residual antennal segments, and tarsi light brown, mandibles brownish black.

Head small, a little less than two-thirds times the pronotal width, gently convex and flattened on vertex, very sparsely, microscopically punctate, with obscure transverse rugosities near frontal impressions and supraorbital setae; labrum transversely quadrate, truncate at apex; clypeus weakly swollen, with an obscure short groove near a seta at each side; clypeal suture so deep that the hind margin of clypeus is steeply slant; frontal impressions arcuately divergent behind, fully deep lengthwise like the suture, and reaching eyes; eyes well prominent hemispherically and two-fifths times the width of head; tempora very short, followed on the prolongation of eye's clear arc, and meeting sub-rectangularly with neck-constriction; genuine ventral margin of eye adjoining buccal fissure; mandibles wide and long, moderately curved inwards, acute at apices; antennae submoniliform and short, not extending behind beyond elytral base, 3rd segment pubescent in apical two-thirds, relatively dilated distally, one-fifth longer than 4th, and twice as long as 2nd; labial palpi not robust, 3rd segment fusiform, one and one-fifth times the 2nd's length; ligula narrow, parallel-sided, and weakly notched at apex; paraglossae fully prolonged forwards beyond ligular apex and fused with ligula up to just behind the apex, comparatively wide, divergent in front at sides; mentum not well transverse, median tooth regular-triangular, produced to apical levels of lateral lobes, epilobes narrow, weakly widened in front; submentum with a pair of long setae at each side, an external seta shorter than internal one; microsculpture mostly invisible, detected vaguely only in the rugosities.

Pronotum weakly, transversely quadrate, only one-fifth wider than long and gently contracted in front and behind at sides, widely and well convex, so that lateral furrows are very narrow and grooved in a line, mostly smooth, rather coarsely, moderately punctate in basal foveae, in lateral furrows, and also on basal area of median line, with several obscure rugosities near median line; sides gently arcuate in front and weakly oblique straightly behind from the widest point at apical two-fifths, rather thickly bordered; apex more or less deeply, evenly emarginate, clearly bordered throughout; base three-tenths wider than apex, slightly oblique at sides, brokenly, obscurely bordered; apical angles

widely rounded; basal angles a little wider than rectangle, tiny-protuberant at tips; basal foveae only weakly depressed on the inclined plane of the convexity, small and ill-defined; front transverse impressions very vague, but not rudimental like hind one; median line deep, widely carved in basal fourth, and reaching both apex and base; microsculpture clear here and there, consisting of transverse meshes in apical area, in rugosities, and partly in basal foveae, and of transverse lines on the residual parts.

Fully winged. Elytra oblong, rather well and uniformly convex, steeply declivous laterally, impunctate; sides almost parallel, weakly arcuate at humeri, apical sinus very shallow; apices not produced behind, closed to each other at tips and drawing a gentle arch, small-toothed at tips; base almost truncate, widely, angularly rounded at humeral angles; striae more or less deep even on disc, scutellar striole extremely short; intervals uniformly, rather well convex in the middle portion, increased in convexity latero-apically and -basally, 3rd interval with uniseriate 4-5 setiferous pores; marginal series divided into two groups, the fore group composed of 8-9 umbilicate pores and the hind one of 11-12 pores; surface almost sleek, very obscurely lined-microsculptured in part.

Ventral surface almost smooth, sparsely, moderately punctate on mesepisterna, very sparsely, obscurely on mesosternum and laterally on metasternum; metepisterna not steeply contracted behind, three-fifths longer than wide; abdomen bearing several short ciliae near hind coxal cavities, apical margin of 6th in ♂ quadrisetose, finely bordered and widely, gently arcuate at apex.

Fore tibia comparatively thick, fully dilated distally, and clearly sulcate lengthwise on dorsal side, with three spines along apico-external margin, hind tibia bearing a short thin spine subapically near external margin; 1st segment of mid tarsus without adhesive squamae, 2nd to 4th fully furnished with biseriate squamae, hind tarsi in both sexes a little shorter than the width of head (ratio of the length to the width = 0.93 in ♂, 0.83 in ♀), 1st equal in length to 2nd and 3rd together and almost twice 2nd, 4th one-third times 1st, claw segment bisetose ventrally on each side.

Aedeagus (Fig. 18) more or less robust, gently arcuate, not abruptly thinned distally, and spherically thickened at apex; apical orifice widely opened in apical third, then narrowed behind, inner sac possessing two groups of spines, one consisting of 5 spines, the other of 8 spines; apical lamella subquadrate, weakly dilated before rounded apex; ventral side finely bordered, tiny-serrate on the borders in apical fifth. Stylus (Fig. 19) bearing four spines at apical margin of basal segment; valvifer bisetose at apex.

Length: 9.0 mm. Width: 3.0 mm.

Holotype: ♂, Tapah, Malaysia, 17. I. 1976, Y. KIYOYAMA leg. (in T. SHIBATA's coll.). Paratype: 1 ♀, same locality as the holotype, 27. III. 1974, Y. KIYOYAMA leg.

The new species is similar to *Oxycentrus* (*Oxycentropsis*) *shibatai* N. ITO, but is different from the latter, in addition to the subgeneric characteristics, in having the pronotum more weakly contracted behind, the hind tibia with a seta before apex near external margin, and the aedeagus robuster and bearing the spines of inner sac less in number.

Oxycentrus (s. str.) *changi* HABU

(Pl. 11, fig. 10; Pl. 12, fig. 20)

Oxycentrus changi HABU, 1978, Ent. Rev. Japan, 31: 103-106; HABU, 1978, *ibid.*, 32: 32-33.

Body parallel-sided, pitchy black, shiny, iridescent lustre invisible or faint only on elytra; palpi and antennae light brown, antennae and legs dark brown to reddish brown.

Head evenly, rather well convex, not wide, a little less than two-thirds times the pronotal width, very finely and sparsely punctate; labrum transversely quadrate, weakly convergent at sides; clypeus flattened or gently raised, truncate at apex, possessing a longitudinal sulcus near each side; clypeal suture fine and not deep even at each end, frontal impression running arcuately behind from the end and reaching eye, fully deep near apex and gradually shallowed behind; eyes more or less prominent, half the interocular space; tempora somewhat developed, gently contracted behind and forming an obtuse and blunt angle with neck-constriction; genuine ventral margin of eye adjoining buccal fissure; mandibles robust and long, moderately curved inwards, pointed at tips; antennae rather slender and extending a little beyond pronotal base, 3rd segment weakly dilated towards apex, pubescent in apical three-fifths, as long as 4th and twice 2nd; labial palpi slender, 3rd segment relatively sparse and as long as 2nd; ligula weakly widened forwards, truncate at apex, fused with paraglossae up to a little behind apex; paraglossae arcuate at external sides, well produced beyond ligular apex, narrow in the produced part; apical emargination of mentum comparatively shallow, with a regular-triangular tooth at the bottom, epilobes wide, not abruptly widened in front; microsculpture mostly invisible, detected as vague transverse lines laterally on occiput.

Pronotum subsquare, almost as wide as long (ratio of width to length = 1.07), evenly, rather well convex, the convexity occupying most area, so that lateral furrows run in a line, largely not punctate, coarsely and moderately punctate only in basal foveae and lateral furrows, obscurely, sparsely transverso-rugose on impunctate area: sides weakly

contracted towards both apex and base from the widest point at apical two-fifths, shallowly sinuate before base, comparatively thickly bordered; apex truncate, clearly bordered throughout; base three-tenths wider than apex, slightly bisinuate, forming subrectangular and narrowly rounded angles with sides, its border complete and slightly ridged; basal foveae small and ovate, isolated far from lateral borders by wide gentle swells; both front and hind transverse impressions vague; median line fine and shallow, coarsened only near base by punctures, not reaching apex and base; microsculpture detected only on the rugosities and on basal area, consisting of obscure transverse lines.

Hind wings fully developed. Elytra parallel-sided, more or less elongate, a little more than one and two-thirds times as long as wide, steeply declivous baso-laterally and more gently so apically; base fully gently declined at sides, obtuse and angulate at shoulders, which are very slightly toothed at tips; apices not produced behind, widely, gently rounded at tips, and very narrowly separated; scutellar striole very short; intervals more or less raised even on disc, 3rd interval bearing a row of two setiferous pores in apical fifth; marginal series divided into two groups, which are far from each other, the fore group consisting of 7-8 umbilicate pores and the hind group of 9-10 pores; microsculpture mostly lacking, observable as vague transverse lines in part.

Ventral surface rather coarsely, sparsely punctate on prepisterna and coarsely, moderately punctate on mesosternum, on mes- and metepisterna, and laterally on metasternum; metepisterna fully contracted behind, three-fifths longer than wide; 2nd and 3rd segments of abdomen sparsely ciliate only on middle areas, 6th finely bordered at outer margin, which is quadrisetose and widely, gently rounded in ♂.

Fore tibia not robust, more or less dilated distally, trispinous along apico-external margin, clearly, longitudinally sulcate on dorsal side, apex weakly incised in external half, without median protuberance, terminal spur wide and simple; hind tibia bearing a short thin subapical spine; mid tarsus biseriately squamous on ventral sides of 2nd to 4th segments; hind tarsus relatively robust, at least one-sixth shorter than the width of head, 1st two-thirds longer than 2nd and six-sevenths times 2nd and 3rd together, 4th about two-thirds times 3rd, claw segment bisetose along each ventral margin.

Aedeagus (Fig. 20) crescent-shaped, well constricted before apex and rather so before basal part; apex knob-shaped and oblique to left in lateral view; apical orifice occupying mostly on dorsal side, inner sac with six long peg-shaped pieces arranged lengthwise and several small pieces near apex; apical lamella small, transverse, widely rounded at tip; ventral side depressed near apex, unbordered and sparsely biserrate

longitudinally.

Length: 7.0 mm. Width: 2.2 mm.

Specimen examined: 1 ♂, paratype, Xin po, Taiwan, 10. IV. 1966, B.-S. CHANG leg.

The species resembles *Oxycentrus argutoroides* (BATES), but has the pronotum and elytra slimmer and the aedeagus armed with many copulatory pieces in inner sac instead of bearing no pieces.

Oxycentrus (s. str.) *subdepressus* sp. nov.

(Figs. 3 & 4, Pl. 11, fig. 13)

The present new species is closely allied to *Oxycentrus changi* HABU, but differs from the latter in having the pronotum less convex, more strongly contracted behind at the sides, angularly rounded at basal angles instead of quite rounded, with basal foveae distinctly shallower (seeming to be flat), the elytra not steeply declivous laterally and somewhat arcuate at sides (not parallel), and the pieces in inner sac of aedeagus (Fig. 3-b) shorter and more in number.

The 3rd elytral interval possesses one to three setiferous pores along 2nd stria. The hind tarsus is five-sixths times the width of head. The 1st segment of the tarsus is rather long, twice 2nd and a little longer than 2nd and 3rd combined.

Length: 6.0-7.0 mm. Width: 2.0-2.2 mm.

Holotype: ♂, Liukuei, Kaohsiung Hsien, Taiwan, 12. VIII. 1972, Y. MAEDA leg. (in T. SHIBATA's coll.). Paratypes: 1 ♂, 5 ♀ ♀, same data as the holotype; 1 ♂, 1 ♀, Nanshanchi, Nantou Hsien, Taiwan, 23. IX. 1970, K. TOH leg., and 24. IX. 1970, Y. KIYOYAMA leg., respectively.

Oxycentrus (s. str.) *obtusicollis* sp. nov.

(Figs. 5 & 6; Pl. 11, fig. 12)

On comparison with *O. changi*, the body is more or less wider, the 3rd segments of labial palpi are more tumid, the eyes are less prominent and not hemispherical, the temples are more gently contracted, the pronotum is more transverse (one-third wider than long), almost flattened at basal foveae instead of relatively deepened, more finely punctate, and not rounded at basal angles, and the elytra are not parallel, more weakly raised and with less convex intervals. The new species is also similar to *O. horni* SCHAUBERGER, but is distinguished from the latter by the body smaller, the eyes smaller and less prominent, the pronotum more transverse and more obtuse at basal angles, and the elytral interval less convex. Furthermore, the new species resembles *O. subdepressus*, but differs from the latter in having the 3rd segment of labial

palpus more dilated, the eyes less convex and the pronotum more transverse.

The setiferous pores on 3rd elytral interval are one or two in number. The hind tarsi in ♂ are one-ninth longer than the width of head, in ♀ are as long as the width, and the 1st segment is as long as 2nd and 3rd together. The inner sac of aedeagus is armed with five to seven pieces. The arrangement of the pieces varies and one piece is situated before basal part in the individuals.

Holotype: ♂, Phuc-Son, Annam (Vietnam), XI-XII. H. FRUHSTORFER leg. (in the Museum of Humboldt University). Paratypes: 3 ♂♂, 2 ♀♀, same data as the holotype.

References

- BATES, H. W., 1873. On the Geodephagous Coleoptera of Japan. Trans. Ent. Soc. London: 219-322.
- 1876. Additions to the list of Geodephagous Coleoptera of Japan, with synonymic and other remarks. Ibid.: 1-5, pl. 1.
- 1892. Viaggio di LEONARDO FEA in Birmania regioni vicine. XLIV. List of the Carabidae. Ann. Mus. Civ. Stor. Nat. Genova, (2) 12: 267-428.
- HABU, A., 1973. Fauna Japonica, Carabidae: Harpalini, (Insecta: Coleoptera). Keigaku Publishing Co. Ltd., Tokyo, Japan: 1-430.
- 1978. Two new species from Formosa (Coleoptera, Carabidae). Ent. Rev. Japan, 31 (1/2): 103-109.
- 1978. On some species of ground beetles from the Ryukyu hitherto unknown or poorly known to Japan (Coleoptera, Carabidae). Ibid., 32 (1/2): 31-37.
- ITO, N., 1993. Study on Asian Carabidae, VI. Species of the genus *Oxycentrus* CHAUDOIR (1). Trans. Shikoku Ent. Soc., 20 (2): 51-59.
- SCHAUBERGER, E., 1938. Neue indo-malayisches Harpalinen des Deutschen Entomologischen Instituts Berlin-Dahlem. (Neunter Beitrag zur Kenntnis der indo-orientalischen Harpalinen). Arb. Morph. Taxon. Ent. Berlin-Dallem, 5 (1): 37-54.

Explanation of Plates 11-12

- Pl. 11, fig. 7. *Oxycentrus* (s. str.) *omaseoides* BATES
 8. *Oxycentrus* (s. str.) *horni* SCHAUBERGER
 9. *Oxycentrus* (s. str.) *siamensis* sp. nov.
 10. *Oxycentrus* (s. str.) *changi* HABU
 11. *Oxycentrus* (s. str.) *quadricollis* sp. nov.
 12. *Oxycentrus* (s. str.) *obtusicollis* sp. nov.
 13. *Oxycentrus* (s. str.) *subdepressus* sp. nov.

- Pl. 12. fig. 14. *Oxycentrus* (s. str.) *omaseoides* BATES
 15. & 16. *Oxycentrus* (s. str.) *horni* SCHAUBERGER
 17. *Oxycentrus* (s. str.) *siamensis* sp. nov.
 18. & 19 *Oxycentrus* (s. str.) *quadricollis* sp. nov.
 20. *Oxycentrus* (s. str.) *changii* HABU
 14, 15, 17, 18, 20, Male genitalia; 16 & 19, female genitalia.
 a: dorsal view; b: inner sac; c: ventral view.

New Records of Three Species Belonging to Tribe Harpalini (Carabidae, Coleoptera)

By NOBORU ITO

I note here the new records of three species, *Hyarpalus formosanus* JEDLIČKA, *Harpalus* (s. str.) *quadripunctatus ainus* HABU et BABA and *Harpalus* (*Pseudophonus*) *jureceki* (JEDLIČKA).

I wish to express my hearty thanks to Dr. FRITZ HIEKE of Museum für Naturkunde der Humboldt Universität zu Berlin for his giving the chance to examine the valuable materials and to Dr. JOSEF JELINEK of Narodni Museum v Praze for his kind loan of some types.

1. *Hyarpalus formosanus* JEDLIČKA

JEDLIČKA, 1940, Neue Carab. Ostasien, Part 13:11 (Formosa: Kosempo); HABU, 1973, Fauna Japonica, Carabidae: Harpalini (Insecta: Coleoptera): 201-204 (Japan: Okinawa Pref.: Ishigaki Is.).

The species has hitherto known from Taiwan and the Ryukyus in Japan. I could examine a specimen from China through Dr. FRITZ HIEKE.

Specimen examined: 1 ♂, Canton, China, LEHMANN leg.

Distribution: Japan, Taiwan, China (newly recorded).

The example from China has a little bluish reflection on elytra like that of *Hyarpalus cyanellus* (BATES), instead of being quite black and the somewhat wider body.

2. *Harpalus* (s. str.) *quadripunctatus ainus* HABU et BABA

HABU, 1963, Akitsu, 11: 25-27 (Japan: Hokkaido: Sounkyo Spa and Mt. Maekan);
 HABU, 1973, Fauna Japonica, Carabidae: Harpalini (Insecta: Coleoptera): 145,
 162-165.

Specimen examined: 1 ♂, Juhniko, Aomori Pref., Japan, 13. VI. 1988, N. ITO leg.
Distribution: Japan (Hokkaido, Honshu (newly recorded)).

3. *Harpalus (Pseudophonus) jureceki* (JEDLIČKA)

Pseudophonus jureceki JEDLIČKA, 1928, Ent. Mitt., 17:45-46 (Sachalin; Ussuri: Sutschan).

Harpalus (Pseudophonus) jureceki: SCHAUBERGER, 1929, Col. Centralbl., 3:184; SCHAUBERGER, 1930, *ibid.*, 4:171; SCHAUBERGER, 1935, Ark. Zool., 27A(4):2.

Ophonus jureceki: HABU, 1957, Kontyû, 25:69; NAKANE, 1963, Icon. Ins. Japan, Colore natur. edit., 2(Col.):43.

Harpalus (Pseudophonus) jureceki: HABU, 1968, Bull. Nat. Agr. Sci., (C) No. 22: 288, 291-293; HABU, 1968, Ent. Rev. Japan, 21:6.

Specimen examined: 1 ♀, Sapa, North Vietnam, 8-13. IX. 1992, M. ITOH leg.

Distribution: Japan, Korea, Sakhalin, E. Siberia, China, Vietnam (newly recorded).

The species was hitherto known only from East Asia, but must be distributed over the Asian subtropical region.

国際動物命名委員会からのお願い (14)

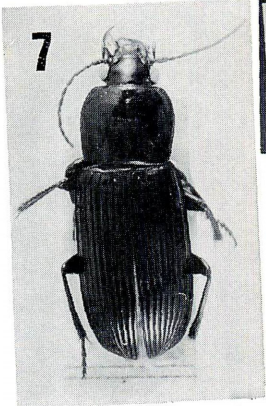
Applications

The following Applications were published on June 30, 1994 in Vol. 51, Part 2 of the Bulletin of Zoological Nomenclature. Comment or advice on these Applications is invited for publication in the Bulletin and should be sent to the Executive Secretary, I. C. Z. N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, United Kingdom.

Application No.

- 2862 A. A. H. LICHTENSTEIN's (1796, 1797) *Catalogus musei zoologici* ... Sectio tertia. *Continens Insecta* and D. H. SCHNEIDER's (1800) *Verzeichniss einer Parthei Insecten*.: proposed suppression, with conservation of some LICHTENSTEIN (1796) names (*Insecta* and *Arachnida*).
- 2890 *Rhopalosiphum monardae* DAVIS, 1911 (currently *Hyalomyzus monardae*; Homoptera): proposed conservation of the specific name.
- 2929 *Bhatia* DISTANT, 1908 (Homoptera): proposed confirmation of *Eutettix? olivaceus* MELICHAR, 1903 as the type species.
- 2878 *Scarabaeus rufus* MOLL, 1782 (currently *Aphodius rufus*), *Scarabaeus rufus* FABRICIUS, 1792 (currently *Aegialia rufa*) and *Scarabaeus foetidus* HERBST, 1783 (currently *Aphodius foetidus*; Coleoptera): proposed conservation of usage of the specific names.
- 2885 *Ischyryus* LACORDAIRE, 1842, *Lybas* LACORDAIRE, 1842, *Mycotretus* LACORDAIRE, 1842 and *Megischyryus* CROTCH, 1873 (Coleoptera) proposed conservation.

(continued to p.143)



Oxycentrus
omarevides
n. sp. Bates.

Rangoon
Birmaniam
Fea 1887

Coll. Kraatz

DEI
Eberswalde



Oxycentrus
Horini Schaub.
det. Dr. E. Schaub.

Mak.
57

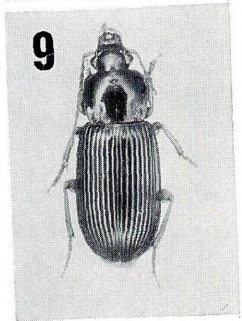
Holotypus

Type

le l'obes

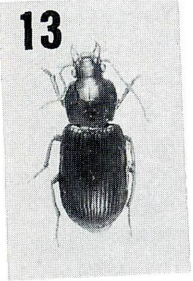
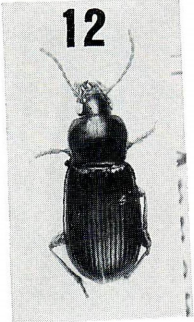
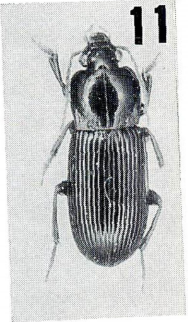
Coll.
Jarmar Schaub

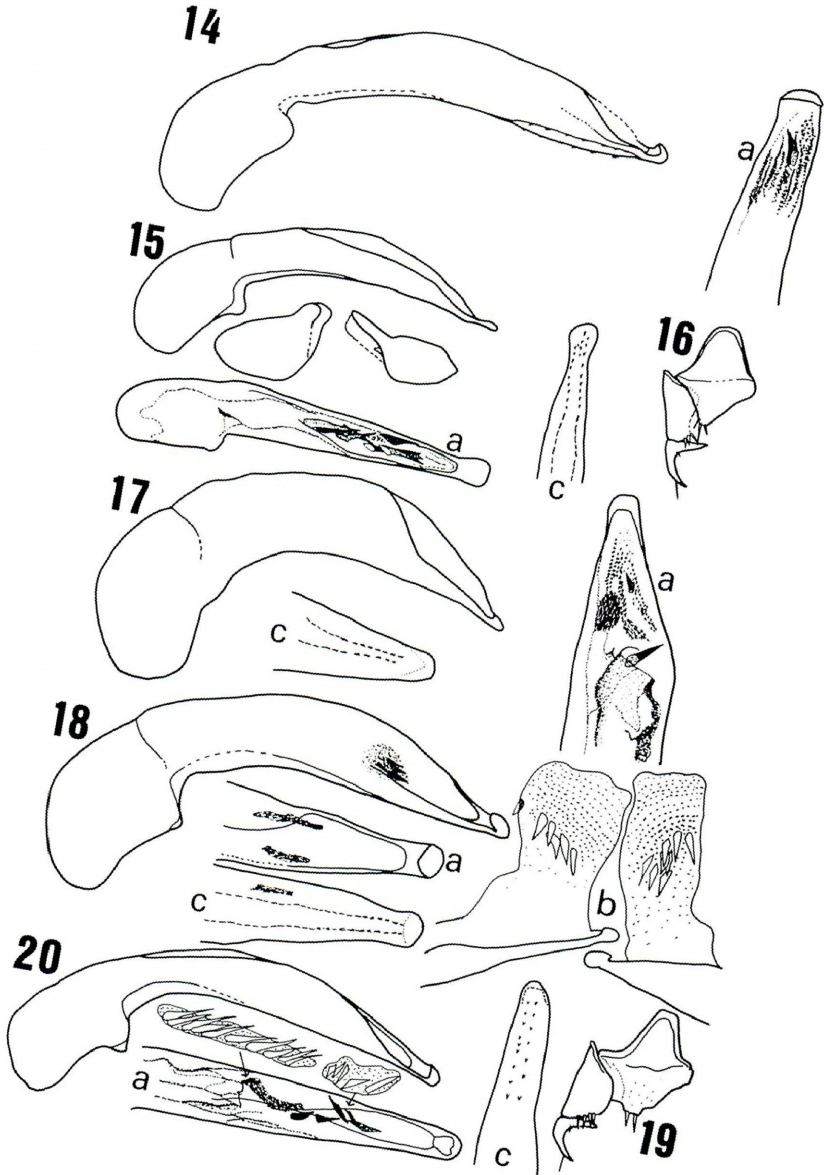
DEI
Eberswalde



Paratype
Oxycentrus
changii
HABU

APR 10. 1966
新加坡
B-S. CHANG





Two New Staphylinid Beetles from the Kii-peninsula, Japan (Coleoptera, Staphylinidae)

By YASUHIKO HAYASHI

Abstract Two new species of the genus *Phylidrodes* BERNHAUER and *Pseudobium* MULSANT et REY are described from Japan.

Phylidrodes is now known only from Japan and includes about 25 species. Most species of the genus are recorded mainly from central area of Honshū, Japan. The present new species of *Phylidrodes* is firstly reported from the Kii-peninsula, the southernmost area of Honshū.

Pseudobium is known from the west Palaearctic region, Near East, the Mediterranean region, North Africa, North India, Burma and Bhutan, and includes about 15 species. It is rather questionable to place this species newly described in this paper in the genus *Pseudobium*, because of slight differences in structures of mouth organs, hind legs and male genitalia.

Before going further, I wish to express my cordial thanks to Messrs. YUTAKA KIMURA and HIDEO KAWASE for their kind presentation of materials, and to Mr. TAICHI SHIBATA for critical reading of the manuscript of this paper.

Omalinae, Coryphiini

Phylidrodes (s. str.) *kawaseorum* sp. nov. (Figs. 1-4)

Body subfusiform, rather slender and convex, moderately shiny and covered with rather sparse and pale brownish short pubescence; colour black to blackish brown, elytra pale brownish yellow (sometimes darkened throughout), with parascutellar to sutural region, anal segments of abdomen, legs (except apical third of femora and tibiae dark brown) pale brownish yellow, mouth organs and basal parts of 2nd to 4th antennal segments reddish brown, and apical 3 or 4 segments of antennae dark brown. Length: 4.9-5.5 mm.

Male: Head subtrapezoidal, considerably wider than long (27.0:18.5), widest at postgenae; surface minutely and sparsely punctured, covered with distinct reticulate microsculpture; frons deeply, subtriangularly

and clearly depressed, bottom of the depression weakly convex, almost impunctate, glabrous, inclined anteriorly and linked with a vertex-occipital depression by a narrow and rather shallow groove, the latter depression deep, subtriangular, ill-defined and with a pair of small foveae; postgena markedly expanded, protrudent laterad beyond strongly convex eyes, uniformly rounded and nearly twice as long as longitudinal diameter of eye. Antennae slender and long, reaching fully apex of elytra, with all segments much longer than wide, not thickened apically; 1st segment thick, opaque, subfusiform, a little more than 3 times as long as wide and much thicker than the following segments, which are nearly equal in the thickness to each other, and each segment with the following relative length: 14.0-7.0-7.0-7.0-8.0-8.0-8.0-8.0-7.5-7.0-8.5.

Pronotum subcordate, considerably convex, a little wider than long (24.5:18.5), a little narrower than (24.5:27.0) and nearly as long as head; front margin gently arcuate, basal one feebly bisinuate; front angles widely rounded, hind ones subrectangulate, not produced and blunt at the tips; sides gently narrowed behind from front third and feebly emarginate in hind half; disc finely and sparsely punctured (but the punctures much coarser than those on head), covered with distinct reticulate microsculpture, grooved medianly and transversely at base, weakly humped just behind the median groove, the median groove running from

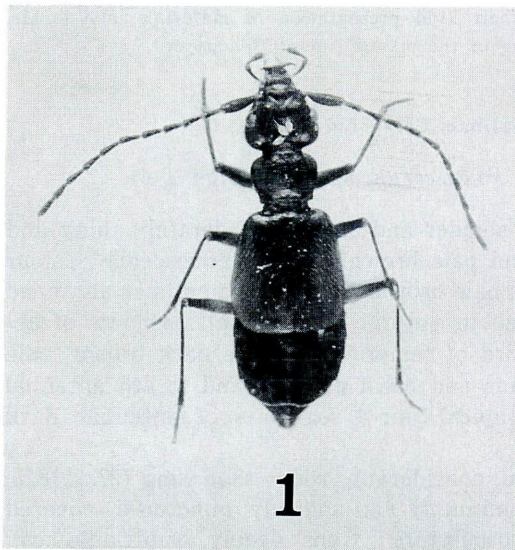


Fig. 1. *Phylidroides* (s. str.) *kawaseorum* sp. nov., ♂, habitus.

just behind front margin to basal third, considerably wide and deep in the front part and becoming shallower posteriorly, the basal groove narrow, shallow, a little widened in the lateral ends, foveate at the middle and rather opaque with strongly roughened reticulate microsculpture; the punctures much larger than those on head.

Scutellum subpentagonal, subacute at tip, depressed in front part and covered with dense reticulate microsculpture.

Elytra gently dilated apically, almost as long as wide (slightly shorter than

maximum length as 42.0: 43.5), much longer and wider than pronotum (42.0: 18.5 and 42.0: 24.0) and widest at apical fourth; sides and apical margin nearly straight; latero-apical angles widely rounded; surface more coarsely and less sparsely punctured than those on pronotum, without microsculpture, finely and indefinitely grooved throughout along suture.

Abdomen gently narrowed posteriad (in well extended specimens), weakly convex above, very minutely asperate-punctate, with microsculpture being transversely striato-reticulate, very dense and strong in the post-median part of 4th sternite and becoming weaker in hinder tergites; basal 5 visible sternites shallowly indefinitely depressed near side margins; 8th sternite widely and deeply emarginate at apex but slightly protuberant at the middle of the emargination; stigma conspicuous and strongly convex.

Legs slender and long; protarsi not dilated; tarsi much shorter than half length of respective tibiae (for example, hind tarsus is about one-third as long as hind tibia).

Male genitalia (Figs. 3-4) rather thick and symmetrical; penis bottle-shaped, strongly curved ventrad, gently amplitude and rather weakly sclerotized dorsad in basal half (therefore the basal half somewhat warped in dry state) subparallel-sided in apical half, then abruptly convergent to the blunt tip in its apical portion, ventral side of apical half sharply edged laterally in the basal two-thirds, vaguely depressed in the middle, and weakly carinate medianly in the apical half; parameres bilobed, slender, short, not extending beyond penis, slightly but distinctly dilated inwards at about apical third, with 2 fine setae at each tip.

Female (Fig. 2): Head relatively small, slightly wider than (26.0: 25.0) and nearly as long as pronotum; postgenae less expanded, not

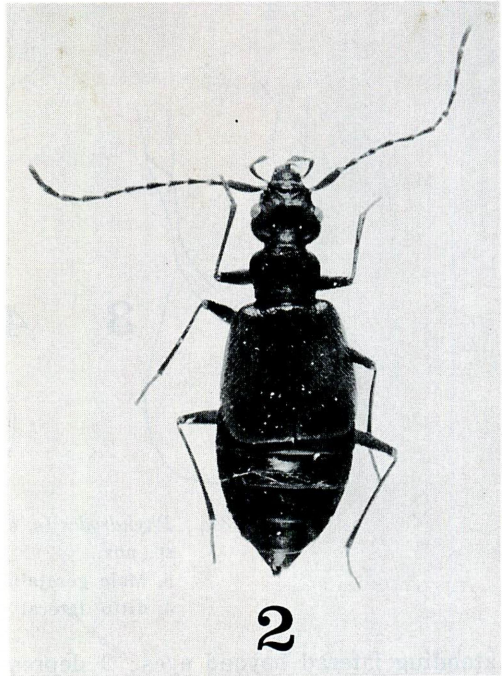
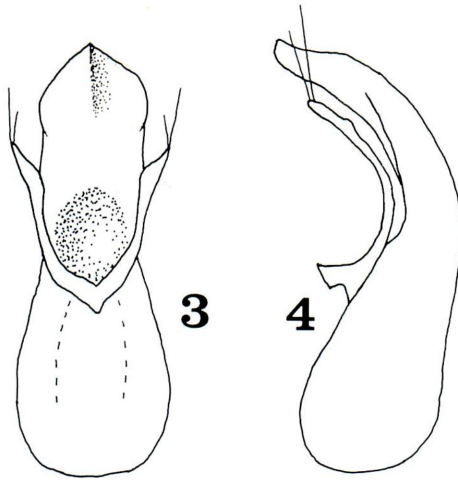


Fig. 2. *Phylidroides* (s. str.) *kawaseorum* sp. nov., ♀, habitus.



Figs. 3-4. *Phylidrodes* (s. str.) *kawaseorum*
sp. nov.
3, Male genitalia, ventral view;
4, ditto, lateral view.

extending laterad beyond eyes; 2 depressions on head less deepened; elytra a little wider than long (49.0 : 47.0), much wider and longer than pronotum (49.0 : 25.0 and 47.0 : 19.5); protarsi a little slenderer.

Holotype: ♂, Hirakura, Mie, 25. V. 1990, H. KAWASE leg. Allotype: ♀, same data as the holotype. Paratypes: 1 ♂, 1 ♀, same data as the holotype; 13 ♂♂, 13 ♀♀, same locality as the holotype, 20. V. 1990, 25. V. 1991, 16. V., 23. V. and 29. V. 1992, 21. V. 1993, H. KAWASE leg.

Though the present species resembles closely to *Phylidrodes* (s. str.) *rufescens* WATANABE, in the latter species the head of the female is almost as wide as pronotum and the elytra are as wide as long, and the male genitalia are distinctly different.

The present species is closely related to *P.* (s. str.) *aquatilis* (SHARP) in the resemblance of the male genitalia, sculpture on upper surface of the fore body. In the latter species microsculpture on the pronotum is very weak, indefinite, and the elytra are dark, blackish and rather closely punctured.

Parameres in *P. rufescens* and *P. aquatilis* are not dilated in the apical portions and bearing 3 or 4 fine setae at each tip.

The specific name is given after Messrs. EIJI KAWASE, the chairman of the Ishikawa Entomologists Society, and his son, HIDEO KAWASE, the collector of the present new species.

Bionomics: The present species was found in moss on a rock which is on a mountain stream and wet through, but it was not found there except May. This species was often observed to take something like a larva of Diptera on its mouth.

Also many larvae of a species of Diptera were found in that moss.

Paederinae, Lathrobii

Pseudobium yutakakimurai sp. nov. (Figs. 5-11)

Male: Body subcylindrical, weakly shiny and covered with dark stiff pubescence; colour nearly black, mouth organs, antennae, tarsi and anal segments brown, legs (except tarsi) and abdominal sternites dark brown, and tergites somewhat iridescent. Length 5.5 mm.

Head subquadrate, slightly longer than wide (33.0 : 31.0), genae rapidly narrowed in front, front margin and hind one nearly straight, side feebly arcuate, and hind angles rounded; upper surface rather strongly convex, shallowly, distinctly and widely depressed in front of vertex, moderately coarsely and sparsely punctured, with very fine but distinct reticulate microsculpture, the punctures a little irregular in size, rather shallow, well defined and much sparser on frons (clypeal area) and on top of vertex; supra-antennal tubercles strongly convex, subgenae (space between infragenal line and gular suture) coarsely, sparsely and deeply punctured. Eyes rather small, not prominent and nearly a half as long as postgena. Antennae considerably slender and long, reaching fully the middle of pronotum; basal 2 segments polished; 1st to 7th segments and 11th more or less longer than wide, 8th nearly as long as wide, 9th and 10th slightly wider than long; 4th to 10th somewhat moniliform; 1st the thickest and subfusiform, 2nd to 8th and 11th nearly equal in width, 9th as wide as 10th and slightly wider than the rest except the 1st, 11th gibbous and subacute at tip; each segment with the following relative length: 7.0-4.0-4.0-3.5-3.0-3.0-3.0-2.5-2.5-2.5-4.0.

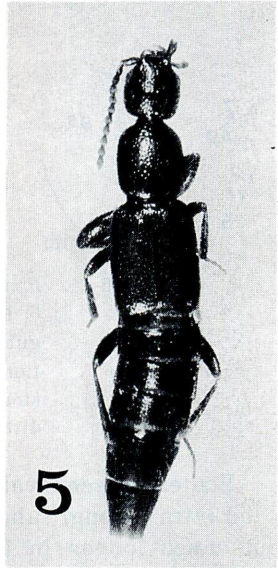
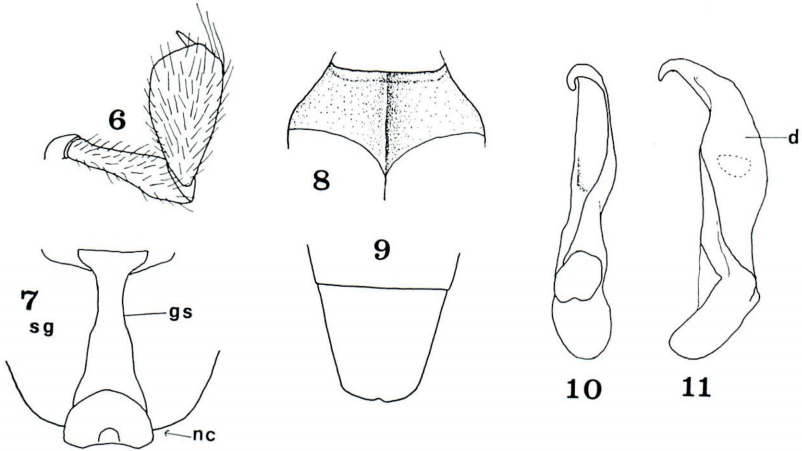


Fig. 5. *Pseudobium yutakakimurai* sp. nov., habitus.

Labrum deeply bilobed and edentate. Maxillary palpus (Fig. 6) with 3rd segment pyriform, conspicuously thickened apicad and densely ciliate; 4th slender, subulate and very short. Third segment of labial palpus slender, short and much shorter than 2nd. Gular plate (Fig. 7) very wide, more conspicuously widened in hind half, surface distinctly convex throughout but faintly impressed medianly in the hind third.

Pronotum suboblong, parallel-sided, well convex, a little longer than wide (42.0:37.0), a little wider and much longer than head (37.0:31.0 and 42.0:33.0), front margin arcuate but feebly emarginate in the middle, basal one nearly straight, and each angle widely rounded; surface moderately, coarsely and sparsely punctured as on head, with distinct fine reticulate microsculpture, with a widely impunctate median line which is finely sulcate medianly in about basal third.



Figs. 6-11. *Pseudobium yutakakimurai* sp. nov.

6, Maxillary palpus; 7, under side of head, with gular sutures (gs=gular suture; nc=neck constriction; sg=subgena); 8, prosternum; 9, 7th and 8th sternites; 10, male genitalia, ventral view; 11, ditto, lateral view (d=dorsum).

Scutellum semioval, with several small punctures.

Elytra oblong, subparallel-sided, a little longer than wide (54.0:48.0, but much longer in the maximum length as 60.0:48.0), considerably wider and longer than pronotum (48.0:37.0 and 54.0:42.0), sides slightly arcuate, apices feebly emarginate, latero-apical angles widely rounded; surface weakly and coarsely rugose, sparsely, shallowly and ill-definitely punctured, without microsculpture, narrowly and shallowly depressed along suture, so that suture is distinctly elevated except for basal part.

Prosternum (Fig. 8) conspicuously carinate medially in the full length. Mesosternum at least bearing median keel.

Abdomen parallel-sided in basal 4 segments, then rapidly narrowed posteriad; basal 4 tergites shallowly but distinctly and transversely impressed at each base; punctures small, sparse and becoming smaller

behind; microsculpture composed of weak fine striae; 7th sternite (Fig. 9) without distinct sexual feature; 8th (Fig. 9) very feebly emarginate medially in the middle and subtruncate at apex.

Legs moderately long, meso-, metafemora and protibiae not so thick as in *Lobrathium* species; 1st segment of metatarsus very slightly longer than 2nd (barely perceptible in lateral or ventral view).

Male genitalia (Figs. 10-11) conspicuously asymmetrical, relatively small, about one-eighth as long as body length, without parameres; ventral side (ventral sclerite, sensu HAYASHI, 1994) strongly sclerotized, narrow, strongly curved at apex as a fish-hook, twisted to the left, weakly constricted in apical side of basal orifice, gently dilated towards apical third, then gently narrowed towards subacute apical tip, base protuberant behind as a chin and rounded at the tip; dorsal side entirely membranous, semitransparent, weakly bulgy and without any sclerotized appendages.

Holotype: ♂, Mt. Ohdai, Nara, 11. VI. 1972, Y. KIMURA leg. (in coll. T. SHIBATA).

The present species is apparently similar in the general appearance to *Lathrobium ishiharai* HAYASHI.

The present species is perhaps closely related to *P. peyerimhoffi* JARRIGE from E. Algier and Tunisia in the resemblance of the male genitalia and the transverse impression on each base of 3rd to 6th abdominal tergites.

The specific name is given after Mr. YUTAKA KIMURA, who is a staff member of the Osaka Coleopterological Society.

References

- BLACKWELDER, R. E., 1939; A generic revision of the staphylinid beetles of the tribe Paederini. Proc. U. S. Nat. Mus., 87 (3069): 93-125.
- CAMERON, M., 1931; Coleoptera, Staphylinidae II. In the Fauna of British India, including Ceylon and Burma. 257 pp., 2 pls. Taylor & Francis, London.
- COIFFAIT, H., 1982; Coléoptères Staphylinidae de la région paléarctique occidentale IV. Sousfamille Paederinae, Tribus Paederini (Paederi, Lathrobii). Nouv. Rev. Ent., Suppl. 12 (4): 1-440.
- SHARP, D., 1889; The Staphylinidae of Japan. Ann. Mag. Nat. Hist., (6) 3: 463-476.
- WATANABE, Y., 1990; A taxonomic study on the subfamily Omaliinae from Japan (Coleoptera, Staphylinidae). Mem. Tokyo Univ. Agr., 31: 57-391.

New Record of Staphylinidae (Coleoptera) from Japan (2)

By YASUHIKO HAYASHI

Two *Philonthus* species are newly recorded from Japan, and in the present species a pair of large erect setae on the male 9th abdominal sternite are absent.

Philonthus diallus TOTTENHAM

Philonthus diallus TOTTENHAM, 1953, Ann. Mag. nat. Hist., (12) 6: 145.

Specimens examined: 1 ♂, 2 ♀♀, Uto, Kumamoto, 24-VII-1965 and 1 ♀, Kumano-ura, Tanegashima Is., 27-VII-1965, T. ITO leg.

Distribution: Japan (new record); China.

Philonthus freyi BERNHAUER

Philonthus freyi BERNHAUER, 1939, Mitt. Münch. ent. Ges., 29: 591.

Specimens examined: 3 ♂♂, 2 ♀♀, Itami, Hyogo, 20-VII-1965, T. ITO leg.; 1 ♂, Uenoshiba, Osaka, 13-IV-1958, K. UEDA leg.; 1 ♀, Abeno, Osaka, 21-IV-1957, Y. KIMURA leg.; 1 ♂, Shirahone, Nagano, 12-VIII-1960, Y. KIMURA leg.; 1 ♀, Ina, Nagano, 27-III-1963, Y. HAYASHI leg.

Distribution: Japan (new record); China.

Notes: The Japanese specimens exactly correspond with the original description except that elytra are somewhat longer, nearly as long as pronotum.

References

- COIFFAIT, H., 1974. Coléoptères Staphylinidae de la région paléarctique occidentale II. Sousfamille Staphylininae, Tribus Philonthini et Staphylinini. Nouv. Rev. Ent., Suppl. 4 (4): 1-593.

The Male Genital Organ of
Apatrobus brancuccii ZAMOTAJLOV
(Coleoptera, Carabidae)

By SEIJI MORITA

Motoazabu 1-3-28-405, Minato-ku, Tokyo, 106 Japan

Abstract Conformation of the male genital organ of *Apatrobus brancuccii* ZAMOTAJLOV is described.

Recent investigations made by myself have clarified that distributional range of *Apatrobus* covers the mountainous areas of the western half of Japan. Only the exception is *A. hayachinensis* (NAKANE) (1968, p. 104) which occurs in Tohoku district, North Japan, and is zoogeographically isolated. Distributional pattern shown by the Japanese members of *Apatrobus* suggests that they have their origin in Mainland China and have radiated from there in every direction.

In 1992, ZAMOTAJLOV described an interesting patrobine carabid from Bhutan under the name of *Apatrobus brancuccii*. Though excellent drawings of habitus and male genital organ were given at the same time, the aedeagal inner armature of this species was not satisfactorily described.

I am, therefore, going to give an account of the organ in the present paper, based upon two males from the original series.

Apatrobus (Parapatrobus) brancuccii ZAMOTAJLOV
(Figs. 1-3)

Apatrobus (Parapatrobus) brancuccii ZAMOTAJLOV, 1992, Mitt. schweiz. ent. Ges., 65: 267, figs. 16, 20-23, 37.

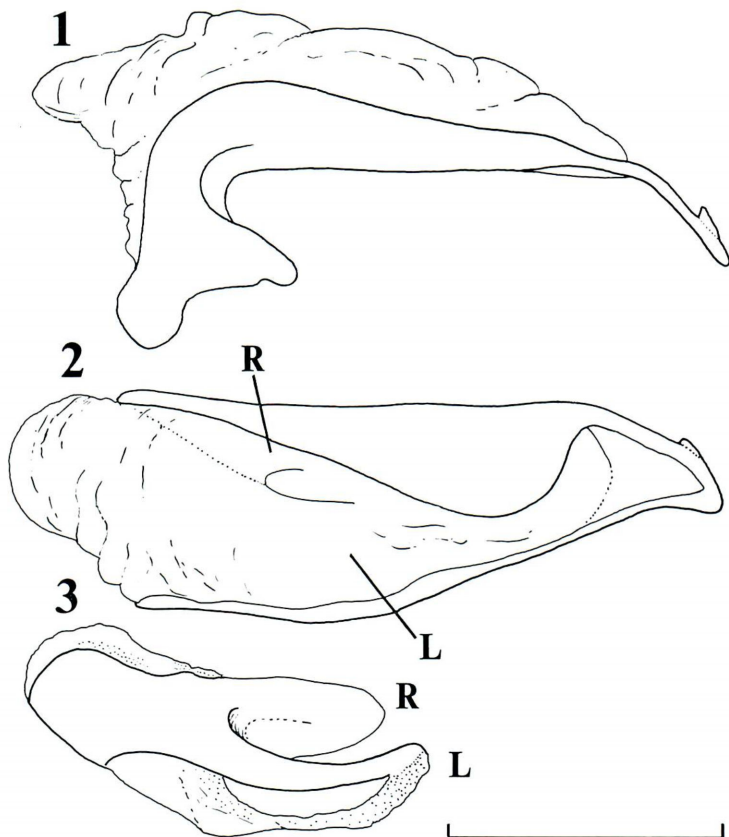
Description of aedeagal structure.

Inner sac covered with poorly sclerotized scales or very minute spinules except for the dorsal side of the inner sac and also armed with a copulatory piece (= a long proximal copulatory piece: cf. ZAMOTAJLOV, 1992, p. 267); very minute and moderately sclerotized spinules at the ventro-apical part, but not forming teeth-patch; a copulatory piece very large and elongate, and with two projections produced apically; right

projection (R) broad, short and lightly sclerotized; left one (L) heavily sclerotized, and narrower and longer than the right; basal part of the copulatory piece large, rolled and lightly sclerotized.

Specimens examined. 2 ♂♂, 1 ♀, Kidiphu Forest, 3,900 m, 9-VII-1980, W. RÖDER leg. The two males were borrowed from the Naturhistorisches Museum Basel. The single female was obtained by exchange from Dr. ZAMOTAJLOV.

Notes. According to my examination of Japanese species, conformation of aedeagus, especially the shape of copulatory piece and the number of patches of teeth, furnishes an important character for classifying patrobines. This species is characterized by the primitive structure of male genitalia, which bear a small and poorly developed patch of moderately sclerotized spinules.



Figs. 1-3. Male genitalia of *Apatrobis* (*Parapatrobis*) *brancuccii* ZAMOTAJLOV. 1, Aedeagus, left lateral view; 2, aedeagus, dorsal view; 3, copulatory piece, dorsal view (R: right projection, L: left projection). (Scale bar: 1.0 mm.)

It is possible that the members of the genus *Apatrobus* can be found in Mainland China and the Korean Peninsula.

I wish to express my deep gratitude to Dr. SHUN-ICHI UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for critical reading of the manuscript of this paper. Thanks are also due to Dr. MICHEL BRANCUCCI of the Naturhistorisches Museum for loan of the type specimens under his care, to Dr. A. S. ZAMOTAJLOV for supplying me with his material, and to Mr. KATSURO YAHIRO for his kind help.

References

- MORITA, S., 1985. Carabidae (Bembidiinae, Patrobiniae). In UÉNO, S.-I., Y. KUROSAWA & M. SATÔ (eds.), *The Coleoptera of Japan in Color*, 2: 89-103. Hoikusha, Osaka. (In Japanese).
- NAKANE, T., 1968. On some remarkable species of beetles collected in Mt. Hayachine and Miyako. *Mem. natn. Sci. Mus., Tokyo*, (1): 104-108. (In Japanese, with English summary).
- ZAMOTAJLOV, A. S., 1992. Notes on classification of the subfamily Patrobiniae (Coleoptera, Carabidae) of the Palaearctic Region with description of new taxa. *Mitt. schweiz. ent. Ges.*, 65: 251-281.

(continued from p.132)

Opinions

The following Opinions were published on June 30, 1994 in Vol. 51, Part 2 of the Bulletin of Zoological Nomenclature. Copies of these Opinions can be obtained free of charge from the Executive Secretary, I. C. Z. N.

Opinion No.

- 1770 *Pachyrhynchus* GERMAR, 1824, *Somatodes* SCHÖNHERR, 1840 and the specific name of *Pachyrhynchus moniliferus* GERMAR, 1824 (Coleoptera): conserved.
- 1771 *Cryptophagus advena* WALTZ, 1834 (currently *Ahasverus advena*; Coleoptera): specific name conserved.
- 1772 Metopiini RAFFRAY, 1904 (Coleoptera): spelling emended to Metopiasini, and Metopiini TOWNSEND, 1908 (Diptera): spelling emended to Metopiaini, so removing the homonymy with Metopiinae FOERSTER, (1869) (Hymenoptera).
- 1773 *Nacaduba* MOORE, (1881) (Lepidoptera): given precedence over *Pepliphorus* HÜBNER, (1819).
- 1774 *Catocala connubialis* GUENÉE, 1862 (Lepidoptera): specific name conserved.
- 1775 *Banksinella luteolateralis* var. *albothorax* THEOBALD, 1907 (currently *Aedes* (*Neomelaniconion*) *albothorax*), *B. luteolateralis* var. *circumluteola* THEOBALD, 1908 (currently *A. (N.) circumluteolus*) and *A. (N.) mcinotoshi* HUANG, 1985 (Diptera): specific names confirmed, and *A. (N.) albothorax*: neotype designated.

ミカゲゴモクムシ長野県に産す

森 田 誠 司

ミカゲゴモクムシ *Harpalus (Pseudophonus) roninus* BATES は、Nagasaki を基産地として1873年に記載された大型のゴモクムシである。背面および肢が、黒色であることにより、ほかのゴモクムシ類とは容易に識別される。わが国においては、広島県（岡本・大沢、1967）、九州、対馬（柄沢、1968）より、国外では朝鮮半島（Tschitschérine, 1895）、中国北部（Jedlička, 1942）、台湾（笠原、1985）より広く知られている。しかしながら本種の採集記録は少なく珍しい種類のようなのである。筆者は、最近平沢・早川両氏のご好意で長野県で採集された本種を検査することができた。既知産地から東へ遠く離れた興味深い記録であり、ここに報告しておく。

1♀、長野県伊那市羽広（はびろ）、7-IX-1982、脇田健介採集。

採集者によると、採集地は、中央アルプス北端の経ヶ岳東側に位置し、標高約800m、当時一帯は、林が所々散在する畑地で、夜間、街路燈の下で採集されたという。

筆者の手元にある佐賀県産（1♀）の標本と比較してみたが、やや小型で細長い感じをうける以外、差異は認められなかった。

なお、上記の台湾の記録は、原色日本甲虫図鑑（II）（保育社）（p. 143）によるもので、ほかの文献からの引用であるか、新記録であるのか、一応 REITTER（1900, 1928）、JEDLIČKA（1928, 1942）、HABU（1968, 1973）をあたってみたが、判断できなかった。

末筆ながら、標本を快くご提供下さり発表を許された脇田健介氏、種々お世話頂いた平沢伴明・早川広文両氏に厚くお礼申し上げます。

Revision of the *Debile* Group of the Genus *Siagonium*
KIRBY et SPENCE from Japan¹⁾
(Coleoptera, Staphylinidae, Piestinae)

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Abstract The *debile* group of the staphylinid genus *Siagonium* KIRBY et SPENCE is revised, and three new species are described as follows: *S. puthzi* from Hokkaido and Kyushu, *S. hammondi* from Shikoku and Kyushu, and *S. deboiseae* from Honshu. The lectotype is designated for *S. debile* SHARP. Key to the species of the *debile* group is provided, and the aedeagi are illustrated for comparison.

This is the 2nd part of the series in which I intend to revise the Japanese Piestinae. The genus *Siagonium* is to be divided into 4 species groups (NAOMI, 1995), and the *debile* group is only treated in this paper. The group of *debile* is defined here, and three new species belonging to this species group are described as follows: *S. puthzi*, *hammondi* and *deboiseae*. In addition, the aedeagi are illustrated for comparison. Same abbreviations as in NAOMI (1995) are used.

The group of *S. debile*

The group of *debile* is composed of four species, *S. debile*, *puthzi*, *hammondi* and *deboiseae* from Japan. This group is diagnosed by combination of the following characters: body small (2.5-3.3 mm), head with or without horns in male; punctures on head and pronotum moderately dense to dense; elytra usually bicolorous, black to dark reddish brown on central part, reddish to reddish brown along lateral and posterior margins, but sometimes entirely reddish brown; median lobe of aedeagus pointed or rounded.

Key to the species of the *S. debile* group

1 (4) Head and pronotum covered with distinct or obsolete microsculptures in both

¹⁾ Revision of the subfamily Piestinae from Japan, II.
[Ent. Rev. Japan, Vol. XLIX, No. 2, pp. 145-154, Dec., 1994]

- sexes; head with a pair of horns and antennae extending beyond posterior margins of elytra in male; aedeagus with median lobe bluntly pointed or rounded at apex.
- 2 (3) Head robuster and eyes smaller in both sexes; aedeagus with median lobe bluntly pointed at apex, parameres extending a little beyond apex of median lobe; head with anterior margin less rounded in female.....*S. debile* SHARP
- 3 (2) Head less robust and eyes larger in both sexes; aedeagus with median lobe rounded at apex, parameres extending much beyond apex of median lobe; head with anterior margin more rounded in female.*S. puthzi* NAOMI, sp. nov.
- 4 (1) Head and pronotum with smooth surface in both sexes; head without horns and antennae almost reaching posterior margins of elytra in male; aedeagus with median lobe moderately to strongly pointed at apex.
- 5 (6) Mandible with a dorsal tooth (or bifurcate at apex) in male; aedeagus with median lobe weakly constricted before apicolateral corners, and arcuately emarginate at apicolateral margins.*S. hammondi* NAOMI, sp. nov.
- 6 (5) Mandible without dorsal tooth (or simply pointed at apex) in male; aedeagus with median lobe gradually narrowed apically to the obtuse apicolateral corners, and straight at apicolateral margins.....*S. deboiseae* NAOMI, sp. nov.

Siagonium debile SHARP

Siagonium debile SHARP, 1889, Ann. Mag. nat. Hist., (6) 3:464; BERNHAUER et SCHUBERT, 1910, Coleopt. Cat., (19):8; ADACHI, 1957, J. Toyo Univ., (11):198; NAKANE, 1963, Icon. Ins. Japon. Col. nat. ed., 2:81; SHIBATA, 1976, Ann. Bull. Nichidai Sanko, (19):78; WATANABE, 1985, Coleopt. Jpn. Col., 2:262.

Male and female. Body 2.7-3.2 mm in length, small, moderately convex, parallel-sided and shining.

Coloration. Head, pronotum and abdomen black to dark brown; 8th abdominal segment reddish brown; elytra various in color, usually dark brown in central part and reddish to reddish brown along lateral and posterior margins, but sometimes the reddish area is restricted into four areas, namely, two humeral areas and two posterolateral corners so that dark brown part forms a cross-shape, in another case elytra entirely reddish to reddish brown; antennae and legs reddish brown to yellowish brown.

Male. Relative measurements: HL: 35; HW: 54; PL: 36; PW: 51; EL: 70; EW: 58; ALP: 16 : 10 : 14 : 11 : 14 : 15 : 15 : 14 : 14 : 13 : 20.

Head with clypeofrontal area flat but declivous anteriorly, rounded at its anterior margin; antennal tubercles well-developed and protuberant, with horns at anterior margins of the tubercles, horns various in length, short and pointed in one specimen, long, slender and curved inward in another specimen, median area between antennal tubercles deeply concave, vertex flat or weakly concave, neck longer in central part than in lateral one, separated from vertex by a curvilinear suture; surface on clypeofrontal area with punctures round, sparse and irregular,

microsculptures obsolete, vertex with punctures dense, round and distinct, interstice usually narrower than diameter of puncture, shining, with microsculptures reticulate, and distinct or sometimes obsolete, neck with punctures smaller than those on head, and with microsculptures; two long setae and the other several short setae along upper margin of eye. Eyes small, round and prominent, about as long as postocular areas. Antennae elongate, hardly broadened apically, reaching almost posterior margin of 5th abdominal tergite. Mandibles each with two teeth, a ventral tooth short, broad and pointed, and a dorsal tooth elongate, curved inward and strongly pointed, sometimes with its inner margin weakly and minutely serrate.

Pronotum moderately convex and marginate only at lateral sides, both anterior and posterior margins almost straight, pronotum broadest just behind anterolateral corners, then weakly narrowed posteriorly in anterior $\frac{2}{3}$, and constricted at base; surface with a median longitudinal depression which is broad and indistinct in outline, with a pair of large but shallow mediolateral depressions; punctures dense, distinct, round and almost regular, interstice indistinctly sculptured, much narrower than diameter of puncture; several short setae along anterior and lateral margins. Mesoscutellum elongate tongue-shaped, its inner area with fine and reticulate microsculptures, and outer area smooth and strongly shining.

Elytra elongate-rectangular, side margins very weakly arcuate or straight, hind margins together forming a very weak emargination; surface weakly uneven, sometimes elevated along sutural area, each elytron with 5 or 6 rows of irregular punctures, interstice shining.

Legs moderate in length; tibiae each with a row of minute spines at apico-external side.

Abdomen broad, relatively short and convex above; paratergites relatively narrow, erect and punctate; surface with fine, distinct and reticulate microsculptures; punctures very fine and sparse; pubescence short and sparse, but becoming a little denser posteriorly from 4th to 7th tergites. Aedeagus (Fig. 1-A) with median lobe moderately bulbous at base, irregularly narrowed apically, then obtusely pointed at apex, with blunt anterolateral corners, internal armatures as in Fig. 1-A; parameres extending a little beyond apex of median lobe, gently curved inward in full length.

Female. Relative measurements: HL: 33; HW: 53; PL: 35; PW: 50; EL: 70; EW: 58; ALP: 15 : 8 : 10 : 8 : 9 : 9 : 9 : 10 : 10 : 10 : 16.

Head smaller than in male, almost pentagonal in shape before eyes, but anterior margin weakly rounded; antennal tubercles less developed than in male, horns absent, vertex with a shallow and broad depression

along internal side of each antennal tubercle, the depression becoming shallower mesially. Antennae reaching the middle of elytra. Mandibles each short and simply pointed.

Type materials. I was able to study three specimens deposited in the NHML. The label of 1st specimen (male) is as follows: *Siagonium debile*. Type D. S. Miyano-shita. May. 1880. LEWIS/"Type" (round label with red margin)/SHARP Coll 1905-313./Japan. LEWIS. I dissected this specimen for examination of aedeagus, and the aedeagus was mounted on celluloid board. The specimen is here designated as the lectotype of *S. debile*; the label "Lectotype *Siagonium debile* SHARP, NAOMI des. 1994" was attached to it. The label of 2nd specimen (female) is as follows: *Siagonium debile*. Type D. S. Nikko. Japan/Japan. LEWIS./SHARP Coll 1905-313. The label of 3rd specimen is as follows: Japan. G. LEWIS. 1910-320./*Siagonium debile*/"SYNTYPE" (round label with blue margin).

Further specimens examined. 1 ex., Mt. Amagi, Izu, Shizuoka Pref., 5. i. 1940, K. SAKAGUCHI (NTC); 1 ex., Komagadake, Nagano Pref., 20. vii. 1939, K. TANIGUCHI (NTC); 2 exs., Nojiri, Nagano Pref., 1. v. 1942, T. NAKANE (NTC); 1 ex., Shomyonotaki, Mt. Tateyama, Toyama Pref., 26. vii. 1939, K. SAKAGUCHI (NTC); 1 ex., Iwama Spa, Hakusan, 9. viii. 1957, I. TOGASHI (NTC); 1 ex., Yashagaike, Fukui Pref., 31. v. - 2. vi. 1974, H. SASAJI (NSC); 1 ex., same locality, 29. iv. 1982, H. SASAJI (NSC); 2 exs., Mt. Arashima, Fukui Pref., 19. vi. 1983, H. SASAJI (NSC); 1 ex., Koike, Kari-kominoike Pond, Fukui Pref., 19. vii. 1981, H. SASAJI (NSC); 1 ex., Koike, Oono, Fukui Pref., 8. vii. 1979, H. SASAJI (NSC); 1 ex., Nogo-hakusan, Oono-shi, Fukui Pref., 6. viii. 1982, H. SASAJI (NSC); 1 ex., Ikegahara, Oono, Fukui Pref., 26. vi. 1983, H. SASAJI (NSC); 1 ex., Umenoki-Otsu, Shiga Pref., 6. xii. 1980, T. OGATA (NSC).

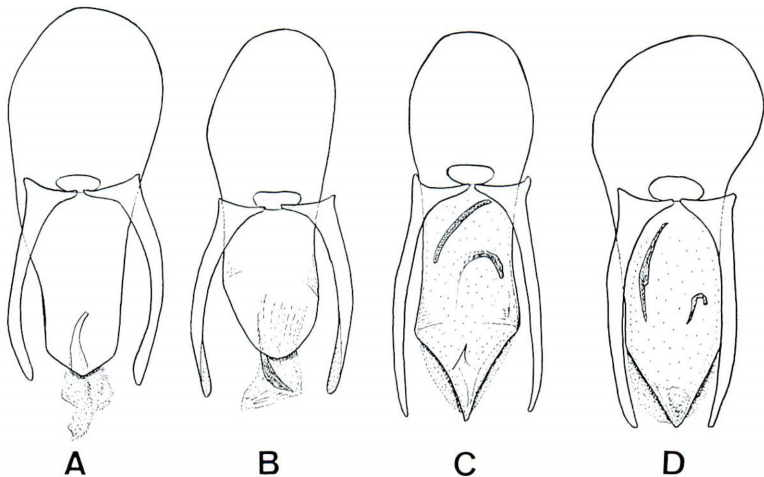


Fig. 1. Aedeagi of *Siagonium* spp. in dorsal view.

A, *S. debile* SHARP; B, *S. puthzi* sp. nov.; C, *S. hammondi* sp. nov.; D, *S. deboiseae* sp. nov.

Distribution. Japan (Honshu).

Remarks. *Siagonium debile* is allied to *puthzi*, but in the former species the median lobe of aedeagus is bluntly pointed at apex, and the parameres extend a little beyond the apex of median lobe.

The specimens measured are as follows: male (lectotype) and female (Nikko. Japan/ Japan. Lewis./ SHARP Coll. 1905-313; NHML).

Siagonium puthzi NAOMI, sp. nov.

Male and female. Body 2.6-3.2 mm in length, subparallel-sided and shining.

Coloration. Head black to dark brown, with clypeofrontal area brown to reddish brown; pronotum black to dark brown; elytra dark brown to brown in central part, reddish brown to yellowish brown along lateral and posterior margins; abdomen black to dark brown, with 8th segment reddish brown; antennae and legs reddish brown to yellowish brown.

Male. Relative measurements: HL: 35; HW: 58; PL: 42; PW: 53; EL: 75; EW: 58; ALP: 20 : 10 : 17 : 15 : 18 : 18 : 18 : 17 : 16 : 15 : 22.

Head similar in structure to *debile*, but a little smaller and less robust, antennal tubercles a little narrower and less developed, horns thinner and longer, clypeofrontal area narrowed anteriorly, with its anterior margin almost straight; surface on clypeofrontal area with very sparse punctures and indistinct microsculptures, vertex with punctures moderate in density and size, weakly irregular, interstice distinctly and reticulately microsculptured, narrower than to about as broad as diameter of puncture; two long setae and other several short setae along dorsal margin of eye. Eyes larger than those of *debile*, prominent, distinctly longer than postocular areas. Antennae slender, reaching posterior margin of 4th abdominal tergite. Mandibles similar in structure to *dibile*, but a little slenderer.

Pronotum similar in structure to *debile*, but sometimes flatter and less weakly constricted at base, anterior margin weakly arcuate, side margins marginate, rounded in anterior $\frac{2}{3}$, and subparallel in posterior $\frac{1}{9}$ to $\frac{1}{10}$, posterior margin almost straight to very weakly arcuate; surface with a median longitudinal groove shallow, narrowed in posterior part, a pair of mediolateral foveae which are shallow and round; punctures round to elliptical, distinct, dense and somewhat irregular, interstice with distinct to indistinct microsculptures. Mesoscutellum elongate tongue-shaped, minutely but distinctly microsculptured on anterior $\frac{1}{2}$, smooth and very shining at posterolateral marginal area, lateral margins weakly sinuate.

Elytra elongate-rectangular, subparallel-sided, humeral areas and posterolateral corners rounded, hind margins almost straight; surface similar in structure to *debile*.

Abdomen parallel-sided in 4th to 7th segments, very weakly narrowed posteriorly in 8th segment; paratergites well-developed and erect; dorsal surface with very sparse and fine punctures, and covered with very fine but distinct microsculptures. Aedeagus (Fig. 1-B) with median lobe weakly bulbous at base, a little irregularly narrowed toward apex which is a little asymmetrically rounded, apicolateral corners absent, internal armatures as in Fig. 1-B; parameres longer than those in *debile*, gently curved inward in full length, distinctly extending beyond apex of median lobe.

Female. Relative measurements: HL: 25; HW: 47; PL: 34; PW: 46; EL: 68; EW: 55; ALP: 11 : 7 : 8 : 6 : 7 : 8 : 8 : 8 : 8 : 14.

Head smaller than in male, genal area distinct and parallel-sided, anterior margin rounded, horns absent. Antennae reaching the middle of elytra. Mandibles each short, relatively broad, flat above and simply pointed, left mandible with a very small tooth at about apical $\frac{1}{3}$ of its internal edge.

Holotype: ♂ (Type No. CBM-ZI 33613), Mt. Mayuyama, Shimabara, Nagasaki Pref., 4. i. 1978, S. IMASAKA. Paratypes: 1 ex., Soranumadake, Hokkaido, 28. v. 1985, M. OHARA (NSC); 4 exs., same data as holotype (NSC); 2 exs., Mt. Unzen, Shimabara, Nagasaki Pref., 24. ix. 1983, M. T. CHŪJŌ (NSC); 1 ex., same locality, 4. x. 1978, S. IMASAKA (NSC).

Distribution. Japan (Hokkaido, Kyushu).

Remarks. *Siagonium puthzi* sp. nov. is allied to *debile*, but in the new species the body is less robust, and the head and pronotum are flatter above. In addition, the median lobe of aedeagus is rounded at apex, its apicolateral corner is absent, and the parameres are longer (Fig. 1-B).

At the present stage, the distributional range of *puthzi* is separated into Hokkaido and Kyushu. However, the separated condition of its distribution is, I suppose, due to incomplete investigation, and this species will be additionally found also from Honshu.

Specimens measured are as follows: male (holotype) and female (Mt. Mayuyama, Shimabara, Nagasaki Pref., 4. i. 1978, S. IMASAKA; NSC).

Etymology. This species is named in honor of Dr. VOLKER PUTHZ (Schlitz, Germany), whose kind guidance and cooperation in my study of Japanese Steninae are very much thankful to me.

Siagonium hammondi NAOMI, sp. nov.

Male. Body 3.0-3.2 mm in length, subparallel-sided and shining.

Coloration. Head, pronotum and abdomen black to dark reddish

brown; elytra black to dark brown in central part, reddish brown along lateral to posterior margins; antennae and legs brown through reddish brown to yellowish brown.

Relative measurements: HL: 35; HW: 59; PL: 39; PW: 52; EL: 72; EW: 63; ALP: 18 : 10 : 12 : 11 : 14 : 14 : 14 : 15 : 15 : 20.

Head with antennal tubercle of one side minutely and oddly emarginate at its anterior margin, in other words, the anterior margin of tubercle provided with two small protuberances, the posterior (outer) protuberance much broader (larger) than anterior (inner) one, horns absent, a pair of large, round and shallow depressions between antennal tubercles, clypeofrontal area smoothly continuous to vertex, relatively broad, with its anterior margin very weakly sinuate or almost straight, genal area subparallel-sided, vertex gently convex, postocular area rounded; surface with punctures round, dense, distinct and almost regular, interstice smooth and shining, usually narrower than diameter of puncture; two long setae and additional short ones along dorsal margin of eye. Eyes small, round and prominent, about as long as postocular areas. Antennae long and slender, reaching posterior margins of elytra. Mandibles each consisting of two teeth, a ventral tooth short, broad and pointed, and a dorsal tooth longer and narrower than ventral one, acutely pointed at apex.

Pronotum moderately convex above, marginate laterally and posteriorly, rounded laterally in anterior $\frac{2}{3}$, then constricted at base, and distinctly angulate at posterolateral corners, anterior margin almost straight, posterior margin very weakly arcuate; surface almost even, with a median longitudinal groove narrow, a small fovea at posterior end of the groove, mediolateral depressions shallow, each extending to inside of posterolateral corner of pronotum; punctures round, dense, distinct and almost regular, interstice very smooth and shining, usually narrower than diameter of puncture; four setae along anterior margin. Mesoscutellum elongate tongue-shaped, minutely sculptured on anterior part, very smooth on posterior part.

Elytra elongate-trapezoidal, weakly convex above, side margins weakly arcuate, posterolateral corners rounded, hind margins together forming a very weak emargination near sutural area; surface on each elytron with 6 or 7 rows of punctures, interstice almost smooth and shining.

Abdomen moderately convex above, subparallel-sided; paratergites developed; surface with very minute and sparse punctures and reticulate microsculptures. Aedeagus (Fig. 1-C) with median lobe weakly bulbous at base, weakly constricted at the middle, then weakly broadened toward apicolateral corners which are narrowly rounded and weakly expanded

laterally, apicolateral margins very weakly and arcuately emarginate, apex acutely pointed, internal armatures consisting of three pieces, apical one spine-shaped and pointed toward base, median one fishing-hook-shaped, basal one baculiform but a little curved; parameres hardly reaching apex of median lobe, slender and almost straight or weakly curved inward in full length.

Female. Unknown.

Holotype: ♂ (Type No. CBM-ZI 33614), Mt. Tsurugi, Tokushima Pref., 15-17. x. 1980, S. NAOMI. Paratype: 1 ♂, Mt. Tara, Nagasaki Pref., 4. vi. 1980, S. IMASAKA (NSC).

Distribution. Japan (Shikoku, Kyushu).

Remarks. *Siagonium hammondi* sp. nov. is allied to *deboiseae*, but in the former species the mandible is provided with dorsal tooth in male, and the median lobe of aedeagus is weakly but distinctly constricted at the middle.

Etymology. This species is named in honor of Dr. PETER HAMMOND (NHML), who is helpful in loaning me the type specimens used in this study.

Siagonium deboiseae NAOMI, sp. nov.

Male and female. Body 2.5-3.3 mm in length, subparallel-sided and moderately shining.

Coloration. Head, pronotum and abdomen black; elytra black to dark brown in central part, reddish brown along lateral and posterior margins, but sometimes reddish-brown parts of lateral sides are broken into humeral areas and posterolateral corners, contrast between these two colors stronger than that in *hammondi*; antennae with 1st segment dark brown, 2nd to 11th brown to reddish brown; legs reddish brown to yellowish brown.

Male. Relative measurements: HL: 35; HW: 55; PL: 35; PW: 49; EL: 66; EW: 58; ALP: 20 : 9 : 11 : 8 : 10 : 10 : 10 : 10 : 10 : 15.

Head similar in structure to that in *hammondi*, antennal tubercles weakly prominent, each with its anterior margin vaguely or weakly emarginate, without horn, anterior margin of head almost straight or very weakly arcuate, median area between antennal tubercles depressed, with a pair of large and shallow depressions, vertex almost flat to weakly convex above, postocular areas rounded; surface with punctures round, distinct, moderately dense in anterior part, dense in posterior part, sometimes umbilicate, interstice very smooth and shining, narrower than diameter of puncture even in anterior part; two long setae along dorsal margin of eye. Eyes similar in structure to those in *hammondi*. Antennae long, reaching posterior margins of elytra in larger individual, but reaching posterior $\frac{2}{3}$ of elytra in smaller individual. Mandibles

each short, flat above, and simply pointed at apex, left mandible with a very small tooth near apical $\frac{1}{3}$ of internal edge.

Pronotum moderately convex above and marginate at lateral sides, weakly arcuate at anterior margin, rounded laterally in anterior $\frac{2}{3}$, constricted at base, posterolateral corners distinctly angulate, posterior margin straight; surface with a median longitudinal groove narrow but distinct, mediolateral depressions shallow, each extending to near posterolateral corner; punctures round, distinct, dense and weakly irregular, interstice very smooth and shining, usually much narrower but sometimes a little narrower than diameter of puncture; several long setae along anterior margin. Mesoscutellum very elongate-triangular, sinuate laterally, its anterior part minutely sculptured, its posterior part very smooth, with several punctures.

Elytra relatively broad and moderately convex above, side margins very weakly rounded, posterolateral corners rounded, posterior margins together forming a very shallow emargination; surface similarly punctured as in *hammondi*.

Abdomen moderately convex above, subparallel-sided; paratergites developed and erect; surface with fine and sparse punctures and reticulate microsculptures. Aedeagus (Fig. 1-D) with median lobe strongly bulbous at base, then subparallel-sided or very weakly narrowed apically in the middle, moderately pointed at apex, apicolateral corners blunt, apicolateral margins straight, internal armatures composed of two pieces, right one fishing-hook-shaped, smaller than that in *hammondi*, left one baculiform, a little curved; parameres slender, reaching just apex of median lobe.

Female. Relative measurements: HL: 32; HW: 50; PL: 32; PW: 45; EL: 62; EW: 51; ALP: 17 : 9 : 10 : 9 : 9 : 9 : 9 : 9 : 9 : 17.

Sexual dimorphism almost absent in the structures of head (including antennae and mandibles) and thorax.

Holotype: ♂ (Type No. CBM-ZI 33615), Ohdaigahara, Nara Pref., 29. v. 1985, S. NOMURA. Paratypes: 4 exs., same data as holotype (NSC); 2 exs., Yunoyama Spa, Mie Pref., 11. v. 1975, H. OHISHI (NSC).

Distribution. Japan (Honshu).

Remarks. *Siagonium deboiseae* sp. nov. is allied to *hammondi*, but in the former species the mandible has no dorsal tooth in male, and the median lobe of aedeagus is subparallel-sided or very weakly narrowed apically.

Specimens measured are as follows: male (Ohdaigahara, Nara Pref., 29. v. 1985, S. NOMURA; NSC) and female (Yunoyama Spa, Mie Pref., 11. v. 1975, H. OHISHI; NSC).

Etymology. This species is named in honor of Miss EMMA DEBOISE (NHML), who kindly arranged for me the loan of type specimens used in this paper.

Acknowledgements

I would like to express my sincere gratitude to Dr. PETER HAMMOND and Miss EMMA DEBOISE (The Natural History Museum, London) for their kind loan of type materials of *Siagonium debile*. My cordial thanks are also due to Dr. TAKEHIKO NAKANE (Chiba City) for his kind loan of valuable specimens of Japanese *Siagonium*.

References

- ADACHI, T., 1957. The staphylinid fauna of Japan. J. Toyo Univ., (11):1-35.
- BERNHAEUER, M. & K. SCHUBERT, 1910. Staphylinidae I. In S. SCHENKLING (ed.), Coleopterorum Catalogus, (19):1-86. W. Junk, Berlin.
- NAKANE, T., 1963. Staphylinidae. In Iconographia Insectorum Japonicorum Colore naturali edita, Vol. II (Coleoptera), pp. 81-100. Hokuryukan, Tokyo. (In Japanese).
- NAOMI, S., 1995. Revision of the subfamily Piestinae (Coleoptera: Staphylinidae) from Japan, I. Nat. Hist. Res., Chiba, 3 (2). (In press).
- SHARP, D., 1889. The Staphylinidae of Japan. Ann. Mag. nat. Hist., (6) 3:28-44, 108-121, 249-267, 319-334, 406-419, 463-476.
- SHIBATA, Y., 1976. Provisional check list of the family Staphylinidae of Japan. I (Insecta: Coleoptera). Ann. Bull. Nichidai Sanko, (19):71-212. (In Japanese).
- WATANABE, T., 1985. Staphylinidae (part). In UÉNO, S.-I., Y. KUROSAWA and M. SATO (eds.), The Coleoptera of Japan in Color. Vol. II, pp. 261-289. Hoikusha, Osaka. (In Japanese).

A New Species of the Genus *Tritoma* from Japan (Coleoptera, Erotylidae)

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2399, Kida-chô, Suzuka-shi, Mie Pref., 513 Japan

Recently I had an opportunity to examine unknown erotylid beetles from Fukushima Pref., Japan. After the close examination, I recognized them as a new species and I am going to describe it.

Before going further, I wish to express my hearty thanks to Mr. KENJI KUBOTA for his kind offer of these valuable materials, to Dr. MICHIO CHÛJÔ for his useful advice on literature, to Dr. KÔHEI KUBOTA for his reading the manuscript, and to Mr. HISAYUKI MORITA for his drawing fine line sketch (Fig. 1).

Tritoma kubotai sp. nov.

(Figs. 1, 2)

(Japanese name: Abukuma-chibi-ohkinokomushi)

Body rather widely oval, strongly convex on dorsum, about 1.79 times as long as wide; black in greater parts and bright, head red posteriorly, mouth parts and maxillary palpus yellowish brown, antennae dark reddish brown, each with three terminal and clubbed segments blackish brown, abdominal sternites dark reddish brown except for the 1st sternite blackish brown, tibiae blackish brown, tarsi dark reddish brown, scutellum and elytra red, elytra with a large and black macula; the macula semicircular, slightly elongate, occupying most portion of elytral disc, slightly notched on 2nd intervals of anterior margin, and rounded at the anterior corners.

Head nearly half as wide as pronotum, sparsely punctured, the punctures large and rough; clypeus rather strongly narrowed anteriorly, strongly emarginate and immarginate at apex, but finely marginate in lateral portions; eyes moderate in size, interocular distance about three times as wide as the transverse diameter of eye; antennae (Fig. 2-A) eleven-segmented, three terminal segments forming a club; 1st segment

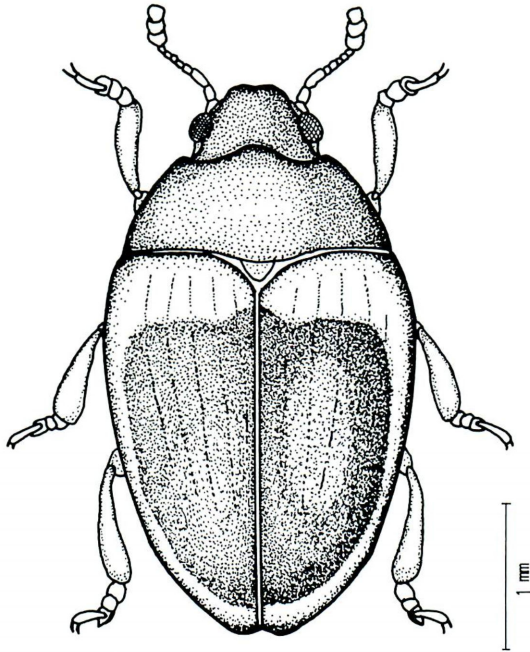


Fig. 1. *Tritoma kubotai* sp. nov., dorsal habitus.

cylindrical, wider than long, weakly convergent towards apex; 2nd longer than wide; 3rd twice as long as 2nd, about 2.3 times as long as wide; 4th as long as wide; 5th longer than wide; 6th and 7th as long as wide individually; 8th wider than long; 9th about 1.5 times as wide as long; 10th about 1.7 times as wide as long; 11th about 1.2 times as wide as long, rounded at apex. Terminal segment of maxillary palpus (Fig. 2-B) strongly transverse, about three times as wide as long; mentum (Fig. 2-C) elongate and subpentagonal, pointed at apex.

Pronotum transverse, about 2.23 times as wide as long, widest at base; anterior margin shallowly bisinuate, gently arched and produced forwards at the middle; anterior corners roundly projected forwards; posterior corners slightly angulate; lateral margins clearly marginate, gradually narrowed in basal half and strongly so in the rest; disc sparsely punctured, the punctures large and rough, nearly as same as those on head.

Elytra elongate, about 1.15 times as long as wide, widest at basal two-fifths and slightly wider at base than pronotum, with nine seriate rows of punctures, in which punctures are relatively larger than those on pronotum, 9th rows situated on lateral margins; intervals sparsely

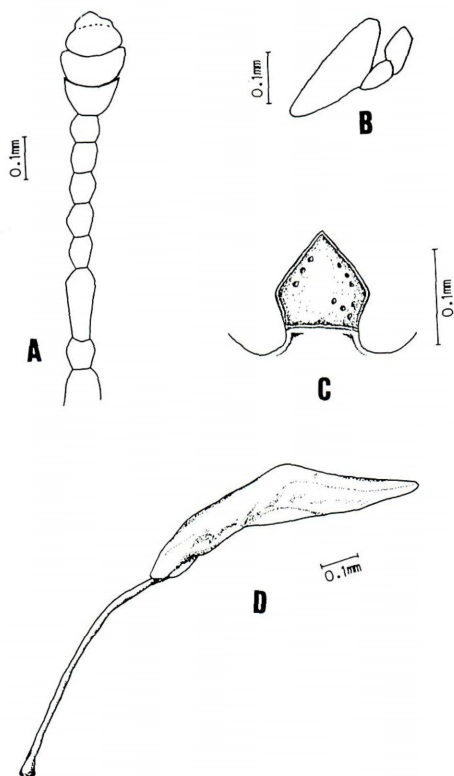


Fig. 2. *Tritoma kubotai* sp. nov.

A: Antenna; B: maxillary palpus; C: mentum;
D: male genitalia.

and minutely punctured; basal corners slightly produced forwards, and rather pointed at the apices; basal margin clearly marginate; lateral margins weakly arcuate in basal two-fifths and strongly narrowed forwards in apical two-fifths.

Prosternum sparsely punctured; prosternal process slightly arcuate posteriorly, longer than wide; prosternal carinae straight, distinctly convergent anteriorly and slightly bent inwards at their apices. Metasternum with large and rough punctures, sparsely bearing short hairs; metacoxal line entire in whole length, longitudinal carinae extending near posterior margin of 1st abdominal segment.

Body length: 3.55-4.40 mm; width: 2.10-2.40 mm.

Distribution: Japan (Honshu).

Holotype: ♂, Idekawa-rindô, Kawauchi-mura, Futaba-gun, Fukushima Pref., 30. VII. 1989, K. KUBOTA leg. (preserved in the Collection of the Osaka Museum of Natural History (OMNH), Type No. TI 55). Paratypes: 3 ♂♂, 3 ♀♀, the same data as the holotype (preserved in the Collection of the Osaka Museum of Natural History and in my collection).

Food-fungus: *Poly-porellus badius* (PERS.: S. F. GRAY) IMAZ. (Japanese name: Ashiguro-take).

Remarks. This new species resembles *Tritoma maculifrons pseudodiscalis* NAKANE, 1961, and *Tritoma discaloides* NAKANE, 1986, in having elytral black marking, but the former is easily distinguished from the latter two species by the clypeus emarginate at the apex and the mentum more elongate.

The new species is also similar to *Tritoma discalis* (LEWIS, 1887), but it is quite different from the latter in having the larger and wider body, the macula of elytra neither oval nor rhombic, and not strongly projected forwards at the anterior margin.

Etymology. The specific name of the new species is given after Mr. KENJI KUBOTA, for it was captured only by him from the low mountainous area of Fukushima Pref., Northern Japan.

References

- BOYLE, W. W., 1956. A revision of the Erotylidae of America, North of Mexico (Coleoptera). Bull. Amer. Mus. Nat. Hist., N. Y., 110 (2): 117-118.
- CHÛJÔ, M., 1969. Fauna Japonica, Erotylidae. 316 pp., 23 pls.
- LEWIS, G., 1887. A list of fifty Erotylidae from Japan, including thirty five new species and four new genera. Ann. Mag. Nat. Hist., (5) 20 (115): 53-73.
- NAKANE, T., 1961. New or little-known Coleoptera from Japan and its adjacent regions. XV. Fragm. Coleopt., (1): 1-6.
- 1986. Notes on some species of Erotylidae occurring [sic] in Japan, with description of a new species. Kita-Kyûshû no Konchû, 33 (3): 131-134, pl. 1.

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