

PSEPHENIDAE:
II. Synopsis of *Schinostethus* WATERHOUSE,
with descriptions of 14 new species
(Coleoptera)

C.-F. LEE, M.A. JÄCH & P.-S. YANG

Abstract

The genus *Schinostethus* WATERHOUSE (Coleoptera: Psephenidae: Eubriinae) is updated taxonomically and faunistically. Two subgenera are recognized: *Schinostethus* s.str. and *Sundodrupeus* PIC. Fourteen new species are described: *S.* (s.str.) *brevicornis* sp.n. [East Malaysia], *S.* (s.str.) *jii* sp.n. [China], *S.* (s.str.) *luzonicus* sp.n. [Philippines], *S.* (s.str.) *malickyi* sp.n. [Thailand], *S.* (s.str.) *medius* sp.n. [Nepal], *S.* (s.str.) *sichuanensis* sp.n. [China], *S.* (*Sundodrupeus*) *albosulcus* sp.n. [Vietnam, Laos], *S.* (*Sundodrupeus*) *laosensis* sp.n. [Laos], *S.* (*Sundodrupeus*) *maculatus* sp.n. [West Malaysia], *S.* (*Sundodrupeus*) *nepalensis* sp.n. [Nepal], *S.* (*Sundodrupeus*) *pacholatkoii* sp.n. [Vietnam], *S.* (*Sundodrupeus*) *priscus* sp.n. [East Malaysia], *S.* (*Sundodrupeus*) *sakaii* sp.n. [Philippines], *S.* (*Sundodrupeus*) *vietnamensis* sp.n. [Vietnam, Laos].

The following new synonymies are proposed (junior synonyms in square brackets): *Schinostethus* (s.str.) *brevis* (LEWIS, 1895) [= *Drupeubria brevis takeuchii* NAKANE, 1952], *Schinostethus* (s.str.) *opacus* (WATERHOUSE, 1880) [= *Drupeus pruinosus* PIC, 1923].

Lectotypes are designated for *Drupeus indicus* PIC, 1916, *Drupeus notatithorax* PIC, 1923, *Drupeus notatithorax* var. *theresae* PIC, 1944, *Drupeus pruinosus* PIC, 1916, *Drupeus pruinosus* PIC, 1923.

New combinations: *Schinostethus indicus* (PIC, 1916), *Schinostethus notatithorax* (PIC, 1923), *Schinostethus notatithorax* var. *theresae* (PIC, 1944), *Schinostethus pruinosus* (PIC, 1916), *Schinostethus pruinosus* (PIC, 1923), and *Sundodrupeus* PIC, 1916 are transferred from *Drupeus* LEWIS. *Schinostethus diversipes* (PIC, 1923) is transferred from *Grammeubria* KIESENWETTER.

Keys to males of both subgenera are provided.

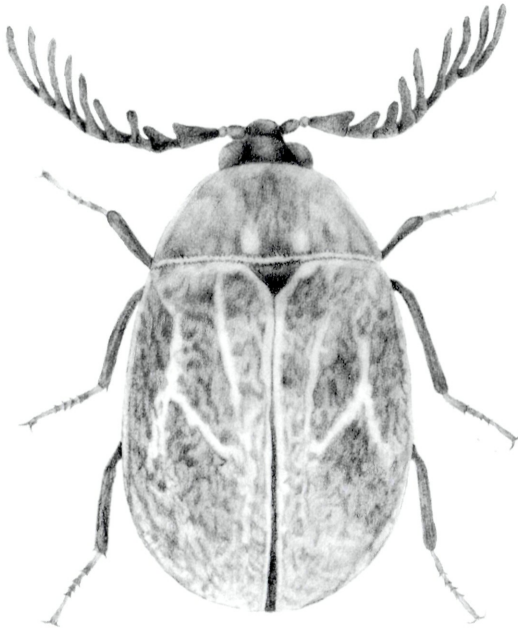
Numerous new distributional data are presented. The genus *Schinostethus* is recorded for the first time from Nepal, Bhutan, Sichuan, Yunnan, Fujian, Hong Kong, Laos, Philippines, Sabah, Bali.

Key words: Coleoptera, Psephenidae, *Schinostethus*, *Sundodrupeus*, taxonomy, new species, Oriental Realm.

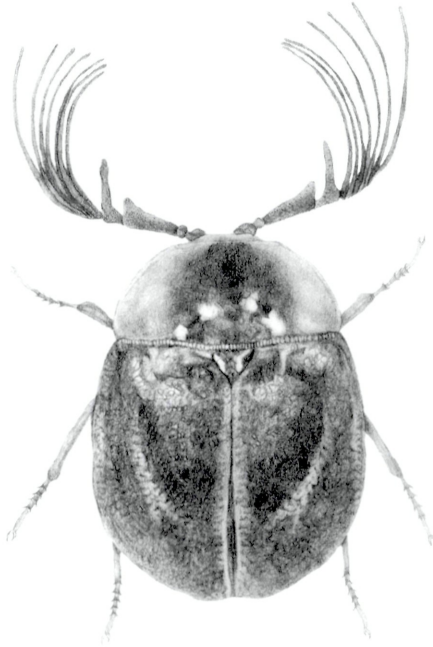
Introduction

Schinostethus WATERHOUSE belongs to the subfamily Eubriinae. This genus is widely distributed in the Oriental realm and the E Palearctic region. *Schinostethus* was reviewed taxonomically by LEE & al. (1993). The present paper is an update to that review and it is not to be regarded as a thorough revision. Included are descriptions of 14 new species, keys (for males), lectotype designations, new synonymies, new combinations, and numerous new distributional data.

The genus *Schinostethus* is recorded for the first time from Nepal, Bhutan, Sichuan, Yunnan, Fujian, Hong Kong, Laos, the Philippines, Sabah, and Bali.



1



2

Figs. 1 - 2: Habitus of 1) *Schinostethus* (s.str.) *opacus*, male, 2) *S. (Sundodrupeus) notaitithorax*, male.

Acronyms & CWBS localities:

BNMH	The Natural History Museum, London
BPBM	Bishop Museum, Honolulu
CASS	Chinese Academy of Sciences, Institute of Applied Ecology, Shenyang
CNC	Canadian National Collection, Biosystematics Research Centre, Ottawa
MIING	Muséum d'Histoire naturelle, Geneva
MNIHP	Muséum national d'Histoire naturelle, Paris
NML	Nationaal Natuurhistorisch Museum, Leiden
NMB	Naturhistorisches Museum, Basel
NMW	Naturhistorisches Museum, Wien
NTU	National Taiwan University, Taipei
SIW	Smithsonian Institution, Washington, D.C. [= National Museum of Natural History]
TMB	Természettudományi Múzeum, Budapest
WUN	Women's University, Nagoya
ZMUC	Universitetets Zoologisk Museum, Copenhagen
WP	Maxium width of pronotum
LP	Length of pronotum at middle
WE	Maxium width of elytra
LE	Length of elytra

CWBS loc. 225: **Sichuan Province**; Yaan City Region; ca. 16 km N Yaan City and ca. 3 km N Shangli Town; small stream, ca. 0.5 m wide, ca. 950 m a.s.l.; 9.VI.1996; leg. Ji & Wang.

Check List of the genus *Schinostethus*

- | | |
|--|---|
| 1. <i>S.</i> (s.str.) <i>brevicornis</i> sp.n. | East Malaysia (Sabah) |
| 2. <i>S.</i> (s.str.) <i>brevis</i> (LEWIS, 1895)
= <i>S. brevis takeuchii</i> (NAKANE, 1952) syn.n. | Japan (Honshu, Shikoku), China (Fujian) |
| 3. <i>S.</i> (s.str.) <i>jii</i> sp.n. | China (Sichuan) |
| 4. <i>S.</i> (s.str.) <i>luzonicus</i> sp.n. | Philippines (Luzon) |
| 5. <i>S.</i> (s.str.) <i>malickyi</i> sp.n. | Thailand |
| 6. <i>S.</i> (s.str.) <i>medius</i> sp.n. | Nepal |
| 7. <i>S.</i> (s.str.) <i>minutus</i> LEE & al., 1993 | East Malaysia (Sarawak) |
| 8. <i>S.</i> (s.str.) <i>niger</i> LEE & al., 1993 | India, Nepal |
| 9. <i>S.</i> (s.str.) <i>nigricornis</i> WATERHOUSE, 1880 species complex | China, Vietnam, Laos, Thailand, Malaysia, Burma, Bhutan, India, Nepal |
| <i>S. indicus</i> (PIC, 1916) comb.n. | |
| <i>S. diversipes</i> (PIC, 1923) comb.n. | |
| <i>S. nigricornis</i> WATERHOUSE, 1880 | |
| 10. <i>S.</i> (s.str.) <i>opacus</i> (WATERHOUSE, 1880)
= <i>S. pruinatus</i> (PIC, 1923) comb.n., syn.n. (junior homonym) | Indonesia (Java, Bali) |
| 11. <i>S.</i> (s.str.) <i>satoi</i> LEE & al., 1993
= <i>Schinostethus satoi junghuaensis</i> LEE & al., 1993 | Taiwan |
| 12. <i>S.</i> (s.str.) <i>sichuanensis</i> sp.n. | China (Sichuan) |

- | | |
|--|-------------------------|
| 13. <i>S. (Sundodrupeus) albosulcus</i> sp.n. | Vietnam, Laos |
| 14. <i>S. (Sundodrupeus) flabellatus</i> LEE & al., 1993 | Thailand, West Malaysia |
| 15. <i>S. (Sundodrupeus) laosensis</i> sp.n. | Laos |
| 16. <i>S. (Sundodrupeus) maculatus</i> sp.n. | West Malaysia |
| 17. <i>S. (Sundodrupeus) nepalensis</i> sp.n. | Nepal |
| 18. <i>S. (Sundodrupeus) notatithorax</i> (PIC, 1923) comb.n.
= <i>S. notatithorax</i> var. <i>theresae</i> Pic, 1944 comb.n., syn.n. | Vietnam, Laos, Thailand |
| 19. <i>S. (Sundodrupeus) pacholatkoii</i> sp.n. | Vietnam |
| 20. <i>S. (Sundodrupeus) priscus</i> sp.n. | East Malaysia (Sabah) |
| 21. <i>S. (Sundodrupeus) pruinosus</i> (PIC, 1916) comb.n. | Indonesia (Java) |
| 22. <i>S. (Sundodrupeus) sakaii</i> sp.n. | Philippines (Palawan) |
| 23. <i>S. (Sundodrupeus) vietnamensis</i> sp.n. | Vietnam, Laos |

1. *Schinostethus* s.str. WATERHOUSE

The subgenus *Schinostethus* (s.str.) is characterized by 1) antennal segments not shortened, their rami moderately long and not flattened laterally; 2) medio-apical processes of parameres very small, dorsally located, and slightly surpassing the latero-apical processes; usually with a small denticle on each medio-lateral process.

Schinostethus (s.str.) *brevicornis* **sp.n.**

TYPE MATERIAL: **Holotype** ♂ (NMW): "Malaysia, Sabah, Crocker Range, Gunung Emas Highland Resort env., 1500-1700m, 6.-18.VI.1996, 2 a".

MALE: Total length 3.4 mm, width 1.3 mm. Color blackish brown; but scape, pedicel, elytra, tibiae, and tarsi brown. Antennal segments 3 and 4 triangular; relative lengths of rami of segments 3 - 9 about 0.24 : 0.30 : 0.39 : 0.59 : 0.78 : 0.91 : 1 (Fig. 3b). WP/LP = 2.31; LE/WE = 1.17; WP/WE = 0.78.

Aedeagus (Fig. 3a): 2.4 x as long as wide. Penis 0.8 x total length of aedeagus, strongly widened at apical 1/10, subparallel from apical 1/10 to base; apex narrowly rounded; baso-lateral apophyses short, 0.3 x total length of penis. Parameres widest at apex of basal piece; sides almost straight from latero-apical process to apex of basal piece; latero-apical processes short, apex broadly rounded, reaching denticles on medio-apical processes; mesal margins slightly emarginate at apical 1/10; sides subparallel. Basal piece 0.3 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: This species and *S. minutus* are easily distinguished from others by the short rami on antennal segments 4-6; differing from *S. minutus* by the presence of medio-apical parameral processes.

ETYMOLOGY: The name refers to the short antennae.

DISTRIBUTION (Fig. 24): So far known only from the type locality.

***Schinostethus* (s.str.) *brevis* (LEWIS)**

Drupeus brevis LEWIS 1895: 103.

Drupeubria brevis: NAKANE 1952: 37.

Cophaesthetus brevis: NAKANE & al. 1963: 143.

Schinostethus brevis: LEE & al. 1993: 684.

Drupeubria brevis f. *takeuchii* NAKANE 1952: 37. **syn.n.**

Cophaesthetus brevis takeuchii: SATŌ 1983: 4.

Schinostethus brevis takeuchii: LEE & al. 1993: 684.

MATERIAL EXAMINED:

CHINA: FUJIAN: 1 ♂ + 1 ♀ (BPBM): "Fukien, S. China Chungan Bohea Hills 24.IV.1940 T.C.Maa".

SYNONYM: Apparently, *S. b. takeuchii* is a color variation of *S. brevis* (T. Nakane, personal communication).

VARIABILITY: The specimens from Fujian have a more prominent medio-apical parameral process and rounded apex of penis.

DIFFERENTIAL DIAGNOSIS: This species is easily distinguished from others by the bicolored (yellowish and brown) pronotum, antero-medially darkened.

DISTRIBUTION (Fig. 23): Japan (Honshu, Shikoku), China (Fujian).

***Schinostethus* (s.str.) *jii* sp.n.**

TYPE MATERIAL: **Holotype** ♂ (CASS): "CHINA: Sichuan, 9.6.1996 ca. 16 km N Ya'an City 3 km N Shangli, 950m leg. Ji & Wang (CWBS 225)". **Paratypes:** 1 ♂ (NMW), same data as holotype; 1 ♂ (NMB): "CHINA: Sichuan Mt. EMEI, 1050m 18. VII. 1990 L. & M. Bocak lgt.".

MALE: Total length 3.2 mm, width 2.1 mm. Coloration dark chestnut; eyes and antennomeres 3 - 11 black; venter dark chestnut except prothoracic sterna, antero-medial area of meso- and metasterna, tibiae and tarsi chestnut. Antenna (Fig. 4d): relative lengths of rami of antennal segments 3 - 9 about 0.31 : 0.41 : 0.52 : 0.71 : 0.86 : 1 : 1.07. Maxillary palpus (Fig. 4b) slender, relative lengths of segments 2 - 4 about 2.6 : 1 : 1.8; terminal segment apically dilated, apex truncate. Labial palpus (Fig. 4c) small, 0.5 x as long as maxillary palpus; terminal segment medially dilated, apex slightly emarginate; relative lengths of segment 2-3 about 1: 1.3. WP/LP = 2.32. LE/WE = 1.16. WP/WE = 0.82.

Aedeagus (Fig. 4a): slender, 3.5 x as long as wide. Penis 0.6 x total length of aedeagus, widened at apical 1/3, and narrowed at middle; apex narrowly rounded; baso-lateral apophyses small, 0.4 x total length of penis. Parameres widest at apex of basal piece; sides straight; latero-apical process broadly rounded, much lower than denticles on medio-apical process; denticles on medio-apical process prominent; exceeding apex of penis. Basal piece 0.6 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: *Schinostethus jii* is similar to *S. brevicornis* in color, differing by its longer antennae and more narrow and shorter penis. *Schinostethus jii* is characterized by parameres with straight margins.

ETYMOLOGY: This species is named for Prof. Lanzhu Ji (Shenyang).

DISTRIBUTION (Fig. 22): China (Sichuan).

***Schinostethus* (s.str.) *luzonicus* sp.n.**

TYPE MATERIAL: **Holotype** ♂ (SIW): "Luzon P. J. Montalban, Sept., 1923 \ coll. R. C. McGregor".

MALE: Total length 3.4 mm, total width 2.2 mm. Coloration reddish brown; eyes black and antenna dark brown; scape and pedicel paler. Relative lengths of rami of antennal segments 3 - 9 about 0.27 : 0.38 : 0.56 : 0.75 : 0.98 : 1 : 1.02 (Fig. 5d). Maxillary palpus (Fig. 5b) slender, relative lengths of segments 2 - 4 about 2.2 : 1 : 2.0, terminal segment apically dilated, apex rounded. Labial palpus (Fig. 5c) small, about 0.49 x as long as maxillary palpus, terminal segment asymmetrical with straighter mesal face, apex truncate, relative lengths of segments 2 - 3 about 1 : 2.0. Hind tarsus slender, about 0.60 times as long as tibia, relative length of segments about 3.0 : 1.2 : 1.0 : 1 : 2.7. WP/LP = 2.88. LE/WE = 1.24. WP/WE = 0.85.

Aedeagus (Fig. 5a): 2.6 x as long as wide. Penis very small, 0.5 x total length of aedeagus, widened posteriorly; apex broadly rounded; baso-lateral apophyses short, 0.2 x total length of penis. Parameres widest at apex of basal piece; latero-apical processes very broadly rounded, much lower than denticles on medio-apical processes; denticles exceeding medio-apical processes; medio-apical processes on parameres in ventral position. Basal piece 0.7 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: *Schinostethus luzonicus* is very similar to *S. nigricornis* in color. It can be distinguished from the latter by its shorter penis and the parameres being ventrally articulated with medio-apical processes.

ETYMOLOGY: Named in reference to the type locality.

DISTRIBUTION (Fig. 23): Known only from the type locality.

Schinostethus (s.str.) *malickyi* sp.n.

TYPE MATERIAL: **Holotype** ♂ (NMW): "S-THAILAND: Boripat WF, 27.-28.4.1993, 200 m 6°59'N 100°09'E leg. Malicky". **Paratypes:** 2 ♂ ♂ (NTU, NMW), same data as holotype.

MALE: Total length 2.6 - 2.9 mm, total width 1.8 - 1.9 mm. Coloration blackish brown, except maxillary palpi and legs paler; eyes black. Relative lengths of rami of antennal segments 3 - 9 about 0.28 : 0.44 : 0.54 : 0.67 : 0.85 : 1 : 1.06 (Fig. 6c). Maxillary palpus (Fig. 6b) similar to *S. vietnamensis*, relative lengths of segments 2 - 4 about 2.8 : 1 : 2.4. Hind tarsus slender, about 0.63 x as long as tibia; relative lengths of segments about 3.3 : 1.3 : 1.2 : 1 : 3.7. WP/LP = 2.21 - 2.67. LE/WE = 1.04 - 1.13. WP/WE = 0.76 - 0.85.

Aedeagus (Fig. 6a): 3.1 x as long as wide. Penis 0.8 x total length of aedeagus, apically tapering from apical 1/4 to apex, subparallel from apical 1/4 to base; apex broadly acute; baso-lateral apophyses 0.2 x total length of penis. Parameres strongly narrowed at middle; sides convex from latero-apical processes to middle; latero-apical processes exceeding denticles on medio-apical processes; mesal margin strongly emarginate at apical 1/4, convex at middle. Basal piece 0.7 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: Though *S. malickyi* resembles *S. niger* in the black color, *S. malickyi* is easily distinguished by its short antennae and short medio-apical processes of the parameres.

ETYMOLOGY: This species is dedicated to Dr. H. Malicky (Lunz), who has collected many Psephenidae from the Oriental region.

DISTRIBUTION (Fig. 24): So far known only from the type locality.

Schinostethus (s.str.) *medius* sp.n.

Holotype ♂ (WUN): "June 1, 1972 J. Emoto leg. Kyushu Univ. Col. \ (E. NEPAL) Lelcp (1770m) 27°31'N, 87°31'E". **Paratypes:** 3 ♂ ♂ (WUN, NTU), same data as holotype; 1 ♂: "June 2, 1972 Y. Nishida leg. Kyushu Univ. Col. \ (E.

NEPAL) Lelep (1770m) 27°31'N, 87°31'E"; 1 ♂ (WUN): "(E. NEPAL) Gurza (2100m) 27°18'N, 87°33'E - Anbote (900m) 27°19'N, 87°38'E \ June 24, 1972 H. Makihara leg. Kyushu Univ. Col."; 1 ♂ (WUN): "July 19, 1972 Y. Nishida leg. Kyushu Univ. Col. \ (E. NEPAL) Chanlung (1250m) 27°26'N, 87°36'E - Dobhan (800m) 27°19'N, 87°38'E".

MALE: Total length 3.5 - 4.1 mm, total width 2.2 - 2.6 mm. Head black, but mouth parts, scape and pedicel paler; pronotum blackish brown, with antero-lateral areas paler; scutellum brown; elytra brown to blackish brown; venter brown, prosternum, tibiae, and tarsi paler. Relative lengths of rami of antennal segments 3 - 9 about 0.27 : 0.36 : 0.51 : 0.80 : 0.98 : 1 : 1.00 (Fig. 7d). Maxillary palpus (Fig. 7b) slender, terminal segment apically dilated, apex obliquely truncate, relative lengths of segments 2 - 4 about 2.8 : 1 : 2.1. Labial palpus (Fig. 7c) small, about 0.50 x as long as maxillary palpus, sides of terminal segment convex, apex arcuate, relative lengths of segments 2 - 3 about 1 : 1.5. WP/LP = 2.21 - 2.37. LE/WE = 1.18 - 1.23. WP/WE = 0.82 - 0.96.

Aedeagus (Fig. 7a): 2.8 x as long as wide. Penis 0.7 x total length of aedeagus, suddenly widened at apical 1/4; apex narrowly rounded; baso-lateral apophyses 0.3 x total length of penis. Parameres widest at apex of basal piece; sides slightly emarginate halfway between latero-apical process and apex of basal piece; latero-apical processes broadly rounded; medio-apical processes curved, exceeding penis, without denticles. Basal piece 0.7 x total length of aedeagus, dorsally connected with parameres.

DIFFERENTIAL DIAGNOSIS: This species has very elongate rami on the antennae and no denticles on medio-apical processes of parameres.

ETYMOLOGY: The aedeagal morphology of this species is somewhat intermediate between the subgenera.

DISTRIBUTION (Fig. 22): Nepal.

Schinostethus (s.str.) *minutus* LEE, YANG & BROWN

Schinostethus (s.str.) *minutus* LEE, YANG & BROWN 1993: 686.

TYPE MATERIAL: The holotype ♂ and 3 paratypes (2 ♂♂ + 1 ♀) are deposited in BMNH.

DIAGNOSIS: This species is easy to distinguish from other species by the weakly serrate antennal segments 4-5 and absence of the medio-lateral processes of the parameres.

DISTRIBUTION (Fig. 24): So far known only from the type locality (Sarawak).

Schinostethus (s.str.) *niger* LEE, YANG & BROWN

Schinostethus niger LEE, YANG & BROWN 1993: 687.

TYPE MATERIAL: The holotype ♂ and one paratype ♀ are deposited in BMNH.

MATERIAL EXAMINED:

INDIA: 1 ♂, Sikkim, Lagyap, 2500 m a.s.l., 2.VII.1982, leg. Ch.J. Rai (NMB).

NEPAL: 1 ♂ + 1 ♀, Basantapur, 27°07'N, 87°24'E, 2300 m a.s.l., 3.V.1972, leg. Y. Nishida (WUN); 1 ♂, Chitre-Tatopani, 1100-2500 m a.s.l., 11.V.1984, leg. C. Holzschuh (NMB).

DIAGNOSIS: *Schinostethus niger* is easily distinguished from other species by the elongate and truncate parameral apices.

VARIABILITY: The specimens examined herein have yellowish brown pronotal margins.

DISTRIBUTION (Fig. 22): India, Nepal.

Schinostethus (s.str.) *nigricornis* WATERHOUSE species complex

Schinostethus nigricornis WATERHOUSE 1880: 564; CHAMPION 1924: 251; LEE & al. 1993: 684.

Drupeus indicus PIC 1916: 3.

Grammeubria diversipes PIC 1923: 10.

TYPE MATERIAL: Holotype ♀ (BMNH) (wrongly identified as ♂ by LEE & al. 1993).

Lectotype ♂ of *Drupeus indicus* (by present designation, MNHP): "Sikkhim Kurseong, 3-6000 ft, F Newton Mai 1912 \ Type \ TYPE \ Muséum Paris Coll. M. Pic \ *Drupeus indicus*". **Paralectotype**: 1 ♂, same label data as lectotype (MNHP).

Syntype (? holotype) ♀ of *Grammeubria diversipes* (MNHP): "Sikkim März, April H. Fruhstorfer \ Type \ TYPE \ Muséum Paris Coll. M. Pic \ *Grammeubria diversipes* n sp". Additional syntypes might turn up, thus we refrain from a lectotype designation.

SYNONYMY: As long as the *S. nigricornis* species complex has not been revised thoroughly, we refrain from proposing new synonymies.

MATERIAL EXAMINED:

CHINA: HONG KONG: 3 ♂♂, 30.V.1965, leg. S. Asahina (WUN, NTU). **FUJIAN**: 1 ♂, "Kuatun" [= Guadun], 27.VIII.1946, coll. Pic (MNHP). **YÜNNAN**: 1 ♂ + 1 ♀, Baoshan, 5.-8.VI.1993, leg. E. Jendek & O. Šauša (NMW); 1 ♂, Weibaoshan, 25°12'N 100°24'E, 2800-3000 m a.s.l., 29.-30.VI.1992, leg. V. Kuban (NMB); 1 ♀, Cangshan, eastern slope, 25°42'N 100°08'E, 2000-2500 m a.s.l., 21.VI.1992, leg. D. Kral (NMB); 1 ♀, same locality as previous, 25°43'N 100°06'E, 2500-3000 m a.s.l., 25.VII.1992, leg. V. Kuban (NMB); 1 ♀, Gaoligong, 25°22'E 98°49'N, 1500-2500 m a.s.l., 17.-24.V.1995, leg. V. Kuban (NMB).

VIETNAM: 6 ♂♂ + 2 ♀♀, Lao Cai Prov., 28 km W Sa Pa, ca. 1600 m a.s.l., 2.VII.1997, leg. C.-F. Lee (NTU); 1 ♀, Sa Pa, 11.-15.V.1990, leg. P. Pacholatko (NMB).

LAOS: 1 ♂ + 2 ♀♀, Oudomxay, 12.-13.V.1996, leg. C.-F. Lee (NTU); Luang Namtha, 800 - 1200 m a.s.l., 1997 (NMW).

THAILAND: 1 ♂ + 2 ♀♀, Chiang Mai, Doi Inthanon, 1200 m a.s.l., Bang Khun Klang, at light, 98°32'E 18°32'N, 3.-10.X.1989, leg. P. Chantaramongkol & H. Malicky (NMW, NTU); 1 ♀, Doi Inthanon, 29.VIII.-5.IX.1989, leg. H. Malicky (NMW); 1 ♀, Doi Inthanon, 7.V.1980, leg. E. Fuller (NMW); 4 ♂♂, Maeo Khun Klang, 1350 m a.s.l., Doi Inthanon, 20.X.1983, leg. M. Sakai (WUN, NTU); 1 ♂, Maeo Khun Klang, 1300 m a.s.l., Doi Inthanon, 20.X.1983, leg. M. Tomokuni (WUN); 1 ♂ + 1 ♀, labelled as former, but "21.X.1983" (WUN); 2 ♂♂, Chiang Mai, Doi Pui, 19.IV.1985, leg. M. Tao (NTU); 1 ♂ + 1 ♀, Doi Pui, 7.V.1983, leg. H. Kan (NTU); 2 ♂♂, Doi Pui, 1400-1500 m a.s.l., 2.V.1982, leg. T. Shimomura (WUN); 1 ♂, labelled as former, but "28.IV.1982" (NTU); 1 ♀, labelled as former, but "6.V.1982" (WUN); 1 ♂, Meo Village, 31.V.1978, leg. K. & H. Akiyama (WUN).

MALAYSIA: 1 ♂, Pahang, Fraser's Hill, 1050 m a.s.l., Jeriau Waterfalls, 19.III.1993, leg. Löbl & Calame (MHNG).

BHUTAN: 1 ♂, Chongra, 18 km S Tongsa, 1900 m a.s.l., 22.VI.1972 (NMB).

INDIA: 5 ♂♂, Meghalaya, W Garo Hills, Nokrek, ca. 1100 m a.s.l., 25°29.6'N 90°19.5'E, 9.-17.V.1996, leg. Jendek & Šauša (NMW, NTU); 3 ♂♂, Kashmir, 1700-1800 m a.s.l., 7.III.1970, leg. H. Aspöck & H. Rausch (NMB); 1 ♂, Chaubattia, 1900-2100 m a.s.l., 25.V.1981, leg. M. Brancucci (NMB); 3 ♂♂, E Sikkim, Karponang, 2700 m a.s.l., 8.-11.XI.1984, leg. Ch.J. Rai (NMB); 1 ♂, Darjeeling, Shorang, 1300 m a.s.l., leg. B. Bhakta (NMB); 1 ♂, Darjeeling, Mane Bhanjang, Sukhia Pokhri, 9.VI.1975, leg. W. Wittmer (NMB); 1 ♀, Darjeeling, Kalimpong, Chitray, 300 m a.s.l., 8.V.1987, leg. Ch.J. Rai (NMB); 3 ♂♂, Sikkim, Kurseong, leg. R.P. Bretaudeau (NMW, MNHP) - aedeagus identical with aedeagus of lectotype of *S. indicus*.

NEPAL: 1 ♂ + 1 ♀, Gandaki, Kaski Distr., Suikhet, Chandrakot, 1000-1600 m a.s.l., 8.VI.1986, leg. C. Holzschuh (NMW); 1 ♀, Chichila-Mure, 1900 m a.s.l., 24.IV.1980, leg. W. Wittmer (NMB); 1 ♂, Danda Pakhar, 1800-2500 m a.s.l., 1.VI.1977, leg. M. Brancucci (NMB); 1 ♀, Bagmati, Sindhupalchok, Dapkakharka, 2100 m a.s.l., 11.VI.1989, leg. M. Brancucci (NMB).

TAXONOMY: The *Schinostethus nigricornis* species complex is composed of several closely related and partly very variable species. This complex still needs to be revised thoroughly. We were so far not able to separate the species of the complex satisfactorily.

Aedeagus (Figs. 8a, b).

DISTRIBUTION (Fig. 22): Bhutan, Burma, China (Fujian, Hong Kong, Yunnan), India, Laos, Malaysia, Nepal, Thailand, Vietnam.

***Schinostethus* (s.str.) *opacus* (WATERHOUSE)**

Cophaesthetus opacus WATERHOUSE 1880: 566.

Schinostethus opacus: LEE & al. 1993: 686.

Drupeus pruinosus PIC 1923: 12 (nec PIC 1916). **syn.n.**

TYPE MATERIAL: The holotype ♂ is deposited in BMNH, but only the maxillary and labial palpi, antenna, and abdomen are preserved.

SYNONYM: Lectotype ♂ of *Drupeus pruinosus* (by presented designation, MNHP): "G^{ns} Gedeh N.W. Praeanger IZ Kannegetter \ Type \ TYPE \ Muséum Paris Coll. M. Pic \ *Drupeus pruinosus* nsp \ *Cophaesthetus opacus* m. [and some illegible letters]".

ADDITIONAL MATERIAL EXAMINED:

INDONESIA: JAVA: 1 ♂, "Guassan", 6.IV.1933, leg. P.H. Doesburg (NML); 3 ♂♂ + 3 ♀♀, Gunung Salak, 8 km S Bogor, Sungai Ciapus, ca. 800 m a.s.l., 17.VIII.1994, leg. R. Schuh (NMW, NTU); 1 ♂, Gunung Gede-Pangrango, Selabintana gate to Sawer Waterfall, 1000-1200 m a.s.l., 23.VIII.1994, leg. R. Schuh (NMW); 1 ♂, Gunung Gede-Pangrango, track to Cibereum Waterfall, 1500-1620 m a.s.l., 2.-3.VIII.1994, leg. R. Schuh (NMW); 1 ♂, "Tjibodas" [= Cibodas], 22.VII.1965, leg. J. Winkler (BPBM); 1 ♂ + 4 ♀♀, Lamongan, 7.-11.XII.1928, leg. E. Csiki (TMB); 1 ♂, Lamongan, 7.XII.1928, leg. E. Csiki (TMB). **BALI:** 1 ♂, Baturiti, 14.VI.1929, leg. E. Csiki (TMB).

MALE: Total length 2.8 - 3.3 mm, total width 1.9 - 2.2 mm. Coloration highly variable: yellowish brown to blackish brown; head and antennae blackish brown to black; some individuals with paler prothorax; but medio-posterior areas on pronota sometimes darkened; elytra with a paired, reverse V-shaped, grayish white stripe, consisting of paler pubescence, arising near humerus, split at basal 1/3, mesal arm apically conjoined with longitudinal stripe; longitudinal stripe arising from halfway between suture and humerus on base of elytron; its outer branch apically abbreviated at middle of elytron; suture covered by grayish white pubescence. Relative lengths of rami of antennal segments 3 - 9 about 0.35: 0.48 : 0.60 : 0.78 : 0.91 : 1 : 1.04 (Fig. 9d). Maxillary palpus (Fig. 9b) small; apex truncate; relative lengths of segments 2 - 4 about 2.9 : 1 : 2.0. Labial palpus (Fig. 9c) about 0.58 x as long as maxillary palpus; outer margin of terminal segment more arcuate; relative lengths of segments 2 - 3 about 1 : 1.1. WP/LP = 2.56 - 2.71. LE/WE = 1.15 - 1.21. WP/WE = 0.76 - 0.83.

Aedeagus (Fig. 9a): 2.2 x as long as wide. Penis 0.9 x as long as wide, posteriorly widened, suddenly narrowed at apical 1/7; apex narrowly rounded; baso-lateral apophyses short, 0.2 x total length of penis. Sides of parameres slightly emarginate at apical 1/3, widest at basal 1/3; latero-apical process of each paramere nearly reaching denticle on medio-apical process; both latero- and medio-apical process moderately rounded; mesal margin emarginate near apex. Basal piece 0.6 x total length of aedeagus, distinctly separate.

FEMALE: Total length 3.7 - 4.1 mm, total width 2.9 - 3.1 mm. Antennal segments 3 - 5 triangular, segment 6 moderately serrate, segments 7 - 10 strongly serrate, relative lengths of segments 3-6 about 1 : 0.74 : 0.66 : 0.63 (Fig. 9e). WP/LP = 2.38 - 2.67. LE/WE = 1.22 - 1.29. WP/WE = 0.77 - 0.81.

DIFFERENTIAL DIAGNOSIS: This species is easy to distinguish from others by the grayish white stripes on the elytra. *Schinostethus opacus* resembles *S. (Sundodrupeus) notatithorax* externally but differs in the oblong body form.

DISTRIBUTION (Fig. 24): Indonesia (Java, Bali).

***Schinostethus* (s.str.) *satoi* LEE, YANG & BROWN**

Schinostethus satoi LEE, YANG & BROWN 1993: 688.

Schinostethus satoi junghuaensis LEE, YANG & BROWN 1993: 692 (synonymized by LEE & JACH 1995).

TYPE MATERIAL: The holotype ♂ (NTU) and 119 paratypes (94 ♂♂ + 25 ♀♀) (NMW, NTU, SIW, WUN).

DIAGNOSIS: *Schinostethus satoi* is easily distinguished from others by the reduced latero-apical process and by lacking denticles on the medio-lateral processes of the parameres.

DISTRIBUTION (Fig. 23): Taiwan.

***Schinostethus* (s.str.) *sichuanensis* sp.n.**

TYPE MATERIAL: **Holotype** ♂ (NMW): "CHINA: Sichuan Emei Shan VI. 1992".

MALE: Total length 3.8 mm, total width 2.6 mm. Coloration reddish brown; head black except scape and pedicel dark brown and mouthparts brown; venter blackish brown but apices of femora and bases of tibiae paler; tarsi brown. Relative lengths of rami of antennal segments 3 - 9 about 0.57 : 0.68 : 0.80 : 0.96 : 0.96 : 1 : 1.00 (Fig. 10b). Apices of maxillary palpi truncate. WP/LP = 2.61. LE/WE = 1.18. WP/WE = 0.73.

Aedeagus (Fig. 10a): 2.9 x as long as wide. Penis 0.7 x total length of aedeagus, basally widened; apex broadly acute; baso-lateral apophyses long, 0.5 x total length of penis. Sides of parameres narrowed halfway between denticles on medio-apical processes and apex of basal piece; without latero-apical processes; mesal margins closest at apical 1/3, strongly emarginate near connection with both margins. Basal piece 0.8 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: This species is similar to *S. nigricornis* due to the reddish brown body color, but it differs by its longer antenna, and by lacking the latero-apical processes of the parameres.

ETYMOLOGY: Named in reference to the type locality.

DISTRIBUTION (Fig. 22): So far only known from the type locality.

Key to males of *Schinostethus* s.str.

- | | | |
|----|---|---------------------|
| 1 | Antennal segments 4-5 weakly serrate | 2 |
| 1' | Antennal segments 4-5 pectinate | 3 |
| 2 | Medio-lateral processes of parameres absent, without denticles on latero-apical processes | <i>minutus</i> |
| 2' | Medio-lateral processes of parameres present, with denticles on latero-apical processes | <i>brevicornis</i> |
| 3 | Medio-lateral processes of parameres reduced or absent | 4 |
| 3' | Medio-lateral processes of parameres well developed | 6 |
| 4 | Medio-lateral processes of parameres truncate, latero-apical processes absent | <i>niger</i> |
| 4' | Medio-lateral processes of parameres rounded, latero-apical processes reduced | 5 |
| 5 | Coloration reddish brown; medio-lateral processes of parameres with denticles | <i>sichuanensis</i> |
| 5' | Coloration dark brown; medio-lateral processes of parameres without denticles | <i>satoi</i> |
| 6 | Medio-lateral processes of parameres without denticles | <i>medius</i> |
| 6' | Medio-lateral processes of parameres with denticles | 7 |
| 7 | Each elytron with a reverse V-shaped stripe | <i>opacus</i> |

7'	Elytra unicolorated	8
8	Pronotum yellowish brown, antero-medially darkened	<i>brevis</i>
8'	Pronotum unicolorated	9
9	Elytra reddish brown	10
9'	Elytra dark chestnut or black	11
10	Penis very short, apex broadly rounded	<i>luzonicus</i>
10'	Penis long, apex narrowly rounded or acute	<i>nigricornis</i> complex
11	Parameres long (0.4 x length of aedeagus), lateral margins straight, latero-apical processes much shorter than medio-lateral processes	<i>jii</i>
11'	Parameres short (0.3 x length of aedeagus), lateral margins arcuate, latero-apical processes prominent, nearly reaching medio-lateral processes	<i>malickyi</i>

2. *Schinostethus* subg. *Sundodrupeus* PIC, comb.n.

Drupeus (*Sundodrupeus*) PIC 1916: 4.

Type species: *Schinostethus* (*Sundodrupeus*) *pruinus* (PIC 1916: 4).

This subgenus differs from the nominate subgenus by the following antennal and aedeagal characteristics: 1) antennal segments 5-10 strongly shortened, their rami elongate and laterally flattened, terminal segment subequal in length to rami of penultimate segment; 2) medio-apical parameral process well developed, ventrally located, and surpassing latero-apical processes; without denticles on medio-lateral processes.

Schinostethus (*Sundodrupeus*) *albosulcus* sp.n.

TYPE MATERIAL: **Holotype** ♂ (NMW): "LAOS: Phongsali 12-13.V.1996, leg. C.-F. Lee". **Paratypes**: 1 ♂ (NTU), same data as holotype; 5 ♂♂: "N. Vietnam: Lao Cai Prov. 28km, W. of Sa Pa, 2/VII/1997, ca. 1600m, leg. C.-F. Lee" (NTU, NMW); 5 ♂♂: "(VIETNAM) Tam Dao, 29.V.1995 leg. C.-F. Lee" (NTU, NMW).

MALE: Total length 4.1 mm, width 2.9 - 3.0 mm. Coloration blackish brown, except legs paler. White pubescence covering base of pronotum and suture. Relative lengths of rami of antennal segments 3 - 6 about 0.27 : 0.40 : 0.73 : 1 (Fig. 11d). Maxillary palpus (Fig. 11b) slender; terminal segment apically dilated, apex obliquely truncate, slightly bisinuate; relative lengths of segment 2 - 4 about 3.1 : 1 : 1.9. Labial palpus (Fig. 11c) small; about 0.32 x as long as maxillary palpus; apex truncate; relative lengths of segments 2 - 3 about 1 : 1.1. WP/LP= 2.34 - 2.75. LE/WE= 1.10 - 1.17. WP/WE = 0.76.

Aedeagus (Fig. 11a): 2.5 x as long as wide. Penis 0.6 x total length of aedeagus, basally widened; apex narrowly rounded; baso-lateral apophyses short, 0.3 x total length of penis. Sides of parameres strongly emarginate at apical 1/3, widest near apex of basal piece; latero-apical processes short, apex broadly rounded; medio-apical processes articulated with parameres, moderately curved, not reaching apex of penis; mesal margin slightly emarginate at apical 1/10, almost straight from apical 1/7 to middle. Basal piece 0.7 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: *Schinostethus albosulcus* is very close to *S. maculatus* but it differs by the emarginate mesal margins of parameres.

VARIABILITY: Specimens from Tam Dao (Vietnam) differ by reddish brown elytra and venter (Fig. 26).

ETYMOLOGY: The name refers to the white elytral suture.

DISTRIBUTION (Fig. 24): Vietnam, Laos.

Schinostethus (Sundodrupeus) flabellatus LEE, YANG & BROWN

Schinostethus flabellatus LEE, YANG & BROWN 1993: 688.

TYPE MATERIAL: The holotype ♂ and 3 paratypes (♂♂) are deposited in BMNH.

MATERIAL EXAMINED:

MALAYSIA: PENANG: 1 ♂, Aceh Forest Reserve 2 km W Telok Bahang, 5.-6.VII.1993, leg. R. Schuh (NMW); **PERAK:** 7 ♂♂, Bukit Larut, 5 km E Taiping, 600-900 m a.s.l., 3.VIII.1993, leg. R. Schuh (NMW, NTU); **PAHANG:** 1 ♂, Fraser's Hill, 29.VIII.1994, leg. Lee (NMW); 1 ♂, Tanah Rata, 17.II.1970 leg. S. Suzuki (WUN); 1 ♀, Cameron Highlands, 2.IX.1994, leg. Lee (NMW); 1 ♀, Cameron Highlands, 1.XII.1968, leg. M. Satô (WUN); 1 ♀, Cameron Highlands 1500 m a.s.l., 26.III.1984, leg. K. Fujita (WUN); 10 ♂♂ + 1 ♀, Tioman Island, Kampung Tekek, 15.-24.VII.1993, leg. R. Schuh (NMW, NTU).

THAILAND: 1 ♂, Doi Suthep, 14.V.1985, leg. M. Tao (WUN); 1 ♂, Doi Suthep, 25.V.1980, leg. M. Tao (WUN); 1 ♂, labelled as former, but "21.V.1985" (NTU); 11 ♂♂, Tramot, 7°16'N 100°02'E 100 m a.s.l., 29.IV.1993, leg. H. Malicky (NMW, NTU); 1 ♂, 600 m a.s.l., Ton Nga Chang, 6°58'N 100°12'E, 4.-5.V.1993, leg. H. Malicky (NMW); 1 ♂ + 1 ♀, Banna, Nakhon 108 m a.s.l., 5.-10.V.1958, leg. T.C. Maa (BPBM).

DIAGNOSIS: This species is very similar to *S. notatithorax* (see below).

VARIABILITY: The specimens collected from Tioman Island are shorter (3.2 mm in length, 2.3 mm in width). Specimens from Taiping, Fraser's Hill, and Cameron Highlands are similar to those of Tioman Island in body size (2.9 - 3.2 mm long, 2.1 - 2.5 wide), but the medio-apical processes of parameres are shorter (Fig. 12) and the pronotum is blackish brown.

DISTRIBUTION (Fig. 25): Thailand, West Malaysia.

Schinostethus (Sundodrupeus) laosensis sp.n.

TYPE MATERIAL: **Holotype** ♂ (NMW): "N LAOS, Luang Namtha env., 800 - 1200 m, May 1997". **Paratype:** 1 ♂ (NTU), same data as holotype.

MALE: Total length 3.2 mm, total width 2.3 mm. Coloration blackish brown, except prothorax (including pronotum, prosternum, and prosternal epimeron) yellowish brown, pronotum medially darker. Relative lengths of rami of antennal segments 3 - 7 about 0.14 : 0.33 : 0.79 : 0.92 : 1 (Fig. 13d). Maxillary palpus (Fig. 13b) slender, terminal segment apically dilated, apex medially depressed, relative lengths of segments 2 - 4 about 3.0 : 1 : 2.1. Labial palpus (Fig. 13c) small, about 0.55 x as long as maxillary palpus; terminal segment medially widened, apex truncate, relative lengths of segments 2 - 3 about 1 : 1.1. WP/LP = 2.67. LE/WE = 1.09. WP/WE = 0.83.

Aedeagus (Fig. 13a): 3.6 x as long as wide. Penis 0.6 x total length of aedeagus, apically tapering; apex narrowly rounded; baso-lateral apophyses long, 0.4 x total length of penis. Parameres moderately narrowed at middle; widest apically; latero-apical processes slender and tube-like, apex narrowly rounded; medio-apical processes moderately curved. Basal piece 0.6 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: *Schinostethus laosensis* is very close to *S. flabellatus*, differing by the slender tube-like latero-apical process of parameres.

ETYMOLOGY: Named in reference to the type locality.

DISTRIBUTION (Fig. 25): So far only known from the type locality.

Schinostethus (Sundodrupeus) maculatus sp.n.

TYPE MATERIAL: **Holotype** ♂ (NMW): "MALAYSIA: Pahang, Fraser Hill, 29.viii.1994, leg. Lee". **Paratypes** (NTU, NMW, SIW, WUN): 17 ♂♂ + 1 ♀, same data as holotype; 3 ♂♂, "MALAYSIA: Pahang, Cameron Highlands, 2.ix.1994, leg. Lee".

MALE: Total length 3.6 - 4.3 mm, total width 2.5 - 2.9 mm. Coloration brown; pronotum sometimes darkened, but both sides relatively paler; head black, except mouthparts, scape, and pedicel paler; venter dark brown, prosternum and mesosternum paler; abdomen brown. Elytra covered with dense, white pubescence; some patches of pubescence the same color as elytra, forming maculae. Relative lengths of rami of antennal segments 3 - 7 about 0.24 : 0.35 : 0.59 : 0.97 : 1 (Fig. 14d). Maxillary palpus (Fig. 14b) slender, apex emarginate, relative lengths of 2 - 4 about 3.2 : 1 : 2.3. Labial palpus (Fig. 14c) short, about 0.55 x as long as maxillary palpus, terminal segment dilated laterally, apex truncate. WP/LP= 2.20 - 2.56. LE/WE= 1.08 - 1.19. WE/WP= 0.75 - 0.85.

Aedeagus (Fig. 14a): 3.0 x as long as wide. Penis 0.7 x total length of aedeagus, apically tapering from apical 1/4, subparallel from apical 1/4 to base; apex narrowly rounded; baso-lateral apophyses long, 0.4 x total length of penis. Parameres moderately narrowed at apical 1/3; widest at apex of basal piece; latero-apical processes wide, apex very broadly rounded; medio-apical processes moderately curved; mesal margins straight from apex to middle; convex at middle, and then narrowed at basal 1/3. Basal piece 0.6 x total length of aedeagus, distinctly separate.

FEMALE: Total length 4.7 mm, total width 3.3 mm. Color similar to male; except elytra black, lateral pale sides of pronotum wider, venter and legs yellowish brown except metepisternum and metepimeron darker. Elytra also covered with dense, white pubescence, but in some areas pubescence the same color as elytra, forming maculae. Antenna (Fig. 14e) similar to *S. notatithorax*, but segments 6-10 serrate strongly; relative lengths of segments 3 - 6 about 1 : 0.78 : 0.58 : 0.40. WP/LP= 2.51. LE/WE= 1.15. WE/WP= 0.74.

DIFFERENTIAL DIAGNOSIS: *Schinostethus maculatus* is easy to distinguish from others by its spotted elytra. It and *S. albosulcus* are characterized by the wide latero-apical processes of the parameres.

ETYMOLOGY: Named in reference to its spotted elytra.

DISTRIBUTION (Fig. 25): West Malaysia.

Schinostethus (Sundodrupeus) nepalensis sp.n.

TYPE MATERIAL: **Holotype** ♂ (NMW): "E - NEPAL, Dhankuta Arun Valley, 1500-750-1100 m Num - Hedangna, 26. 5. 1980 leg. C. Holzschuh". **Paratype:** 1 ♂ (NMB): "Arun R. 800m Hedangan[sic!]-Num 16.VI.1983 \ E-Nepal Arun V. M. Brancucci"; 1 ♀ (NMB): "Lamobagar 1400-Hedangna: Arun 15.VI.83 1400-800m \ E. Nepal Arun V. M. Brancucci".

MALE: Total length 4.0 mm, total width 2.8 mm. Coloration blackish brown, except prothorax (including pronotum, prosternum, and prosternal epimeron) yellowish brown, pronotum medially darker. Relative lengths of rami of antennal segments 3 - 7 about 0.23 : 0.41 : 0.63 : 0.91 : 1 (Fig. 15b). Maxillary palpus slender, terminal segment apically dilated, apex obliquely truncate, relative lengths of segments 2 - 4 about 3.0 : 1 : 2.2. Labial palpus small, about 0.54 x as long as maxillary palpus; terminal segment medially widened, apex rounded, relative lengths of segments 2 - 3 about 1 : 1.2. WP/LP = 2.58. LE/WE = 1.14. WP/WE= 0.75.

Aedeagus (Fig. 15a): 2.2 x as long as wide. Penis 0.7 x total length of aedeagus, gradually tapering apically and basally from apical 1/3; apex very broadly rounded; baso-lateral apophyses long, 0.4 x total length of penis. Parameres widest at middle; latero-apical process slender, apex narrowly rounded; medio-apical processes enlarged, greatly exceeding penis, widest at middle; narrowed near base; apices acute. Basal piece 0.5 x total length of aedeagus, distinctly separate.

FEMALE: Total length 4.8 mm, total width 3.2 mm. Similar to males in color; but pronotum antero-medially darkened, legs and abdomen yellowish brown. WP/LP = 2.44. LE/WE = 1.19. WP/WE = 0.78.

DIFFERENTIAL DIAGNOSIS: Although *S. nepalensis* resembles *S. flabellatus* in color, it is closer to *S. maculatus* and *S. sakaii* in relative lengths of rami of antennal segments 3-7, differing from both species by its bicolored pronotum and black elytra, broadly rounded apex of penis, and well developed medio-apical processes of parameres.

ETYMOLOGY: Named in reference to the type locality.

DISTRIBUTION (Fig. 22): So far only known from the type locality.

***Schinostethus (Sundodrupeus) notatithorax* (Pic) comb.n.**

Drupeus notatithorax Pic 1923: 12.

Drupeus notatithorax var. *theresae* Pic 1944: 1. **syn.n.**

TYPE MATERIAL: **Lectotype** ♂ (by present designation, MNHP): "Lac...bho [partly illegible] Tonkin \ Type \ TYPE \ Muséum Paris Coll. M. Pic \ *Drupeus notatithorax* n sp".

SYNONYM: Lectotype ♂ of *Drupeus notatithorax* var. *theresae* (by present designation, MNHP): "Hoa Binh \ Type \ TYPE \ Muséum Paris Coll. M. Pic \ var. *theresae* n sp".

ADDITIONAL MATERIAL EXAMINED:

VIETNAM: LAI CHAU: 1 ♂, Ba A Chia, 8.V.1995, leg. M. Satô (WUN); 18 ♂♂ + 2 ♀♀, 40 km S Lai Chau, 21°51'42"N, 103°17'07"E, ca. 953 m a.s.l., 29.VI.1997, leg. C.-F. Lee (NTU); **VINH PHU:** 1 ♂, Tam Dao, 6.-9.V.1990, leg. P. Pacholátko (NMB); **HOANG LIEN SON:** 1 ♂, Sa Pa, V.1990, leg. J. Picka (NMB); 1 ♂ + 1 ♀, same locality as previous, 11.-16.VI.1990, leg. A. Olexa (NMB); 2 ♂♂, same locality as previous, 11.-15.V.1990, leg. P. Pacholátko (NMB); 1 ♂, same locality and date as previous, leg. L. Dembicky (NMB).

LAOS: OUDOMXAY: 24 ♂♂ + 3 ♀♀, Oudomxay, 12.-13.V.1996, leg. C.-F. Lee (NMW, NTU).

THAILAND: CHIANG MAI: 8 ♂♂ + 5 ♀♀, Doi Inthanon, Mae-Sa Waterfall and Huai Kaew Waterfall, larvae collected 10.-12.XII.1993, emerged 30.XII.1993 - 8.III.1994, leg. C.-F. Lee (NTU, NMW, SIW); 3 ♂♂, Huai Kaew Waterfall, 2.VIII.1979, leg. B. Petersen (ZMUC); 1 ♂, Sop Mae Klang, 1070 m a.s.l., Doi Inthanon, 18.X.1983, leg. Y. Nishikawa (WUN); 1 ♂, Chiang Mai, Doi Suthep, 21.V.1985, leg. M. Tao (WUN); 1 ♂ + 1 ♀, Doi Suthep, Konhathan waterfall area, 600 m a.s.l., 20.-27.X.1979 (ZMUC); 1 ♂, Wien Ko Sai, 19.V.1985, leg. S. Ohmono (WUN); 1 ♂, Doi Suthep, 1.VII.1978, leg. K. Ushijima (WUN); 1 ♂, Top of Doi Suthep, 4.V.1961, leg. K. Iwata (WUN); 1 ♂, Chiang Mai, 16.VI.1965, leg. K. Morimoto (WUN); 1 ♂, Mae Klang, 11.VI.1965, leg. K. Morimoto (WUN); 1 ♂, W Mae Rim, Mae Sa, 30.-31.XI.1995, leg. H. Zettel (NMW); 1 ♂ + 1 ♀, Fang, 600 m a.s.l., 14.VI.1965, leg. P.D. Ashlock (BPBM); 1 ♂, Banna, Chawang, near Nakhon, 70 m a.s.l., 5.IX.1958, leg. Gressitt (BPBM); 1 ♂, Thanon Thong Chai, 300 m a.s.l., 7.IV.1991, leg. O. Král & V. Kubán (NMB).

MALE: Total length 3.3 - 3.8 mm, total width 2.4 - 2.6 mm. Coloration blackish brown except prothorax yellowish brown, a wide medial longitudinal band on pronotum black; legs brown or yellowish brown but basal 1/4 to apex of tibia and tarsi darkened. Elytra with one pair of reverse V-shaped, grayish white stripes consisting of pale pubescence, arising near humerus, apically directed toward apex of elytra, abbreviated at middle of elytra, a branch derived at middle, transverse, abbreviated near suture; suture and lateral margins also covering grayish white pubescence. Relative lengths of rami of antennal segments 3 - 6 about 0.16 : 0.31 : 0.87 : 1 (Fig. 16d). Maxillary palpus (Fig. 16b) widest at apex, apex feebly emarginate, relative lengths of segments 2 - 4 about 2.5 : 1 : 1.7. Labial palpus (Fig. 16c) small, about 0.53 x as long as maxillary palpus, outer side of terminal margin dilated, apex also feebly emarginate, relative length of segments 2 - 3 about 1 : 1.1. Hind tarsus small, about 0.65 times as long as tibia, relative lengths of tarsal segments about 3.3 : 1.7 : 1.1 : 1 : 3.9. WP/LP = 2.29 - 2.68. LE/WE = 1.03 - 1.11. WP/WE = 0.82 - 0.86.

VARIABILITY: Two specimens are paler, having grayish white stripes on elytra extending into apical half; one of which has one pair of oblique and slender stripes near scutellum. Some individuals have brown legs.

Aedeagus (Fig. 16a): 2.9 x as long as wide. Penis 0.7 x total length of aedeagus; sides bisinuate, apically tapering from apical 1/3; apex narrowly rounded; baso-lateral apophyses short, 0.3 x

total length of penis. Latero-apical process of each paramere prominent and slender, apex narrowly rounded; medio-apical process articulated with parameres, slender and slightly curved, almost reaching penis; mesal margin strongly emarginate at apical 1/4, with a prominent process near emargination; sides of parameres subparallel. Basal piece 0.55 x total length of aedeagus, distinctly separate.

FEMALE: Total length 4.3 - 4.4 mm, total width 3.0 - 3.2 mm. Color similar to male except mesosternum and metasternum yellowish brown or brown, abdomen and legs yellowish brown. Antenna (Fig. 16c): segments 3 and 4 slightly serrate, process on segment 5 relatively prominent, on segments 6 - 10 similar to each other, much more prominent; relative lengths of segments 3 - 6 about 1 : 0.58 : 0.43 : 0.38. LP/WP = 2.70 - 2.87; LE/WE = 1.09 - 1.17; WP/WE = 0.78 - 0.84.

DIFFERENTIAL DIAGNOSIS: This species is similar to *S. flabellatus*, differing by grayish white stripes on elytra, the prominent and slender latero-apical processes, and the process on the mesal margins of parameres.

DISTRIBUTION (Fig. 25): Vietnam, Laos, Thailand.

Schinostethus (Sundodrupeus) pacholatkoii sp.n.

TYPE MATERIAL: **Holotype** ♂ (NMW): "S-VIETNAM 28.-30.4. 12km N Dalat, 1994 Lang Bian Pacholatko & Dembicky". **Paratypes:** 2 ♂ (NMW), same data as holotype; 1 ♂ (NMW): "S-VIETNAM 12km SW Bao Loc 16. - 29. 5. 1994 Pacholatko & Dembicky"; 1 ♂ (TMB): "Da Lat, Thac Datanla, rainforest, swept. / No. 728. 7.XII.1994, S.Mahunka. Gy. Sziraki & Zombon"; 3 ♂ (BPBM): "VIET NAM, 45 km EW of Dalat, 3850m 5.V.1960 \ L. W. Quate Collector \ S. Quate collector"; 1 ♂, as same collector but "VIET NAM, 18 km NW of Dalat, 1300m 4-5.V.1960 (BPBM)".

MALE: Total length 3.6 - 4.1 mm, total width 2.4 - 2.7 mm. Coloration blackish brown; head darker; prothorax yellowish brown, a black medial, longitudinal band on pronotum, sometimes narrowed; tarsi paler. Relative lengths of rami of antennal segments 3 - 6 about 0.19 : 0.36 : 0.94 : 1 (Fig. 17c). Maxillary palpus (Fig. 17c) dilated apically, apex truncate obliquely, relative lengths of segments 2 - 4 about 2.8 : 1 : 2.0. Labial palpus (Fig. 17d) small, about 0.47 x as long as maxillary, terminal segment similar to that of maxillary palpus, relative lengths of segments 2 - 3 about 1 : 1.3. WP/LP = 2.26 - 2.54. LE/WE = 1.12 - 1.25. WP/WE = 0.83 - 0.87.

Aedeagus (Figs. 17a, b): 2.8 x as long as wide. Penis 0.7 x total length of aedeagus, posteriorly widened; apex narrowly rounded; baso-lateral apophyses long, 0.5 x total length of penis. Latero-apical process of each paramere very wide, apex truncate, slightly emarginate at middle, covering basal half of medio-apical process, reaching apex of penis; medio-apical process articulated with parameres, slightly curved; sides subparallel, slightly convex at apical 1/4. Basal piece 0.5 x total length of aedeagus. Sometimes latero-apical processes of parameres expanding outward (Fig. 17b).

DIFFERENTIAL DIAGNOSIS: Somewhat resembling *S. flabellatus*. *Schinostethus pacholatkoii* is easily distinguished from other species by its wide and truncate latero-apical parameral processes.

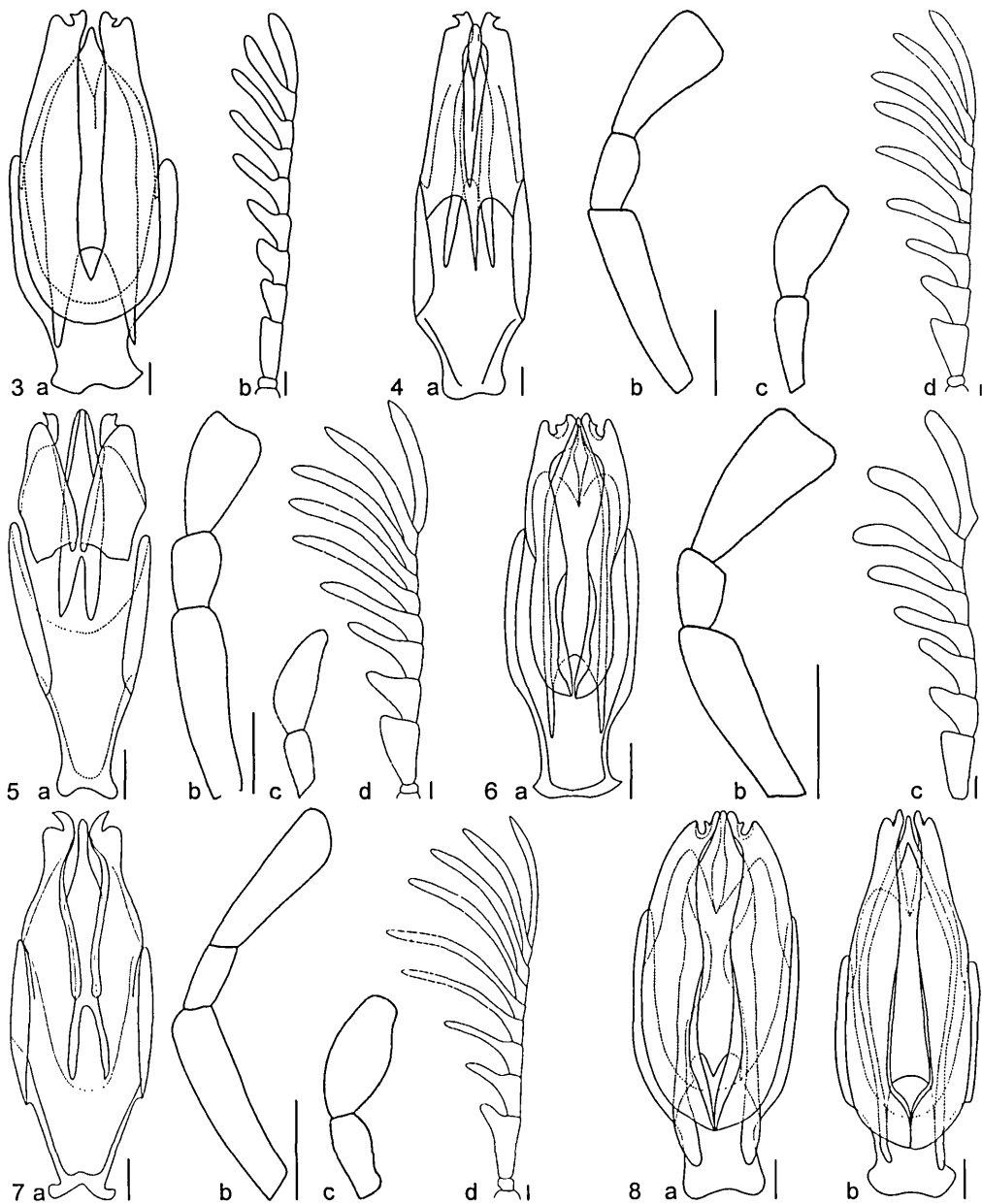
VARIABILITY: Some individuals paler, brown, black band on pronotum sometimes reduced.

ETYMOLOGY: This species is named after the collector of the holotype.

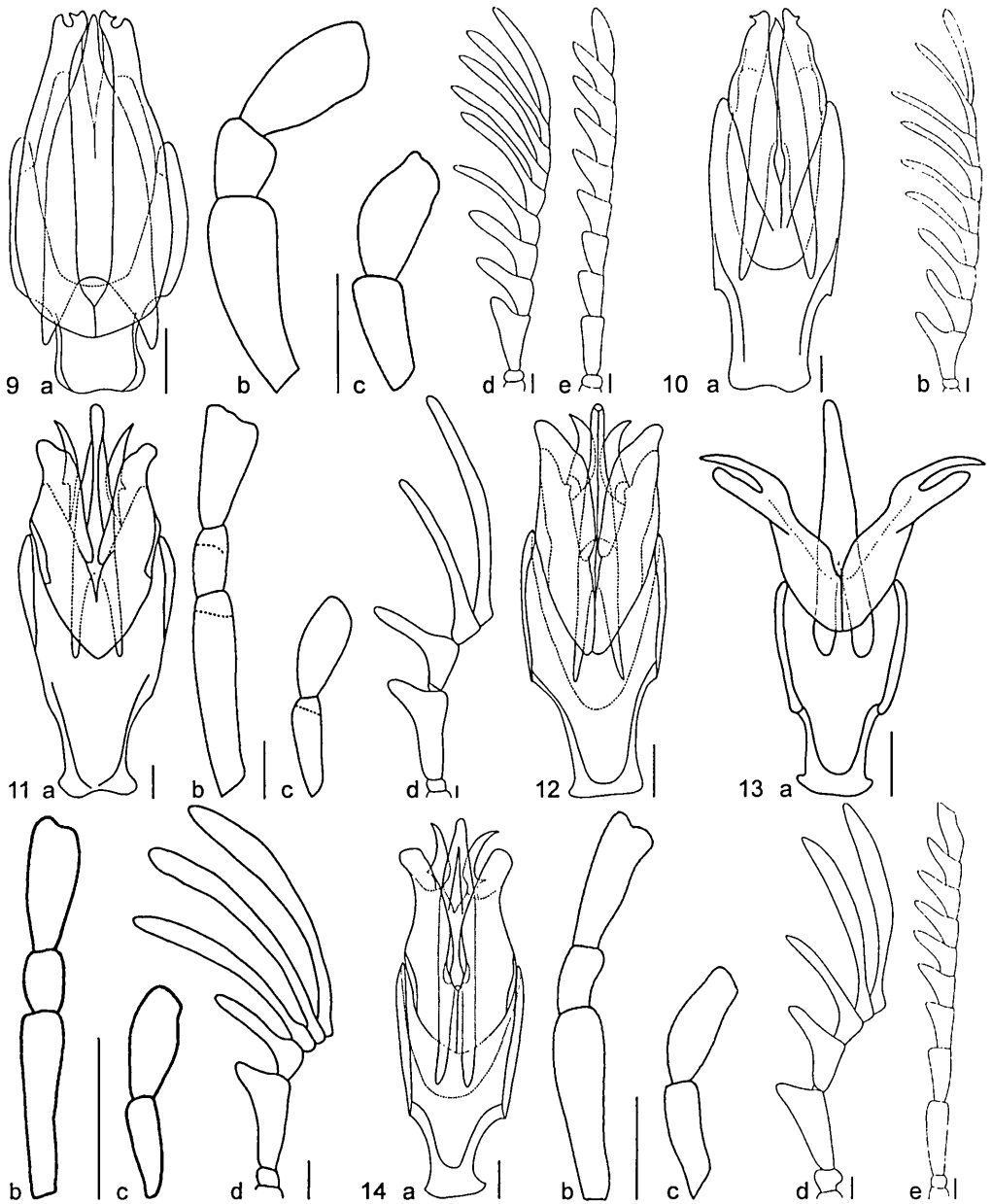
DISTRIBUTION (Fig. 25): Known only from N Vietnam.

Schinostethus (Sundodrupeus) priscus sp.n.

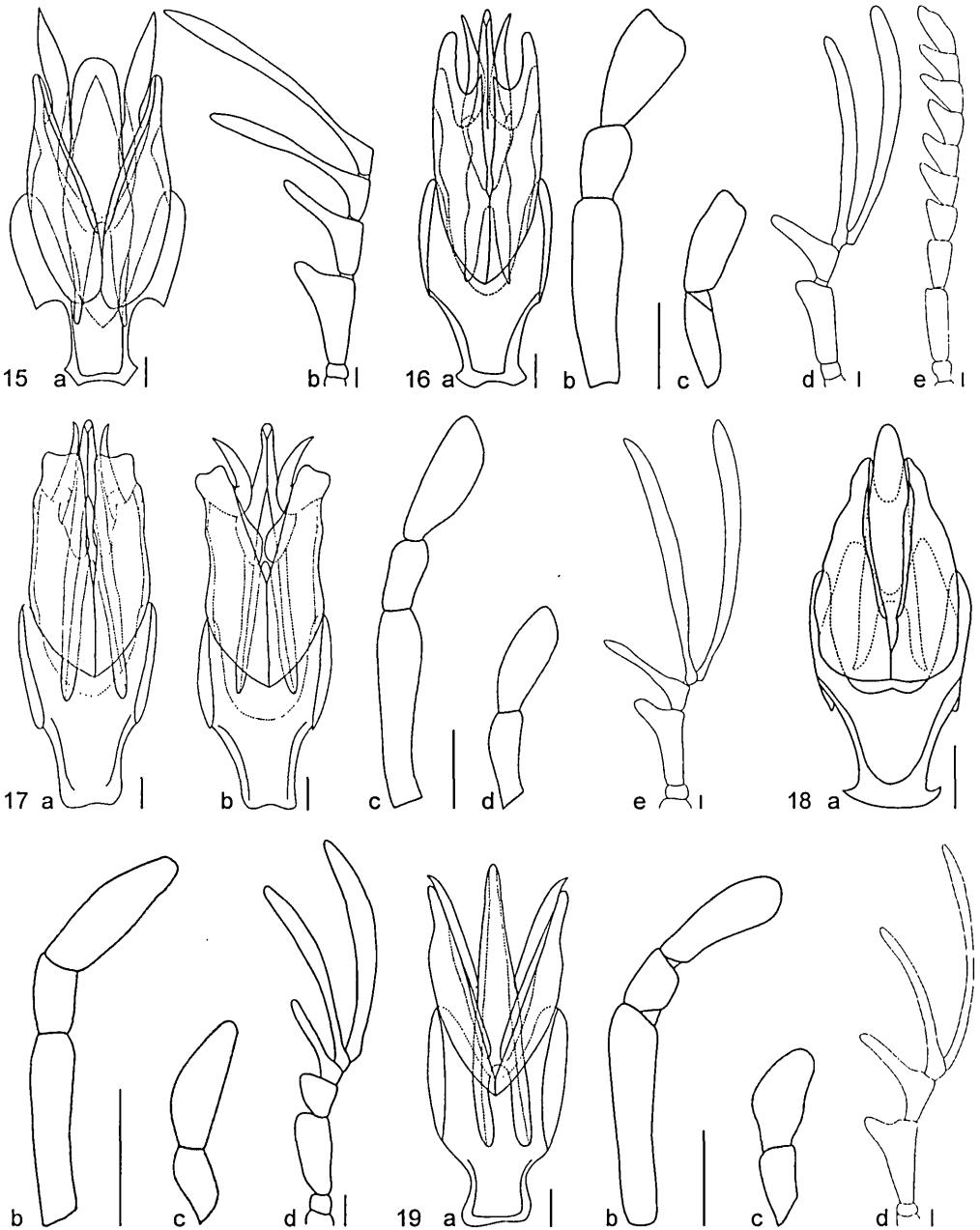
TYPE MATERIAL: **Holotype** ♂ (BPBM): "BRITISH N. BORNEO Sandakan Nov. 26, 1958 \ T.C. Maa Collector Bishop"



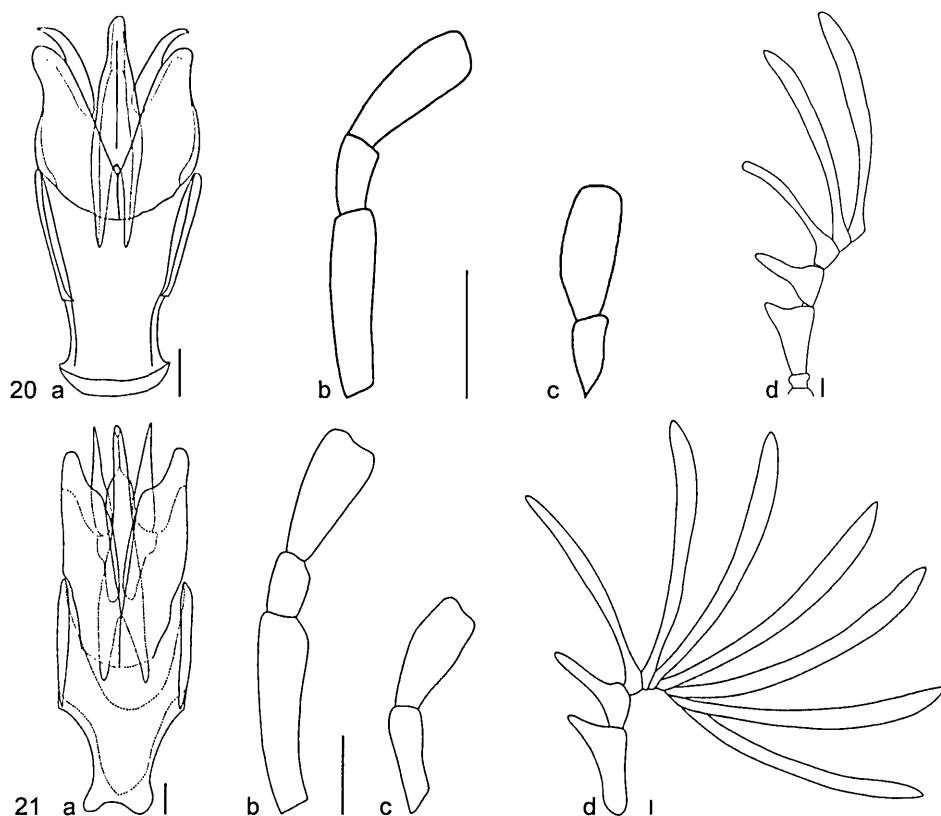
Figs. 3 - 8: 3) *Schinostethus brevicornis*: a) aedeagus; b) male antenna; 4) *S. jii*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; 5) *S. luzonicus*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; 6) *S. malickyi*: a) aedeagus; b) maxillary palpus; c) male antenna; 7) *S. medius*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; 8) *S. nigricornis*: a) aedeagus, Meghalaya; b) aedeagus, same locality, different specimen. Scale bar = 100 μ m.



Figs. 9 - 14: 9) *Schinostethus opacus*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; e) female antenna; 10) *S. sichuanensis*: a) aedeagus; b) male antenna; 11) *S. albosulcus*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; 12) *S. flabellatus*: aedeagus; 13) *S. laosensis*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; 14) *S. maculatus*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; e) female antenna. Scale bar = 100 μ m.



Figs. 15 - 18: 15) *Schinostethus nepalensis*: a) aedeagus; b) male antenna; 16) *S. notatithorax*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; e) female antenna; 17) *S. pacholatkoii*: a, b) aedeagus; c) maxillary palpus; d) labial palpus; e) male antenna; 18) *S. pruinosus*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; 19) *S. pruinosus*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna. Scale bar = 100 μ m.



Figs. 20 - 21: 20) *Schinostethus sakaii*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna; 21) *S. vietnamensis*: a) aedeagus; b) maxillary palpus; c) labial palpus; d) male antenna. Scale bar = 100 μ m.

MALE: Total length 2.6 mm, width 1.8 mm. Coloration blackish brown except eyes and antennae black. Antennal segment 3 suboblong, segment 4 triangular; relative lengths of rami of segments 3 - 7 about 0.16 : 0.18 : 0.41 : 0.88 : 1 (Fig. 18d). Maxillary palpus (Fig. 18b) slender, terminal segment tapering apically, apex arcuate; relative lengths of segments 2 - 4 about 2.9 : 1 : 2.4. Labial palpus (Fig. 18c) small, about 0.49 x as long as maxillary palpus; apex similar to that of maxillary palpus, relative lengths of segment 2 - 3 about 1 : 2.1. WP/LP = 2.36. LE/WE = 1.09. WP/WE = 0.74.

Aedeagus (Fig. 18a): Very characteristic. Aedeagus 2.4 x as long as wide. Penis 0.7 x total length of aedeagus, basally widened; apex broadly rounded; baso-lateral apophyses short, 0.3 x total length of penis. Parameres widest near base, narrowed at apical 1/4 and 1/10; mesal margin almost straight; without medio-apical processes. Basal piece 0.6 x total lengths of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: This new species is easy to distinguish from others in this subgenus by its small body size, the triangular 4th antennomere and the parameres lacking medio-apical processes.

ETYMOLOGY: The name refers to the fact that this could be an ancestral species.

DISTRIBUTION (Fig. 25): Only known from the type locality in Borneo (Sabah).

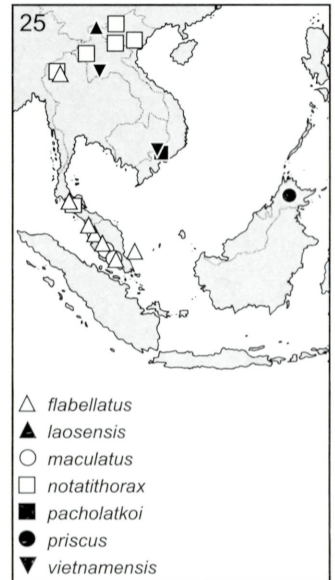
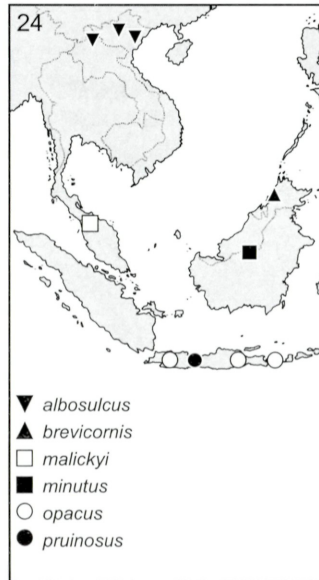
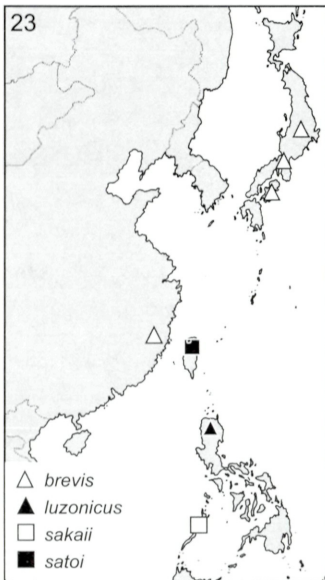
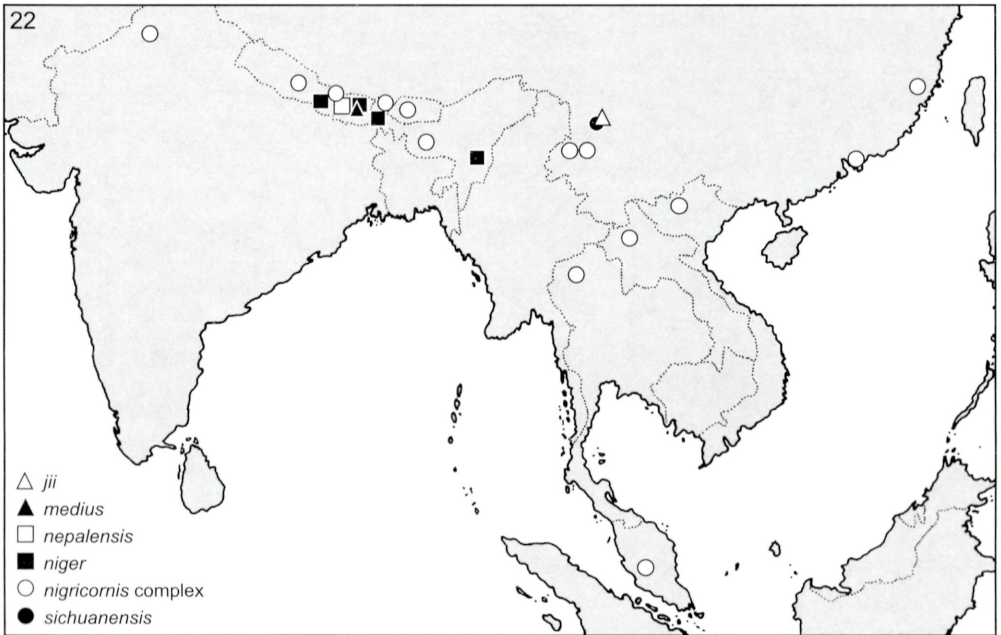


Fig. 22: Geographical distribution of *Schinostethus jii*, *S. medius*, *S. nepalensis*, *S. niger*, *S. nigricornis* complex, *S. sichuanensis*.

Fig. 23: Geographical distribution of *Schinostethus brevis*, *S. luzonicus*, *S. sakaii*, *S. satoi*.

Fig. 24: Geographical distribution of *Schinostethus albosulcus*, *S. brevicornis*, *S. malickyi*, *S. minutus*, *S. opacus*, *S. pruinosus*.

Fig. 25: Geographical distribution of *Schinostethus flabellatus*, *S. laosensis*, *S. maculatus*, *S. notatithorax*, *S. pacholatkoii*, *S. priscus*, *S. vietnamensis*.

Schinostethus (Sundodrupeus) pruinus (Pic) comb.n.

Drupeus (Sundodrupeus) pruinus Pic 1916: 4 (nec Pic 1923).

TYPE MATERIAL: **Lectotype** ♂ (MNHP): "Java occident. Pengalangan 4000' 1893 H.Fruhstorfer \ pas coll Bou... [illegible] \ n. genre pres Eubrianax \ Type \ TYPE \ Muséum Paris Coll. M. Pic \ Sundodrupeus pruinus Pic."

ADDITIONAL MATERIAL EXAMINED:

1 ♂ (NML): "Leg. Mrs E WALSH Preanger - Java 2000' Djampang tengal S. Tjidoeroch 1-10 XII. 1934 \ Museum Leiden \ Drupeus (Sundodrupeus) pruinus Pic DET. M.SATO 1986"; 1 ♂ (NMB): "Java M^{es} Djampang".

MALE: Total length 3.9 mm, total width 2.7 mm. Coloration brown; head and antenna (except two basal segments) darkened. Relative lengths of rami of antennal segments 3 - 6 about 0.23 : 0.37 : 0.73 : 1 (Fig. 19d). Maxillary palpus (Fig. 19b) slender, apex rounded, relative lengths of segments 2 - 4 about 3.7 : 1 : 2.1. Labial palpus (Fig. 19c) small, about 0.36 x as long as maxillary palpus, one side of terminal segment dilated, apex rounded, relative lengths of segments 2 - 3 about 1 : 2.3. WP/LP = 2.64; LE/WE = 1.12 - 1.17; WP/WL = 0.83 - 0.85.

Aedeagus (Fig. 19a): Very characteristic. Aedeagus 2.6 x as long as wide. Penis 0.8 x total length of aedeagus, basally widened; apex narrowly rounded; baso-lateral apophyses short, 0.3 x total length of penis. Sides of parameres narrowed at apical 1/3, basally tapering; medio-apical processes widely connected with latero-apical processes, apex curved and acute, slightly exceeding latero-apical processes; latero-apical processes narrowly rounded; mesal margins almost straight. Basal piece 0.6 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: This new species is easily distinguished from other species in the subgenus by its brown body and the broad connection between medio-apical processes and mesal margins of parameres.

DISTRIBUTION (Fig. 24): Indonesia (Java).

Schinostethus (Sundodrupeus) sakaii sp.n.

TYPE MATERIAL: **Holotype** ♂ (WUN): "[PALAWAN] Matalangao (150m) nr. Roxas 28.VIII.1985 M. Sakai".

MALE: Total length 2.8 mm, total width 1.9 mm. Coloration chestnut brown except head and antennal segments 3 - 11 black. Relative lengths of rami of antennal segments 3 - 7 about 0.23 : 0.32 : 0.58 : 0.92 : 1 (Fig. 20d). Maxillary palpus (Fig. 20b) slender, terminal segments slightly dilated apically, apex truncate, relative lengths of segments 2 - 4 about 2.6 : 1 : 2.0. Labial palpus (Fig. 20c) small, about 0.5 x as long as maxillary palpus, relative lengths of segments 2 - 3 about 1 : 1.8, terminal segment similar to that of maxillary palpus. WP/LP = 2.77; LE/WE = 1.18; WP/WE = 0.85.

Aedeagus (Fig. 20a). Very characteristic. Aedeagus 2.3 x as long as wide. Penis small, 0.6 x total length of aedeagus, widest at middle, tapering apically and basally from middle; apex narrowly rounded; baso-lateral apophyses short, 0.2 x total length of penis. Parameres widest at apex of basal piece, slightly narrowed at apical 1/3; latero-apical processes broadly rounded; medio-apical processes widely connected with latero-apical processes basally and laterally, moderately curved and acute. Basal piece 0.6 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: This new species is somewhat close to *S. sakaii* due to color and aedeagus, but differs by a shorter penis, shorter rami of antennomere 5, and the wide latero-apical parameral processes.

ETYMOLOGY: The species name is dedicated to the collector.

DISTRIBUTION (Fig. 23): So far only known from the type locality in the Philippines.



26



27



28

Figs. 26 - 28: 26) *Schinostethus albosulcus* at Tam Dao, Vietnam [Photograph by C.-L. Li]; 27) *Schinostethus maculatus* at the type locality, Fraser's Hill, West Malaysia [Photograph by C.-L. Li]; 28) *Schinostethus notatithorax*, reared in laboratory from larva collected at Chiang Mai, Thailand [Photograph by T.-S. Lee]

***Schinostethus (Sundodrupeus) vietnamensis* sp.n.**

TYPE MATERIAL: **Holotype** ♂ (BPBM): "VIET NAM 20km S., Dalat 1300m. 12.IX.1960 J. L. Gressitt Collector".

Paratype: 1 ♂ (BPBM): "LAOS: Vientiane Prov. Ban Van Euc 31.XII.1968 \ Native Collector BISHOP MUSEUM".

MALE: Total length 4.7 mm, total width 3.2 mm. Coloration reddish brown, except antennae, eyes, maxillary and labial palpi blackish brown; tibiae and tarsi darker. Relative lengths of rami of antennal segments 3 - 6 about 0.24 : 0.33 : 0.83 : 1 (Fig. 21d). Maxillary palpus (Fig. 21b) slender, relative lengths of segments 2 - 4 about 2.8 : 1 : 2.0; apex feebly emarginate. Labial palpus (Fig. 21c) small, about 0.56 x as long as maxillary palpus, relative lengths of segments 2 - 3 about 1 : 0.9. Hind tarsus slender, about 0.66 x as long as tibia, relative lengths of segments about 3.5 : 1.5 : 1.2 : 1 : 4.4. WP/LP= 2.45; LE/WE= 1.09; WP/WE= 0.84.

Aedeagus (Fig. 21a): Very characteristic. Aedeagus 3.0 x as long as wide. Penis 0.7 x total length of aedeagus, apically tapering; apex very narrowly rounded; baso-lateral apophyses short, 0.3 x total length of penis. Sides of paramere subparallel from apex of latero-apical processes to apex of basal piece; mesal margins strongly emarginate at apical 1/4; and straight from apical 1/4 to base; medio-apical processes articulated with parameres, reaching apex of penis. Basal piece 0.6 x total length of aedeagus, distinctly separate.

DIFFERENTIAL DIAGNOSIS: This new species is easy to distinguish from others in this subgenus by its reddish brown color. It is also characterized by the wide latero-apical processes and the emarginate apical mesal margins of parameres.

ETYMOLOGY: Named in reference to the type locality.

DISTRIBUTION (Fig. 25): Vietnam, Laos.

Key to males of the subgenus *Sundodrupeus*

- 1 Antennal segments 3 triangular, rami on segments 4 very short (0.4 x length of rami on segment 6); medio-apical processes of parameres absent *priscus*
- 1' Antennal segments 3 strongly serrate or pectinate, rami on segment 4 long (>0.6 x length of rami on segment 6); medio-apical processes of parameres present 2
- 2 Medio-apical processes widely connected with parameres 3
- 2' Medio-apical processes narrowly connected with parameres 4
- 3 Penis short (0.6 x length of aedeagus), apices of medio-lateral processes of parameres prominent *sakaii*
- 3' Penis long (0.8 x length of aedeagus), apices of medio-lateral processes of parameres small *pruinus*
- 4 Medio-apical processes of parameres very long, medially dilated; apex of penis broadly rounded *nepalensis*
- 4' Medio-apical processes of parameres short, not medially dilated; apex of penis narrowly rounded ... 5
- 5 Mesal margins of parameres strongly emarginate near apices 6
- 5' Mesal margins of parameres slightly emarginate or smooth near apices 7
- 6 Coloration reddish brown; latero-apical processes of parameres broadly rounded *vietnamensis*
- 6' Coloration blackish brown; but pronotum yellowish brown, with a wide, medial, longitudinal black band; reverse V-shaped white stripes on elytra; latero-apical processes of parameres narrowly rounded *notatithorax*
- 7 Latero-apical processes of parameres very wide, apices slightly emarginate *pacholatkoii*
- 7' Latero-apical processes of parameres narrow, apices truncate or rounded 8

- 8 Rami on antennal segments 5 very long, subequal to those on segment 6; pronotum usually bicolored, yellowish brown and medially darkened 9
- 8' Rami on antennal segments 5 much shorter than those on segment 6 (0.6 x or 0.7 x); pronotum unicolored, dark brown or blackish 10
- 9 Latero-apical processes of parameres very wide *flabellatus*
- 9' Latero-apical processes of parameres slender, tube-like *laosensis*
- 10 Elytra maculate; mesal margins of parameres smooth *maculatus*
- 10' Elytra without maculae; mesal margins of parameres slightly emarginate near apices *albosulcus*

Acknowledgments

Our sincere thanks are due to H.P. Brown, W.D. Shepard, and T.K. Philips for reading the manuscript. We are greatly indebted to M. Brancucci, I. Löbl, O. Merkl, T. Nakane, G.A. Samuelson, M. Satô and P.J. Spangler for providing specimens and valuable information. We thank K.-C. Wong for line drawings and A.-L. Chu for habitus illustrations.

References

- CHAMPION, G.C. 1924: XXXVII. Some Indian Coleoptera. - Annals and Magazine of Natural History 9: 249-264.
- LEE, C.-F. & JÄCH, M.A. 1995: Psephenidae: 1. Check list of the Psephenidae (Coleoptera), pp. 349-354. - In M.A. JÄCH & L. Ji (eds): Water Beetles of China. Vol. 1. - Wien: Zoologisch-Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein, 410 pp.
- LEE, C.-F. & YANG, P.-S. 1996: Taxonomic revision of the Oriental species of *Dicranopselaphus* Guérin-Méneville (Coleoptera: Psephenidae: Eubriinae). - Entomologica Scandinavica 27: 169-196.
- LEE, C.-F., YANG, P.-S. & BROWN, H.P. 1993: Revision of the genus *Schinostethus* Waterhouse with notes on the immature stages and ecology of *S. satoi*, n. sp. (Coleoptera: Psephenidae). - Annals of the Entomological Society of America 86: 683-693.
- LEWIS, G. 1895: On the Dascillidae and Malacoderm Coleoptera of Japan. - Annals and Magazine of Natural History 16: 98-122.
- NAKANE, T.K. 1952: New or little known Coleoptera from Japan and its adjacent regions, VII. Dascillidae. - Scientific Reports of the Saikyo University 1: 35-41.
- NAKANE, T., OHBAYASHI, K., NOMURA, S. & KUROSAWA, Y. 1963: Iconographia insectorum Japonicorum colore naturali edita, 2 (Coleoptera). - Tokyo: Hakuryukan, (in Japanese).
- PIC, M. 1916: Descriptions abrégées diverses. - Mélanges exotico-Entomologiques 20: 1-20.
- PIC, M. 1923: Nouveautés diverses. - Mélanges exotico-Entomologiques 40: 1-32.
- PIC, M. 1944: Opuscula martialia XIII. - L'Échange, Revue Linnéenne (special issue): 1-16.
- SATÔ, M. 1983: Family Ptilodactylidae. - In: Checklist of Coleoptera of Japan. No. 20. - Coleopterists' Association of Japan. Department of Zoology, National Science Museum, Tokyo (in Japanese).
- WATERHOUSE, C.O. 1880: Descriptions of new Coleoptera belonging to the families Psephenidae and Cyphonidae. - Cistula Entomologica 2: 563-573.

Chi-Feng LEE

Museum of Biological Diversity, The Ohio State University, 1315 Kinnear Road, Columbus OH 43212-1192, U.S.A.

Dr. Manfred A. JÄCH

Naturhistorisches Museum, Burgring 7, A - 1014 Wien, Austria

Prof. Ping-Shih YANG

Department of Entomology, National Taiwan University, Taipei, Taiwan

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Water Beetles of China](#)

Jahr/Year: 1998

Band/Volume: [2](#)

Autor(en)/Author(s): Lee Chi-Feng, Jäch Manfred A., Yang Ping-Shih

Artikel/Article: [Psephenidae: II. Synopsis of Schinostethus Waterhouse, with descriptions of 14 new species \(Coleoptera\) 303-326](#)