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Three New Lepturine Beetles of the Genus *Ephies* (Coleoptera, Cerambycidae) from Celebes and the Malay Peninsula

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Abstract *Ephies taoi* and *E. notabilis* from Celebes and *E. alius* from the Malay Peninsula are described as new species. A key is given for the species of *Ephies* from Malaysia, Indonesia and the Philippines.

The genus *Ephies* PASCOE comprises about fifteen species which are mainly distributed in the Oriental Region, but some of them should be transferred to the genus *Pseudoparanaspia* HAYASHI, 1977. Almost all the species of these two genera are similar in coloration to lycid beetles which occur in the same habitat. I have had opportunities to examine specimens of two species belonging to the genus *Ephies* from Celebes. This is the first record of the genus from Celebes, though an undescribed species is known from Macassar (PASCOE, 1866, p. 506). I have another related species which resembles *E. dilaticornis* PASCOE in the collections from the Malay Peninsula collected by myself and Mr. K. SAKAI in 1976. These three species are described in this paper.

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Ephies taoi sp. nov.

(Figs. 1, 2, 5, 6, 9, 12, 17, 22 & 27)

This species is comparable with *E. philippensis* SCHWARZER in having longer elytra, according to the original description and figure, but it is distinguished from the other species of the genus by the presence of metallic blue tinge on the elytra with

only inconspicuous pubescence.

Male. Head black with median portion of mandibles and labium brown to dark brown; eyes light brown; prothorax dark red with black prosternum; scutellum black; elytra lustrous metallic blue, rarely with greenish or purplish tinge except for black sutural margin; legs black with femora dark blue; underside of mesothorax black; undersides of metathorax and abdomen dark metallic blue and much less shiny than elytra.

Head distinctly narrower than posterior width of prothorax (width across eyes: width of prothorax=1.0: 1.3); in dorsal view, distance between tips of stretched mandibles and anterior margin of eye slightly longer than the distance between anterior margin of eye and angular temple (1.13–1.16: 1.0); frons with median sulcus reaching occiput but faded between anterior margin of antennal cavities, space between apical median sulcus and clypeofrontal suture feebly convex above; surface minutely and densely punctured from frons to occiput, the punctures on basal half of clypeus distinctly coarser than those of frons to occiput but apical half of clypeus glabrous; antennal tubercles distinctly raised at inner ridges; antennal apices surpassing apical third of elytra, each outer margin of 3rd to 10th segments strongly dilated apically and outer corner pointed (Fig. 5).

Prothorax strongly declivous anteriorly in lateral view (Fig. 9); relative length of anterior and posterior margins and of apex to base=3.5: 7.1: 5.9; surface minutely and densely punctured and densely covered with recumbent silky brownish-red pubescence. Scutellum narrow-triangular with black pubescence.

Elytra very elongate, about 2.6–2.8 times as long as the length from tips of mandibles to basal margin of prothorax and about 3.8–4.0 times as long as humeral width; each apex broadly truncate though slightly sinuate on apical margin, with an obtuse tooth at outer angle and a small tooth at sutural angle (Fig. 12); surface finely and sparsely punctured with short blackish pubescence.

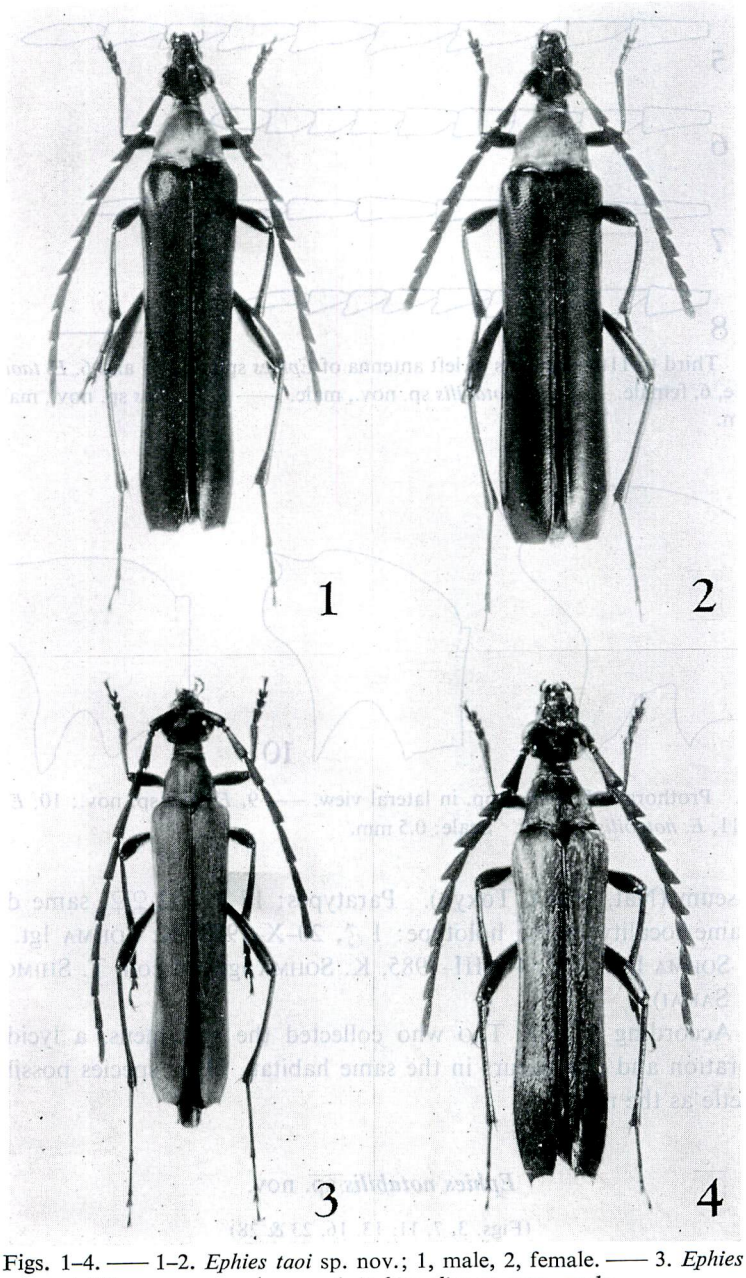
Legs with hind femora distinctly thicker than fore and mid femora; basal three segments of hind tarsus in a ratio of 5.2: 2.1: 1.2 (Fig. 17).

Abdominal sternites minutely punctured with short blackish pubescence, the punctures sparser towards apical segment from basal segment; 5th sternite barely emarginate on apical margin and slightly depressed at apicomedian portion.

Genitalia: lateral lobes comparatively long and slender in the genus (Fig. 22); median lobe strongly curved at middle in lateral view (Fig. 27 a), its apex bluntly pointed in dorsal view (Fig. 27 c) and narrowly truncate on apical margin in lateral view (Fig. 27 b).

Female. Similar to the male in general appearance, but differs from it in the following respects: body more robust; lateral sides of gena somewhat dark red and underside of gena and prosternum brighter red; antennae short, reaching basal half of elytra, 3rd to 10th segments less serrate (Fig. 6).

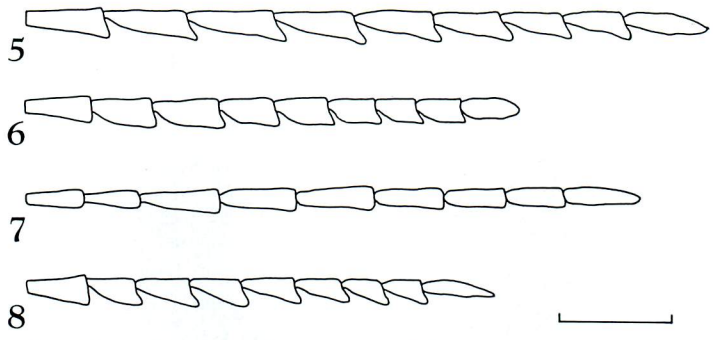
Length: ♂, 15.0–22.0 mm; ♀, 18.0–22.5 mm (measured from tips of mandibles to elytral apices); width: ♂, 2.6–3.5 mm; ♀, 3.5–4.4 mm (measured between humeral angles



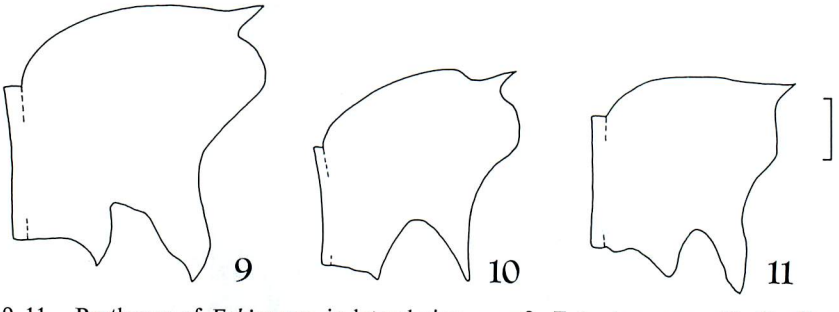
Figs. 1–4. —— 1–2. *Ephies taoi* sp. nov.; 1, male, 2, female. —— 3. *Ephies notabilis* sp. nov., male. —— 4. *Ephies alius* sp. nov., male.

of elytra).

Type series. Holotype: ♂, Pedamaran, ca. 1,000 m alt., Rantepao, Tana Toraja, Celebes I., Indonesia, 10–14. II. 1985, M. TAO lgt. (deposited in the National



Figs. 5–8. Third to 11th segments of left antenna of *Ephies* spp. —— 5 and 6. *E. taoi* sp. nov.; 5, male, 6, female. ——7. *E. notabilis* sp. nov., male. —— 8. *E. alius* sp. nov., male. Scale: 2.0 mm.



Figs. 9–11. Prothorax of *Ephies* spp. in lateral view. —— 9, *E. taoi* sp. nov.; 10, *E. alius* sp. nov.; 11, *E. notabilis* sp. nov. Scale: 0.5 mm.

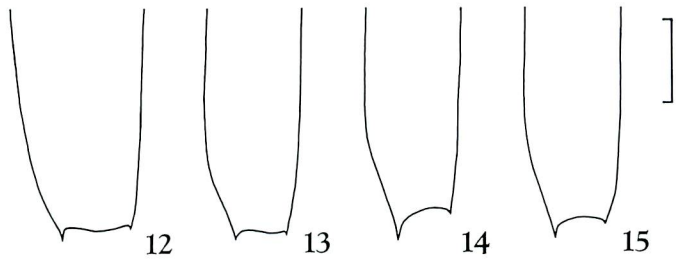
Science Museum (Nat. Hist.), Tokyo). Paratypes: 17 ♂♂, 2 ♀♀, same data as the holotype; same locality as the holotype: 1 ♂, 20–X–1983, K. SOHMA lgt.; 1 ♂, 10–II–1985, K. SOHMA lgt.; 1 ♂, 4–VIII–1985, K. SOHMA lgt. (in coll. T. SHIMOMURA, M. TAO and K. SAKAI).

Note. According to Mr. TAO who collected the specimens, a lycid beetle of similar coloration and size occurs in the same habitat. This species possibly mimics the lycid beetle as the model.

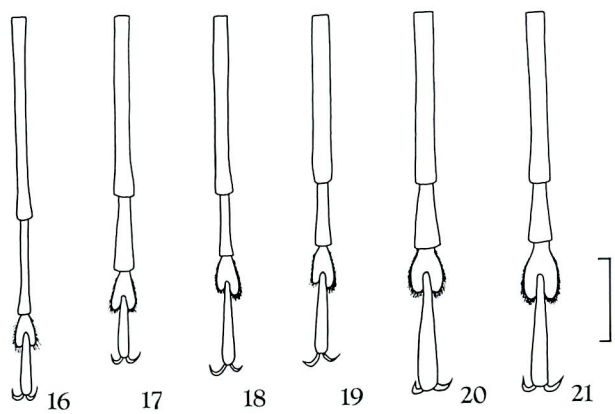
Ephies notabilis sp. nov.

(Figs. 3, 7, 11, 13, 16, 23 & 28)

This species somewhat resembles *E. taoi* and *E. philippensis* in having longer elytra, but it is distinguished from the other known species of the genus by the following characters: 3rd to 10th antennal segments not serrate though each segment is weakly dilated apically (Fig. 7); legs slenderer, especially hind tarsus slenderer and longer (Fig. 16).



Figs. 12–15. Apex of left elytron of *Ephies* spp. —— 12, *E. taoi* sp. nov.; 13, *E. notabilis* sp. nov.; 14–15, *E. alius* sp. nov. Scale: 1.0 mm.



Figs. 16–21. Left hind tarsus of male of *Ephies* spp. —— 16, *E. notabilis* sp. nov.; 17, *E. taoi* sp. nov.; 18, *E. alius* sp. nov.; 19, *E. dilaticornis* PASCOE; 20, *E. nagaii* OHBAYASHI et SATÔ; 21, *E. nigrosericeus* HAYASHI. Scale: 16 and 17=1.0 mm, 18–21=0.5 mm.

Male. Head black with sides of frons, lateral and ventral sides of gena, mentum and maxillary cardo and stipes dark brownish red; prothorax dark red with underside of apical margin and each large spot of lateral side black; scutellum and elytra reddish brown; legs black with bases of fore and mid femora and procoxae brown; undersides of meso- and metathoraces and abdomen dull black.

Head width across eyes equal to posterior width of prothorax; in dorsal view, distance between tips of mandibles and anterior margin of eye distinctly shorter than the distance between anterior margin of eye and angular temple (1.0: 1.23); frons with median sulcus barely reaching occiput but faded between anterior margin of antennal cavities; surface finely and densely punctured from frons to occiput, sparsely with golden red pubescence; punctures on clypeus somewhat coarser than those of frons to occiput except for glabrous apical margin; antennal tubercles gently raised at inner ridges; antennae reaching apical fifth of elytra, not serrate and each outer margin of 3rd to 10th segments weakly dilated apically but each outer corner not

pointed (Fig. 7); relative lengths of antennal segments=2.7: 0.4: 2.7: 2.6: 3.6: 3.5: 3.4: 3.3: 3.0: 2.8: 3.7.

Prothorax weakly declivous anteriorly in lateral view (Fig. 11), with an extremely shallow depression at middle just behind anterior margin in slant rear view; relative lengths of anterior and posterior margins and distance from apex to base=2.8: 5.0: 4.4; surface minutely and densely punctured, covered with short recumbent golden red pubescence. Scutellum subtriangular with golden red pubescence.

Elytra elongate, about 2.6 times as long as the length from tips of mandibles to basal margin of prothorax and about 3.85 times as long as humeral width; each apex truncate though slightly sinuate at apical margin, with an obtuse tooth at outer angle and an inconspicuous tooth at sutural angle (Fig. 13); surface finely and moderately punctured with subrecumbent silky brownish pubescence.

Legs slender; hind tarsus slenderer and longer than those of the other species of this genus, with the three basal segments in a ratio of 6.3: 2.9: 1.0 (Fig. 16).

Abdominal sternites minutely punctured with short brownish pubescence; 5th sternite distinctly emarginate on apical margin between lateral angles and subtriangularly depressed from apical margin to basal fourth, the depression gradually becoming shallower towards base.

Genitalia: lateral lobes depressed from inner margin nearly to outer margin at about apical two-thirds (Fig. 23); median lobe short, apex slightly bent in lateral view (Fig. 28 b) and sharply pointed in dorsal view (Fig. 28 c).

Length: 14.5 mm (measured from tips of mandibles to elytral apices); width: 2.6 mm (measured between humeral angles of elytra).

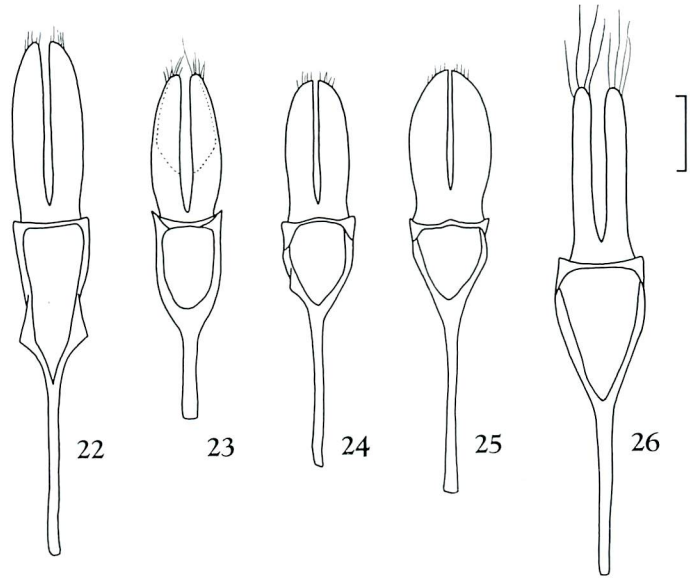
Holotype: ♂, Pedamaran, ca. 1,000 m alt., Rantepao, Tana Toraja, Celebes I., Indonesia, 4–VIII–1985, K. SOHMA lgt. (in coll. T. SHIMOMURA).

Notes. This species is distinguished from the other members of the genus by not serrate antennae, slenderer and longer hind tarsus and the shape of apical median lobe in male genitalia. I have concluded that it belongs to *Ephies* because the shape of lateral lobes of male genitalia is similar to that of *Ephies* but not to that of *Pseudoparanaspia* which is most closely allied to *Ephies*. This species is similar to *E. sericeus* FISHER from Java in the coloration of body according to the original description, but *E. sericeus* should be transferred to *Pseudoparanaspia*, because its body is much smaller and narrower, and its antennae are composed of shorter cylindrical segments.

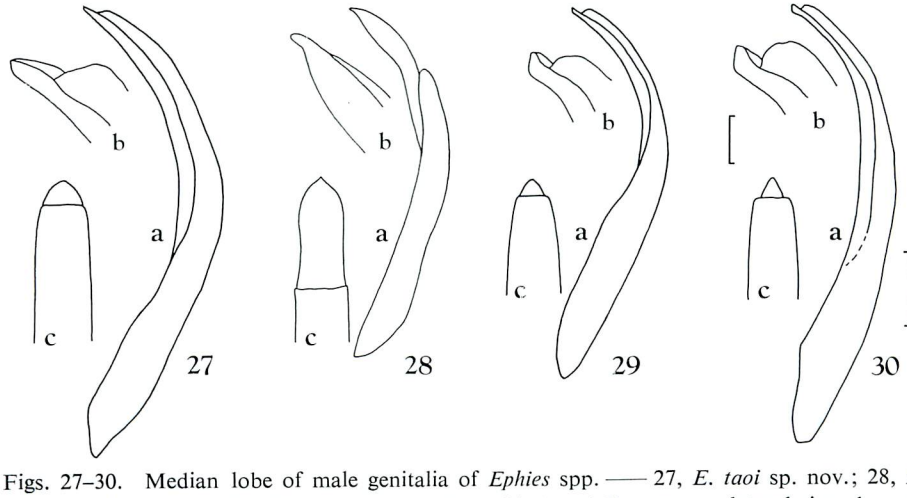
Ephies alius sp. nov.

(Figs. 4, 8, 10, 14, 15, 18, 24 & 29)

This species is similar to *E. dilaticornis* PASCOE from Borneo and Sumatra and *E. sulcipennis* BATES from NW India in having metallic dark blue on the underside of body and bicolored elytra with red base and black apex, but it is distinguishable from the former by the following characters: frons to occiput and oculomalar spaces



Figs. 22–26. Parameres of male genitalia of *Ephies* spp. and *Pseudoparanaspia semiephies* HAYASHI in dorsal view. —— 22, *E. taoi* sp. nov.; 23, *E. notabilis* sp. nov.; 24, *E. alius* sp. nov.; 25, *E. dilaticornis* PASCOE; 26, *P. semiephies* HAYASHI. Scale: 22–25=0.5 mm, 26=0.25 mm.



Figs. 27–30. Median lobe of male genitalia of *Ephies* spp. —— 27, *E. taoi* sp. nov.; 28, *E. notabilis* sp. nov.; 29, *E. alius* sp. nov.; 30, *E. dilaticornis* PASCOE. a, lateral view; b, apex in sublateral view; c, apex in dorsal view. Large scale: a=0.5 mm; small scale: b=0.125 mm, c=0.25 mm.

of head and prothorax metallic dark blue; median black portion of pronotum narrower, almost linear; apical black area of elytra smaller; basal red area of elytra darker. Judging from the original description, it also differs from the latter in having metallic dark blue prothorax and larger apical black area in elytra.

Male. Head metallic dark blue and faintly shiny on dorsum; mandibles, palpi, labrum and clypeus dark brown to black; eyes light brown; antennae black with dark blue tint on 1st and 2nd segments; prothorax metallic dark blue; scutellum black; elytra deep red, darker from median portion towards completely black apical fourth; legs metallic dark blue, femora brighter than in tibiae and tarsi; underside of body lustrous metallic dark blue, partly with greenish sheen; underside of abdomen brighter than elsewhere.

Head narrower than posterior width of prothorax (width across eyes: width of prothorax=1.0: 1.15); in dorsal view, distance between tips of stretched mandibles and anterior margin of eye equal to the distance between anterior margin of eye and angular temple; surface minutely and densely punctured from frons to occiput, the punctures on basal half of clypeus distinctly coarser than those of frons to occiput but apical half of clypeus glabrous, the punctures on basal half of clypeus coarser and sparser than those of *E. dilaticornis*; antennal apices not reaching apical third of elytra, each outer margin of 3rd to 10th segments strongly dilated apically and outer corner pointed (Fig. 8).

Pronotum finely and densely punctured, covered with recumbent silky red pubescence except for recumbent blackish pubescence on longitudinal median portion and near basal margin and with silky yellowish pubescence near basal corners; relative lengths of anterior and posterior margins and of apex to base=2.8: 5.7: 4.5. Scutellum narrow-triangular and covered with black pubescence.

Elytra distinctly bicostate on each disc as in *E. dilaticornis*, about 2.4 times as long as the length from tips of mandibles to basal margin of prothorax and about 3.6 times as long as humeral width; each apex narrowly emarginate on apical margin, with a sharp tooth at outer angle and a small tooth at sutural angle (Figs. 14–15); surface finely and sparsely punctured and covered with recumbent silky red pubescence on about basal three-fourths and with recumbent black pubescence on about apical fourth.

Legs with hind femora distinctly thicker than fore and mid femora; outer lobe of 3rd segment of hind tarsus shorter than its inner lobe; basal three segments of hind tarsus in a ratio of 2.8: 1.0: 0.7 (Fig. 18).

Abdominal sternites minutely and somewhat densely punctured with yellowish pubescence on each basal portion of 1st to 4th sternites but each apical portion of 1st to 4th sternites very sparsely punctured with blackish pubescence; space between the punctures polished; 5th sternite truncate apically with a sharp large tooth at each apical corner; its surface minutely and moderately punctured with blackish pubescence.

Genitalia: lateral lobes (Fig. 24) narrower than those of *E. dilaticornis* (Fig. 25);

median lobe curved at middle in lateral view (Fig. 29 a) and in dorsal view, less sharply pointed (Fig. 29 c) than that of *E. dilaticornis* (Fig. 30 c).

Length: 13.5–14.0 mm (measured from tips of mandibles to elytral apices); width: 2.5 mm (measured between humeral angles of elytra).

Type series. Holotype: ♂, nr. Kuala Kuba Bahru, Selangor, Malaysia, 24–III–1976, T. SHIMOMURA lgt. (in coll. T. SHIMOMURA). Paratype: 1 ♂, same data as the holotype, K. SAKAI lgt. (coll. K. SAKAI).

Notes. This species is similar to the following three species in the elytral color pattern: *E. nagaii* OHBAYASHI et SATÔ from Borneo, *E. cruentus* PASCOE from Penang I. off the Malay Peninsula and *E. apicalis* KANO from Taiwan, but it is distinguishable from them by metallic dark blue on underside of body instead of black in these three species.

Key to the Species of the Genus *Ephies* from Malaysia, Indonesia and the Philippines

1. Body smaller (length: 9.5 mm); antennae "robust and cylindrical", composed of "compact" segments but slightly dilated at their apices; pronotum, scutellum and elytra brownish yellow; antennae and underside of body black; range: Java ..... *E. sericeus* FISHER (? *Pseudoparanaspia*).
— Body larger and broader (length more than 11.5 mm; width more than 2.0 mm); antennae composed of longer segments and usually distinctly serrate; lateral lobes of male genitalia broader and outer margins roundly extended ..... 2.
2. Hind tarsus longer, 2nd segment more than twice as long as 3rd segment; antennae not serrate; range: Celebes ..... *E. notabilis* sp. nov.
— Hind tarsus shorter, 2nd segment less than twice as long as 3rd segment; antennae distinctly serrate ..... 3.
3. Elytra longer, more than 3.7 times as long as humeral width and entirely metallic blue, or wholly red ..... 4.
— Elytra shorter, less than 3.7 times as long as humeral width and bicolored with red base and black apex, or completely black in ground color ..... 5.
4. Elytra metallic blue; range: Celebes .....*E. taoi* sp. nov.
— Elytra red; range: Philippines (Baginis) ..... *E. philippensis* SCHWARZER.
5. Underside of body metallic dark blue ..... 6.
— Underside of body black, not metallic ..... 7.
6. Upper sides of head and prothorax metallic dark blue; median black portion of pronotum narrower; apical black area of elytra smaller (♂: apical fourth of elytra black); range: Malay Peninsula .....*E. alius* sp. nov.
— Upper sides of head and prothorax black; median black portion of pronotum broader; apical black area of elytra broader (about apical third to half of elytra black in both sexes); range: Borneo and Sumatra .... *E. dilaticornis* PASCOE.

7. Elytra entirely black covered with silky black pubescence, basal portion usually covered with silky red pubescence in male; range: Malay Peninsula .... *E. nigrosericeus* HAYASHI.
— Elytra bicolored ..... 8.
8. Apical three-fifths to half of elytra black; oblique border line of red and black areas of elytra more clearly defined; range: Borneo..... ..... *E. nagaii* OHBAYASHI et SATÔ.
— Apical fourth of elytra black; transverse border line of red and black areas of elytra less clearly defined; range: Malaysia (Penang I.) .... *E. cruentus* PASCOE.

摘　　要

下村　徹：セレベスとマレー半島産モウセンハナカミキリ属の3新種．—— 下記の *Ephies* 属の3新種を記載した．また，マレーシア，インドネシア，フィリピン産のこの属に含まれる種に対して検索表をつけた．

1．*Ephies taoi* SHIMOMURA（セレベス産）は，金属光沢がある藍色の上翅によって，この属の他種とは容易に区別できる．

2．*Ephies notabilis* SHIMOMURA（セレベス産）は，鋸歯状でない触角，より長い後跗節をもつことでこの属としては異質であるが，類似の *Pseudoparanaspia* 属とは雄交尾器の側葉片の形状が異なり，この種を *Ephies* 属に含めるべきものと判断した．またジャワ産の *E. sericeus* とは，より長い体長，より長い触角節で区別できる．

3．*Ephies alius* SHIMOMURA（マレー半島産）は，ボルネオ，スマトラ産の *E. dilaticornis* と北西インド産の *E. sulcipennis* に似ているが，前者とは頭部背面と前胸が金属光沢を帯びる暗藍色，前胸背板の黒色部分がより狭く，ほとんど線状，上翅の先端黒色部分がより狭い，上翅基部の赤色がより濃いという特徴で区別できる．また後者とは，暗藍色の前胸背板，上翅先端の黒色部分が広いという点で区別できる．

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