

Notes on the Taiwanese Species of the Genus *Stilicoderus* (Coleoptera, Staphylinidae)

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Abstract A new species of the staphylinid genus *Stilicoderus* is described and illustrated from Taiwan under the name of *S. kasaharai*. New data are given on the distribution of three Taiwanese species previously known and a key to all the species is provided.

About seventy species of the genus *Stilicoderus* have hitherto been reported from Asia, New Guinea and Australia (ROUGEMONT, 1996). Of these, three species, *S. exiguitas* SHIBATA, *S. formosanus* ROUGEMONT, *S. kuani* SHIBATA, have been known from Taiwan. Recently, I had an opportunity to examine an interesting species of this genus obtained from the temperate forest of the northern to southern mountainous areas in Taiwan. After a careful examination, it was clarified that the species belongs to the *feae–discalis–signatus* species-group (ROUGEMONT, 1986 a) and is new to science. It will be described in the present paper under the name of *S. kasaharai*.

Before going further, I wish to express my cordial thanks to Dr. Yasuaki WATANABE of Tokyo University of Agriculture for his constant guidance and encouragement, and to Dr. Shun-Ichi UENO of the National Science Museum (Nat. Hist.), Tokyo for his kindness extended to me in various ways. Heartly thanks are also due to Messrs. S. SAITO, W. SUZUKI and T. WATANABE for their help in supplying with material, and to Mr. Akinori YOSHITANI for his assistance in preparing the illustration of whole insect inserted in the present paper.

Stilicoderus exiguitas SHIBATA

Stilicoderus exiguitas SHIBATA, 1974, Bull. Japan ent. Acad., **8**: 11.

Stilicoderus exiguitas: ROUGEMONT, 1996, Revue suisse Zool., **103**: 720.

Stiliderus exiguitas: ROUGEMONT, 1986, Ent. Abh. Mus. Tierk. Dresden, **49**: 162.

Additional material examined. 2♂♂, Kuantaochi, about 650 m alt., Nantou Hsien, 25–VII–1973, Y. SHIBATA leg.; 1♂, Nanshanchi, Nantou Hsien, 4–VIII–1978, W. SUZUKI leg.; 6♀♀, Fenchihu, about 1,400 m alt., Chia Hsien, 9–VIII–1974, Y. SHIBATA leg., 7♂♂, same locality, 6–VIII–1976, 1♂, 6♀♀, same locality, 7–VIII–1977, 1♀, same locality, 30–III–1982, 3♂♂, 5♀♀, same locality, 13–VIII–1983, Y. SHIBATA leg.

Distribution. Taiwan (central mountain range); China (Guizhou).

Stilicoderus kuani SHIBATA

Stilicoderus kuani SHIBATA, 1974, Bull. Japan ent. Acad., **8**: 8.

Stiliderus kuani: ROUGEMONT, 1986, Ent. Abh. Mus. Tierk. Dresden, **49**: 177.

Additional material examined. [Taiwan] 1 ♀, Fenchihu, about 1,400 m alt., Chiai Hsien, 6–VIII–1976, Y. SHIBATA leg. [Laos] 3 ♂♂, Khammouan Prov., Ban Khoun Ngeun env., N 18°07', E 104°29', alt. 250 m, 4~16–XI, 25~30–XI–2000, E. JENDÉK & P. PACHOLÁTKO leg.; 3 ♂♂, 6 ♀♀, Boli Khan Xai Prov., Ban Nape (8 km NE), 600 m, N 18°21', E 105°08', 1~18–V–2001, C. L. PESA leg. (Recorded for the first time from Laos).

Distribution. Taiwan (central mountain range); Laos (central region).

Stilicoderus formosanus ROUGEMONT

Stilicoderus formosanus ROUGEMONT, 1996, Revue suisse Zool., **103**: 717.

Additional material examined. 1 ♂, Lalashan, about 1,600 m alt., Taoyuan Hsien, 27–III–1982, Y. SHIBATA leg.; 2 ♂♂, 1 ♀, near Chihtuan, about 1,600 m alt., Ilan Hsien, 26–III–1982, Y. SHIBATA leg.; 4 ♂♂, 3 ♀♀, Lushan, 1,200 m alt., Nantou Hsien, 27~28–VII–1977, Y. SHIBATA leg.; 1 ♂, Sungkang, Nantou Hsien, 25–V–1995, J.-J. LUO leg.; 1 ♀, Fenchihu, about 1,400 m alt., Chiai Hsien, 9–VIII–1974, Y. SHIBATA leg., 1 ♂, 3 ♀♀, same locality, 6–VIII–1976, 1 ♀, same locality, 11–VIII–1978, 1 ♂, 1 ♀, same locality, 13–VIII–1983, Y. SHIBATA leg.

Distribution. Taiwan (northern to central mountain range).

Stilicoderus kasaharai sp. nov.

(Figs. 1–4)

Body relatively elongate, subconvex and subparallel-sided. Colour black, moderately shining; mouthparts, antennae and legs reddish brown; each elytron with a large but not very sharply limited reddish spot before anterior two-thirds, which extends from humerus to near a short distance from suture but not attached to the latter; abdomen more or less sericeous. Length: 7.5–8.0 mm.

Head suborbicular, moderately convex above, nearly as long as broad and slightly wider than pronotum (greatest width of head/greatest width of pronotum=1.12), with lateral sides almost semicircular behind the eye and posterior part much longer than the longitudinal diameter of eye (length of posterior part/longitudinal diameter of eye=1.73); eyes relatively small but somewhat prominent; transverse impression on each side behind antennal tubercle very feeble and indistinct; surface closely covered with rather deep, moderately coarse punctures with short dark brown pubescence, though sparser in frontal area between antennal tubercles. Antennae elongate, extending a little beyond the middle of pronotum and not thickened apicad; 1st segment robust, dilated apicad and as long as the preceding two segments together, 2nd somewhat

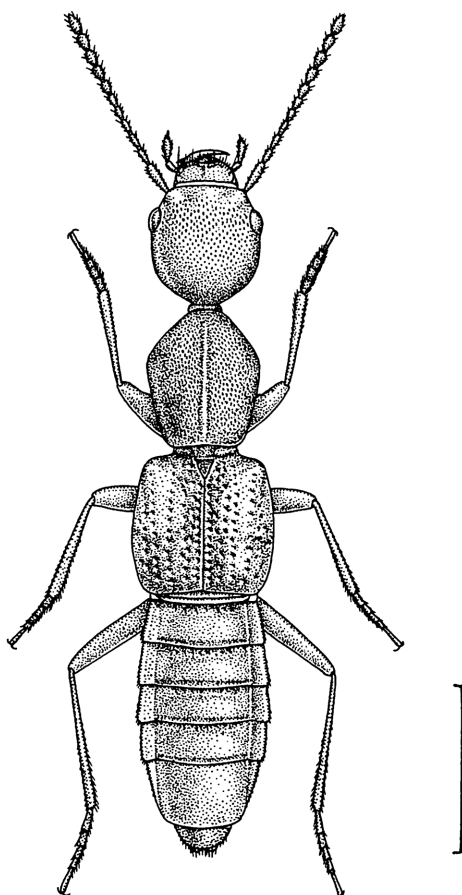


Fig. 1. *Stilicoderus kasaharai* sp. nov., ♂, from Fenchihu in Taiwan. Scale: 2.0 mm.

longer than wide, each one of 3rd to 6th a little longer than preceding segment and slightly dilated towards apex, 6th to 10th more or less ovoid and subequal in length to one another, the apicalmost 1.6 times as long as the penultimate and subacuminate towards the tip.

Pronotum nearly trapezoidal, well convex above, almost as long as wide (greatest width of pronotum/length of pronotum measured along the midline=1.06) and moderately narrower than elytra (greatest width of pronotum/greatest width of elytra=0.85), widest at the rounded latero-anterior angles which are at about anterior third, abruptly contracted anteriad, gently and straightly so towards the posterior angles; lateral sides finely but distinctly bordered throughout though not visible from above except for the posterior half of the lateral margin and both anterior and posterior margins; surface closely covered with elevated granular setiferous punctures and also provided with the same close pubescence as on head, but along the middle there is a

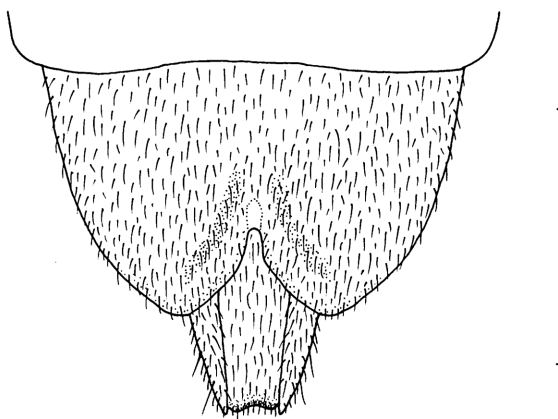


Fig. 2. Last three abdominal sternites in male of *Stilicoderus kasaharai* sp. nov. Scale: 0.5 mm.

rather broad, raised, impunctate shining line. Scutellum semicircular, rugose, bearing several moderately deep punctures.

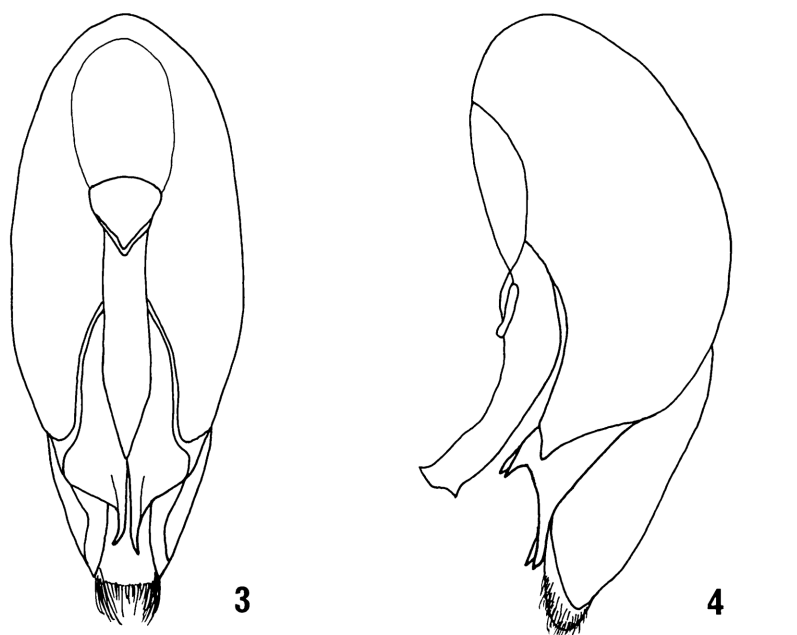
Elytra moderately depressed above, about as long as wide (greatest width of elytra/greatest length of elytra=1.02), broadest at about the middle and gently constricted both basally and apically, posterior angles moderately broadly rounded off, latero-posterior region more or less declined; surface provided with numerous serially aligned large foveate punctures and sparsely covered with extremely fine interstitial setiferous punctures.

Abdomen subcylindrical, nearly as wide as elytra, widest at 4th visible segment and gradually narrowed both basally and apically; each tergite very finely and closely punctured and pubescent, though the basal region of proximal four visible tergites each is provided with more or less transverse depression, inside of which is closely covered with distinct reticulate ground sculpture; 8th sternite (Fig. 2) rather deeply, subtriangularly excised at the middle of hind margin. Legs rather slender; protarsi slightly dilated, 4th tarsal segment simple, not bilobed.

Male genital organ (Figs. 3–4) short but robust, moderately sclerotized. Median lobe oblong-lanceolate, basal part more or less globular, anterior margin of the apical part with dense pilosity; ventral face provided with two pairs of short acutely pointed cylindrical parameroid lobes, one at about one-fourth from base, and the other at about one-eighth, the latter apical lobes asymmetrically curved, respectively. Fused paramere moderately broad, markedly shorter than median lobe, and abruptly narrowed in apical third towards apex which is narrowly pointed, strongly curved outwards at about middle in profile.

Female. Similar in general appearance to male, but four protarsal segments are less dilated, and the 8th abdominal sternite is simple at the middle of posterior margin.

Type series. Holotype: ♂, allotype: ♀, Fenchihu, 1,400 m alt., Chiai Hsien, 6–VIII–1976, Y. SHIBATA leg. Paratypes: 1 ♂, 1 ♀, same locality and data as the holotype,



Figs. 3-4. Male genital organ of *Stilicoderus kasaharai* sp. nov.; ventral view (3) and lateral view (4). Scale: 0.6 mm.

1 ♂ (teneral), same locality, 7-VIII-1977, 1 ♂ (teneral), same locality, 13-VIII-1983, Y. SHIBATA leg.; 5 ♂♂, 2 ♀♀, Tadongshan, Chiai Hsien, 10~13-VIII-1978, Y. SHIBATA leg.; 1 ♂ (teneral), Lalashan, Taoyuan-Taipei Hsiens, 24-VII-1978, Y. SHIBATA leg., 1 ♂, 2 ♀♀, same locality, 25-VII-1978, W. SUZUKI leg.; 1 ♂, Lushan, 1,200 m alt., Nantou Hsien, 30-VII-1978, Y. SHIBATA leg.; 5 ♂♂, 3 ♀♀, Tengchih, near Liukuei, Kaohsiung Hsien, 13-VIII-1978, Y. SHIBATA leg., 1 ♂, same locality, 3-V-1983, S. SAITO leg.; 1 ♂, Tianchi, 2,200 m alt., Kaohsiung Hsien, 1-VII-1976, Y. SHIBATA leg.

The holo- and allotypes are deposited in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture, and the paratypes are preserved in the author's private collection.

Distribution. Taiwan (northern to southern mountain range).

Notes. This species belongs to the *signatus* subgroup in the *faeae-discalis-signatus* group (ROUGEMONT, 1986 a, p. 142, 1996, p. 715). The *signatus* subgroup contains eight species, *S. incognitus* (ROUGEMONT) and *S. kambaitiensis* SCHEERPELTZ from Burma, *S. lomholdti* (ROUGEMONT) and *S. siamensis* (ROUGEMONT) from Thailand, *S. maai* (ROUGEMONT) from Borneo, *S. nepalensis* (ROUGEMONT) from Nepal, *S. pendleburyi* CAMERON from Malaysia and *S. signatus* SHARP from Japan and China. This new species is very similar in many respects to *S. signatus* SHARP but readily distinguished from it by the following points: body much larger in size; reddish spot on elytra much

larger; temples more widely divergent posteriad, with well marked postero-lateral angles; and different configuration of male genital organ.

All the specimens of the type series were found from under dead fallen leaves accumulated on the forest floor.

Etymology. The present new species is dedicated to the memory of the late Mr. Sumao KASAHARA, who was not only an artist but was a good specialist of carabid beetles.

Key to the Taiwanese Species of *Stilicoderus*

1. Elytra rough on surface, densely covered with fine granulose puncturation and also with indistinct serially aligned foveate punctures 2.
- Elytra more or less smooth on surface, either sparsely covered with extremely fine granulose puncturation or fine simple puncturation and with distinct serially aligned large foveate punctures 3.
2. Elytra maculate, with reddish spot; head subquadrate, moderately rounded to apico-lateral angles; eyes large and well prominent; with posterior region longer than the longitudinal diameter of eye (1.8 : 1) *S. exiguitas* SHIBATA.
- Elytra immaculate, entirely black; head subovate, broadly rounded but with well marked apico-lateral angles; eyes small and not prominent; posterior region much longer than the longitudinal diameter of eye (2.8 : 1) *S. formosanus* ROUGEMONT.
3. Elytra maculate, with large reddish spot, sparsely covered with fine simple puncturation and sporadically with moderately short pubescence on surface *S. kasaharai* sp. nov.
- Elytra immaculate, entirely dark reddish brown, sparsely covered with extremely fine granulate puncturation and densely with moderately long pubescence on surface *S. kuani* SHIBATA.

要 約

柴田泰利：台湾産 *Stilicoderus* 属についての知見。—— *Stilicoderus* 属には約70種がアジア、ニューギニア、オーストラリアから知られ、そのうちの3種が台湾産である。今回、台湾北部から南部にかけての温帯林の落葉下から得られた種を検したところ、ROUGEMONT (1986 a) の *Feae-discalis-signatus* 種群に属するが、明らかに新種と判定されるので、*S. kasaharai* と命名・記載した。なお、本種は画家でありゴミムシの専門家でもあった故笠原須磨生氏に献名したものである。

この種は、日本や中国に分布するオオクビボソハネカクシ *S. signatus* SHARP に類似するが、大型で上翅の赤斑は大きく、複眼後方の側頭部は後方に向かってより拡がり、さらに雄交尾器の形状の違いなどによって容易に区別される。

その結果、台湾からは次の4種が記録されたことになる。

1. *Stilicoderus exiguitas* SHIBATA [*Minor* 種群]
分布. 台湾 (中央部山地); 中国 (貴州).
2. *Stilicoderus formosanus* ROUGEMENT [*Japonicus* 種群]
分布. 台湾 (北部から中央部山地).
3. *Stilicoderus kuani* SHIBATA [*Feae-discalis-signatus* 種群]
分布. 台湾 (中央部山地); ラオス (中央部, 新記録)
4. *Stilicoderus kasaharai* SHIBATA [*Feae-discalis-signatus* 種群]
分布. 台湾 (北部から南部山地).

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