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New Tenebrionid Beetles from Taiwan (2)

Two New Species Dedicated to the late Dr. Masataka SATÔ

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Abstract Two new tebebrionid species are described from Taiwan and dedicated to the late Dr. Masataka SATÔ: *Scaphidema satoi* sp. nov. and *Strongylium masatakai* sp. nov.

It is well known that Dr. Masataka SATÔ was interested in the beetles of the family Tenebrionidae. He guided the authors for a long time, and gave the first author very interesting specimens collected from various areas of East Asia. They have never forgettable memories of field surveys with him to Thailand, Laos, Taiwan, etc. On this occasion, the authors would like to describe two new Taiwanese species of the family Tenebrionidae and to dedicate them to the late Dr. Masataka SATÔ.

Before going further into details, they would like to express their cordial acknowledgement to Dr. Makoto KIUCHI, Tsukuba City, for taking clear photographs inserted in this paper. They also wish to express their deep gratitude to Emeritus Curator Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for critically reading the manuscript of this paper.

The abbreviation used herein is as follows: NMNST–National Museum of Natural Science, Taichung.

Scaphidema satoi sp. nov.

(Figs. 1, 3–4)

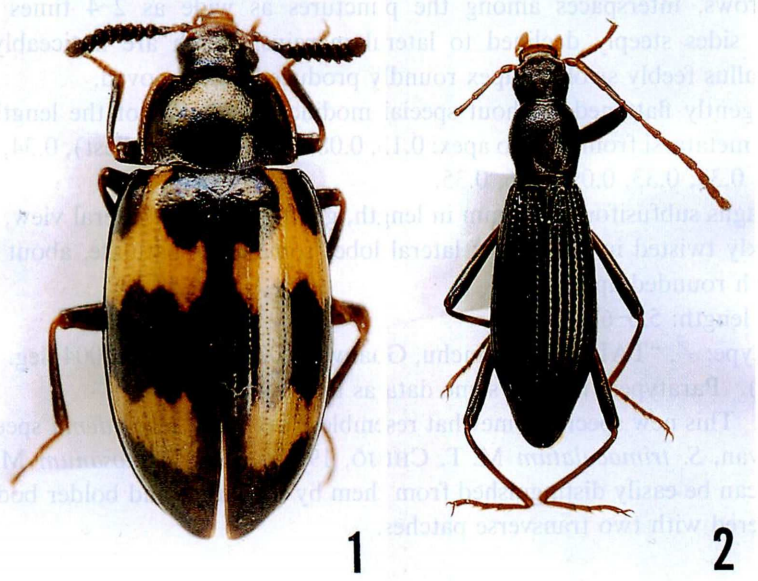
Two basal segments and apical part of 11th segment of antennae, anterior part of head, lateral margin of pronotum, ventral sides of head, prothorax, and legs dark reddish brown, the remaining parts of antennae, major part of pronotum, scutellum, and major part of ventral side brownish black; each elytron black with a pair of yellowish patches: the anterior patch extending from 2nd interval to 8th, with a prolongation reaching base of elytron in 5th interval, with posterior margin zigzagged, the posterior patch smaller than the anterior, extending from the midst of 2nd interval to 8th, with anterior and posterior margins zigzaged; each surface almost glabrous, dorsal surface moderately shining, ventral surface somewhat alutaceous. Body somewhat oblong-ovate, moderately convex dorsad.

Head transversely subelliptical, gently inclined apicad, scattered with strong punctures; clypeus transversely subhexagonal, very feebly depressed, not shining, covered with isodiametric microsculpture; fronto-clypeal and clypeo-genal borders defined; genae oblique, weakly produced antero-laterad, weakly raised, with narrow impunctate areas in front of eyes; frons feebly convex in middle, very weakly covered with isodiametric microsculpture, depressed in posterior area, where the punctures become sparser; interocular distance about 3.0 times the width of the transverse diameter of an eye in male, about 2.6 times in female. Eyes transverse in dorsal view, moderately convex laterad, obliquely inlaid into head. Antennae somewhat clavate, weakly flattened, with segments 5th to 10th each wider than long, ratio of the length of each segment from base to apex: 0.17, 0.07 (smallest), 0.14, 0.20, 0.18, 0.17, 0.17, 0.17, 0.16, 0.16, 0.29.

Pronotum subtrapezoidal, wider than long (3 : 2), widest at base, gradually narrowed anteriad; apex gently bisinuous, feebly produced in middle, finely bordered; base gently produced, weakly bisinuous in lateral parts, not bordered; sides gently declined to lateral margins, which are markedly grooved and rimmed, the rims feebly notched behind front angles; front angles subrectangular, moderately produced anteriad, hind angles slightly obtuse; disc moderately convex, covered with isodiametric microsculpture, scattered with punctures much smaller and sparser than those on head; punctural interspaces smooth, as wide as 2–6 puncture diameters. Scutellum triangular with rounded sides, covered with isodiametric microsculpture, scattered with punctures more closely and coarser than those on pronotum.

Elytra subovate, about 1.5 times as long as wide, 3.3 times longer and 1.4 times wider than pronotum, widest slightly behind the middle; dorsum rather strongly convex, highest slightly before the middle; disc with rows of small, rather closely set punctures,

Figs. 1–6. —— 1–2. Habitus of *Scaphidema* and *Strongylium*; 1, *Scaphidema satoi* sp. nov., male, holotype; 2, *Strongylium masatakai* sp. nov., male, holotype. —— 3–6. Male genitalia; 3, *Scaphidema satoi* sp. nov., dorsal view; 4, ditto, lateral view; 5, *Strongylium masatakai* sp. nov., dorsal view; 6, ditto, lateral view.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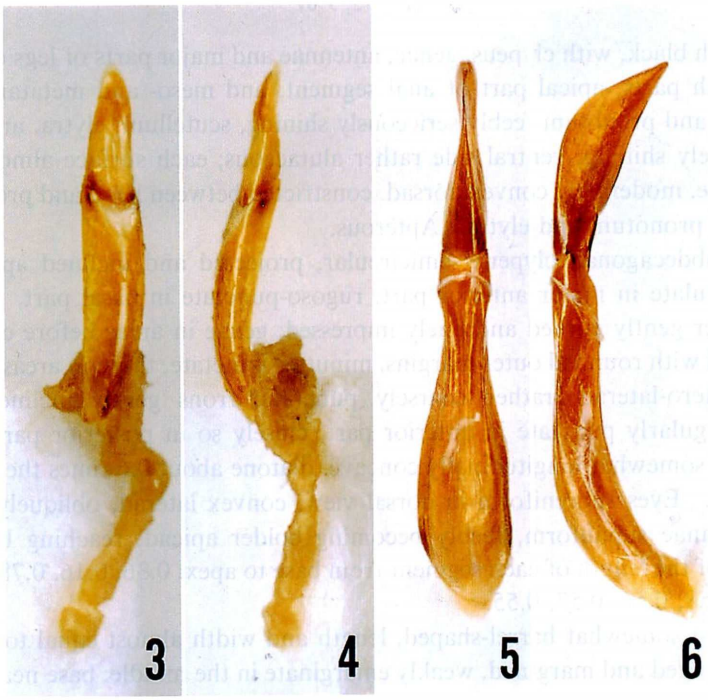
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8th and 9th rows obsolete; intervals very feebly convex, scattered punctures smaller than those in rows, interspaces among the punctures as wide as 2–4 times their own diameters; sides steeply declined to lateral margins, which are noticeably grooved; humeral callus feebly swollen; apex roundly produced, not grooved.

Legs gently flattened, without special modification; ratios of the lengths of pro-, meso- and metatarsi from base to apex: 0.13, 0.08, 0.07, 0.05 (smallest), 0.34; 0.15, 0.11, 0.11, 0.06, 0.33; 0.33, 0.09, 0.06, 0.35.

Aedeagus subfusiform, 1.1 mm in length, gently curved in lateral view, with basal piece weakly twisted in basal part; lateral lobes somewhat spatulate, about 0.3 mm in length, with rounded apex.

Body length: 5.6–6.6 mm.

Holotype: ♂, "TAIWAN: Hsinchu, Guanwu, 2000 m, 12–VI–2004, leg. C.-F. LEE (NMNST). Paratypes: 12 exs., same data as the holotype.

Notes. This new species somewhat resembles two other *Scaphidema* species known from Taiwan, *S. trimaculatum* M. T. CHÛJÔ, 1968, and *S. formosanum* MASUMOTO, 1982, but can be easily distinguished from them by the larger and bolder body with the elytra covered with two transverse patches.

Strongylium masatakai sp. nov.

(Figs. 2, 5–6)

Brownish black, with clypeus, genae, antennae and major parts of legs dark reddish brown, mouth parts, apical part of anal segment, and meso- and metatarsi yellowish brown; head and pronotum feebly sericeously shining, scutellum, elytra, antennae, and legs moderately shining, ventral side rather alutaceous; each surface almost glabrous. Body elongate, moderately convex dorsad, constricted between head and pronotum, and also between pronotum and elytra. Apterous.

Head subdecagonal; clypeus semicircular, projected and inclined apicad, rather closely punctulate in major anterior part, rugoso-punctate in basal part, with fronto-clypeal border gently curved and finely impressed; genae in areas before eyes strongly raised laterad with rounded outer margins, minutely punctate, those in areas behind eyes inclined postero-laterad, rather coarsely punctate; frons gently inclined anteriad, coarsely, irregularly punctate in anterior part, closely so in posterior part, with area between eyes somewhat longitudinally concave; diatone about 0.6 times the width of an eye diameter. Eyes subreniform in dorsal view, convex laterad, obliquely inlaid into head. Antennae subfiliform, feebly becoming bolder apicad, reaching basal 1/3 of elytra, ratio of the length of each segment from base to apex: 0.36, 0.16, 0.78, 0.61, 0.54, 0.56, 0.59, 0.58, 0.56, 0.57, 0.55.

Pronotum somewhat barrel-shaped, length and width almost equal to each other; apex feebly bulged and margined, weakly emarginate in the middle; base nearly straight, clearly bordered, rather noticeably rimmed; sides steeply inclined, roundly convex laterad and weakly sinuous before hind angles in dorsal view, with lateral margins

enveloping ventral parts, finely bordered but the borders are invisible from above; front angles rounded and hind angles obtuse in dorsal view; disc moderately convex, weakly impressed in a V-shape at base, also impressed at the base on each side, weakly covered with isodiametric microsculpture, rather closely, irregularly scattered with small punctures, sparsely intermixed with minute punctures among small punctures (about 1/5–1/6 in size). Scutellum triangular, feebly convex, weakly covered with isodiametric microsculpture, sparsely punctulate.

Elytra subfusiform, longer than wide (7 : 3); dorsum convex slightly posteriad, highest at the middle, weakly depressed behind the scutellum; disc punctato-striate, the striae fine and punctures in them rather strong, somewhat foveolate in lateral parts; intervals convex, weakly covered with isodiametric microsculpture, very sparsely punctulate, rather noticeably, somewhat transversely aciculate; lateral margins enveloping ventral parts; humeral portions not swollen; apices rather noticeably roundly produced.

Terminal segment of maxillary palpus securiform, interior side being 0.65 times the length of the exterior and 0.75 times the width of apex; mentum obtrapezoidal, gently convex in middle, depressed in basal part on both side, feebly covered with isodiametric microsculputure, sparsely scattered with microscopic punctures, weakly rugulose, and sparsely haired; gula rather smooth, with subparabolic border and a pair of impressions at anterior corners.

Prosternum punctate, weakly covered with isodiametric microsculpture in postero-lateral parts, ridged along apex, rather strongly raised between procoxae, depressed in the medial part, with prosternal process somewhat obpentagonal, coarsely granulate and rugulose; mesosternum with major parts covered by prosternum, roughly rugoso-punctate; metasternum rather strongly punctate, the punctures in lateral parts becoming larger and sparser; abdomen weakly covered with isodiametric microsculpture, rather closely punctulate, with lateral parts of sternite I to III weakly, longitudinally wrinkled, anal sternite weakly, somewhat semicircularly depressed in apical part.

Legs medium-sized for a member of this genus; profemora becoming bolder behind the middle, metafemora rather elongate; protibiae feebly curved, with intero-ventral face slightly gouged and minutely haired, meso- and metatibiae almost straight; tarsi rather long, tufted beneath, ratios of the lengths of pro-, meso- and metatarsi from base to apex: 0.27, 0.23, 0.19, 0.21, 0.65; 0.62, 0.34, 0.30, 0.22, 0.68; 1.22, 0.53, 0.34, 0.67.

Aedeagus 3.15 mm in length, 0.53 mm in width, moderately curved in lateral view; basal piece constricted in anterior 1/4 in dorsal view, convex in basal 1/3; lateral lobes 1.38 mm in length, sharply triangular in dorsal view, strongly compressed, somewhat falciform in lateral view.

Body length: 10.5–12.8 mm.

Holotype: ♂, "TAIWAN: Taitung, Shouka, 7～9–XII–2005, leg. C.-F. LEE (NMNST). Paratypes: 4 exs., same data as for the holotype.

Notes: This new species closely resembles *Strongylium claudum* (GEBIEN, 1913), originally described from "Suisharyo und Kosempo", Taiwan, but can be distinguished from the latter by the body slenderer, with the head and pronotum more strongly

punctate, the pronotum somewhat barrel-shaped, the elytra more strongly punctato-striate, the punctures in the striae closer and obviously rounded (sparser and somewhat longitudinal in *S. claudum*), and the male genitalia differently shaped.

要　　約

益本仁雄・李 奇峰・秋田勝己：台湾産ゴミムシダマシ科の新種 (2)：故佐藤正孝博士に捧げた2新種．—— 筆者らは，台湾産のゴミムシダマシ科を再検討しているが，研究過程でツヤゴミムシダマシ属およびナガキマワリ属の2新種が発見された．生前，ご指導を賜った名古屋女子大学名誉教授，故佐藤正孝博士に因み，*Scaphidema satoi* sp. nov. および *Strongylium masatakai* sp. nov. と命名した．

References

CHÛJÔ, M. T., 1968. A check list of the Formosan Tenebrionidae (Coleoptera) III. *Kontyû, Tokyo*, **36**: 393–397.

MASUMOTO, K., 1982. New or little-known Tenebrionidae from Formosa (II). *Ent. Rev. Japan*, **36**: 143–152.