New or little-known Tenebrionid beetles (Coleoptera) from Taiwan (17) Descriptions of five new species with a new genus, a report of new distribution and a resurrection

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Abstract. Five new tenebrionid beetles from Taiwan are described as *Dioedus taiwanus* sp. nov., *Clamoris chungi* sp. nov., *Plesiophthalmus* (*Inspinogeton*) *yutashanus* sp. nov., *Bolitotrogoides lanyuensis* gen. et sp. nov., and *Stenochinus matsudai* sp. nov. One species among them belongs to a new genus *Bolitotrogoides* gen. nov., and *Dioedus miyakensis* (Nakane, 1963) is recorded from Taiwan for the first time. In addition, a synonymized species, *Hemicera nakamurai* Masumoto, 1982 is resurrected for the second time as a good species.

INTRODUCTION

We have been studying the tenebrionid fauna of southeastern Asia, particularly those of Taiwan, for more than fifty years. The island of Taiwan is located in the semitropical zone, so most members of the fauna belongs to this zone, but some others have continental factors. Taiwan is not a big island, compared to Borneo and the likes, but its geographical features are very complicated; there are high mountain ridges and deep valleys. So, the species of insects therein are highly diverse. Among our collections, we found several unknown tenebrionid species. After recently conducted careful examination, we recognized that five species are new to science, as described in this paper. Of those, one species belongs to a new genus, and one species belonging to *Dioedus* will be added to the fauna of Taiwan. Finally, we will yet again resurrect as a good species *Hemicera nakamurai*, which was twice synonymized under *H. kurosawai* (Ando 2003, Ando et al. 2016).

MATERIAL AND METHODS

The specimen materials used for this study are mainly offered from the Taiwan Agriculture Reserch Institute (TARI), Wufeng, Taichung City, Taiwan, and our colleagues.

External morphology and male genitalia were examined using an Olympus SZ60 and a Leica MS5 stereoscopic microscope. Photographs were taken using an Olympus PEN E-P3 digital camera equipped with an extension tube and a ZUIKO AUTO-MACRO 50 mm f3.5 lens or a 80 mm f4 lens, and stacked using the free software Combine ZM from Alan Hadley.

The label data of the analysed specimens are verbatim cited between quotation marks. A slash is used to separate lines of the data on the label, and a double slash separates the labels. Holotypes will be preserved in the Taiwan Agricultural Research Institute, in Wufeng, Taichung (TARI) and the National Musesum of Nature and Science, in Tsukuba, Japan (NSMT). Paratypes will be deposited in both institute and museum for the moment, but shared to some major museums in Europe and America in future.

Abbreviations used herein are as follows: BL = Body length (labrum to apices of elytra along median line in dorsal view); BW = Body width (at widest part of body, mostly in elytra); LAI-XI = Length of antennomere I to XI; WE/ED = Width between eyes / Eye transverse diameter; PW = Pronotal width (at widest part); PL = Pronotal length (along the midline); EL = Elytral length (along the elytral suture); EW = Elytral width (at widest part); LTB-A = Lengths of pro-, meso- and metatarsi from baso- to apicomeres; AL = Aedeagus length (apicale apex to basale base). AW = Aedeagus width (at widest point in dorsal view); AbL = Basale length of aedeagus; AaL = Apicale length of aedeagus; Co. = County.

TAXONOMY

Tribe Penetini Lacordaire, 1859

Genus *Dioedus* J. L. LeConte, 1862

Type species: *Dioedus punctatus* J. L. LeConte, 1862.

Dioedus taiwanus sp. nov.

(Figs. 1-2)

Type locality. Taiwan, Kaohsiung City, Tenghsi.

Type material. Holotype: (♂): "Taiwan: Kaoshiung [nec: Kaohsiung] / Tengchih [nec: Tenghsi] / 01. I. 2015, leg. Y.-T. Chung" (TARI). Paratypes: (2 ♂♂, 1 ♀): same data as for the holotype; (2 ♂♂, 2 ♀♀): Kaoshiung [sic: =Kaohsiung], CCCC (=Chang-Chin Chen's Collection) , Weiliaonshan, 24. XI. 2021, Y.-T. Chung leg.; (1 ♀): same locality, 16. XI. 2021, Y. -T. Chung leg.

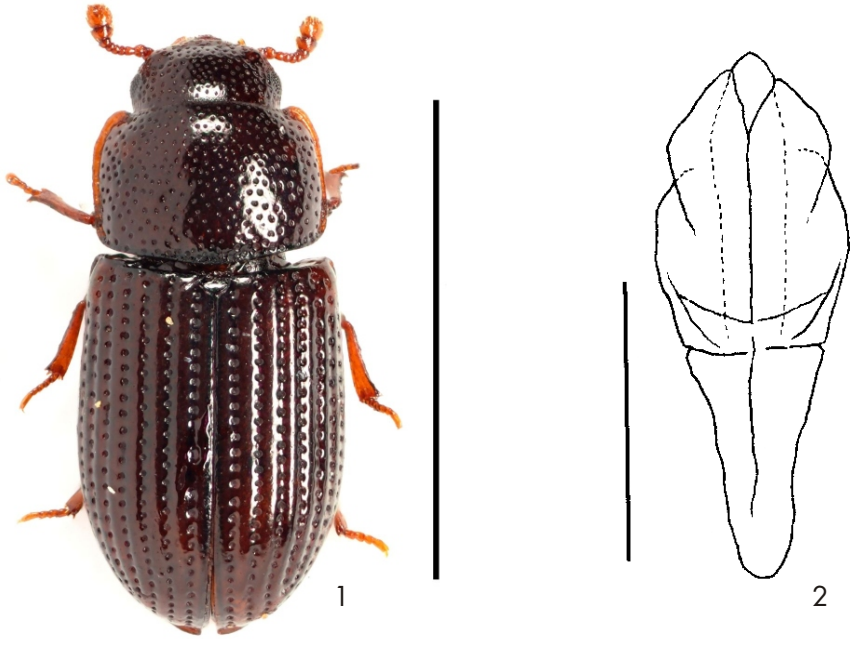
Description of holotype. Body elongate oval, moderately strongly convex dorsad, BL 2.31 mm, BW 1.05 mm (widest point across elytra), BL/BW 2.2; color dark brown, antennae, mouth parts, legs lighter in color; dorsal surface moderately shining, ventral surface weakly shining; body surface almost glabrous; antennomeres minutely haired, legs partly haired.

Head transversely elliptical, gently, somewhat roundly inclined apicad; labrum concealed under clypeus; clypeus transverse, more steeply inclined than frons, with apical margin weakly produced, sparsely scattered with minute punctures; fronto-clypeal suture indefinite; genae obliquely raised antero-laterad, scattered with fine punctures, with exterior margins obtusely produced; frons fairly wide, gently raised posteriad, coarsely punctate. Eyes small, feebly convex laterad, weakly, roundly inlaid into head; WE/ED 8.4. Antennae with two apical antennomeres clavate, particularly antennomere XI large and nearly round, whose tip barely reaches basal half of the pronotum. LAI-XI 0.09, 0.04, 0.02, 0.02, 0.02, 0.02, 0.02, 0.02, 0.03, 0.05, 0.11.

Pronotum subquadrate with moderately rounded sides, PL 0.67 mm, PW 0.84 mm, PW/PL 1.3, widest slightly before middle; apex feebly emarginate, not bordered but finely margined; base very weakly produced and slightly bisinuous, bordered by punctate groove; front angles roundly produced; hind angles obtusely angulate; disc weakly, rather transversely convex, highest slightly before middle, fairly closely, coarsely punctate; sides gradually, roundly declined to lateral margins, which are bordered by strongly punctate grooved. Scutellum triangular with rounded sides, flat and rather smooth, scattered with minute punctures.

Elytra longitudinally elongated subovate, though the basal portion is truncate, EL 1.46 mm, EW 1.05 mm, EL/EW 1.4, EL/PL 2.2, EW/PW 1.3, widest at middle, very slightly sinuous in basal 1/4; dorsum gently convex with sutural portions weakly depressed, highest at middle; disc

strongly punctate grooved, the punctures mostly round and notching intervals; intervals rather strongly convex, weakly microsculptured; sides fairly steeply, roundly declined to lateral margins, which are bordered by punctate grooves and fine ridges, and invisible from above; humeri gently swollen; apices rounded.



Figs. 1-2. *Dioedus taiwanus* sp. nov., holotype, ♂; 1- habitus; 2- aedeagus (dorsal view).
Scales: 2.0 mm for Fig. 1; 0.2 mm for Fig. 2.

Maxilla with terminal palpomere slightly elongated ovate. Mentum subquadrate, with a pair of fairly large punctures at middle. Gula with borders indefinite, microsculptured and coarsely punctate.

Prosternum rather wide; apex widely emarginate; anterior and medial parts gently convex longitudinally, microsculptured, and coarsely punctate; posterior part (area between procoxae) narrowed, weakly raised and minutely punctate; prosternal process weakly, widely produced posteriad, microsculptured and sparsely, minutely punctate. Mesoventrite medium-sized, gently depressed, weakly convex medially, microsculptured, shallowly, umbilicately punctate. Metaventrite medium-sized, moderately convex, longitudinally impressed in posterior 1/3 on median line, microsculptured, sparsely scattered with shallow umbilicated punctures, those in lateral parts becoming larger and sparser.

Abdomen medium-sized, microsculptured, coarsely scattered with shallow, umbilicated punctures, which become weaker and smaller apicad; ventrite V sparsely scattered with minute punctures, with rounded apex.

Femora subclavate, feebly microsculptured, shallowly, minutely punctate. Tibiae rather short and nearly straight, becoming wider apicad, minutely, umbilicately punctate. Tarsi rather short,

with tarsomeres becoming bolder in each apical part. LTB-A 0.04, 0.02, 0.02, 0.02, 0.07; 0.04, 0.02, 0.02, 0.02, 0.07; 0.07, 0.03, 0.02, 0.07.

Aedeagus complicatedly shaped, longitudinally subrhombical and gently convex medially in dorsal view, AL 0.37 mm, AW 0.14 mm, for far the details see Fig. 2.

Variability of males (n=4). Coloration is variable between yellowish and dark brownish in individuals. Major parts of lengths and ratios are as follows: BL 2.00-2.31 mm, BW 0.90-1.05 mm, BL/BW 2.2; EL/EW 1.4-1.5, EL/PL 2.2-2.4, EW/PW 1.1-1.3.

Females (n=3). Compared with males, antennae a little shorter and pronotum slightly narrower in anterior portions.

Differential diagnosis. No species belonging to this genus has ever been known from Taiwan. The present new species somewhat resembles *Dioedus miyakensis* (Nakane, 1963). The former can be distinguished from the latter by the body obviously smaller (2.5-3.0 mm in the latter), the head with vertex not convex, the pronotum wider, particularly widest before the middle, the front angles produced anteriad, and more strongly punctate, the grooves of the lateral margins narrower and deeper, and the elytral punctures in grooves stronger.

Etymology. The specific name, *taiwanus*, is given after Taiwan where the first species of the genus *Dioedus* was collected.

Distribution. Southern Taiwan.

Genus *Clamoris* Des Gozis, 1886

Type species: *Phtora crenata* Mulsant, 1854.

Clamoris chungi sp. nov.

(Figs. 3-4)

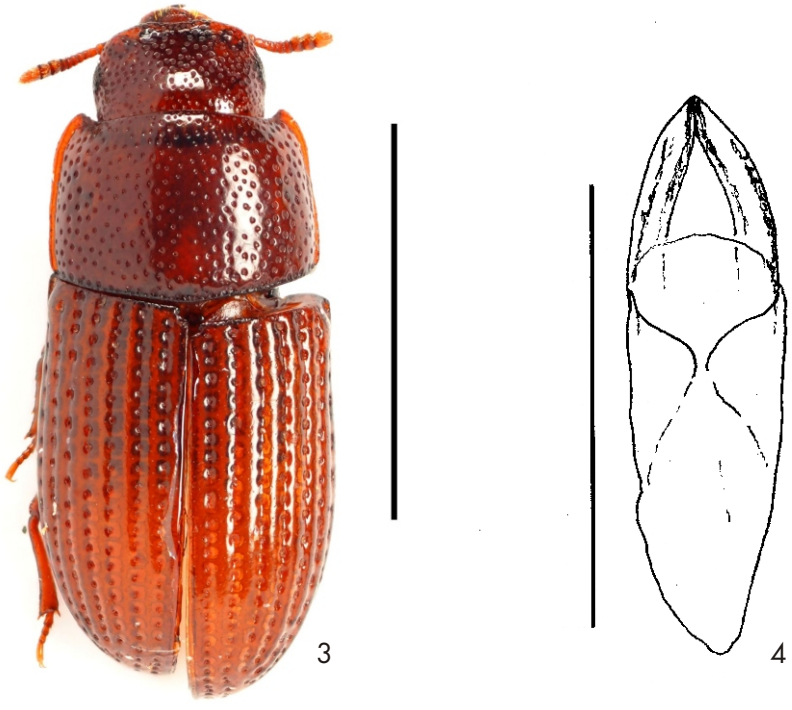
Type locality. Taiwan, Pingtung Co., Tahanshan.

Type material. Holotype (♂): "Taiwan: Pingtung CCCC / Tahanshan / 20. III. 2021. leg. Y.-T. Chung." (TARI); Paratype: (1 ♀): same locality and collector as holotype, 26. II. 2021, (NSMT).

Description of holotype. Body elongate elliptical, moderately strongly convex dorsad, BL 3.40 mm, BW 1.62 mm (widest point across elytra), BL/BW 2.1; color dark brown, antennae, mouth parts, and legs lighter in color; dorsal surface moderately, rather vitreously shining, ventral surface weakly, rather sericeously shining; body surface almost glabrous; antennomeres minutely haired, legs partly haired.

Head transversely subelliptical, though the basal portion is concealed under the pronotum, gently inclined apicad; clypeus short but wide, scattered with small punctures, with a small, widely, transversely subcrescent-shaped part in front, which is slightly depressed and minutely punctate; genae subtriangular, bordered from clypeus and frons by grooves, obliquely raised, scattered with small punctures, with exterior margins slightly rounded; frons wide, gently raised posteriad, weakly microsculptured, rather closely and coarsely punctate. Eyes small, feebly convex laterad, weakly, roundly inlaid into head; WE/ED 11.0. Antennae with three apical

antennomeres clavate, tip of antennomere XI reaching apex of pronotum. LAI-XI 0.08, 0.05, 0.04, 0.03, 0.03, 0.03, 0.03, 0.04, 0.07, 0.07, 0.14.



Figs. 3-4. *Clamoris chungi* sp. nov., holotype, ♂; 3- habitus; 4- aedeagus (dorsal view).
Scales: 2.0 mm for Fig. 3; 0.5 mm for Fig. 4.

Pronotum subquadrate with slightly rounded sides, PL 0.90 mm, PW 1.27 mm, PW/PL 1.4, widest at middle; apex widely, weakly emarginate, hardly bordered; base very weakly produced, finely bordered by punctate groove; front angles roundly produced; hind angles obtusely angulate; disc gently convex, highest slightly before middle, scattered with small punctures, which are smaller and sparser than those on frons; sides gradually declined to lateral margins, which are clearly grooved, the grooves with finely ridges and easily visible from above. Scutellum triangular with rounded sides, feebly convex and rather smooth.

Elytra longitudinally elongate subovate, though the basal portion is truncate, EL 1.87 mm, EW 1.62 mm, EL/EW 1.2, EL/PL 2.1, EW/PW 1.3, widest at middle, very slightly sinuous in basal 1/5; dorsum gently convex with sutural portions slightly depressed, highest at middle; disc strongly punctate grooved, the punctures mostly round and notching intervals; intervals rather strongly convex, weakly microsculptured; sides fairly steeply, roundly declined to lateral margins, which are bordered by sparsely punctate grooves and fine ridges, and invisible from above; humeri gently swollen; apices rounded.

Maxilla with terminal palpomere rather noticeably elongated subcylindrical. Mentum subquadrate, obviously convex medially, microsculptured and shallowly punctate. Gula triangle, gently convex in medial part, smooth, with a pair of small impressions near apex on borders.

Prosternum wide, microsculptured, and coarsely punctate, with latero-marginal parts transversely wrinkled; apex widely emarginate; anterior and medial parts gently convex longitudinally; posterior part rather strongly raised medially; area between procoxae narrowed; prosternal process somewhat inverted decagonally produced posteriad, antero-medial part with a large umbilicated puncture at middle, posterior marginal portion weakly depressed and rather noticeably microsculptured. Mesoventrite short, depressed, rather closely minutely punctate. Metaventrite medium-sized, moderately convex, longitudinally impressed in posterior half on median line, weakly microsculptured and rather coarsely punctate in antero-lateral parts, smooth and sparsely scattered with minute punctures in medio-posterior part. Abdomen medium-sized, noticeably microsculptured and coarsely punctate in latero-basal portions, rather smooth and simply punctate in medial and apical portions; abdominal ventrite V with rounded apex.

Femora subclavate, feebly microsculptured, sparsely scattered with minute punctures. Tibiae rather short, slightly curved exteriorly, becoming wider apicad, microsculptured, minutely punctate; protibiae densely clothed with hairs in apical half on interior faces; mesotibiae sparsely clothed with spine-like hairs in apical halves on exterior faces; metatibiae clothed with spine-like hairs in apical 1/4 mainly on ventral faces. Tarsi medium-sized, clothed with rather long hairs on ventral faces. LTB-A 0.06, 0.03, 0.03, 0.03, 0.05; 0.06, 0.04, 0.04, 0.04, 0.08; 0.07, 0.04, 0.04, 0.09.

Aedeagus weakly elongated subelliptical, AL 0.63mm, AW 0.18 mm; basale strongly convex and smooth on dorsal surface, rather strongly curved in lateral view, AbL 0.43 mm; apicale flattened and subelliptical, AaL 0.25 mm.

Females (n=1). Almost no difference from male in external appearance.

Differential diagnosis. From Taiwan, *C. formosanus* (Masumoto, 1982) has ever been known. The present new species can be easily distinguished from *C. formosanus* by the body smaller (4.2-4.8 mm in the latter) and more compact (BL/BW 2.5 in the latter), the head wider, marginal grooves of the pronotum obviously narrower.

Etymology. The specific name, *chungi*, is given in honor of the type collector.

Distribution. Southern Taiwan.

Tribe Amarygmini Gistel, 1848

Genus *Plesiophthalmus* Motchulsky, 1858

Type species: *Plesiophthalmus nigrocyaneus* Motchulsky, 1858.

Subgenus *Inspinogeton* Pic, 1937

Type species: *Cyriogeton impressipennis* Pic, 1937.

Plesiophthalmus (*Inspinogeton*) *yutashanus* sp. nov.

(Figs. 5-7)

Type locality. Kaohsiung City.

Type material. Holotype (♂): "Taiwan: Kaoshiung [sic: Kaohsiung] CCCC / Yutashan / 29. IV. 2019. leg. / B. X. Guo." (TARI).

Description of holotype. Body elongate elliptical, strongly convex dorsad, BL 8.48 mm, BW 3.58 mm (widest point across elytra), BL/BW 2.4; color black, antennae, mouth parts and tarsi with brownish tinge, hairs mostly pale yellowish; head, pronotum and legs strongly shining, scutellum and elytra weakly, sericeously shining, prosternum, mesoventrite and abdomen weakly shining, metaventrite moderately shining; body surface almost glabrous, six apical antennomeres, intero-ventral face of tibiae and tarsi minutely haired.

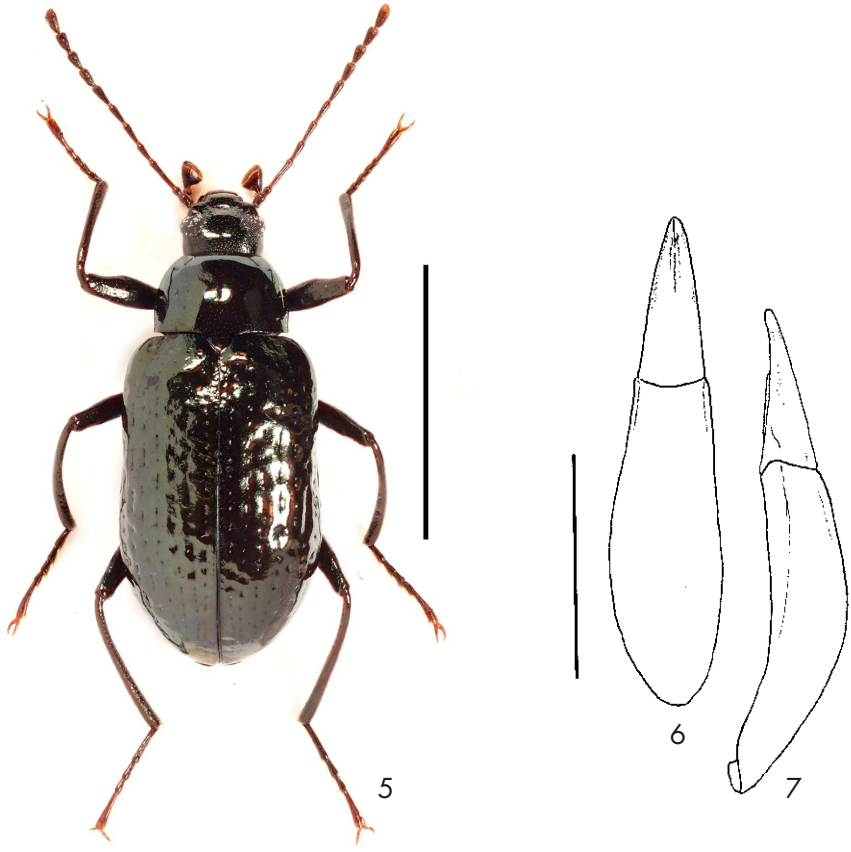
Head almost subvertical in repose, subdecagonal, though the basal portion is concealed under the pronotum; clypeus trapezoidal, gently, somewhat transversely convex in middle, apical part curved ventrad and loosely truncate, scattered with small, round punctures, each with a short minute hair; fronto-clypeal suture rather widely curved and grooved, the groove connecting clypeo-genal borders, and reaching exterior margins; genae obliquely raised antero-laterad, depressed in basal parts, areas before eyes irregularly scattered with punctures, with exterior margins rounded; frons somewhat wide Y-shaped, gently raised posteriad, irregularly scattered with large and small punctures. Eyes large, moderately convex antero-laterad, roundly, obliquely inlaid into head; WE/ED 1.4. Antennae subfiliform, tip of antennomere XI reaching basal 1/4 of elytra. LAI-XI 0.37, 0.16, 0.65, 0.39, 0.41, 0.39, 0.41, 0.38, 0.39, 0.38, 0.40.

Pronotum subquadrate, more strongly narrowed anteriad than posteriad, PL 1.64 mm, PW 2.40 mm, PW/PL 1.5, widest at middle; apex nearly straight, entirely bordered; base very weakly produced and slightly bisinuous, weakly emarginate at middle opposite to scutellum; front angles subrectangular, though hardly visible from above due to pronotal convexities; hind angles obtusely angulate; disc strongly convex, highest at medial portion, scattered with minute punctures, with longitudinal impression along median line; sides steeply, roundly declined to lateral margins, which are bordered and ridged, and invisible from above in anterior portions. Scutellum triangular with rounded sides, weakly convex in medial part, weakly microsculptured, sparsely, minutely punctate.

Elytra elongate elliptical, though the basal portion is truncate, EL 5.63 mm, EW 3.58 mm, EL/EW 1.6, EL/PL 3.4, EW/PW 1.5, widest at apical 2/5, sinuous in basal 1/3, basal portions gently, roundly produced laterad and posterior portions roundly narrowed apicad from widest point; dorsum rather strongly convex, highest at basal 1/3, with pair of low protrusions close to base; disc with rows of punctures, which are round in first rows, and become elongate or foveolate laterad; intervals convex, weakly undulate, microsculptured and wrinkled, scattered with microscopic punctures; sides fairly steeply declined to lateral margins and slightly enveloping underbody, the lateral margins bordered by fine ridges, and visible from above only in sinuated portions; humeri gently swollen; apices feebly produced and very slightly dehiscent.

Maxilla with terminal palpomere well-dilated, apical and extero-lateral sides nearly same length, interior side short and gently rounded. Mentum subpentagonal, convex medially, fairly smooth and scattered with minute punctures. Gula triangular, parabolically depressed posteriad, finely, longitudinally wrinkled, with lateral borders deeply impressed.

Prosternum short with apex widely V-shaped and ridged; anterior part depressed, microsculptured; medial part raised, microsculptured, with pair of round protuberances close to interior borders of procoxae; posterior part (=prosternal process) depressed, somewhat inverted pentagonal, protuberant on surface, with apex rounded. Mesoventrite short; anterior and medial parts strongly depressed, coarsely ruguloso-punctate; posterior part narrowed, strongly raised in Y-shape, ruguloso-punctate. Metaventrite normal in size, moderately convex, longitudinally impressed along median line; basal part slightly convex, coarsely ruguloso-punctate; remaining parts micro-aciculate, scattered with minute punctures. Abdomen normal in size, microsculptured, scattered with small punctures; ventrite V rather smooth, scattered with small punctures, apex subtruncate.



Figs. 5-7. *Plesiophthalmus* (*Inspinogeton*) *yutashanus* sp. nov., holotype, ♂; 5- habitus; 6- aedeagus (dorsal view); 7, ditto (lateral view). Scales: 5.0 mm for Fig. 5, 1.0 mm for Figs. 6 & 7.

Femora subclavate, closely punctate; profemora with obtuse angle at apical 2/5 on anterior faces. Tibiae rather slender, weakly becoming bolder apicad, rather closely punctate, each puncture with a fine hair; protibiae slightly curved ventrad, hairs in apical half on ventral face becoming longer; mesotibiae slightly curved intero-ventrad, hairs in apical 2/5 on interior face becoming longer apicad; metatibiae slightly curved ventrad, hairs in apical 1/5 on ventral face becoming longer apicad. Tarsi slender. LTB-A 0.31, 0.22, 0.23, 0.19, 0.68; 0.44, 0.31, 0.24, 0.20, 0.73; 0.84, 0.39, 0.35, 0.82.

Aedeagus short subfusiform, AL 2.14 mm, AW 0.55 mm (widest point in basale); basale with AbL 1.44 mm, elongate elliptical, though the apical part is obliquely invaded by the apicale, slightly widened posteriad, gently convex, and weakly curved in lateral view; apicale weakly elongate triangular, with AaL 0.74 mm, AaL/AL 0.35, slightly longitudinally convex.

Female. Unknown.

Differential diagnosis. This new species somewhat resembles *Plesiophthalmus chujoi* Masumoto, 2005, from Fushan Botanical Garden, Yilan Co., Taiwan. The former can be easily

distinguished from the latter by the body wholly black and fairly strongly shining, the pronotum almost smooth, the elytra with a pair of protuberances near the base, the punctures in rows irregular, the intervals undulate, and the legs a little shorter, particularly, the protibiae shorter and only slightly curved.

Etymology. The specific name, *yutashanensis*, is given after the place, Yutashan, Kaohsiung City, where the holotype was collected.

Tribe Cnodalonini Oken, 1843

Bolitotrogoides gen. nov.

Type species: *Bolitotrogoides lanyuensis* gen. et sp. nov. Gender: masculine.

Body elongate oval, fairly strongly convex dorsad, dark in color; head almost horizontal against pronotum in repose, coarsely punctate and partly granulate and rugulose, with marginal grooves of eyes deepened only in posterior parts; antennae subclavate, hardly reaching the basal portion of pronotum. Pronotum subquadrate with moderately rounded sides, gently convex, apex feebly produced, not bordered but very weakly ridged, the ridge with granules; base very weakly produced and slightly bisinuous, bordered by punctate ridge; lateral margins finely bordered and ridged, the ridges crenulate and granulate, and entirely visible from above. Elytra elongated subovate, rather strongly convex, shallowly punctate-grooved; intervals gently convex, with rows of acutely pointed tubercles; lateral margins grooved and finely ridged. Prosternum medium-sized with prosternal process rather large; mesoventrite short; metaventrite and abdomen medium-sized. Pro-, meso- and metacoxae not close with each other. Legs not modified. Aedeagus simple in shape.

Notes. We have been examining about the systematic position of this species for several years. Even though the body surface is covered with granules or tubercles, we finally concluded that this species belongs to a new genus of the tribe Cnodalonini by the reason of the body structure.

Bolitotrogoides lanyuensis gen. et sp. nov.

(Figs. 8-11)

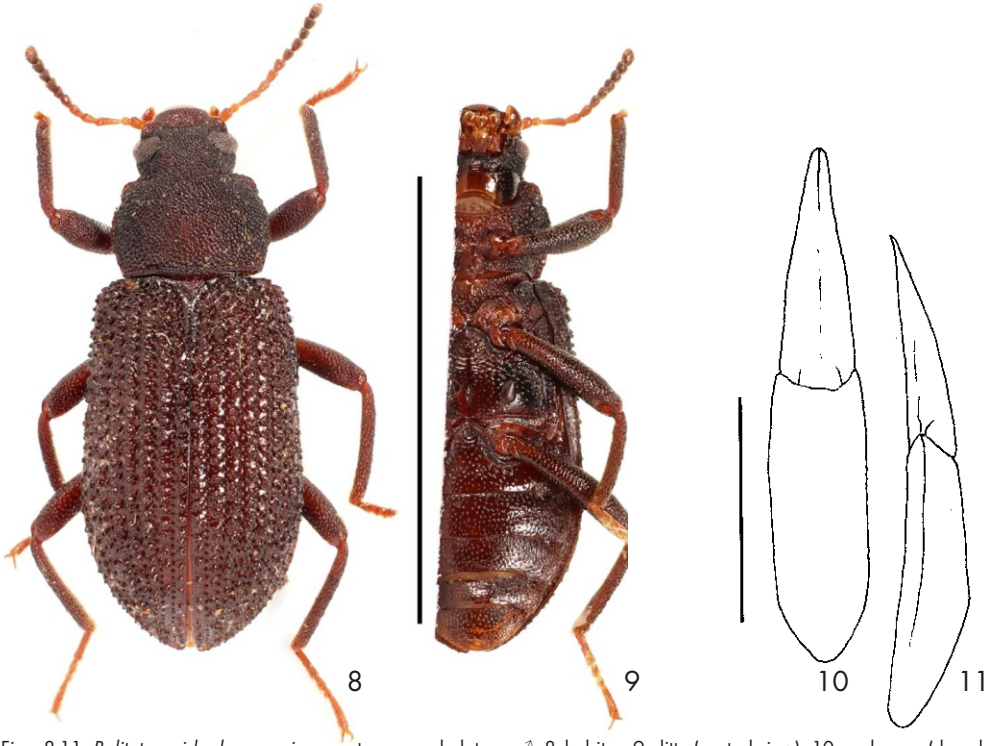
Type locality. Lanyu Is., East off the main island of Taiwan.

Type material. Holotype (♂): "Taiwan: Taitung CCCC / Lanyu / 09. IV. 2019. leg. Y.-T. Chung." (TARI).

Description of holotype. Body elongate oval, fairly strongly convex dorsad, BL 6.00 mm, BW 2.48 mm (widest point across elytra), BL/BW 2.4; color black with feebly brownish tinge, six basal antennomeres, mouth parts and tarsi lighter in color, hairs mostly pale yellow; head, five apical antennomeres, pronotum and femora and tibiae almost matt (bottoms of punctures often weakly shining), scutellum and elytra weakly shining (tops of tubercles rather strongly shining), six basal antennomeres and tarsi gently shining, prosternum and mesoventrite nearly matt, metaventrite and abdomen moderately shining; body surface almost glabrous, six apical antennomeres, apico-interior parts of tibiae and tarsi (particularly on ventral faces) haired.

Head almost horizontal against pronotum in repose, nearly round; clypeus inverted trapezoid, weakly depressed in basal part, widened apicad, truncate at apex, closely, rather coarsely punctate; fronto-clypeal suture nearly straightly grooved, the groove connecting with clypeo-

genal borders, and reaching exterior margins; genae obliquely raised antero-laterad, depressed in basal parts and areas before eyes, coarsely punctate, with exterior margins roundly produced; frons fairly wide, gently raised posteriad, coarsely, irregularly granulo-punctate, the punctures often fused with one another, and forming rugosities; grooves around eyes deepened in posterior parts. Eyes transverse, moderately convex laterad, roundly inlaid into head; WE/ED 1.7. Antennae subclavate, tip of antennomere XI barely reaching basal 1/4 pronotum. LAI-XI 0.19, 0.07, 0.26, 0.12, 0.13, 0.11, 0.12, 0.13, 0.12, 0.12, 0.18.



Figs. 8-11. *Bolitotrogoides lanyuensis* gen. et sp. nov., holotype, ♂; 8- habitus; 9- ditto (ventral view); 10- aedeagus (dorsal view); 11- ditto (lateral view). Scales: 5.0 mm for Figs. 8 & 9, 1.0 mm for Figs. 10 & 11.

Pronotum subquadrate with moderately rounded sides, PL 1.23 mm, PW 1.78 mm, PW/PL 1.4, widest slightly behind middle; apex feebly produced, not bordered but very weakly ridged, the ridge with granules; base very weakly produced and slightly bisinuous, bordered by punctate ridge; front angles subrectangular; hind angles obtusely angulate; disc moderately, rather transversely convex, highest in medial portion, closely punctate, the punctures rather small, subumbilicate, and often fused with each other, spaces among punctures narrowly ridged and often granulate; sides gradually, roundly declined to lateral margins, which are finely bordered and ridged, the ridges crenulate and micro-granulate, and entirely visible from above. Scutellum triangular, widely elevated in basal part, slightly microsculptured, sparsely, minutely granulate.

Elytra elongate subovate, though the basal portion is truncate, EL 4.12 mm, BW 2.48 mm, EL/EW 1.7, EL/PL 3.3, EW/PW 1.4, widest at apical 2/5, slightly sinuous in basal 1/4; dorsum rather strongly convex, highest at basal 1/3; disc shallowly grooved, the grooves with rows of

punctures, which are subovate, and mostly with a pair of small tubercles on each side; intervals gently convex, mostly microsculptured, with rows of acutely pointed tubercles, which are mostly independent, but rarely connected with each other; sides fairly steeply, roundly declined to lateral margins, which are bordered by sparsely, minutely punctate grooves and fine ridges, and invisible from above (only rows of tubercles on the lateralmost intervals visible from above); humeri gently swollen, remarkably tuberculate; apices rounded.

Maxilla with terminal palpomere well-dilated, with interior side shorter than exterior and apical sides. Mentum inverted subtrapezoidal, inverted triangularly convex in antero-medial part, microsculptured, minutely punctate. Gula parabolically bordered, weakly convex, feebly microsculptured and micro-aciculate, with pair of impressions near apical part on borders.

Prosternum moderate in size; apex gently roundly emarginate and ridged; anterior part microsculptured, rather coarsely punctate and micro-granulate; medial part gently raised, narrowed, microsculptured, and ruguloso-punctate; posterior part gently widened, weakly declined to prosternal process, which is widened posteriad, weakly triangularly produced, weakly ridged medially, microsculptured, weakly punctate and sparsely granulate. Mesoventrite short; anterior and medial parts strongly depressed, longitudinally rugulose, granulate in medial part; posterior part strongly raised in V-shape, microsculptured, obliquely, finely ridged and sparsely granulate. Metaventrite medium-sized, moderately convex, longitudinally impressed in posterior 1/3 on median line, microsculptured; basal part slightly convex and granulate; medial and posterior parts scattered with small umbilical punctures; lateral parts coarsely scattered with larger umbilicate punctures. Abdomen medium-sized, microsculptured; basal part of ventrite I rugose, posterior part of ventrites I to III closely, coarsely punctate, each puncture with a minute hair; ventrite IV scattered with small, somewhat transverse punctures; ventrite V rather strongly punctate in basal part, the punctures becoming weaker apicad, and rugulose in apical part, with apex widely rounded.

Femora subclavate, closely punctate, the punctures often fused with one another, with spaces among punctures granulo-rugulose. Tibiae nearly straight, slightly becoming bolder apicad, rugulose, microscopically granulate; each tibia with hairs in apico-ventral part. Tarsi moderate in size. LTB-A 0.08, 0.06, 0.06, 0.05, 0.33; 0.22, 0.10, 0.07, 0.06, 0.34; 0.34, 0.13, 0.08, 0.39.

Aedeagus subfusiform, AL 1.07 mm, AW 0.19 mm; basale with AbL 0.59 mm, elongate elliptical, truncate in apical part, gently convex longitudinally in dorsal view, weakly curved in lateral view; apicale elongated triangular, AaL 0.49 mm, AaL/AL 0.83, with apices not so acute.

Female. Unknown.

Notes. No species allied to this new species has ever been known.

Etymology. The specific name, *lanyuensis*, is given after Lanyu island where the holotype was collected.

Distribution. Taiwan (Lanyu Island, 60 km east of the main island of Taiwan).

Genus *Stenochinus* Motschulsky, 1860

Type species: *Stenochinus reticulatus* Motschulsky, 1860.

Stenochinus matsudai sp. nov.

(Figs. 12-14)

Type locality. Taiwan, Pingtung Co., Mt. Dahanshan.

Type material. Holotype (♂): "Mt. Dahanshan, 1000 m / -1300 m, Pingtung / County, TAIWAN / 13. VI. 2019 / K. MATSUDA leg. // Coll. Masumoto / 2019." (NSMT). Paratypes: (3 ♂♂, 2 ♀♀): same data as for the holotype.

Description of holotype. Body elongate elliptical, fairly strongly convex longitidinally, BL 9.25 mm (head concealed by pronotum in repose, thus, measured from apices of pronotum to apices of elytra), BW 3.05 mm, BL/BW 3.0; color brownish black, antennae, mouth parts, apical part of head, and claws dark reddish brown; surfaces almost matt, six basal antennomeres, mouth parts, apical parts of head and claws weakly shining; surfaces mostly covered with a sort of secretion, more or less clothed with minute scales or hairs.

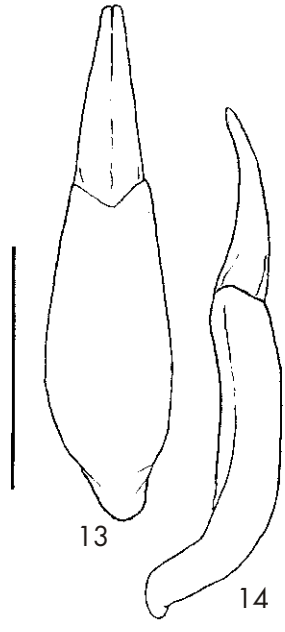
Head abruptly inclined in repose, transversely subelliptical, concealed under the pronotum, covered with a sort of secretion; clypeus subtrapezoidal, though the apical margin is weakly, roundly produced, ruguloso-punctate and minutely granulate, the punctures in antero-medial part with minute hairs, those in lateral and posterior parts with minute rod-like scales; fronto-clypeal suture indefinite; clypeo-genal borders obliquely sulcate and reaching exterior margins; genae weakly, obliquely raised antero-laterad, weakly depressed in areas before eyes, exterior margins gently rounded, surface minutely punctate, each puncture with a fine rod-like scale; frons rather wide, fairly steeply raised posteriad, irregularly punctate and micro-granulate, each puncture with a rod-like scale. Eyes medium-sized, weakly convex laterad, roundly, transversely inlaid into head, WE/ED 3.4. Antennae clavate, antennomere XI subovate, with tip reaching apical 1/3 of pronotum. LAI-XI 0.28, 0.13, 0.17, 0.11, 0.09, 0.07, 0.07, 0.09, 0.12, 0.10, 0.25.

Pronotum subquadrate, strongly convex, with area above medial part of apex noticeably, roundly produced, PL (length between produced apex and base) 2.98 mm, PW 2.53 mm, PW/PL 1.2, widest at middle; apex widely rounded, finely ridged in lateral parts, concealed by roundly produced part medially, which is weakly incised at the middle; base nearly straight, very finely ridged, slightly incised at middle; front angles acutely projected antero-laterad; hind angles obtusely angulate; disc strongly convex, highest at apical 3/7, weakly depressed in antero-medial portion, longitudinally grooved in apical 1/7 on median line, the groove becoming deeper apicad and connected with front incision; disc slightly covered with a sort of secretion, closely, coarsely ruguloso-punctate, minutely granulate and with minute rod-like scales; sides roundly produced, steeply inclined and enveloping underbody, thus, only apical and basal margins visible from above. Scutellum somewhat inverted pentagonal, gently convex widely in medial part, weakly impressed in medio-basal part, microsculptured and sparsely micro-granulate.

Elytra elongate subovate, though the basal portion is truncate, EL 6.27 mm, EW 3.05 mm, EL/EW 2.1, EL/PL 2.1, EW/PW 1.2, widest at apical 3/8, weakly sinuous in basal 3/8; dorsum rather strongly convex longitudinally, highest at basal 1/3; disc weakly covered with a sort of secretion and clothed with minute rod-like scales, shallowly punctate striate, each puncture with a minute tubercle on both sides; intervals mostly gently convex, but rather ridged in antero-medial portions, with rows of granules, which are mixed in size, rarely fused with one another and forming short ridges, each summit of those shiny; sides roundly declined to lateral margins and slightly enveloping underbody; lateral margin bordered by punctate groove and fine ridges with

minute scales, and invisible from above; humeri gently swollen, granulate and clothed with minute scales; apices rounded, clothed with minute scales.

Maxilla with terminal palpomere well-dilated, apical side longest and interior side shortest. Mentum inverted trapezoid, though the sides roundly widened apicad, convex medially, microsculptured, closely, minutely punctate, and sparsely minutely granulate, with lateral margins coarsely ridged. Gula parabolically bordered, the border interrupted in apical part, feebly microsculptured, transversely wrinkled.



Figs. 12-14. *Stenochinus matsudai* sp. nov., holotype, ♂; 12- habitus; 13- aedeagus (dorsal view); 14- ditto (lateral view). Scales: 5.0 mm for Fig.5, 1.0 mm for Figs. 13 & 14.

Prosternum rather short and narrow; apex rounded and ridged; anterior part slightly depressed, microsculptured and punctate, the punctures with short minute scales; medial part abruptly raised; posterior part strongly raised and convex in area between procoxae, closely, finely punctate and clothed with minute rod-like scales; prosternal process sublinguiform, depressed in basal part, raised apicad, ridged on median line, minutely punctate and clothed with fine scales, with apex acute; postero-interior parts clothed with pairs of rod-like scales. Mesoventrite with anterior and medial parts strongly depressed, ridged along median line, coarsely ruguloso-punctate, each puncture with a rod-like hair, posterior parts strongly raised in V-shape, ruguloso-punctate and

finely haired. Metaventrite rather short, moderately convex, slightly depressed in medial part, longitudinally impressed in apical half on median line, closely, coarsely punctate, each puncture with a rod-like scale. Abdomen rather long, microsculptured, fairly closely punctate, each puncture with a rod-like scale; ventrite V finely punctate in apical part, each puncture with a decumbent hair (instead of scales), apex rounded.

Femora rather short-subclavate, closely, minutely punctate, each puncture with a minute rod-like scale. Tibiae fairly short and stout, flattened on interior faces, closely punctate and clothed with decumbent hairs; protibiae nearly straight, densely haired on both sides along flattened interior face; mesotibiae slightly curved interiad, densely haired on flattened interior face, the hairs becoming longer apicad; metatibiae very slightly curved interiad, densely haired in upper area of flattened interior face, the hairs becoming longer apicad. Tarsi medium-sized. LTB-A 0.28, 0.25, 0.23, 0.13, 0.58; 0.27, 0.21, 0.17, 0.11, 0.53; 0.44, 0.26, 0.12, 0.56.

Aedeagus short subfusiform, gently curved in lateral view, AL 2.03 mm, AW 0.50 mm (widest point in basale); basale with AbL 1.40 mm, elongate subovate, though the apical part is invaded by apicale, widest at basal 1/3, gently convex dorsad, weakly curved in lateral view; apicale elongate triangular, weakly curved in lateral view, with AaL 0.73 mm, AaL/AL 0.36, weakly longitudinally convex, microsculptured; apices not fused.

Variability of males (n=4). BL 8.72-9.30 mm; BW 2.78-3.20 mm; WE/WD 3.6; PW/PL 1.2; EL/EW 2.0-2.2; EL/PL 2.2-2.4.

Females (n=2). Compared with males, antennae shorter, pronotum slightly narrower with apical incision weaker, legs more simple in shape. Two samples are almost of the same body size; BL 8.32 mm; BW 2.78 mm.

Differential diagnosis. This new species somewhat resembles *Stenochinus carinatus* (Gebien, 1914), from southern Taiwan. The former can be easily distinguished from the latter by the body bolder, the pronotum larger, the elytra with striae not distinct, the intervals not noticeably ridged, and the shape of scales or hairs covered on the body different.

Etymology. The specific name, *matsudai*, is given in honor of Kiyoshi Matsuda, who collect the type series.

Distribution. Southern Taiwan.

NEW DISTRIBUTIONAL RECORD

Dioedus miyakensis (Nakane, 1963)

Tagalus miyakensis Nakane, 1963: 27. Type locality:Tairo-ike, Miyakejima, Izu Is.
Tagalus tokaranus Nakane, 1963: 28. Type locality: Nakanoshima, Tokara Is.
Dioedus miyakensis: Kaszab, 1977: 314. [new combination]
Dioedus tokaranus: Kaszab, 1977: 314. [new combination]
Tagalus tokaranus: M.T. Chűjô, 1985: 313.
Dioedus miyakensis: Löbl et al., 2008: 120.
Dioedus tokaranus: Löbl et al., 2008: 120.
Dioedus miyakensis: Ando, 2015: 347.
Dioedus tokaranus: Ando, 2015: 347. [new synonym of *D. miyakensis*]
Dioedus miyakensis: Akita & Masumoto, 2016: 158.
Dioedus miyakensis: Löbl et al. 2020: 128.

Specimens examined: 1 ♂, Kaoshiung (sic: Kaohsiung), Kaomeitachiao, Taiwan, 11. V. 2016, Y.-T. Chung leg; 1 ♂, Taiwan, Pingtung, CCCC, Tahanshan, 03. I. 2023, leg .Y.-T. Chung; 1 ♀, same locality, 17. II. 2021, same collector.

Distributions. Japan: Kyushu, Tsushima Is., Oosumi Isls. (Yakushima Is.), Tokara Isls. (Kuchinoshima Is., Nakanoshima Is.), The Ryukyus (Amamiôshima Is., Yoroshima Is., Tokunoshima Is., Okinawajima Is., Ishigakijima Is., Iriomotejima Is.), Izu Isls. (Miyakejima Is.), Bonin Isls. (Chichijima Is., Otôtojima Is., Hahajima Is.); Taiwan **[New record]**.

RESURRECTION OF A SYNONYMIZED *HEMICERA* LAPORTE DE CASTELNAU ET BRULLÉ, 1831 SPECIES

***Hemicera* (*Hemicera*) *nakamurai* Masumoto, 1982**
(Figs. 15-17)

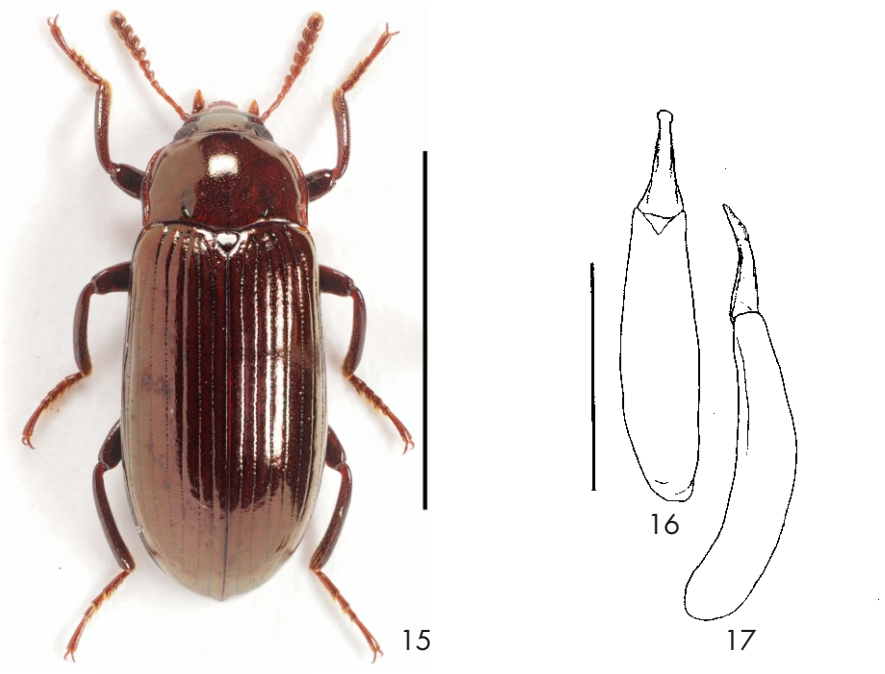
Hemicera nakamurai Masumoto, 1982: 56. Type locality: Sungkang, Nantou Hsien.
H. kurosawai: Ando, 2003: 389 (nec Masumoto, 1981). Type locality: Kuantziling, Tainan Hsien). [First synonymy].
H. nakamurai: Masumoto, Akita, & Lee, 2014: 247. [First resurrection].
H. (*H.*) *kurosawai*: Ando, Merkl, Jeng, Chan & Hayashi, 2016: 58. [Second synonymy].

Ando (2003) synonymized *Hemicera nakamurai* Masumoto, 1982 under *H. kurosawai* Masumoto, 1981 without any comment. Masumoto et al. (2014) resurrected it as a good species, but Ando et al. (2016) treated again the former as a synonym of the latter by the reason that "the character states mentioned by them are all within the range of intraspecific variations". Judging from this comment, they presumably did not carefully compare with both holotypes, and easily treated them as synonyms.

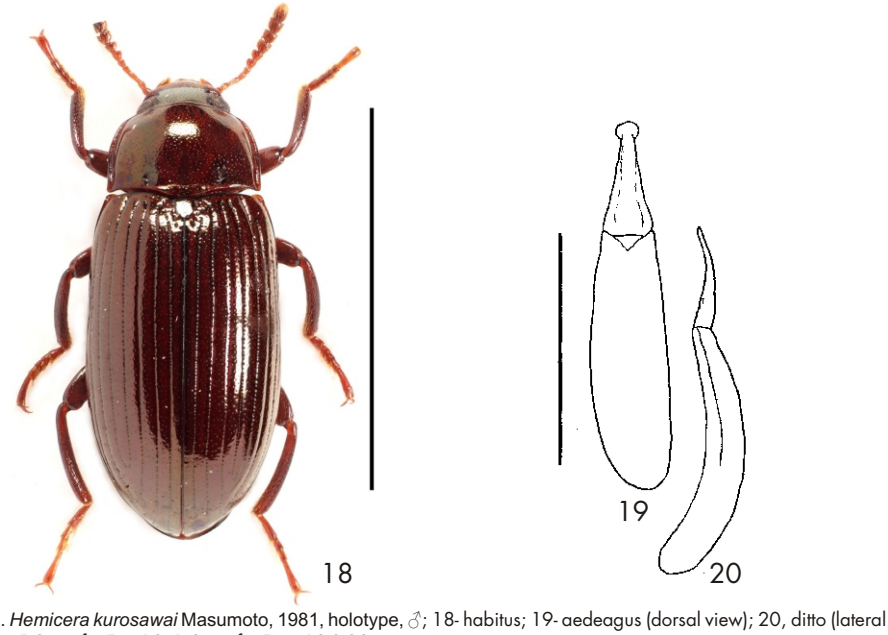
Actually, *H. kurosawai* (See Figs. 18-20) is widely distributed in Taiwan. The body shape is elongate elliptical and its size varies (4.0-7.1 mm). Besides, *H. nakamurai* is only known from Sungkang (type locality) up until now, and the body shape is longitudinally quadrate and weakly widened posteriad, with 6.5 mm in body length. Those two species are easily distinguished also by the shape of the aedeagus. Both are absolutely indipendent species. (See Figs. 16 &17 and Figs. 19 & 20).

Additional account of the aedeagus in each species. The aedeagus of *H. nakamurai*, compared with that of *H. kurosawai*, is larger and slenderer, with the apicale smaller, weakly compressed from sides, and the spoonful apex smaller. Results of measurement of each holotype are as follows:

H. nakamurai: AL 1.88 mm, AW 0.35 mm, AW/AL 0.19, AaL 0.50 mm, AbL 1.28 mm, AaL/AL 0.27.
H. kurosawai: AL 1.50 mm, AW 0.35 mm, AW/AL 0.23, AaL 0.50 mm, AbL 1.08 mm, AaL/AL 0.33.



Figs. 15-17. *Hemicera nakamurai* Masumoto, 1982, holotype, ♂; 15- habitus; 16- aedeagus (dorsal view); 17, ditto (lateral view). Scales: 5.0 mm for Fig. 15, 1.0 mm for Figs. 16 & 17.



Figs. 18- 20. *Hemicera kurosawai* Masumoto, 1981, holotype, ♂; 18- habitus; 19- aedeagus (dorsal view); 20, ditto (lateral view). Scales: 5.0 mm for Fig. 18, 1.0 mm for Figs. 19 & 20.

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