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New Tenebrionid (Coleoptera) Beetles from Taiwan

(9) Descriptions of Eight New Cnodalonine Species and an Additional Account of the Previously Described Species

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Abstract Eight new Taiwanese tenebrionid species belonging to the tribe Cnodalonini, Stenochiinae are described: *Gnesis meilingae* sp. nov., *G. dulanensis* sp. nov., *G. lini* sp. nov., *Oedemutes* (*Tamdaous*) *lutaoensis* sp. nov., *Euhemicera nanrenensis* sp. nov., *E. taichuani* sp. nov., *E. shihchiehi* sp. nov., and *Neoplamius kusamai* sp. nov. An additional account of the previously described species is provided.

As the ninth part of our series dealing with the Taiwanese tenebrionid beetles, we will describe eight new species and provide an additional account of the species described in the previous paper.

We would like to express cordial thanks to the authorities involved during our field surveys (the Headquarters of Kenting National Park, the Administration of the Taroko National Park, the Dongshih Forest District Office, Forestry Bureau, Council of Agriculture, Executive Yuan, and the Agriculture Bureau, Taichung City Government), and to Dr. Ming-Luen JENG and Dr. Mei-Ling CHAN (National Museum of Natural History, Taichung), for the application arrangement of research permission. We also thank Dr. Yen-Chiu LAN (Kang Ning University), Mr. Tai-Chuan WANG (Taiwan Agricultural Research Institute, Chiayi), Mr. Kuo-Hung CHUANG (Taoyuan District Agricultural Research and Extension Station, Council of Agriculture, Executive Yuan), Mr. Shih-Chieh HUANG (International Flyer Pacific Corporation), Mr. Chui-Sheng CHIU (Kang Ning University), and Dr. Keiichi TAKAHASHI (Ushiku City), for assisting our ongoing field surveys. We are indebted to Dr. Takeshi YORO (Kamakura City), Dr. Tatsuya NIISATO (Kokubunji City), Mr. Shigeo TSUYUKI (Zushi City), Mr. Yu-Long LIN (Taipei) and Mr. Bo-Xin Guo (Tainan), for offering materials to the present study. Thanks should also be expressed to Dr. Jing-Fu TSAI (Hokkaido University), for giving us invaluable ecological comment on our new species. We also thank Dr. Makoto KIUCHI (Tsukuba City), for taking clear photographs inserted in this paper. Finally, special thanks should be expressed to Emeritus Curator Dr. Shun-Ichi UENO (National Museum of Nature and Science, Tsukuba) for his constant guidance on our taxonomic study.

The abbreviations used herein are as follows: NMNST = National Museum of Natural Science, Taichung; NSMT = National Museum of Nature and Science, Tsukuba; TARI = Taiwan Agricultural Research Institute, Wufeng.

Descriptions of New Taxa

Subfamily Stenochiinae

Tribe Cnodalonini

Gnesis meilingae sp. nov.

(Figs. 1, 10-13)

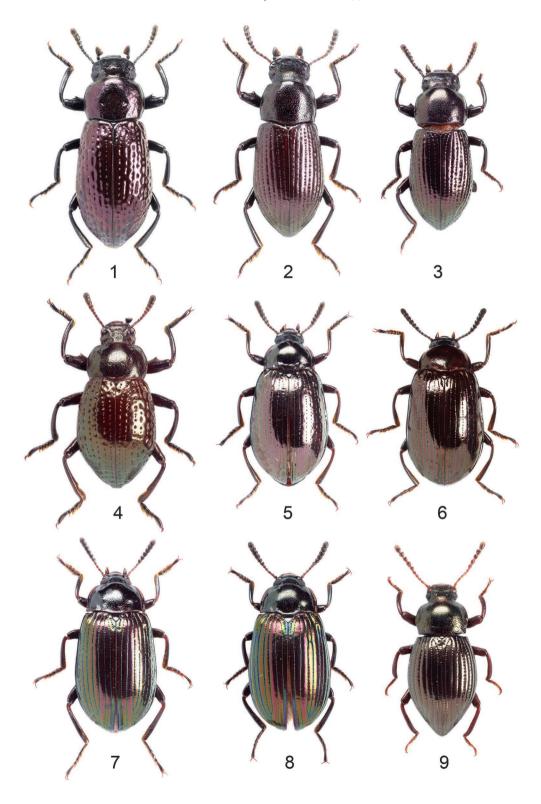
Body elongated subovate, strongly constricted at the border of fore and hind bodies, convex dorsad; head and major portion of pronotum dark purple with feeble coppery tinge, posterior margin of pronotum, scutellum and elytra dark reddish brown, ventral surface almost piceous, hairs on antennae, apico-interior faces of tibiae and tarsi beneath brownish yellow; dorsal surface strongly, metallically shining, ventral surface rather strongly, vitreously shining; each surface almost glabrous, six apical segments of antennae, apico-interior faces of tibiae and tarsi beneath haired.

M a l e: Head transversely elliptical, weakly microsculptured, almost flat and gently inclined anteriad in major antero-medial portion, inclined laterad in postero-lateral portions, grooved along lateral and posterior margins of eyes; clypeus obtrapezoidal, weakly convex in medial part, subtruncate in front, scattered with small punctures, and also sparsely scattered with minute ones; fronto-clypeal border transversely sulcate in middle, obliquely bent anteriad in lateral parts, and reaching to exterior margins; genae gently dilated laterad, rather flattened, depressed before eyes, rather closely, finely punctate, with exterior margin rounded; frons somewhat triangular, weakly depressed in middle, fine-ly punctate and weakly wrinkled; vertex weakly convex, finely punctate and weakly wrinkled. Eyes transversely subovate in dorso-lateral view, roundly convex laterad, slightly obliquely inlaid into head, with diatone about four times the width of the transverse diameter of an eye. Antennae clavate, tip of segment XI barely reaching to basal 1/5 of pronotum, X the widest, ratio of the length of each segment from I to XI: 0.16, 0.09, 0.39, 0.19, 0.16, 0.15, 0.18, 0.22, 0.23, 0.24, 0.36.

Pronotum subquadrate with rounded sides, very weakly sinuous before base, wider than long (4 : 3), widest at the middle; apex feebly produced, slightly narrower than base, rimmed in lateral parts; base very widely triangular, weakly sinuous in lateral parts, entirely bordered by a groove and fine rim; sides gently declined to lateral margins, which are entirely grooved and finely rimmed, the grooves and rims visible from above; front angles rounded, hind angles acutely produced; disc weakly convex, flattened in medial portion, more weakly microsculptured than on head, irregularly wrinkled in lateral portions, longitudinally and weakly impressed in postero-medial 2/5, obliquely and weakly impressed close to base on each side, sparsely punctate, each puncture with a minute setiferous hair. Scutellum triangular, weakly depressed, with surface almost smooth.

Elytra oblong-ovate, though the base is widely emarginate, 1.59 times as long as wide, 2.80 times the length and 1.29 times the width of pronotum, widest at the middle, gently, roundly narrowed anteriad and posteriad; dorsum strongly convex, highest at basal 3/10; disc with rows of subovate punctures, which are often connected with each other by fine striae, and often become large foveae in

Figs. 1–9. Habitus, A. — 1, Gnesis meilingae sp. nov., holotype; 2, G. dulanensis sp. nov., holotype; 3, G. lini sp. nov., holotype; 4, Oedemutes (Tamdaous) lutaoensis sp. nov., holotype; 5, Euhemicera nanrenensis sp. nov., holotype; 6, E. taichuani sp. nov., holotype; 7, E. shihchiehi sp. nov., holotype; 8, E. sakisimensis (M.-T. CHÛJÔ, 1978); 9, Neoplamius kusamai sp. nov., holotype.



lateral portions; intervals weakly convex, weakly microsculptured, sparsely scattered with microscopic punctures, very weakly microaciculate; sides steeply declined to lateral margins, which envelope the ventral body, and are bordered by punctate-grooves and fine rims; humeri reduced; epipleura wide in basal parts and gently tapering apicad; apices gently, roundly produced. Hind wings atrophied.

Maxillary palpi strongly dilated apicad, terminal segment with rounded exterior side about twice the length of the nearly straight interior, slightly longer than the weakly rounded apical. Mentum somewhat obtrapezoidal, closely punctate, with lateral margins rimmed. Gula rather smooth, with an oblique impression on each side.

Prosternum rather short; apex widely emarginate and weakly margined by punctate-rugulosity; anterior portion weakly convex, rather smooth and weakly microsculptured; medial portion nearly flat and sparsely, minutely punctate; posterior portion depressed, with prosternal process longitudinally grooved and projected posteriad. Mesoventrite very short; anterior portion rather smooth, strongly, triangularly depressed in middle; posterior portion ridged in V-shape. Metaventrite rather short, with a longitudinal medial impression in posterior half; medial portions rather smooth, weakly microsculptured, and sparsely, minutely punctate; lateral portions rather microshagreened and shallowly punctate. Abdomen moderate in size, weakly microsculptured; ventrites I–II and anterior part of III rugulo-so-punctulate; posterior part of III and IV–V (anal ventrite) closely, microscopically punctate; anal ventrite with apex rounded.

Legs normal in shape in the members of this genus; femora somewhat short-clavate, closely, finely punctate, profemur with a subtriangular spur at apical 1/4 on anterior edge; tibiae more or less curved interiad, protibia very weakly gouged in apical half and haired in apical 1/5 on interior face, mesotibia haired in apical half on interior face, metatibia haired in apical 2/5 on interior face; tarsi weakly dilated to each apex, densely haired beneath, ratios of the lengths of pro-, meso- and metatarsal segments: 0.28, 0.21, 0.23, 0.19, 0.65; 0.30, 0.20, 0.21, 0.19, 0.68; 0.64, 0.34, 0.26, 0.80.

Male genitalia elongated subfusiform, 2.33 mm in length, 0.34 mm in width; basale curved at basal 1/3 in lateral view; fused apicale 0.92 mm in length, weakly narrowed anteriad in basal 2/5, then rather strongly narrowed and somewhat nib-shaped in apical 3/5, with apices rather acute.

F e m a l e: Antennae shorter; diatone narrower, 3.3 times the width of eye diameter; elytra slenderer and 2.63 times the length of pronotum; legs shorter and less strongly curved; profemoral spur less acute.

Body length: 8.3–10.2 mm.

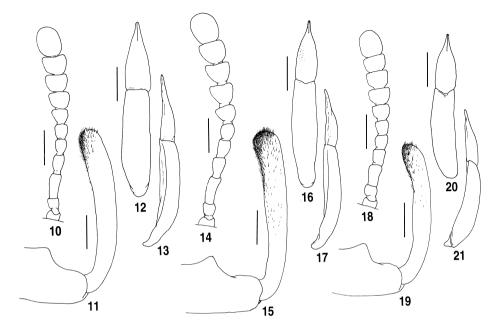
Type series. Holotype: ♂, "Taiwan, Hualian, / Bilu Divine Tree, / 2150 m, 10–11, X. 2013 / K. Takahashi leg." (NMNST). Paratypes: 1 $\stackrel{\circ}{_{-}}$, same data as for the holotype (NSMT); 1 $\stackrel{\circ}{_{-}}$, 1 $\stackrel{\circ}{_{-}}$, "Taiwan, Hualian, / Ci'en, 1995 m, / 13. X. 2013, / K. Takahashi leg." ; 1 $\stackrel{\circ}{_{-}}$, "Taiwan: Pingtung / Tahanshan (大 漢山) / 11. VII. 2013. leg. B.-X. Guo" (TARI).

Etymology. The specific name is given in honor of Dr. Mei-Ling CHAN (National Museum of Natural Science, Taichung) who has been supporting our ongoing field surveys.

Gnesis dulanensis sp. nov.

(Figs. 2, 14-17)

Body elongated subovate, weakly constricted at the border of fore and hind bodies, convex dorsad; head, pronotum, scutellum and femora brownish black, elytra, tibiae and tarsi dark purple, hairs on antennae, apico-interior faces of tibiae, and ventral sides of tarsi brownish yellow; central portion of head, pronotum and scutellum gently, metallically shining, remaining portion of head and elytra, rather sericeously shining, ventral surface sericeously and weakly shining; dorsal surface hardly



Figs. 10–21. Gnesis spp., holotype, ♂. — 10–13, Gnesis meilingae sp. nov.; 14–17, G. dulanensis sp. nov; 18–21, G. lini sp. nov.; 10, 14, 18, antennae; 11, 15, 19, profemur and tibiae; 12, 16, 20, male genitalia (dorsal view); 13, 17, 21, ditto (lateral view). Scales: 0.5 mm.

haired, antennal segments more or less minutely haired, apico-interior faces of tibiae and tarsi beneath finely haired.

M a l e: Head transversely suboctagonal, though the basal portion is concealed under the pronotum, weakly microsculptured, gently inclined anteriad in major medial portion, rather steeply inclined lateral in lateral portions, grooved along lateral and posterior margins of eyes; clypeus somewhat transversely hexagonal, though the anterior part is shortened, weakly convex in medial part, depressed in postero-lateral parts of the convexity, obliquely impressed in lateral parts along exterior margins, truncate in front, closely, irregularly punctate, micro-granular in postero-medial part; fronto-clypeal border straightly sulcate in middle, obliquely bent anteriad in lateral parts, and reaching to exterior margins; genae gently dilated laterad, moderately inclined antero-laterad, depressed before eyes, impressed near exterior margins, rather closely, finely punctate, with exterior margin rounded; frons somewhat subquadrate, weakly depressed on each side close to fronto-clypeal border, rather sparsely and strongly punctate in medial part, closely and weakly punctate in lateral parts; vertex weakly convex, punctate, the punctures becoming smaller and closer laterad and posteriad. Eyes somewhat cashewnut-shaped in dorso-lateral view, roundly convex laterad, slightly obliquely, triangularly inlaid into head, with diatone about 4.5 times the width of the transverse diameter of an eye. Antennae clavate, tip of segment XI fairly reaching to base of pronotum, X and XI the widest, ratio of the length of each segment from I to XI: 0.25, 0.09, 0.38, 0.26, 0.23, 0.21, 0.23, 0.27, 0.25, 0.29, 0.40.

Pronotum subtrapezoidal with rounded sides, very weakly sinuous before base, wider than long (9 : 7), widest at basal 3/7; apex gently produced, slightly narrower than base, rimmed in short lateral parts; base very widely triangular, gently sinuous in lateral parts, rimmed, the rim interrupted in middle; sides rather steeply declined to lateral margins, which are entirely grooved and finely rimmed, the grooves and rims visible from above; front angles obtusely angular, hind angles subrectangular with

acute corners; disc rather strongly, somewhat longitudinally convex, weakly impressed close to apex and also weakly impressed on each side close to base, more weakly microsculptured than on head, rather closely, irregularly punctate, each puncture with a minute setiferous hair. Scutellum triangular, with weakly rounded sides, feebly raised, sparsely scattered with large and small punctures.

Elytra oblong-ovate, though the base is gently emarginate, 1.49 times as long as wide, 2.69 times the length and 1.56 times the width of pronotum, widest at the middle, gently, roundly narrowed anteriad and posteriad; dorsum rather strongly convex, highest at basal 1/4; disc punctate-striate, the striae fine and often interrupted in interior portion, becoming bolder and deeper in lateral portions, the punctures in striae small and close in interior portion, becoming larger and sparser in lateral portions; intervals weakly convex in interior portion, strongly so in lateral portions, weakly microsculptured, sparsely scattered with microscopic punctures, very weakly micro-aciculate; sides steeply declined to lateral margins, which envelop the ventral body, and are bordered by punctate-grooves and fine rims; humeri reduced; epipleura wide in basal parts and gently tapering apicad; apices gently, roundly produced. Hind wings atrophied.

Maxillary palpi subsecuriform, terminal segment with rounded exterior side about twice the length of the weakly rounded interior, 0.9 times the length of the weakly rounded apical. Mentum subcordate, strongly raised anteriad in medial part, microshagreened, sparsely pubescent, impressed in baso-lateral parts, with lateral margins finely rimmed. Gula rather smooth, very weakly, transversely impressed, with a short oblique impression near apex on each side.

Prosternum rather short; apex weakly emarginate; anterior portion microsculptured and rugulose; medial and posterior portions gently raised; prosternal process deeply, longitudinally grooved and projected posteriad. Mesoventrite very short; anterior portion rather smooth, strongly, triangularly depressed; posterior portion ridged in V-shape. Metaventrite short, with a longitudinal medial impression in posterior half; medial portion rather smooth, punctate; lateral portions microshagreened, rugo-so-punctate. Abdomen rather wide, weakly microsculptured; ventrites I–II and anterior part of III ruguloso-punctulate; posterior part of III and IV–V closely punctate; anal ventrite rather closely, minutely punctate in apical part, with apex rounded.

Legs normal in shape in the members of this genus; femora somewhat short-clavate, rather closely, finely punctate, profemur with a subtriangular spur at apical 2/7 on anterior edge; protibia feebly curved interiad, weakly gouged in apical 2/5 and finely haired in apical half on interior face, mesotibia nearly straight, finely haired in apical half on interior face, metatibia nearly straight, finely haired in apical 1/4 on interior face; tarsi weakly dilated to each apex, densely haired beneath, ratios of the lengths of pro-, meso- and metatarsal segments: 0.26, 0.20, 0.20, 0.20, 0.58; 0.28, 0.24, 0.24, 0.22, 0.60; 0.56, 0.28, 0.22, 0.76.

Male genitalia elongated subfusiform, 2.40 mm in length, 0.26 mm in width, weakly narrowed at the border between basale and apicale; basale weakly curved at basal 1/3 in lateral view; fused apicale 0.78 mm in length, subparallel-sided in basal 3/5, rather strongly narrowed and slightly prolonged apicad in remaining part, with apices acute.

F e m a l e: Body more robust; antennae shorter; head a little more convex dorsad; pronotum wider; elytra more strongly punctate; legs shorter, profemoral spur less acute.

Body length: 8.5–11.0 mm.

Type series. Holotype: ♂, "Taiwan, Taitung, / Dulan, 3. IV. 2012 / K. Masumoto & K. Takahashi leg. // Coll. Masumoto / 2013." (NMNST). Paratypes: $1 \triangleleft, 2 \uparrow \uparrow$, same data as for the holotype; $1 \triangleleft, 3 \uparrow \uparrow \uparrow$, "Taiwan, Hualien, / Chimei, 1. IV. 2012 / K. Masumoto & K. Takahashi leg. // Coll. Masumoto / 2013."; $1 \triangleleft, 1 \uparrow, 1 \uparrow,$ "Lijia Lindao (利嘉林道) / Beinan Township / Taitung County, Taiwan / 2-V-2013 / Tatsuya Niisato leg. // K. AKITA / Collection / (65873 & 65886)"; $1 \uparrow,$ "Juisuei, (For.) / 3-VI-

1973 / Coll. H. Yokoyama // K. AKITA / Collection / KAC 30566"; 1 ♀, "Malibulu-Taimali / Date: 29. IV. 1986 / K. MASUMOTO leg."

Etymology. The specific name is given after the place where the holotype and some paratypes were collected.

Gnesis lini sp. nov.

(Figs. 3, 18-21)

Body elongated subovate, rather strongly constricted at the border of fore and hind bodies, convex dorsad; head, pronotum, scutellum and femora brownish black with feeble coppery tinge, elytra, tibiae and tarsi dark purple, hairs on antennae, apico-interior faces of tibiae, and tarsi beneath brownish yellow; medio-posterior portion of head, pronotum and scutellum metallically shining, remaining portion of head and elytra gently, rather sericeously shining, ventral surface weakly, somewhat sericeously shining; dorsal surface hardly haired, antennal segments VII–XI densely, microscopically haired, and V–VI sparsely so, apico-interior faces of tibiae and tarsi beneath densely, finely haired.

M a l e: Head transversely subdecagonal, though the basal portion is concealed under the pronotum, weakly microsculptured, gently inclined anteriad in major medial portion, steeply inclined laterad in lateral portions, grooved along lateral to posterior margins of eyes; clypeus somewhat transversely hexagonal, though the anterior part is shortened, very weakly convex in medial part, depressed in postero-lateral parts, bent ventrad and widely truncate in front, closely, irregularly punctate; fronto-clypeal border nearly straightly sulcate in middle, obliquely bent anteriad in lateral parts, and reaching to exterior margins; genae gently dilated laterad, depressed before eyes, rather closely, finely punctate, with exterior margin rounded; frons somewhat subquadrate, sparsely punctate in medial part, rather closely punctate in lateral parts, with an oblique impression on each side near vertex; vertex weakly convex, irregularly scattered with small punctures. Eyes somewhat transverse in dorsal view, roundly convex laterad, slightly obliquely and roundly inlaid into head, with diatone about 3.5 times the width of the transverse diameter of an eye. Antennae clavate, tip of the terminal segment fairly reaching to basal 1/4 of pronotum, four apical segments nearly widest, ratio of the length of each segment from I to IX: 0.19, 0.11, 0.27, 0.18, 0.16, 0.17, 0.19, 0.24, 0.23, 0.21, 0.31.

Pronotum subquadrate, wider than long (4 : 3), widest at the middle, slightly sinuous before base; apex very weakly produced, slightly narrower than base, finely rimmed in lateral parts; base very widely triangular, slightly sinuous in lateral parts, bordered by a fine impression and rim; sides rather steeply declined to lateral margins, which are entirely, finely rimmed, the rims visible from above; front angles rounded, hind angles obtusely angular; disc moderately, somewhat longitudinally convex, very weakly impressed near front angles and also weakly impressed near the middle in basal 1/4, very weakly microsculptured, rather closely, irregularly scattered with small punctures. Scutellum semicircular, very weakly microsculptured, nearly flat and very sparsely punctate in basal part, weakly depressed in apical part.

Elytra oblong-ovate, though the base is gently emarginate, 1.60 times as long as wide, 2.54 times the length and 1.18 times the width of pronotum, widest at basal 4/9, gently, roundly narrowed anteriad and posteriad; dorsum rather strongly convex, highest at basal 3/10; disc punctate-striate, the striae weak and fine in interior portion, becoming stronger and bolder in lateral portions, the punctures in striae small and close in interior portion, becoming larger and sparser in lateral portions; intervals weakly convex in interior portion, strongly so in lateral portions, weakly microsculptured, sparsely scattered with microscopic punctures, very weakly micro-aciculate; sides steeply declined to lateral margins, which envelop the ventral body, and are bordered by rather bold punctate-grooves and fine

rims; humeri reduced; epipleura wide in basal parts and gently tapering apicad; apices weakly, roundly produced. Hind wings atrophied.

Maxillary palpi subsecuriform, terminal segment with rounded exterior side about 2.3 times the length of the weakly rounded interior, slightly shorter than the nearly straight apical. Mentum widely subcordate, raised apicad, ridged medially, depressed in lateral parts, ruguloso-punctulate. Gula rather parabolic, weakly, transversely wrinkled, with a pair of curved impressions near apex.

Prosternum short; apex weakly, widely emarginate; anterior portion rugulose; medial portion weakly raised and flattened; prosternal process longitudinally, deeply, grooved and strongly projected posteriad. Mesoventrite very short; anterior portion strongly, triangularly depressed; posterior portion ridged in V-shape, almost smooth, and sparsely, microscopically punctate. Metaventrite rather short, with a longitudinal medial impression in posterior half; medial portion smooth and microscopically punctate; lateral portions microshagreened and shallowly punctate. Abdomen rather wide; ventrites I–II and anterior part of III weakly microsculptured, punctate and longitudinally rugose; posterior part of III, and IV–V rather closely punctate; anal ventrite rather closely, minutely punctate in apical part, with apex rounded.

Femora somewhat short-clavate, finely punctate, profemur with a subtriangular spur at apical 2/7 on anterior edge; protibia feebly curved interiad, weakly gouged and finely haired in apical 1/3 on interior face, mesotibia very weakly curved, finely haired in apical half on interior face, metatibia very weakly curved, finely haired in apical 1/3 on interior face; tarsi weakly dilated to each apex, densely haired beneath, ratios of the lengths of pro-, meso- and metatarsal segments (two apical segments of protarsi lost in the holotype): 0.24, 0.18, 0.16, -, -; 0.30, 0.18, 0.16, 0.15, 0.63; 0.46, 0.27, 0.24, 0.68.

Male genitalia elongated subfusiform in dorsal view, 1.84 mm in length, 0.27 mm in width, weakly narrowed at the border between basale and apicale; basale weakly curved in middle in lateral view; fused apicale 0.69 mm in length, subparallel-sided in basal 2/5, then rather strongly narrowed apicad in the remaining part, with apices slightly prolonged, acute and very weakly bent ventrad.

F e m a l e: Body more robust; head a little more convex dorsad; eyes with diatone three times the width of the transverse diameter of an eye; pronotum with lateral margins more simply rounded and less strongly narrowed basad; elytra more strongly produced apicad; legs shorter, profemoral spur less acute.

Body length: 8.5–8.7 mm.

Type series. Holotype: ♂, "Taiwan, Taipei / Yingtzuling (鶯子嶺) / 24. VII. 2010, leg. Y. -L. Lin" (TARI). Paratype: 1 ♀, same data as for the holotype.

Etymology. The specific name is given in honor of Mr. Y.-L. LIN who collected the type series.

Key to the Species of the Genus Gnesis from Taiwan

1(2)	Elytra punctate-striate 3
2(1)	Elytra with rows of foveae, which are often fused with one another, intervals raised, often
	transversely connected with one another
3(4)	Body less strongly convex; pronotum widest before middle; 10.5 mm. Bisyô (= Weichuang),
	Liukuei (Kaohsiung) G. liukueiensis MASUMOTO.
4(3)	Body more strongly convex; pronotum widest at the middle or after middle
5(6)	Body larger (8.5-11.0 mm) in size and more elongate; antennae and legs slenderer. Dulan (Tai-
	tung); Lijia Lindao, Beinan (Taitung), Juisuei, Malibulu (Taimali), Chimei (Hualien)
	G. dulanensis sp. nov.
6(5)	Body smaller (6.7–8.5 mm) in size and shorter; antennae and legs more robust7

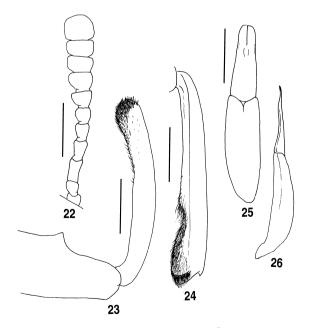
- 7(8) Body larger (8.5–8.7 mm) in size and less strongly convex; head and pronotum less strongly punctate; pronotum widest at the middle. Yingtzuling (Taipei) *G. lini* sp. nov.
- 8(7) Body smaller (6.7–7.2 mm) in size and more strongly convex; pronotum widest at posterior 1/3. Kenting Park, Nanrenshan (Pingtung)G. kentingensis MASUMOTO.
- 9(10) Pronotum with strongly rounded sides, scattered with smaller and shallower punctures, more strongly wrinkled, 8.3–10.2 mm. Bilu Divine Tree, Ci'en (Hualian), Tahanshan (Pingtung) *G. meilingae* sp. nov.

Oedemutes (Tamdaous) lutaoensis sp. nov.

(Figs. 4, 22-26)

Body subovate, convex dorsad, strongly constricted at the border of fore and hind bodies; dark brown, posterior margin of pronotum, scutellum and elytra dark reddish brown, hairs on antennae, apico-interior faces of tibiae and tarsi beneath brownish yellow; dorsal surface moderately shining, ventral surface alutaceous in anterior portion and weakly shining in posterior portion; each surface almost glabrous, antennal segments VII–XI, apico-interior faces of tibiae and tarsi beneath haired.

M a l e: Head rather flat, gently inclined anteriad, weakly microsculptured, grooved along marginal parts of eyes; clypeus weakly, transversely convex in anterior part, slightly emarginate in front, roundly produced in lateral parts of apex, rather closely scattered with small punctures and minute ones, transversely impressed before the fronto-clypeal border; fronto-clypeal border transversely sulcate in middle, obliquely bent anteriad in lateral parts, and reaching to exterior margins; genae gently



Figs. 22–26. Oedemutes (Tamdaous) lutaoensis sp. nov., holotype, ♂. — 22, Antennae; 23, profemur and tibiae; 24, metatibia; 25, male genitalia (dorsal view); 26, ditto (lateral view). Scales: 1.0 mm.

dilated laterad, weakly convex, depressed before eyes, rather closely, finely punctate, with exterior margin rounded; frons somewhat obtrapezoidal, surrounded by shallow groove, hardly punctate in medial part, sparsely scattered with larger punctures than those on clypeus in remaining parts; vertex weakly convex, rather closely punctate. Eyes subreniform in dorso-lateral view, roundly convex laterad, gently, obliquely inlaid into head, with diatone about 3.5 times the width of the transverse diameter of an eye. Antennae noticeably clavate, tip of segment XI barely reaching to basal 1/3 of pronotum, XI the widest, ratio of the length of each segment from I to XI: 0.32, 0.12, 0.31, 0.25, 0.23, 0.22, 0.24, 0.24, 0.25, 0.27, 0.38.

Pronotum subquadrate with rounded sides, wider than long (12 : 7), widest at the middle; apex nearly straight, slightly narrower than base, rimmed in short lateral parts; base very widely triangular, weakly sinuous, grooved and rimmed in lateral parts; sides gently declined to lateral margins, which are entirely grooved and finely rimmed, the rims visible from above; front angles rounded, hind angles obtusely angular; disc gently, broadly convex, more weakly covered with isodiametric microsculpture than head, rather closely scattered with smaller punctures than those on head, and also sparsely scattered with minute punctures. Scutellum triangular, depressed posteriad, sparsely, minutely punctate.

Elytra 1.33 times as long as wide, 2.46 times the length and 1.33 times the width of pronotum, widest at basal 1/3, gently, roundly narrowed anteriad and posteriad; dorsum strongly convex, highest at basal 2/7; disc with rows of subovate punctures which are often connected with each other or by fine striae and become large foveae in lateral portions; intervals weakly convex, weakly microsculptured, scattered with microscopic punctures, very weakly microaciculate; sides steeply declined to lateral margins, which are grooved, finely rimmed, the rims invisible from above in anterior and medial portions; epipleura wide in basal parts and tapering apicad; humeri atrophied; apices weakly produced.

Maxillary palpi subsecuriform, terminal segment with rounded exterior side about 1.67 times the length of the nearly straight interior, nearly the same length of the weakly rounded apical. Mentum subhexagonal, though the posterior part is longer than the anterior, strongly raised in antero-medial part, strongly depressed in U-shape in basal part, sparsely pubescent. Gula subparabolically bordered from underside of neck, alutaceous.

Prosternum short and narrow; apex widely emarginate and margined, anterior portion microsculptured and rugulose; medial portion (inter-procoxal space) tapering posteriad and longitudinally grooved, hardly punctate; posterior portion weakly inclined apicad, with prosternal process triangularly produced. Mesoventrite very short; anterior portion strongly, triangularly depressed; posterior portion ridged in V-shape. Metaventrite short, with a longitudinal impression in posterior 3/5; meidal portion weakly microsculptured, rather closely punctate, weakly, obliquely wrinkled. Abdomen moderate in size; ventrites I–II and anterior part of III weakly microsculptured, coarsely rugoso-punctate; posterior part of III and IV–V closely, finely punctate; anal ventrite with apex rounded.

Legs stout; femora short-clavate, rather closely punctate, profemur with an acute spur at apical 1/3 on anterior edge; tibiae curved interiad, protibia gently curved apicad, weakly gouged at apical 1/3 on interior face, haired in apical 1/3 on interior face, mesotibia gently curved apicad, haired in apical 2/5 on interior face, metatibia weakly curved apicad, gouged in apical 2/5 on interior face, haired in apical half on interior face; tarsi weakly dilated to each apex, densely haired beneath, ratios of the lengths of pro-, meso- and metatarsal segments: 0.48, 0.31, 0.33, 0.19, 0.80; 0.50, 0.36, 0.31, 0.26, 0.91; 0.62, 0.30, 0.27, 1.06.

Male genitalia elongated subfusiform, 3.13 mm in length, 0.57 mm in width; basale curved in middle in lateral view; fused apicale 1.30 mm in length, flattened, weakly narrowed anteriad in basal

half, subparallel-sided in apical half, with apices truncate and slightly rounded.

F e m a l e: Antennae shorter; inter-ocular space narrower with three times the width of eye diameter; elytra shorter and 2.24 times the length of pronotum; legs shorter and bolder, with metatibiae not gouged.

Body length: 11.1–12.7 mm.

Type series. Holotype: \mathcal{A} , "Liutao (=Lutao Island), Taitung / Taiwan / 9–14. VI. 1989 (no collector's name) // Collection / Masumoto / 2002" (NSMT). Paratypes: 1 \mathcal{A} , 5 $\mathcal{P}\mathcal{P}$, same data as for the holotype (1 \mathcal{P} deposited in NMNST).

Notes. This new species resembles *Oedemutes (Tamdaous) formosanus* MASUMOTO, 1981, originally described from Kending, Pingdong co. (MASUMOTO, 1981), but can be distinguished from the latter by the body wider, the dorsal surface less strongly shining, the elytra with intervals less strongly convex, and the male genitalia longer (about 2.5 mm in *O. formosanus*). The present new species can be distinguished from one more species, *O. (T.) itoi* ANDO, 1989 from Taiwan ("Maliburu", Taichung Co.) by the body narrower and less strongly convex, and the legs shorter, with the profemoral spur less acute.

Etymology. The specific name is given after the locality where the type series were collected.

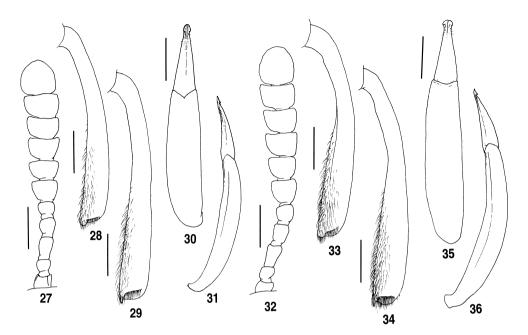
Euhemicera nanrenensis sp. nov.

(Figs. 5, 27-31)

M a l e: Body oblong oval, constricted at the border of fore and hind bodies, convex dorsad; head and femora nearly black, pronotum, scutellum, ventral surface, tibia and tarsi brownish black, elytra dark purple, with areas between and behind scutellary strioles, and also narrow areas along striae greenish violet to golden green, hairs on antennae grayish, those on ventral sides of body, tibiae and tarsi golden yellow; head weakly shining, pronotum and scutellum moderately, feebly vitreously shining and with feeble dark greenish reflection, elytra metallically shining and with feeble coppery or brassy reflection, dorsal surfaces of legs moderately, very weakly vitreously shining; dorsal surface almost glabrous, antennae finely haired, metaventrite with postero-medial portion sparsely pubescent, meso- and metafemora partly, rather densely clothed with short hairs, tibiae partly, rather densely clothed with long hairs, tarsi beneath densely tufted.

Head short and wide, gently inclined anteriad, very weakly microsculptured; clypeus short-obtrapezoidal, very weakly convex in medial part, irregularly punctate, the punctures in medial part rather large and sparse, those in lateral parts smaller and closer, with apex truncate and weakly, widely emarginate; fronto-clypeal border nearly straight widely in middle, obliquely bent in lateral parts, and reaching to exterior margins; genae rather strongly dilated antero-laterad, weakly raised exteriad, depressed before eyes, irregularly, finely punctate; frons wide, weakly convex widely in middle, rather irregularly punctate, the punctures larger than those on clypeus, and each with a microscopic setiferous hair at the center. Eyes slightly oblong oval and obliquely set in dorso-lateral view, rather strongly convex laterad, fairly deeply inlaid into head, with diatone 1.60 times the width of the transverse diameter of an eye. Antennae subclavate, segment X the widest, tip of XI reaching base of elytra, ratio of the length of each segment from I to XI: 0.25, 0.11, 0.26, 0.14, 0.12, 0.22, 0.22, 0.23, 0.23, 0.24, 0.29.

Pronotum subtrapezoidal, wider than long (3:2), widest at the middle and base, very weakly sinuous at basal 1/5; apex nearly straight, obviously narrower than base, grooved and finely rimmed in lateral parts; base weakly produced posteriad, feebly sinuous and finely rimmed in lateral parts, trun-



Figs. 27–36. Euhemicera spp., holotype, ♂. — 27–31, E. nanrenensis sp. nov.; 32–36. E. taichuani sp. nov.; 27, 32, antennae; 28, 33, mesotibia; 29, 34, metatibia; 30, 35, male genitalia (dorsal view); 29, 34, ditto (lateral view). Scales: 0.5 mm.

cate opposite to scutellum; sides gently declined to lateral margins which are strongly grooved and finely rimmed, the grooves becoming bolder posteriad; front angles rounded, hind angles rather acutely produced postero-laterad; disc gently convex dorso-anteriad, weakly depressed in basal portion, microscopically punctate, with a curved impression at basal 1/4 transversely in middle, and also with a pair of oblique, nearly straight impressions on both sides close to base. Scutellum subpentagonal, weakly convex, sparsely, minutely punctate, the punctures smaller than those on pronotum.

Elytra 1.43 times as long as wide, 3.60 times the length and 1.52 times the width of pronotum, widest at the middle, gently narrowed anteriad and posteriad; dorsum strongly convex, highest at basal 1/3; disc finely punctate-striate, the striae often interrupted, the punctures becoming larger and coarser laterad, those in posterior portions becoming finer and sparser; intervals nearly flat to feebly convex, scattered with microscopic punctures which are smaller than those on pronotum; sides steeply declined to lateral margins which are punctate-grooved, narrowly explanate, finely rimmed, and visible from above; epipleura wide in basal parts, gradually tapering in basal 5/7, then rather abruptly narrowed apicad, very weakly microsculptured and sparsely scattered with microscopic punctures; humeri weakly swollen, with exterior corners rounded; apices slightly roundly produced.

Maxillary palpi subsecuriform, terminal segment with widely rounded exterior side about 2.4 times the length of the narrowly rounded interior, about 1.3 times the length of the nearly straight apical. Mentum subhexagonal, with apex slightly wider than base, strongly convex, sparsely scattered with minute punctures and clothed with long hairs. Gula narrowly subparabolic, weakly, transversely aciculate, with a pair of short, crescent impressions on the borders near apex.

Prosternum short; apex widely emarginate and clearly rimmed; medial portion longitudinally, subfusiformly raised, with intercoxal space flattened and longitudinally grooved in lateral parts; prosternal process strongly projected posteriad. Mesoventrite very short; anterior portion strongly, triangu-

larly depressed; posterior portion ridged in somewhat U-shape and sparsely, finely haired. Metaventrite rather short, with a longitudinal impression on the midline; medial portion raised and flattened, closely punctulate and finely pubescent; lateral portions depressed anteriad and posteriad, weakly microsculptured and minutely punctate. Abdomen rather large; ventrite I–IV weakly microsculptured and sparsely punctulate; medial part of ventrite I, baso-medial parts and lateral parts of II, and basal part of III weakly longitudinally wrinkled; lateral parts from II–IV weakly impressed; anal ventrite weakly microsculptured and scattered with minute punctures, which become a little larger and closer apicad, with apex rounded.

Femora subclavate, minutely punctate, meso- and metafemora densely haired in basal halves on posterior faces; tibiae rather closely punctate, protibia gradually becoming bolder apicad, haired in apical half on interior face, mesotibia weakly curved, becoming bolder apicad in anterior half, densely haired in apical 3/7 on interior face, metatibia weakly curved, becoming bolder apicad in apical half, densely haired in apical 2/5 on interior face; tarsi with each segment gently dilated apicad, densely tufted on ventral faces, ratios of the lengths of pro-, meso- and metatarsal segments: 0.24, 0.18, 0.17, 0.16, 0.62; 0.31, 0.18, 0.17, 0.16, 0.70; 0.60, 0.31, 0.19, 0.73.

Male genitalia elongated subfusiform, 2.18 mm in length, 0.31 mm in width; basale gently curved in middle in lateral view; fused apicale 0.74 mm in length, gently tapering anteriad in basal 3/4, then more strongly tapering and weakly prolonged in remaining parts, with apices semicircular and subspatulate.

F e m a l e: Unknown.

Body length: 9.0 mm.

Type series. Holotype: ♂, "南仁山 / Mt. Nanrenshan / Pingtung, FORMOSA / 8 VI 2013 / S. TSUYUKI leg. // Coll. Masumoto / 2013" (NMNST).

Notes. This new species closely resembles *Euhemicera lanae* MASUMOTO, AKITA et LEE, 2013, originally described from the same locality, Nanrenshan, Pingtung co., but can be distinguished from the latter by the body larger and more strongly widened posteriad, the diatone narrower (1.70 times in *E. lanae*), the antennae more strongly clavate, pronotum wider (1.43 times as wide as long in the latter), the elytra shorter (1.60 times as long as wide in the latter) with the humeral portion swollen, the meso- and metafemora haired, the metaventrite pubescent in medial portion, and the male genitalia longer (1.88 mm in the latter) with apical part narrower.

Etymology. The specific name is given after the place where the holotype was collected.

Euhemicera taichuani sp. nov.

(Figs. 6, 32-36)

M a l e: Body subovate, gently constricted at the border of fore and hind bodies, rather strongly convex dorsad; head, metaventrite, and abdomen blackish brown, pronotum, scutellum, elytra, ventral side of head, prosternum, mesoventrite, five basal segments of antennae and legs dark reddish brown, six apical segments of antennae nearly black, mouth parts, gula, pro- and mesocoxae yellowish brown with feeble brownish tinge; dorsal surface metallically to vitreously shining, elytra with feeble coppery to brassy luster, legs, and five basal segments of antennae moderately shining, ventral surface mostly weakly, feebly sericeously shining, six apical segments of antennae mat; dorsal surface almost glabrous, ventral surface, meso- and metafemora and tibiae partly haired, tarsi beneath with tufts of fine hairs, antennal segments VI–XI densely, minutely haired.

Head short and wide, gently inclined anteriad, weakly microsculptured, postero-interior margins of eyes grooved; clypeus short-obtrapezoidal, very weakly convex in medial part, rather closely scat-

tered with small punctures which become smaller laterad, with apex truncate and very slightly emarginate; fronto-clypeal border nearly straight, grooved widely in middle, with lateral part obliquely bent and reaching to exterior margins; genae gently dilated antero-laterad, depressed in intero-basal parts, weakly raised exteriad, scattered with small punctures, with exterior margins rounded; frons widely, weakly convex, punctate, the punctures sparser than those on clypeus; postero-lateral portions of head behind eyes inclined laterad, microsculptured and sparsely, minutely punctate. Eyes nearly transversely oblong-oval in dorsal view, rather strongly convex laterad, fairly deeply inlaid into head, with diatone 1.45 times the width of the transverse diameter of an eye. Antennae clavate, segment X the widest, tip of XI reaching basal 1/6 of elytra, ratio of the length of each segment from I to XI: 0.36, 0.13, 0.30, 0.23, 0.18, 0.24, 0.23, 0.25, 0.23, 0.24, 0.27.

Pronotum subtrapezoidal, wider than long (8 : 5), widest at the middle and base, very weakly sinuous in basal portions; apex very weakly produced, obviously narrower than base, deeply grooved and finely rimmed in lateral parts; base widely in V-shape, weakly produced posteriad, truncate opposite to scutellum, slightly sinuous and finely rimmed in lateral parts; sides gently declined to lateral margins, which are gently roundly produced antero-laterad, strongly grooved and rimmed, the grooves becoming bolder posteriad; front angles rounded, hind angles acutely angular postero-laterad; disc weakly convex dorso-anteriad, rather strongly inclined antero-laterad, weakly so postero-laterad, very weakly depressed in medio-basal portion, obliquely impressed on both sides close to base, very weakly microsculptured, scattered with small punctures which are slightly larger and sparser than on the head. Scutellum subpentagonal, very weakly depressed, very slightly convex dorsad, smooth, hardly punctate.

Elytra about 1.5 times as long as wide, 3.6 times the length and 1.5 times the width of pronotum, widest at the middle; dorsum strongly convex, highest at basal 3/8; disc finely punctate-striate, the striae sometimes interrupted, the punctures small, rather closely set and subovate in medio-interior portions, becoming larger and sparser medio-laterad, and finer posterad; intervals feebly convex, micro-aciculate, sparsely scattered with microscopic punctures which are obviously smaller than those on pronotum; sutural intervals weakly convex; sides rather steeply declined to lateral margins which are punctate-grooved, slightly explanate, finely rimmed, and almost wholly visible from above; epipleura wide in basal parts, gradually tapering to apical 1/10, weakly microsculptured, and weakly wrinkled in posterior parts; gently swollen; apices slightly roundly produced.

Maxillary palpi somewhat cleaver-shaped, terminal segment with widely rounded exterior side about 2.5 times the length of the narrowly rounded interior, about 1.3 times the length of the nearly straight apical. Mentum narrowly subhexagonal though the apex is obviously wider than the base, strongly convex medio-anteriad, rather smooth, sparsely, minutely punctate, with a pair of long hairs. Gula narrowly subparabolically bordered, weakly microsculptured, with a pair of short, crescent impressions on the borders near apex.

Prosternum short, weakly microsculptured; apex widely emarginate and rimmed, with a small projection at the middle; medial portion flattened and rimmed along lateral margins, sparsely pubescent; prosternal process slightly inclined and projected posteriad. Mesoventrite very short, strongly, triangularly depressed, and concealed under prosternum in anterior portion, ridged in somewhat V-shape, rugoso-punctate and sparsely, finely haired in posterior portion. Metaventrite rather short, weakly microsculptured, with a longitudinal impression on the midline; anterior portion rugose and weakly depressed; medial and posterior portions flattened, closely punctulate and finely pubescent; lateral portions gently inclined and sparsely scattered with minute punctures. Abdomen rather large and wide, weakly microsculptured and punctulate; ventrite I to medial part of III weakly longitudinal-ly wrinkled; II and IV depressed in lateral parts; III with a pair of ovate impressions on each side; IV longitudinally wrinkled along basal margin; anal ventrite scattered with microscopic punctures which become closer and finer apicad, with apex rounded.

Femora somewhat short-clavate, minutely punctate, meso- and metatibiae densely haired in basal 3/5 on posterior faces; tibiae more or less curved interiad, closely punctulate, protibia gradually becoming bolder apicad, haired in apical 2/3 on interior face, mesotibia becoming bolder apicad in apical 2/3, weakly gouged in area around basal 1/3 on interior face, weakly twisted at basal 2/5, densely haired in apical half on interior face, metatibia becoming bolder apicad in apical 2/3, gouged in area around basal 2/5 on interior face, very weakly twisted at basal 2/5, densely haired in apical half on interior face; tarsi with each segment weakly dilated apicad, densely tufted on ventral faces, ratios of the lengths of pro-, meso- and metatarsal segments: 0.24, 0.21, 0.22, 0.26, 0.53; 0.26, 0.22, 0.21, 0.19, 0.63; 0.57, 0.26, 0.23, 0.65.

Male genitalia elongated subfusiform, 2.49 mm in length, 0.34 mm in width, curved in middle in lateral view; fused apicale 0.67 mm in length, gently tapering anteriad in basal half, then more strongly tapering apicad, constricted at apical 1/5, and then abruptly widened; apices semicircular in dorsal view.

F e m a l e: Unknown.

Body length: 9.3 mm.

Type series. Holotype: *♂*, "Shiangyuanli, Wanli, / Taipei City, Taiwan / 5. XI. 2011 / K. Masumoto & K. Takahashi leg. // Coll. Masumoto / 2013" (NMNST).

Notes. This new species closely resembles the preceding new species, *Euhemicera nanrenensis* sp. nov., but can be distinguished from the latter by the body obviously wider, the antennae longer, the pronotum wider but more strongly narrowed anteriad, the elytra more noticeably constricted in area around anterior 3/7, legs, particularly in meso- and metatibiae more noticeably modified, and the male genitalia longer and more strongly curved in lateral view.

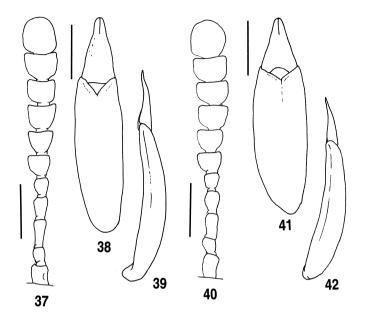
Etymology. The specific name is given in honor of Mr. Tai-Chuan WANG who has been supporting our ongoing entomological study in Taiwan for long time.

Euhemicera shihchiehi sp. nov.

(Figs. 7, 37-39)

Body oblong-ovate, rather strongly convex dorsad; head black, antennal segments VI–XI, major portion of pronotum, scutellum and femora brownish black, antennal segments I–V, apical and lateral margins of pronotum, gula, protrochanters, tibiae and tarsi dark reddish brown, elytra almost coppery purple with areas along striae and lateral margins golden green to bluish green, epipleura bluish green, hairs on antennae, tibiae in apico-interior parts and tarsi beneath brownish yellow; head, metaventrite and legs moderately shining, pronotum, scutellum, ventral side of head and abdomen rather vitreously shining, elytra metallically shining, prosternum and mesoventrite weakly, somewhat tallowily shining; dorsal surface almost glabrous, antennae finely haired, tibiae partly and tarsi beneath haired.

M a l e: Head transverse, moderately convex, gently inclined anteriad and more steeply so laterad, microsculptured, grooved along interior margins of eyes; clypeus transversely subquadrate, nearly straight in front, rather closely, minutely punctate, clypeo-genal borders indefinite; fronto-clypeal border straightly sulcate widely in middle, vaguely, obliquely bent anteriad in lateral parts, and reaching to exterior margins; genae gently dilated and weakly raised laterad, depressed before eyes, rather closely, finely punctate, with exterior margin weakly rounded; frons subquadrate, gently convex, rather closely, irregularly punctate; vertex irregularly, more sparsely punctate than on frons. Eyes transversely subovate and obliquely set in dorsal view, strongly, roundly convex laterad, rather



Figs. 37–42. Euhemicera spp., ♂. — 37–39. E. shihchiehi sp. nov., holotype; 8, E. sakisimensis M.-T. ChÛJÔ, 1978; 37, 40, antennae; 38, 41, male genitalia (dorsal view); 39, 42, ditto (lateral view). Scales: 0.5 mm.

strongly obliquely inlaid into head, with diatone about 1.5 times the width of the transverse diameter of an eye. Antennae noticeably clavate, tip of segment XI fairly reaching to base of pronotum, X the widest, ratio of the length of each segment from I to XI: 0.29, 0.10, 0.22, 0.16, 0.12, 0.17, 0.16, 0.20, 0.19, 0.18, 0.31.

Pronotum subtrapezoidal with obliquely rounded sides, wider than long (8 : 5), widest at base; apex slightly, widely emarginate, obviously narrower than base, grooved and rimmed in lateral parts; base gently, produced in medial part, weakly sinuous in lateral parts, truncate in middle opposite to scutellum, not bordered; sides gently declined to lateral margins, which are boldly grooved and rimmed, the grooves and rims visible from above; front angles rounded, hind angles subrectangular; disc gently convex rather anteriad, irregularly punctate, the punctures smaller than those on head, with a pair of vague oblique impressions close to base. Scutellum subpentagonal, gently convex, smooth and hardly punctate.

Elytra subovate, bisinuous in basal portions, 1.45 times as long as wide, 3.51 times the length and 1.65 times the width of pronotum, widest at apical 4/9, nearly straightly narrowed anteriad, roundly narrowed posteriad; dorsum strongly convex, highest at basal 1/3; disc punctate-striate, the striae continuous in medio-interior portion, often irregularly interrupted in lateral portions, the punctures small and round in medio-interior portion, becoming larger and more elongate in lateral portions; intervals weakly convex, microsculptured, scattered with microscopic punctures; sides steeply declined to lateral margins which are grooved, feebly explanate, and finely rimmed, the grooves and rims almost visible from above; epipleura wide in basal parts and tapering apicad; humeri gently swollen; apices very weakly, roundly produced.

Maxillary palpi subsecuriform, terminal segment with gently rounded exterior side about 2.6 times the length of the nearly straight interior, about 1.2 times the length of the nearly straight apical. Mentum subhexagonal though the apical part is short and the apex is wider than the base, strongly

raised medio-anteriad, ruguloso-punctulate. Gula subtriangular, rather smooth, with a pair of short curved impressions near apex.

Prosternum short; apex widely emarginate and rimmed; anterior portion strongly depressed and somewhat tallowy; medial (inter-procoxal space) and posterior (prosternal process) portions strongly raised, flattened, smooth, and longitudinally grooved on each side; prosternal process strongly projected apicad. Mesoventrite very short, strongly, triangularly depressed in anterior portion, ridged in V-shape in posterior portion. Metaventrite short, with a longitudinal impression in posterior 3/5; medial portion weakly microsculptured, rather transversely, ruguloso-punctulate; lateral portions inclined, rather strongly microsculptured and scattered with large and shallow punctures. Abdomen rather wide; ventrites I–II and basal part of III weakly microsculptured, rugoso-punctate; posterior part of III and IV–V smooth and finely punctate; anal ventrite minutely punctate in apical part, with apex rounded.

Femora subclavate, rather closely, minutely punctate; protibia, feebly becoming bolder apicad, weakly curved intero-ventrad, haired in apical half on ventral face, mesotibia weakly curved ventrad, haired in apical 2/5 on interior face, metatibia nearly straight, feebly becoming apiad, haired in apical 1/4 on interior face; tarsi weakly dilated to each apex, densely haired beneath, ratios of the lengths of pro-, meso- and metatarsal segments: 0.27, 0.25, 0.23, 0.22, 0.50; 0.29, 0.19, 0.18, 0.17, 0.60; 0.62, 0.24, 0.22, 0.63.

Male genitalia short-subfusiform, 1.78 mm in length, 0.36 mm in width; basale moderately curved in medial part in lateral view; fused apicale 0.59 mm in length, flattened, gently narrowed anteriad, with apices weakly prolonged and substpatulate.

F e m a l e: Body a little slenderer; antennae slightly shorter; head more strongly, closely punctate; pronotum narrower, more closely punctate; elytra with punctures in striae sparsely set; legs sorter and less modified, with protarsi not dilated to each apex.

Body length: 5.5–9.0 mm.

Type series. Holotype: 7, "Taiwan, Pingtong / Pref. Nanshan, / 7-8. VI. 2013 / K. Takahashi leg." (NMNST). Paratypes: $1 \, \overline{2}, 2 \, \widehat{+} \, \widehat{+}$, same data as for the holotype; $1 \, \overline{2},$ "Taiwan, Pingtong / Pref. Shouka, LFIT / 5-7. VI. 2013 / K. Takahashi leg."; 1 ♀, "Taiwan, Taitung, / Taitung, Xiaoyeliu, / 3. V. 2012 / H. Akiyama leg."; 1 º, "Taiwan, Taitung, / Dulan, 3. IV. 2012 / K. Masumoto & / K. Takahashi"; 1 ♂, 1 ♀, "Taiwan, Taitung Pref., / Taren Linchuang, / 5–7. VI. 2013, / K. Takahashi leg."; 1 ♀, "墾丁国立森林公園 / Kenting N. F. Park / Pingtung, FORMOSA / 10. VI. 2013 / S. TSUYUKI leg."; 1 ♂, 1 ♀, "南仁山 / Mt. Nanrenshan / Pingtung, FORMOSA / 8. VI. 2013 / S. TSUYUKI leg."; 1 ♂, "社頂 / Sheding / Pingtung, FORMOSA / 9. VI. 2013 / S. TSUYUKI leg."; 2 27, "Mt. Sheding, Kending, / Hengchun, Pingtung, / Taiwan, 31. X. 2011 / Y.-C. Lan leg."; 1 7, "Mt. Sheding, Kending, / Hengchun, Pingtung, / Taiwan, 2. XI. 2011 / Y.-C. Lan leg."; 1 ₽, "Lanrensi, Kending, / Hengchun, Pingtung, / Taiwan, 29-30. X. 2011 / Y.-C. Lan leg."; 1 7, "Taiwan, Hualian, / Guyuan, 11-12. X. / 2013, K. Masumoto / leg. (LT)"; 1 ♀, "Taiwan, Hualian, / Shoufeng, / 1. IV. 2012 / S. Ohmomo leg."; 3 ♂♂, 1 ♀, "Taiwan, Hualian, / Xibao, 13. X. 2013 / K. Takahashi leg."; 1 ♀, "双流 屏東県 / 4-V-2005 / K. Masumoto, J.-F. Tsai / & W. -Z. Chen leg."; 1 A, 1 º, "Jui Suei (For.) / 3-VI-1973 / Coll. H. Yokoyama"; 1 7, "Juisui / Date: 24-VI-1974 / H. YOKOYAMA leg."; 1 7, Mt. Tayuanshan / Date: 23. V. 1974 / Y. Komiya leg."; 1 ², "Northern Across R. / Date: 2. IX. 06 Tao / T.-C. Wang. Yu??"; 1 ♂, "台湾 紅葉温泉 / 20-IV-1974 / J. OKUMA leg."; 1 ♂, 1 ♀, "Taiwan, Taichung, / Shinbaiyan, 1644 m, / 13. X. 2013, / K. Takahashi leg."; 1 ², "Shiztou, Nantou / Taiwan / 7. v. 1992 / Luo Chinchi leg."; 1 ♂, "Mt. Kuantoushan / Nantou, Taiwan / 17. iv. 1993 / Luo Chinchi leg."; 1 ♂, "Dapin, Wanli, / Taipei City, Taiwan / 5. XI. 2011, K. Masumoto / & K. Takahashi leg.".

Notes. This new species closely resembles Euhemicera sakisimensis (M.-T. CHÛJÔ, 1978), (Figs. 8, 40–42) originally described from Arakawa, Ishigaki-jima Island, and recorded from Taiwan

(e. g. ANDO, 1996). In his revisionary paper, ANDO (2003) mentioned the difference between Japanese and Taiwanese populations, but he did not separate them as independent species. On this occasion, we have carefully examined materials from the Southwest Islands of Japan and Taiwan, and concluded that the two populations possess distinguishable characteristics.

The new Taiwanese species can be discriminated from the Japanese one by the body becoming wider posteriad, the eyes more oblique, the pronotum with hind angles produced postero-laterad, the elytra wider, with punctures in the striae more closely set, the legs slenderer, the male genitalia larger and slenderer (1.62 mm in *E. sakishimensis*), and the dorsal coloration also slightly different.

Etymology. The specific name is given in honor of Mr. Shih-Chieh HUANG (Jackie) who has been assisting our field survey.

Neoplamius kusamai sp. nov.

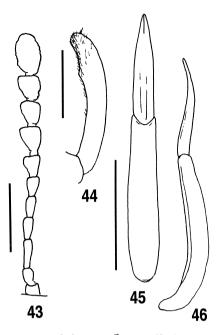
(Figs. 9, 43-46)

Body oblong-ovate, strongly constricted at the border of fore and hind bodies, convex dorsad; posterior portion of head, pronotum and scutellum brownish black, apical halves of antennae, anterior portion of head, tibiae and tarsi rather dark reddish brown, elytra brownish black, major ventral face nearly black, posterior halves of antennae, mouth parts, gula, trochanters, basal parts of femora yellowish brown to reddish brown, hairs on antennae pale yellow, those on tibiae and tarsi brownish yellow; head and pronotum weakly, sericeously shining and with weak brassy luster, scutellum and elytra rather strongly, very weakly sericeously shining with coppery to brassy luster; each surface almost glabrous; antennae finely haired, apico-interior faces of tibiae and tarsi beneath densely haired.

M a l e: Head subdecagonal, though the basal portion is concealed under the pronotum, rather flat, weakly inclined anteriad, rather strongly so laterad, microsculptured; clypeus transversely subhexagonal though the anterior portion is shortened, irregularly punctate, the punctures becoming smaller and closer apicad and laterad, depressed in lateral parts, with apex weakly produced and slightly trunctate; fronto-clypeal border transversely, very weakly sulcate in middle, rather strongly, obliquely so in lateral parts, and reaching to exterior margins; genae gently dilated antero-laterad, flat-tened in anterior parts, depressed before eyes, rather closely punctate, with exterior margins obtusely angular; frons transverse, feebly convex in middle, sulcate along interior margins of eyes, punctate, the punctures rather sparse in medial part, those becoming closer and subovate in lateral parts. Eyes transversely subovate in dorsal view, roundly convex laterad, gently inlaid into head, with diatone about 3.3 times the width of the transverse diameter of an eye. Antennae elongated clavate, tip of segment XI reaching to basal 1/9 of elytra, ratio of the length of each segment from I to XI: 0.15, 0.10, 0.21, 0.16, 0.13, 0.11, 0.14, 0.17, 0.16, 0.15, 0.21.

Pronotum subquadrate with rounded sides, wider than long (3 : 2), widest at the middle, microsculptured; apex slightly emarginate, feebly narrower than base, very finely rimmed in lateral parts; base weakly produced, very slightly sinuous in lateral parts, rimmed, the rim a little bold in medial part and tapering laterad, minutely punctate; sides gently declined to lateral margins, which are finely rimmed, the rims easily visible from above; front angles rounded, hind angles obtusely angular and pointing postero-laterad; disc gently convex, transversely, weakly depressed at basal 1/4, more sparsely scattered with smaller punctures than head in medial portion, those in surrounding portions becoming larger. Scutellum wide-subcordate, convex, very weakly microsculptured, and hardly punctate.

Elytra 1.51 times as long as wide, 3.13 times the length and 1.34 times the width of pronotum, widest at basal 3/8, gently narrowed anteriad and posteriad; dorsum strongly convex, highest at basal



Figs. 43–46. Neoplamius kusamai sp. nov., holotype., A. — 43, Antennae; 44, protibiae; 45, male genitalia (dorsal view); 46, ditto (lateral view). Scales: 0.5 mm.

1/3; disc punctate-striate, the striae fine, the punctures round, closely set and notching intervals; intervals weakly convex in medial portion, rather strongly convex in lateral portions, more weakly microsculptured than on pronotum, sparsely scattered with microscopic punctures; sides steeply declined to lateral margins, which envelop the hind body, and are punctate-grooved, finely rimmed, and invisible from above; epipleura wide in basal parts, tapering apicad, weakly microsculptured; humeri atrophied; apices noticeably produced.

Maxillary palpi subsecuriform, terminal segment with weakly curved exterior side about 2.6 times the length of the rounded interior, slightly shorter than the nearly straight apical. Mentum subcordate, longitudinally raised apicad on the midline, rather tallowy and microgranular. Gula rather widely subparabolic, gently convex, microscopically, transversely wrinkled, with a pair of short, oblique impressions on the borders near apex.

Prosternum short; apex very weakly emarginate and rimmed in medial part; anterior portion transversely rugulose; medial portion raised posteriad, with inter-procoxal space gently flattened and ruguloso-punctate; prosternal process depressed, longitudinally, weakly concave in medial part, tapering apicad, microscopically impressed. Mesoventrite rather short; anterior portion strongly, triangularly depressed and granulo-punctate; medial and posterior portions abruptly raised in Y-shape, ruguloso-punctate in anterior parts, and weakly convex and sparsely punctate in postro-lateral parts. Metaventrite short, very weakly microsculptured, sparsely, finely punctate, strongly wrinkled and punctate along anterior margin, with a longitudinal impression in posterior half. Abdomen moderate in size, weakly microsculptured, scattered with punctures which become finer apicad, each with a decumbent setiferous hair; anal ventrite punctate, the punctures becoming closer and smaller apicad, with apex weakly, roundly produced.

Legs rather stout; femora short-clavate, rather closely punctate; tibiae more or less curved interi-

ad, protibia gently gouged in basal 3/5 and also weakly gouged in apical 2/5 on intero-ventral face, metatibia very weakly gouged in apical 1/3 on interior face, haired in apical half on interior face; tarsi rather slender, ratios of the lengths of pro-, meso- and metatarsal segments: 0.08, 0.04, 0.06, 0.05, 0.18; 0.12, 0.07, 0.09, 0.06, 0.16; 0.13, 0.11, 0.06, 0.21.

Male genitalia slender, 1.18 mm in length, 0.12 mm in width; basale weakly curved in middle in lateral view; fused apicale 0.46 mm in length, narrower than basale at base, very weakly curved in anterior 1/3 in lateral view, with apices pointed.

F e m a l e: Body bolder; head more strongly punctate, with diatone about five times the width of the transverse diameter of an eye; antennae shorter and bolder; pronotum more strongly convex dorsad; elytra wider, 1.42 times as long as wide; legs shorter and less noticeably modified.

Body length: 4.6–5.6 mm.

Type series. Holotype: ♂, "巴陵 (= Paling), 台湾 (= Taiwan) / 1977–7–20 / 草間慶一採集 (= Keiichi KUSAMA leg.) // K. AKITA / Collection / KAC 84097" (NSMT). Paratypes: 1 ♀, "Suuleng (Taipei) / Date: 3-V-1981 / S. Tsuyuki leg. // Coll. Masumoto / 2002"; 1♀, "Taiwan, Taichung, / Gukuan, Mt. Ma Lun, / 16. X. 2013 / K. Takahashi leg."; 1♀, "Taiwan, Taichung, / Gukuan, Mt. Ma Lun, / 16. X. 2013 / K. Takahashi leg.".

Notes. This new species closely resembles *Neoplamius endoi* MASUMOTO, 1981, originally described from Meifeng, Sungkang, Tsuifeng, Nantou co., but can be distinguished from the latter by the body robuster and more convex dorsad, the elytra with the strial punctures larger and the intervals more convex, and devoid of tubercles in apical portions.

Etymology. The specific name is given in honor of the late Dr. Keiichi KUSAMA who collected the holotype. He led the study of Japanese cerambycid beetles during the postwar period.

Additional Account for the Species in the Previous Paper

In the preceding paper (2013, p. 259), we described *Crypsis shangrongae* from Meifeng, Nantou co., Central Taiwan. Due to the page limit, an invaluable ecological comment given by Dr. J.-F. TSAI was not included in the notes. We hereby append it to the present article:

"*Crypsis shangrongae* MASUMOTO, AKITA and LEE, 2013 was collected from an open land with densely growing knotweed (*Polygonum posumbu* BUCHANAN-HAMILTON ex. D. DON, Polygonaceae), partial shade, and scattered with some conifers and broad-leaf trees. Several dozens of hibernating population are aggregated and hiding under the dead layers of knotweed mixed with plenty of organic materials."

For the collecting data, "by Mercury-vapor lamp" should be omitted due to a typographical error.

要 約

益本仁雄・秋田勝己・李 奇峰:台湾産ゴミムシダマシ科甲虫の新種.(9) ニジゴミムシダマシ族の8新種 と既知種に関する追加知見. — 台湾からニジゴミムシダマシ族の8新種, Gnesis meilingae sp. nov., G. dulanensis sp. nov., G. lini sp. nov., Oedemutes (Tamdaous) lutaoensis sp. nov., Euhemicera nanrenensis sp. nov., E. taichuani sp. nov., E. shihchiehi sp. nov., および Neoplamius kusamai sp. nov. を命名記載した. このうち, Euhemicera shihchiehi sp. nov. は、これまで琉球に分布する E. sakisimensis (M.-T. CHûlô, 1978) サキシマオオニジ ゴミムシダマシと同種として扱われてきた種である. また、前報で記載した Crypsis shangrongae MASUMOTO, AKITA et LEE, 2013 の生態的知見について追加報告を行った.

References

ANDO, K., 1989. Studies on the Tenebrionidae of SHIBATA collection mainly from S. E. Asia I. (Coleoptera). *Ent. Rev. Japan*, *Osaka*, **44**: 105–110.

——— 1996. Two new genera of the tribe Cnodalonini from Southeast Asia (Coleoptera, Tenebrionidae). Jpn. J. syst. Ent., Matsuyama, **2**: 189–200.

— 2003. A systematic revision of the genus *Eucyrtus* and its complex (Coleoptera, Tenebrionidae). *Jpn. J. sys. Ent.*, *Matsuyama*, (Mon. Ser., 1): i-xi, 1–604, 38 pls.

2013. A new species of the genus *Neoplamius* MASUMOTO from Taiwan (Coleoptera, Tenebrionidae). *Jpn. J. syst. Ent., Matsuyama*, **19**: 187–190.

CHÚJÔ, M. T., 1973. Five new species of the Tenebrionidae from Japan and her adjacent regions, with a new record of *Gonocephalum coenosum* KASZAB from the Senkaku Island (Coleoptera). *Esakia, Fukuoka*, (8): 13–23.

MASUMOTO, K., 1981. New or little-known Tenebrionidae from Formosa, I. Ent. Rev. Japan, Osaka, 36: 15-26.

——, K. AKITA & C.-F. LEE, 2013. Tenebrionid beetles (Coleoptera) from the Kenting area in Taiwan. Three new species and three new records of occurrence. *Elytra*, *Tokyo*, (n. ser.), **3**: 113–122.

—, C.-F. LEE & K. AKITA, 2007. New tenebrionid beetles from Taiwan (2). Two new species dedicated to the late Dr. Masataka SATÔ. *Elytra*, *Tokyo.*, **35**: 153–158.

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Elytra, *Tokyo*, New Series, **4** (1): 93–94

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Further Records of Weevils New to the Fauna of Izu-Ôshima Island, the Izu Islands, Japan (Coleoptera, Curculionoidea)

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In addition to the recent reports on the weevil fauna of the Izu-Öshima Is., Tokyo (КОЛМА & FUJISAWA, 2011; КОЛМА, 2012), following ten species including two species new to the Izu Islands are added to the fauna based on a recent short survey. Resultingly, a total of 78 species of weevils excluding Scolytidae and Platypodidae are recognized from the island. Collector names are abbreviated as follows: CZ: Chennan ZHANG, HK: Hiroaki KOJIMA and YS: Yûki SHIMIZU. This study was supported by KAKENHI (24510333).

Ant		

Phaulimia aberrans (SHARP, 1891)
 1 ex., Gojinka Sky Line, 9–VI–2013, HK; 1 ex., Miharayama-tozandôro, 10–VI–2013, HK.

Dryophthoridae

2. Aplotes roelofsi (CHEVROLAT, 1882) 1 ex., Mt. Atagoyama, 9–VI–2013, HK.

Curculionidae

- Lepidepistomodes kokurohoshi KOJIMA et MORIMOTO, 2006
 29 exs., Mt. Atagoyama, 9 to 10–VI–2013, HK (on leaves of *Castanopsis sieboldii*). New to the Izu Islands.
- Dermatoxenus caesicollis (GYLLENHAL, 1833) 1 ex., Gojinka Sky Line, 9–VI–2013, HK.
- 5. *Sitona japonicus* ROELOFS, 1873 1 ex., Nodahama, 10–VI–2012, HK.
- Ochyromera japonica (ROELOFS, 1874) 24 exs., Gojinka Sky Line, 9–VI–2013, HK (on Podocarpus macrophyllus).
- Scleropteroides hypocrita (HUSTACHE, 1916) 4 exs., Gojinka Sky Line, 9–VI–2013, HK.
- Phrissoderes rufitarsis (ROELOFS, 1875) 1 ex., Rindô Nomashi-sen, 10–VI–2013, CZ. New to the Izu Islands.
- Colobodellus postfasciatus MORIMOTO et MIYAKAWA, 1985 1 ex., Ômiya-jinja, 13–IX–2012, YS (by shifting litter).
- Colobodes ornatoides MORIMOTO, 1988
 1 ex., Uminofurusato Camp Site, 13–IX–2012, YS; 1 ex., Ômiya-jinja, 13–IX–2012, YS (by shifting litter).

References

KOJIMA, H., 2012. Additional record of weevils new to the fauna of Izu-Ôshima Island, the Izu Islands, Japan (Coleoptera, Curculionidae). *Elytra*, *Tokyo*, (n. ser.), **2**: 144.

—— & Y. FUJISAWA, 2011. Weevils new to the fauna of Izu-Ôshima Island, the Izu Islands, Japan. *Sayabane*, *Tokyo*, (n. ser.), (4): 9–11. (In Japanese, with English summary.)

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