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台湾産ゴミムシダマシ科解説 [VI]
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# 益本 仁雄

# Tenebrionidae of Formosa (6)

#### Kimio MASUMOTO

Higashikamigo-cho 15-9, Totsuka-ku, Yokohama-shi, Kanagawa, 247 Japan

Abstract The author describes 6 new species, Amarygmus hsiaohsingus (Tribe Amarygmini), Paramisolampidius kinugasai and P. tenghsiensis (Tribe Misolampini), Tetragonomenes hirasawai (Tribe Cnodalonini), and Platydema terusane and P. endoi (Tribe Diaperini) in this paper.

# Description of New Species

## Tribe Amarygmini

## Amarygmus hsiaohsingus sp. nov.

Blackish brown; tarsi, pro- and mesosternum lighter in color; mouth organs yellowish; upper surface dark green with blassy or purplish tinge under certain light and strongly metallically shining. Ovoid and strongly convex above.

Head small, weakly convex forward, minutely punctate, punctures sparser in interocular space; fronto-clypeal suture fine and bisinuate, deeply impressed in middle; clypeus transverse, weakly convex, moderately closely punctate and shortly haired, truncate in front, with sides short and parallel in apical half, strongly widened in rest; genae small and oblique, obtusely produced laterad; eyes very large, strongly bulged into antero-inner portion, rather narrowly convex laterad, distance between them about 2/5 their diameter; antennae slender, reaching basal 1/6 of elytra, feebly thickened to apex, relative length of each segment (base to apex): 3.1, 1.3, 2.7, 1.7, 1.9, 1.8, 1.8, 1.8, 1.8, 1.8, 2.3.

Pronotum rather trapezoid, about twice as broad as long, broadest at base and roundly narrowed forward; front border feebly bisinuate and finely margined; basal border broadly arcuate posteriad and roundly produced in median 1/4; sides abruptly and roundly declined, so, front angles invisible in dorsal view, lateral margins finely margined; front angles subrectangular with rounded corners; hind angles obtuse; disk strongly convex, minutely punctate, punctures sparser in middle. Scutellum rather small, regular triangular, sparsely scattered with microscopic punctures on both sides.

Elytra large, 1.4 times as long as broad, about twice length of pronotum, broadest at middle; dorsum strongly convex, thickest before middle; disk with rows of small punctures, those often very finely striated, distance between them 2-3 times their diameter in inner portion, 3-4 times in lateral, 1st rows and 2nd connected to each other near base, 5th reaching base, 3rd and 6th, 2nd and 7th connected in apical portion; intervals flat and wide, scattered with very fine punctures and microscopic (visible in x 20) hairs; sides steeply and roundly declined and softly enveloping hind body, finely margined.

Mentum widely subcordate and shortly truncate at apex, microsculptured, raised in antero-median; gula triangular, microsculptured; maxillary palpus with antepenultimate segment dilated to apex, penultimate subquadrate, and terminal one strongly dilated and somewhat flabellate.

Prosternum very short, coriaceous; front border reflexed, intercoxal space wide and subcordate, gouged on both sides, prosternal process semicircular and declined posteriad; mesosternum coriaceous, raised in wide Y-shape in postero-median portion; metasternum coarsely punctate and weakly wrinkled in major portion, impunctate in postero-lateral. Abdomen shallowly wrinkled and microscopically (visible in x 20) punctate on 2 basal sternites and also 3rd in lateral, a little more closely punctate in middle of 3rd and on 4th, anal sternite microscopically punctate and shortly haired.

Legs medium-sized, relative length of each tarsal segment (base to apex): 2.2, 1.2, 1.0, 0.8, 1.8; 2.9, 1.4, 1.2, 1.0, 3.1; 6.2, 1.8, 1.2, 3.0.

Body length: ca. 4.2 mm.

Holotype: 9, Lienhwachih, Nantou Hsien, Formosa, 6. V. 1978, Y. KOMIYA leg.; paratype: 1 ex., Hsitzutou, Nantou Hsien, 1. VI. 1981, K. KAWADA leg.

This new species somewhat resembles *Amarygmus micans cyaneipennis* PIC from the Philippines but differs from the latter in having a smaller and more convex body, very large eyes, bisinuate fronto-clypeal suture with remarkable median impression, antennae shorter and apical portions not flattened, scutellum regular triangular, elytra with rounded humeral angles, and interprocoxal space noticably wide.

## Tribe Misolampini

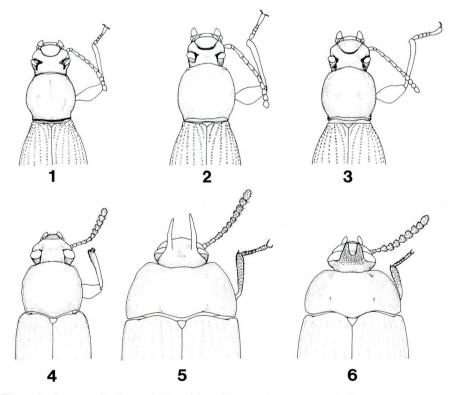
#### Paramisolampidius kinugasai sp. nov.

Piceous; apical half of antenna, mouth organs and tarsi lighter in color; upper surface moderately shining. Body rather strongly constricted between fore and hind bodies and somewhat gourd-shaped.

Head suboctagonal, rather strongly thickened in posterior half and gradually declined forward, closely and coarsely punctate, narrowly impressed medianly in middle, with frontal sulcus rather parabolic and reaching outer margin; genae raised, sloping forward and depressed in posterior portion, very finely punctate; eyes rather small, oblique and elliptic, distance between them about 5 times their diameter; ocular sulcus deeply emarginate and bisinuate in inner portion; vertex feebly swollen on both sides; antennae reaching beyond middle of pronotum, moderately thickened to apex, 11th ovoid, relative length of each segment (base to apex): 3.6, 1.3, 3.8, 2.7, 2.6, 2.6, 2.5, 2.4, 2.2, 2.1, 3.2.

Pronotum rather barrel-shaped, as broad as long, broadest at a little before middle; front border weakly arcuate forward; basal border nearly straight and narrowly margined; sides convex laterad and freebly sinuate just before base; disk strongly convex above, closely and coarsely punctate, punctures often fused together and somewhat rugose, depressed along median and after middle on both sides. Scutellum very small, wide triangular, depressed, nearly impunctate.

Elytra 1.6 times as long as broad, 1.4 times broader than pronotum, broadest just after middle; disk with rows (often narrowly grooved) of strong punctures, these rather sparsely and irregularly set and somewhat fovea-like and transverse; intervals weakly convex, feebly microreticulate, rather closely scattered with microscopic (visible in x 20) punctures and bent hairs; sides strongly declined and enveloping hind body, so, outer rows from 7th invisible in dorsal view.



Figs. 1-6. – 1, Paramisolampidius kinugasai sp. nov.; 2, Paramisolampidius kagoshimensis NAKANE; 3, Paramisolampidius tenghsiensis sp. nov.; 4, Tetragonomenes hirasawai sp. nov.; 5, Platydema terusane sp. nov.; 6, Platydema endoi sp. nov.

Mentum trapezoid, strongly raised and pointed in antero-median portion, gouged in posterior on both sides; gula parabolic, feebly microsculptured, shortly impressed on anterior border on both sides; terminal segment of maxillary palpus securiform, with arcuate outer sides about 1.5 times length of inner and 1.2 times length of apical.

Prosternum finely but clearly margined, moderately closely punctate, intercoxal space raised and finely bisulcate, prosternal process ligulate, declined posteriad and rugosely punctate; mesosternum rugosely punctate, with moderate V-shaped elevation in postero-median; metasternum moderately closely punctate and shortly haired, shallowly wrinkled, swollen in antero-median and postero-lateral, roundly depressed across border between metasternum and 1st abdominal sternite, finely grooved postero-medianly. Abdomen moderately closely, finely punctate and microscopically haired on 4 basal sternites, punctures finer in each apical portion, rugose in basal half of 1st sternite and also along each basal border of 2nd and 3rd, anal sternite impunctate in basal 1/3, coarsely punctate in middle, closely and finely so in apical.

Legs rather slender, projection of protrochanter obtuse; relative length of each tarsal segment (base to apex): 3.0, 1.7, 1.6, 1.4, 4.8; 3.4, 1.9, 1.4, 1.3, 5.2; 6.7, 2.7, 2.0, 5.8.

Body length: ca. 12.5 mm.

Holotype: 9, Suleng, Taoyuan Hsien, Formosa, 3. V. 1981, K. KINUGASA leg.

This new species differs from allied species *Paramisolampidius kagoshimensis* NAKANE from Japan in having small eyes with strongly emarginate sulci, closely punctate pronotum, small and depressed scutellum, and elytra with rows of sparser and somewhat fovea-like punctures.

#### Paramisolampidius tenghsiensis sp. nov.

This new species is closely allied to *Paramisolampidius wufengus* MASUMOTO from Formosa but differs from the nominate species in the following characteristics:

Black; elytra often dark blackish brown; fore body on upper surface somewhat sericeously shining; elytra moderately shining. Body a little shorter and more strongly convex above.

Head more transverse and flattened, more finely punctate, with frontal sulcus clearly widely arcuate; clypeus more sparsely and finely punctate, with front margin not truncate but moderately arcuate; genae raised in each outer portion, obtusely produced; antennae comparatively shorter, relative length of each segment (base to apex): 4.0, 1.5, 3.9, 3.1, 3.0, 3.0, 2.9, 2.9, 2.7, 2.6, 3.7.

Pronotum as broad as long; front border very slightly produced forward; basal border less strongly constricted and more narrowly margined; disk a little more convex above, more strongly punctate, with pair of large vague impressions or often remarkable spotlike ones after middle; sides less strongly convex laterad.

Elytra slightly shorter, nearly 1.6 times as long as broad, about 1.4 times broader than pronotum compared with each broadest point and 2.1 times longer than pronotum, more strongly produced posteriad in apical portion; disk with rows of punctures, these more sparsely and irregularly set, not striated like *P. wufengus* but often narrowly and shallowly grooved, somewhat foveolate, 1st row and 2nd not connected with each other at base, 3rd and 8th connected at apical; scutellary strioles shorter and not angulate like *P. wufengus*; intervals weakly convex and feebly microreticulate.

Mentum slightly narrower, with sharply pointed projection at antero-median. Prosternum more strongly punctate, intercoxal space a little narrower, grooved in median, prosternal process closely and finely punctate and rugose; mesosternum more strongly raised in postero-median; metasternum often obliquely wrinkled in middle. Abdomen more clearly punctate.

Legs shorter; inner side of fore tibia more remarkably widened in middle; projection of protrochanter clearly sharply pointed forward; relative length of each tarsal segment (base to apex): 2.6, 2.2, 2.0, 1.8, 5.5; 3.3, 1.9, 1.7, 1.5, 5.5; 6.5, 2.6, 2.4, 7.4.

Aedeagus shorter; basal piece more strongly curved; lateral robes shorter and slender. Body length: 12.5–15.5 mm.

Holotype: J. Tenghsi, Kaohsiung Hsien, Formosa, 13. VI. 1983, K. MASUMOTO leg.; paratypes: 10 exs., same data as holotype, 8 exs., Tenghsi, 14. VI. 1983, K. MASUMOTO leg.; 1 ex., Tenghsi, 7. VIII. 1983, CHEN WENLUNG leg.

## Tribe Cnodalonini

## Tetragonomenes hirasawai sp. nov.

Dark reddish brown; legs (especially tarsi), gula and parts of ventral surface lighter in color; antennae and palpi yellowish brown; upper surface of head and pronotum dark bluish and moderately shining; elytra greenish or purplish and rather strongly shining. Elongate and subparallel-sided; strongly convex longitudinally.

Head somewhat transverse-hexagonal, strongly elevated in posterior half, flattened in front, moderately closely punctate; frons declined forward; frontal suture very fine and nearly straight, with both ends bent oblique-forward and reaching outer margin; clypeus broad, weakly convex, very slightly emarginate at median of front margin, with both ends rounded, finely punctate, punctures a little smaller than those on frons; genae medium-sized, weakly raised, with outer margin roundly produced oblique-laterad; eyes rather large, moderately convex laterad, distance between them about 1.8 times their transverse diameter; ocular sulcus very deep in inside of eye and straightly extended to rear; antennae medium-sized, reaching basal 1/3 of pronotum, 6 apical segments softly flattened and somewhat club-like, 11th rounded, relative length of each segment (base to apex): 2.4, 1.2, 2.2, 2.0, 1.9, 1.9, 1.9, 2.0, 2.1, 2.3, 2.6.

Pronotum 1.2 times as broad as long, broadest at middle; front border moderately arcuate forward; basal border bisinuate and margined; sides moderately declined, steeply declined in antero-lateral portions with each lateral margin narrowly margined and weakly sinuate in middle and hind portion; front angles subrectangular, pointing fronto-ventrally; hind angles a little obtuse, pointing oblique-posteriad; disk rather strongly convex, moderately closely punctate, punctures a little sparser than those on frons.

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Scutellum triangular with rounded sides, scattered with microscopic punctures.

Elytra about 1.8 times as long as broad, 2.4 times length of pronotum, nearly subparallel, very feebly widened posteriad, broadest at posterior 5/12, then roundly narrowed to rear, narrowly and roundly produced in apexes; dorsum strongly convex longitudinally, faintly flattened after scutellum, thickest at middle; disk with rows (often striated) of punctures, distance between them about 1.5-3.5 times their diameter; intervals nearly flat, microreticulate, sparsely scattered with microscopic punctures; sides steeply declined, lateral margins hardly visible in dorsal view, clearly margined.

Mentum subcordate, shortly truncate at apex, asperate, raised in antero-median portion and ridge-like, bluntly pointed in front; gula parabolic, microshagreened, bordered by fine impressions in anterior portion; terminal joint of each maxillary palpus medium-sized, securiform, with arcuate outer side about twice length of inner and 1.2 times length of apical.

Prosternum microshagreened, coarsely punctate in lateral portions, narrowly margined in front, intercoxal space raised and bisulcate, declined posteriad, with prosternal process triangular and pointed to rear; mesosternum short and coriaceous, raised in V-shape along hind border; metasternum broad and microshagreened, coarsely punctate in anterior 1/3, shallowly wrinkled in antero-lateral portion, sparsely and finely punctate in posterior half. Abdomen rather closely punctate, punctures finer toward apical portion.

Legs comparatively large and slender, relative length of each tarsal segment (base to apex):  $1.6, -, -, -, -;^{1}$  2.5, 1.6, 1.4, 1.2, 4.8; 3.5, 2.0, 1.6, 6.0; claws falciform.

Body length: ca. 8 mm.

Holotype: J, Kuantao-shan, Nantou Hsien, Formosa, 2. VI. 1983, H. HIRASAWA leg.

This new species somewhat resembles *Tetragonomenes semirufus* (GEBIEN) from Luzon Is., but is easily distinguishable from the latter by its larger body, large and slender legs and flat elytral intervals.

#### Tribe Diaperini

#### Platydema terusane sp. nov.

Blackish brown; cephalic horns, outer margins of pronotum and elytra, antennae, palpi and undersurface of fore body dark reddish brown; upper surface with coppery luster. Ovate and remarkably widened forward; strongly convex above.

Head nearly transverse-elliptic, moderately closely and finely punctate, with pair of slender and subparallel horns between eyes and wide Y-shaped groove in middle in male (instead of horns, with pair of low swellings between eyes in female); front margin semicircular and feebly pointed at median; clypeus weakly convex; genae depressed in inner portions; vertex strongly raised; eyes transverse, very narrowly, roundly produced laterad, distance between them a little less than twice of their transverse diameter; antennae medium-sized, reaching base of pronotum, gradually thickened to apex and

1) 4 apical segments were lost in the type specimen.

somewhat club-like, relative length of each segment (base to apex): 3.0, 1.2, 2.3, 2.5, 2.2, 2.1, 2.1, 2.2, 2.3, 2.3, 3.2.

Pronotum nearly trapezoid, 2.6 times as broad as long, broadest at basal 1/3 and roundly narrowed to front and rear; front border broadly emarginate and nearly straight in median 1/3, very finely margined; basal border bisinuate; sides moderately declined, lateral margins clearly margined and very feebly sinuate at frontal 1/3; front angles rounded; hind angles subrectangular; disk rather strongly convex, moderately closely and finely punctate, punctures a little larger than those in elytral intervals, with pair of faint impressions near base. Scutellum triangular with rounded sides, sparsely scattered with microscopic (visible x 25) punctures.

Elytra about 1.3 times as long as broad, 2.8 times length of pronotum, slightly broader than pronotum compared at base of each, broadest in basal 1/3, then roundly narrowed to rear; dorsum strongly convex, thickest at basal 1/3; disk with rows (often finely grooved) of small punctures, distance between them about 1-2 times their diameter in inner portion, 2.5-3.5 times in outer; intervals flat, scattered with very fine punctures, their diameter about 1/4 times of punctures in rows; sides rather steeply declined, canaliculate along reflexed margins.

Mentum subcordate and shortly truncate in apical portion, rather smooth, raised in antero-median portion, obliquely impressed near base on both sides; gula triangular, microshagreened, with pair of small oblique impressions on front border; terminal segment of maxillary palpus rather slender with arcuate outer side about 1.4 times length of inner side and 1.8 times length of obliquely truncate apical.

Prosternum asperate, ridged in antero-median, intercoxal space elevated and somewhat prolonged cordate with surface horizontal and shallowly bisulcate, prosternal process obtusely pointed to rear; mesosternum very short, with small V-shaped elevation at median of bind border; metasternum medium-sized, finely punctate in middle, rather closely and coarsely punctate and shallowly wrinkled in anterior portion, sparsely punctate in lateral, finely pubescent, with median impression in posterior 2/3. Abdomen rather closely and somewhat setaceously punctate, punctures finer on 2 apical sternites, longitudinally and shallowly wrinkled on 2 basal sternites and also in antero-lateral portions of 3rd sternite, strongly grooved along basal borders of 4th and 5th.

Relative length of each tarsal segment (base to apex): 2.0, 2.4, 1.3, 1.2, 5.3; 3.2, 1.6, 1.5, 1.4, 4.8; 5.4, 2.0, 1.8, 5.2; claws sharp.

Body length: 6.5–7.8 mm.

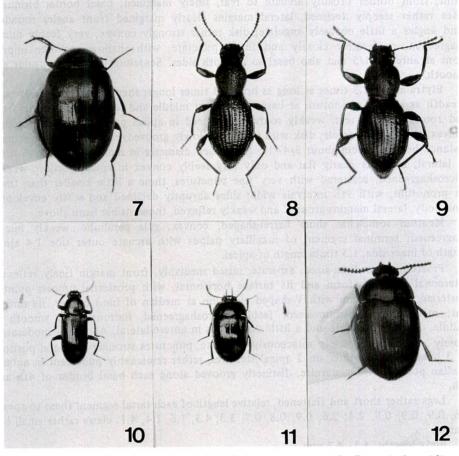
Holotype: &, Tenghsi, Kaohsiung Hsien, Formosa, 14. VI. 1983, K. MASUMOTO leg.; paratypes: 5 exs., same data as holotype.

This new species differs from the allied species *Platydema higonium* LEWIS from Japan in having a body larger and remarkably widened forward and eyes very narrowly rounded laterad.

#### Platydema endoi sp. nov,

Dark reddish brown; apical half of head, margins of pronotum and elytra, undersurface of fore body lighter in color; antennae, palpi and legs yellowish brown. Upper

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Figs. 7-12. - 7, Amarygmus hsiaohsingus sp. nov.; 8, Paramisolampidius kinugasai sp. nov.; 9, Paramisolampidius tenghsiensis sp. nov.; 10, Tetragonomenes hirasawai sp. nov.; 11, Platydema terusane sp. nov.; 12, Platydema endoi sp. nov.

surface moderately shining. Ovate; strongly convex above.

Head small and somewhat elliptic, strongly raised and moderately closely and distinctly punctate in basal half, remarkably depressed and sparsely scattered with microscopic punctures in anterior, with pair of oblique subconical horns between eyes and concaved in middle in male, only with shallow median groove in female; clypeus wide, weakly convex, with front margin nearly straight; genae rather transverse, each weakly depressed in inner portion, and with oblique outer margin; eyes very large, roundly produced laterad, distance between them nearly their transverse diameter; antennae rather large, nearly reaching base of pronotum, 8 apical segments flattened and somewhat club-like, 11th ovoid, relative length of each segment (base to apex): 2.4, 1.5, 2.0, 2.2, 2.3, 2.3, 2.3, 2.3, 2.2, 3.0.

Pronotum about 1.9 times as broad as long, broadest at base, roundly narrowed to

front; front border broadly arcuate to rear, finely margined; basal border bisinuate; sides rather steeply declined, lateral margins clearly margined front angles rounded; hind angles a little obtusely angulate; disk rather strongly convex, very feebly micro-shagreened, moderately closely and finely punctate, with shallow spot-like impressions at anterior 1/5 and also basal so on both sides. Scutellum nearly triangular and smooth.

Elytra about 1.3 times as long as broad, 3 times longer than pronotum, nearly same breadth as that of pronotum at base, broadest at middle and feebly narrowed to front and roundly so to rear, weakly roundly produced in apical portion; dorsum strongly convex, thickest at middle; disk with (often shallowly grooved) rows of small punctures, distance between them about 3/4-1.5 times their diameter in inner portion, 2-3 times in lateral; intervals nearly flat and only very feebly convex in apical portion, weakly microshagreened, scattered with very fine punctures, these a little smaller than those on pronotum, with 9th intervals wide; sides abruptly declined and softly enveloping hind body, lateral margins grooved and weakly reflexed, those visible from above.

Mentum somewhat short barrel-shaped, convex; gula parabolic, weakly microshagreened; terminal segment of maxillary palpus with arcuate outer side 1.4 times length of inner side, 1.5 times length of apical.

Prosternum medium-sized, asperate, raised medianly, front margin finely reflexed, intercoxal space fusiform and its surface horizontal, with prosternal process pointed posteriad, mesosternum with V-shaped elevation at median of hind border, its surface flat; metasternum medium-sized, feebly microshagreened, flattened and smooth in middle, coarsely punctate and a little coriaceous in antero-lateral. Abdomen moderately closely and microscopically setaceously punctate, punctures stronger in lateral portions of 3 basal sternites, finer on 2 apical sternites, rather remarkably pubescent in anteromedian portion of 1st sternite, distinctly grooved along each basal border of 4th and 5th.

Legs rather short and flattened, relative length of each tarsal segment (base to apex): 1.6, 0.9, 0.9, 0.8, 2.4; 2.6, 0.9, 0.8, 0.7, 3.3; 4.3, 1.6, 1.4, 4.1; claws rather small but sharp.

Body length: 4.1-4.3 mm.

Holotype: &, Shanping, Kaohsiung Hsien, Formosa, 30. IV. 1981, T. ENDO leg.; paratype: 1 ex., same data as holotype.

This new species somewhat resembles *Platydema yangmingense* MASUMOTO from Formosa, but is easily distinguishable by its smaller and less strongly convex body, upper surface more weakly punctate, elytral intervals nearly flat, and absence of metallic luster on the upper surface.

摘 要

台湾産ゴミダマシムシの6新種を記載した.

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