

Tenebrionidae of East Asia

(III) A New Genus and Three New Species from Taiwan

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Abstract A new genus allied to the genera *Menepphilus* and *Cryphaeus* (Tenebrionini) is erected for a new Taiwanese species, and two new species of the tribe Cnodalonini from Taiwan are also described.

Through the courtesy of Professor Dr. CHU Y.-C., National Taiwan University, I had an opportunity of collecting tenebrionid beetles in the southern part of Taiwan.

I took many specimens in Liukuei Forest in Kaohsiung Hsien, and in Taimali Forest in Taitung Hsien, both being the experimental forest stations of the Taiwan Forestry Research Institute. As I found some very interesting species in this collection, I am going to describe three new species in the present report.

The first exciting new species belongs to a new genus, which is allied to the genus *Menepphilus* in having general characteristics of the latter, though it is also related to the genus *Cryphaeus*, whose eyes are divided into the dorsal and ventral portions. The second new species belongs to the genus *Platycrepis* of the tribe Cnodalonini, and has been confused with *P. violaceus* KRAATZ, 1880, since GEBIEN (1913) recorded the latter from Taiwan. The third is a species allied to *Addia nakanei* MASUMOTO, 1982 (Cnodalonini). This occurs isolately in southeastern Taiwan, though the latter species is widely distributed in central Taiwan.

I wish to express my sincere gratitude to Professor Dr. CHU Y.-C., National Taiwan University, Dr. YANG C.-C., chief of the Liukuei Station, and Mr. TSAI T.-C., chief of the Taimali Station, Taiwan Forestry Research Institute, for their kind arrangement for my field survey. I am also indebted to Mr. T. INOMATA, Hachiôji City, who took photographs of the new species for this paper, and to Mr. T. SHIBATA and the members of the Osaka Coleopterological Society, who gave me valuable advice for this research.

The holotypes of the new species to be described are preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo.

Genus *Taiwanomenepphilus* gen. nov.

Type species: *Taiwanomenepphilus chui* sp. nov.

Body medium-sized (nearly 10 mm), elongate and subparallel-sided; gently convex longitudinally; winged.

Head moderately produced and nearly horizontal against pronotum in repose, gently depressed in middle; frons with a longitudinal ridge at the inner side of each eye; eyes medium-sized and divided into dorsal and ventral portions; ocular sulcus fairly clear. Antennae medium-sized, with 6 apical segments weakly flattened and somewhat club-like.

Pronotum trapezoidal with all margins bordered though the apical one is interrupted in medial 1/3; disc gently convex above, faintly depressed medially in apical portion in male. Scutellum triangular.

Elytra a little wider than pronotum; dorsum moderately, longitudinally convex, slightly flattened in baso-medial portion; disc noticeably punctate-striate; intervals gently convex; sides steeply declined to clearly bordered lateral margins, enveloping the under side; epipleura entire.

Prosternum trapezoidal, intercoxal space gently raised; mesosternum fairly short with a triangular excavation in middle, whose tip almost reaches the posterior margin, the posterior edge of the excavation being slightly ridged and pointed at each external end; metasternum medium-sized. Abdomen medium-sized, 3rd and 4th sternites each with a membranous posterior margin.

Legs rather robust; male protibia dilated in apical 2/5.

Male genitalia small, with lateral lobes prolonged in apical half.

Notes. This new genus is related to the genus *Menepphilus* MULSANT, 1854 (Tenebrionini), but can be distinguished from the latter by the following characteristics:

- 1) The head is neither convex nor longitudinally bisulcate but gently flattened and longitudinally ridged at the inner side of each eye.
- 2) The eyes are divided into the dorsal and ventral portions.
- 3) The pronotum is faintly depressed medially in the anterior portion in male.
- 4) The mesosternum is excavated in the posterior portion, and the posterior edge of the excavation is slightly ridged and pointed at each external end.
- 5) The male protibiae are neither prolonged nor curved but dilated in the apical portion.

Taiwanomenepphilus chui sp. nov.

(Figs. 1 & 4-7)

Reddish brown, with dorsal surface slightly darker, moderately shining. Elongate and subparallel-sided; gently convex longitudinally.

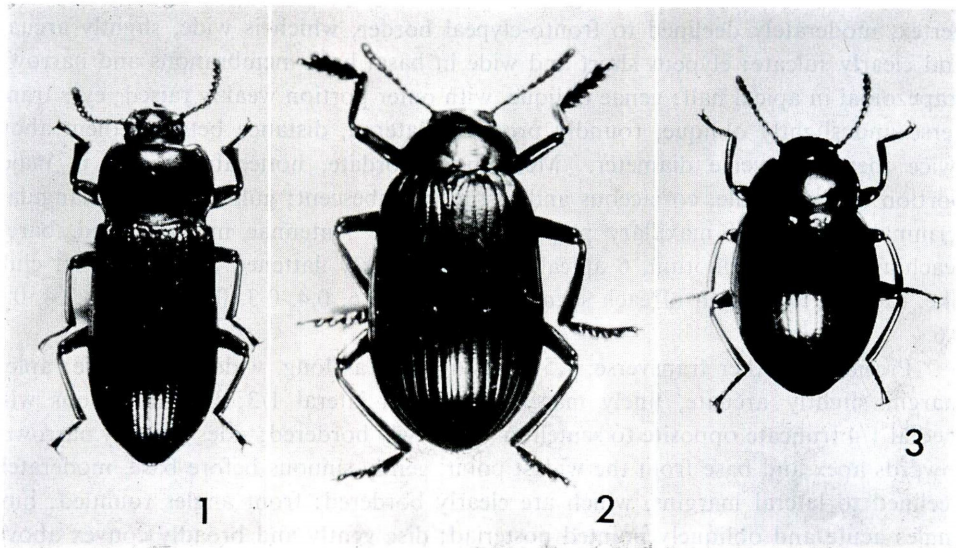
Head subhexagonal, rather closely punctate throughout; frons gently depressed, inner portion of each eye longitudinally ridged; clypeus rather broad, clearly separated by a sulcus from both frons and genae, feebly convex in middle, apical margin sub-linear with each end roundly curved and connecting with the outer margin of gena; genae somewhat auriform, weakly raised in outer portions, slightly depressed before eyes; eyes rather small and obliquely oval in dorsal portion, distance between them slightly more than 4 times their diameter, ventral portion of eye larger than the dorsal,

with ocular sulci rather deep; occiput gently raised. Mentum subcordate with basal portion briefly truncate, roughly sculptured, ridged medially; gula nearly parabolic; terminal segment of maxillary palpus gently dilated. Antennae reaching apical $1/3$ of pronotum, 6 apical segments weakly flattened and somewhat club-like, ratio of the length of each segment from basal to apical: 0.4, 0.2, 0.4, 0.3, 0.3, 0.3, 0.3, 0.3, 0.3, 0.3, 0.5.

Pronotum trapezoidal, about 1.5 times as wide as long; apical margin feebly arcuate, finely bordered in each lateral $1/3$; base gently bisinuous, bordered with punctate groove and rimmed; sides widest at basal $2/5$, gradually narrowed towards apex, rather strongly so towards base, and feebly sinuous slightly before base; moderately declined to lateral margins, which are noticeably bordered; front angles subrectangular with rounded corners; hind angles obtuse, with corners acutely pointed; disc gently convex above, faintly depressed medially in apical $1/4$ in male, rather closely punctate, the punctures shallow, a little larger and sparser than cephalic ones. Scutellum triangular, with wide base and gently rounded sides, sparsely scattered with punctures, which are smaller than pronotal ones.

Elytra 1.8 times as long as wide, 2.8 times length and 1.1 times width of pronotum, widest at apical $4/9$, with apices slightly produced; dorsum moderately, longitudinally convex, slightly flattened in basal portion at middle; disc punctate-striate, the striae sometimes disappeared, the punctures in striae clearly notching intervals; intervals gently convex, scattered with fine punctures; sides gradually steeply declined to lateral margins, which are clearly bordered and hardly visible from above.

Prosternum rather trapezoidal, feebly coriaceous, apical margin arcuate and



Figs. 1-3. — 1. *Taiwanomenephilus chui* gen. et sp. nov. (holotype). — 2. *Platycrepis yangi* sp. nov. (holotype). — 3. *Addia tsaii* sp. nov. (holotype).

bordered, intercoxal space gently raised, prosternal process moderately depressed and obtusely pointed; mesosternum fairly short, triangularly in posterior portion; metasternum medium-sized, moderately closely punctate, shallowly wrinkled in antero-lateral portions, with a median groove in posterior 3/5. Abdomen medium-sized, moderately closely punctate, 3 basal sternites shallowly wrinkled anteriorly, 3rd and 4th sternites each with a membranous posterior margin; anal sternite rimmed along outer margin.

Legs rather robust; male protibia dilated in apical 2/5; ratio of the length of each tarsal segment from basal to apical: 0.4, 0.2, 0.2, 0.2, 1.2; 0.4, 0.2, 0.2, 0.2, 1.2; 0.4, 0.3, 0.2, 1.2, respectively.

Male genitalia very small, lateral lobes prolonged in apical half.

Body length: 9.5–11.5 mm.

Holotype: ♂, Malibulu, Kuinashan, Taitung Hsien, Taiwan, 28. IV. 1986, K. MASUMOTO leg. Paratypes: 10 exs., same data as the holotype; 6 exs., same locality, 29. IV. 1986, 5 exs., same locality, 26. VI. 1986, K. MASUMOTO leg.

Platycrepis yangi sp. nov.

(Figs. 2 & 8–9)

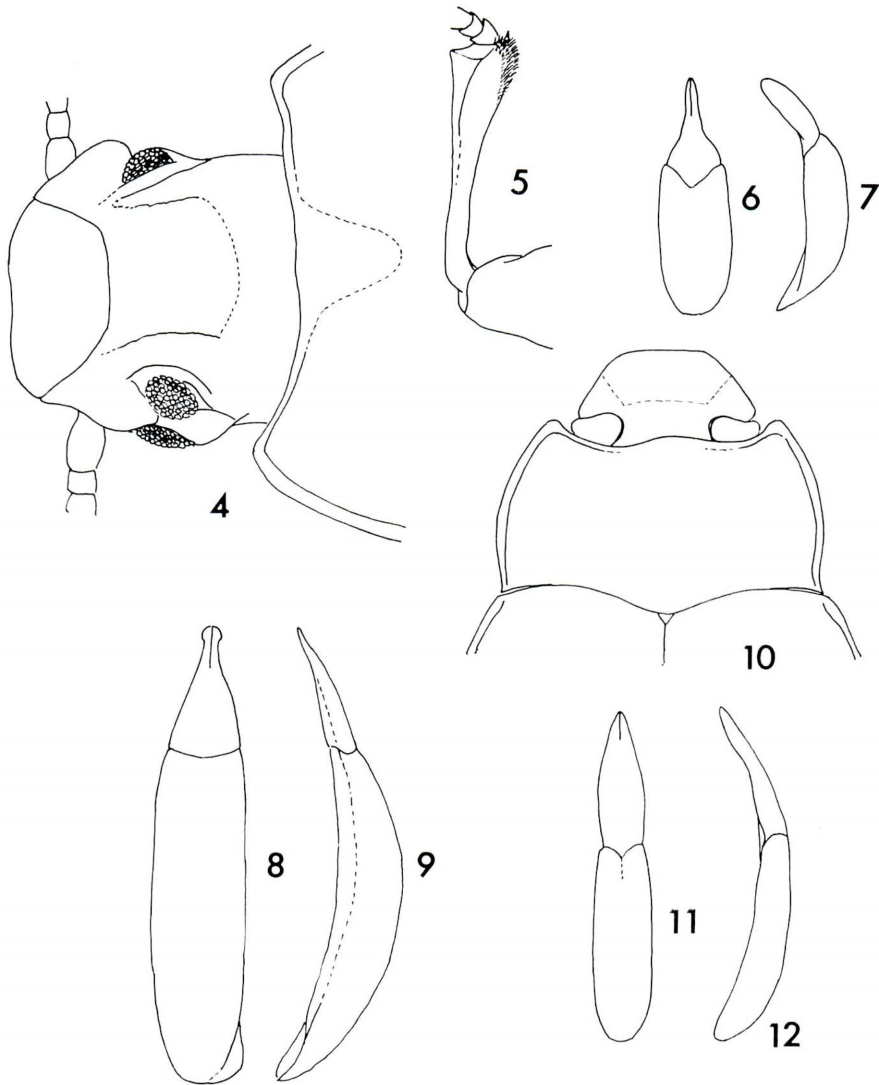
Blackish brown, with antennae, mouth-parts, outer margins of pronotum and elytra, and legs lighter in colour, dorsal surface bearing feeble coppery tinge; pronotum and elytra sericeously shining, ventral surface gently so. Oblong-oval, constricted between bases of pronotum and elytra; moderately convex above.

Head fairly transverse, irregularly and finely punctate, faintly impressed on vertex, moderately declined to fronto-clypeal border, which is wide, slightly arcuate and clearly sulcate; clypeus short and wide in basal half, membranous and narrowly trapezoidal in apical half; genae oblique, with outer portion weakly raised; eyes transverse and slightly oblique, roundly produced laterad, distance between them about twice their transverse diameter. Mentum subcordate, noticeably raised in major portion of the middle, coriaceous and distinctly pubescent; gula long and triangular; terminal segment of maxillary palpus securiform. Antennae medium-sized, barely reaching base of pronotum, 6 apical segments weakly flattened and somewhat club-like, ratio of the length of each segment: 0.6, 0.2, 0.6, 0.4, 0.3, 0.5, 0.4, 0.4, 0.4, 0.4, 0.6.

Pronotum rather transverse, 1.5 times as wide as long, widest at middle; apical margin slightly arcuate, finely margined in each lateral 1/3; base bisinuous with medial 1/4 truncate opposite to scutellum, shallowly bordered; sides roundly narrowed towards apex and base from the widest point, gently sinuous before base, moderately declined to lateral margins, which are clearly bordered; front angles rounded; hind angles acute and obliquely pointed posteriad; disc gently and broadly convex above, moderately closely and finely punctate, with a pair of oblique impressions in posterior 1/3. Scutellum subcordate, glabrous, scattered with punctures, which are a little

smaller than pronotal ones.

Elytra 1.6 times as long as wide, 3.6 times length and 1.5 times width of pronotum, widest at apical $4/9$; dorsum rather strongly convex, thickest at basal $1/3$; disc punctate-striate, the striae fine though clear, the punctures in the striae weakly



Figs. 4–12. — 4–7. *Taiwanomenephilus chui* gen. et sp. nov.; 4, fore body in obliquely lateral view; 5, protibia; 6, male genitalia, dorsal view; 7, same, lateral view. — 8–9. *Platycrepis yangi* sp. nov.; 8, male genitalia, dorsal view; 9, same, lateral view. — 10–12. *Addia tsaii* sp. nov.; 10, fore body in dorsal view; 11, male genitalia, dorsal view; 12, same, lateral view.

notching intervals; intervals rather wide and slightly convex, scattered with fairly shallow punctures, which are clearly smaller than pronotal ones; sides gently narrowed towards base and roundly so towards apices, steeply declined to lateral margins, which are noticeably bordered and narrowly explanate obliquely, thus barely visible from above.

Prosternum fairly short, moderately raised between coxae and bi-ridged longitudinally, apical margin finely edged, prosternal process triangular and rimmed, weakly depressed and pointed posteriad; mesosternum noticeably short, deeply excavated in dilated U-shape in posterior portion, posterior edge of the excavation slightly ridged and bluntly pointed at each external end, with surface rugose and pubescent; metasternum fairly broad, microshagreened and feebly wrinkled, scattered with shallow punctures, with a median groove in posterior 4/5. Abdomen medium-sized, 2 basal sternites and basal portion of 3rd microshagreened and shallowly wrinkled, remaining portion of abdomen finely punctate.

Legs finely punctate. Tibiae in male: protibia gently thickened to apex, densely haired on inner margin of apical half, meso- and metatibiae slightly incurved, thickened towards each apex, haired also in apical half. Tibiae in female: all a little shorter and slenderer than those in male, and indistinctly haired; tarsi except for terminal segments noticeably dilated and densely haired beneath, penultimate segments cordate, ratio of the length of each tarsal segment from basal to apical: 0.8, 0.8, 0.8, 0.8, 1.2; 0.9, 0.8, 0.8, 0.8, 1.3; 1.2, 0.8, 0.8, 1.3, respectively.

Male genitalia elongated fusiform with apex somewhat spatulate.

Body length: ca. 17 mm.

Holotype: ♂, Shanping, Liukuei, Kaohsiung Hsien, Taiwan, 1-2. V. 1986, K. MASUMOTO leg. Paratype: 1 ex., same data as the holotype.

Notes. GEBIEN (1913) recorded *Platycrepis violaceus* KRAATZ, 1880, from Taiwan, but I have been unable to examine any Taiwanese specimen of the species. The present new species is smaller than the southern one and the dorsal surface is less metallically shining. It can be distinguished from *P. violaceus* also by having longer pronotum, shallower elytral striae, and the prosternal process not horizontal but depressed. GEBIEN's record may have been based on this new species.

Addia tsaii sp. nov.

(Figs. 3 & 10-12)

This new species closely resembles *Addia nakanei* MASUMOTO, 1982, widely distributed in central Taiwan, but can be distinguished from the latter by the following characteristics:

Body more ovate, gently constricted between bases of pronotum and elytra, more strongly convex above; dorsal surface bearing purplish lustre.

Head slightly narrower, more convex above; genae less strongly produced laterad; eyes less transverse, distance between them about 2.5 times their diameter (about

twice in *A. nakanei*). Mentum wider and clearly subcordate; gula not parabolic but triangular; terminal segment of maxillary palpus with apical side less oblique against outer and inner sides. Antennae slightly shorter, reaching base of pronotum, 5 apical segments weakly flattened and somewhat club-like, ratio of the length of each segment from basal to apical: 0.9, 0.5, 0.8, 0.7, 0.6, 0.6, 0.7, 0.7, 0.7, 0.7, 1.2.

Pronotum wider and a little shorter, 1.7 times as wide as long, widest at basal 2/5; front margin widely, more deeply emarginate, slightly arcuate forwards in middle; base more clearly bisinuous; sides more strongly arcuate laterad, more steeply declined to lateral margins, which are more thickly rimmed; front angles subrectangular with rounded corners, rather noticeably produced forwards; hind angles acute and slightly pointed obliquely posteriad; disc more convex. Scutellum small and triangular, nearly the same as that of *A. nakanei*.

Elytra rather ovate, 1.3 times as long as wide, 3 times length and 1.3 times width of pronotum, widest at basal 2/5; dorsum more strongly convex, thickest at basal 1/3, with apices roundly produced; disc punctate-striate, the striae fine and often disappeared, the punctures in striae not foveolate but pitted, though clearly notching intervals, about 1.5–2.5 times their diameter apart; intervals rather wide and nearly flat, fairly sparsely scattered with microscopic punctures, feebly and transversely microreticulate; sides more steeply declined to lateral margins, which are more clearly bordered and explanate, visible from above.

Prosternum more strongly raised medially, more apparently depressed before coxae, prosternal process clearly produced with basal portion wider; mesosternum shorter, excavated not triangularly but semicircularly, posterior edge of the excavation less pointed at each external end; metasternum shorter, obliquely wrinkled, with median groove more clearly impressed. Abdomen narrower, more convex antero-medially, with basal portion more roughly wrinkled.

Legs a little more slender; tarsi with ratio of the length of each segment from basal to apical: 0.5, 0.3, 0.3, 0.2, 1.2; 0.5, 0.3, 0.3, 0.2, 1.3; 1.0, 0.3, 0.2, 1.3, respectively.

Male genitalia smaller and slightly more slender, more noticeably curved in lateral view.

Body length: 7.2–9.5 mm.

Holotype: ♂, Malibulu, Kuinashan, Taitung, 28. IV. 1986. K. MASUMOTO leg. Paratypes: 23 exs., same data as the holotype; 5 exs., same locality, 29. IV. 1986, 5 exs., same locality, 26. VI. 1986, K. MASUMOTO leg.

摘 要

台湾南部で実施した採集調査で得られたゴミムシダマシ科のうち、ゴミムシダマシ族 Tenebrionini に属する新属 *Taiwanomenephilus* とそれに含まれる新種 *T. chui*, およびニジゴミムシダマシ族 Cnodalonini に属する *Platycrepis* 属の新種 *P. yangi*, ならびに *Addia* 属の新種 *A. tsaii* を記載した。

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