

## Two New Tenebrionid Species (Coleoptera, Tenebrionidae) from Japan

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**Abstract** Two new tenebrionid beetles are described under the names of *Platydema sawadai* sp. nov. (tribe Diaperini), and *Brachyidium iwojima* sp. nov. (tribe Opatrini). The former was captured on Ishigakijima Is., Ryukyu Islands, Southwest Japan, and the latter was on Iwojima Is., Volcano Islands, at the northern part of Micronesia.

In this paper, two new species of tenebrionid beetles, *Platydema sawadai* sp. nov. (tribe Diaperini), and *Brachyidium iwojima* sp. nov. (tribe Opatrini), will be described from Japan.

The author wishes to express his sincere gratitude to Dr. Ottó MERKL, Természettudományi Múzeum, Budapest, for loaning materials of related species including a paratype of *Caedius palauensis* KULZER preserved in the Múzeum, and also to Mr. Hiroshi SAWADA, Tokyo, for providing with specimens to be described.

The holotypes of the new species are deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo.

### *Platydema sawadai* sp. nov.

(Fig. 1)

Yellowish brown, with basal half of pronotum except for lateral and basal margins, postero-lateral portions of elytra except for lateral and apical portions obviously darker; dorsal surface rather strongly shining, ventral one dully so. Oblong-oval and strongly convex above.

*Male.* Head semicircular, distinctly depressed in an X-shape in middle, minutely punctate, armed with a pair of subconical horns close to eyes, which are leant forwards; clypeus transversely oblong and convex above, densely punctate, with apex moderately arcuate; genae oblique, with outer margin feebly produced; eyes large, somewhat transversely reniform; diatone about 0.8 times transverse diameter of an eye; mentum subcordate with base briefly truncate, convex in middle and distinctly depressed in lateral portions; gula triangular and bordered by fine impressions; terminal segment of maxillary palpus fairly large though gently thickened towards apex, which is obliquely truncate. Antennae subclavate, reaching base of elytra, ratio of the length of each segment from basal to apical as follows: 0.7, 0.2, 0.45, 0.55, 0.5, 0.4, 0.45, 0.4, 0.4, 0.4, 0.7.

Pronotum subtrapezoidal, about twice as wide as long, widest at base and gradually narrowed towards apex; apex nearly straight, finely bordered; base bisinuous, with a short oblique impression on each side; sides steeply declined to lateral margins, which are more distinctly bordered than apex; front angles obtuse, each with rounded corner; hind angles subrectangular; disc rather strongly, transversely convex, minutely punctate, the punctures a little sparser than those in lateral portions. Scutellum short linguiform, sparsely scattered with microscopic punctures.

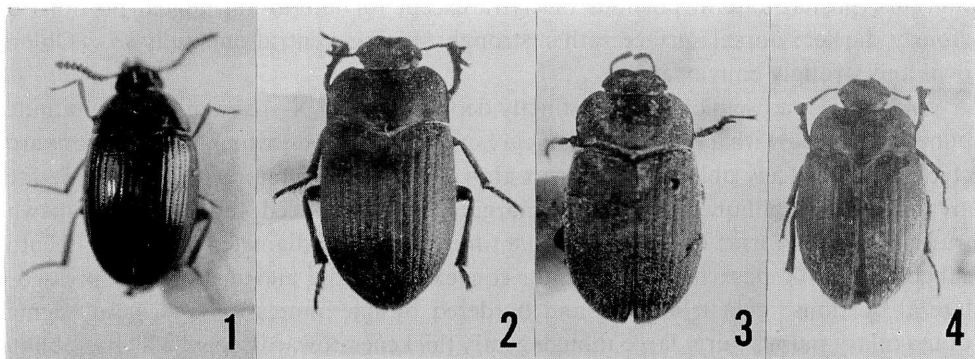
Elytra about 1.3 times as long as wide, 3 times length and 1.2 times width of pronotum, widest a little before the middle, gradually narrowed towards bases and apices; dorsum strongly convex, thickest a little before the middle; disc punctostriate, the punctures in striae fairly clear, distance between them about 1–2 times their own diameter; intervals gently convex on the disc, fairly convex at the side, with rows of fine punctures, which are much smaller than those on pronotum; sides steeply declined to lateral margins, which are distinctly bordered and feebly explanate laterad, hence easily visible from above.

Prosternum rather short and ridged medially, apical margin widely emarginate, rimmed in medial half, with prosternal process subfusiform and projected to rear; mesosternum very short, deeply excavated posteriorly, with posterior edge of the excavation finely ridged; metasternum medium-sized, shallowly wrinkled and scattered with punctures, which become coarser and sparser in lateral portions, with a clear median impression in posterior half.

Abdomen alutaceous and scattered with punctures, which become larger and coarser in lateral parts and minute in the apical.

Legs simple in shape and medium-sized; ratio of the lengths of pro-, meso- and metatarsomeres from basal to apical: 0.35, 0.25, 0.25, 0.25, 0.8; 0.6, 0.3, 0.25, 0.2, 0.75; 0.95, 0.45, 0.3, 0.95, respectively.

Male genitalia somewhat elongated fusiform.



Figs. 1–4. — 1. *Platydemia sawadai* sp. nov., ♂, holotype. — 2. *Brachyidium iwojima* sp. nov., ♂, holotype. — 3. *B. rectangulum* (GEBIEN), ♂, — 4. *B. palauense* (KULZER), ♂, paratype.

*Female.* Head with neither horns nor depressions; dorsal surface more distinctly punctate.

Body length: ca. 4 mm.

*Type series.* Holotype. ♂, Mt. Banna, Ishigakijima Is., Ryukyu Islands, Japan, 29-X-1990, K. SAWADA leg. Paratypes. 9 exs., same data as for the holotype.

*Notes.* This new species may be easily distinguished from other species described from neighbouring areas in East Asia by the male head armed with two symmetrically formed horns and the pronotal and elytral coloration.

***Brachyidium iwojima* sp. nov.**

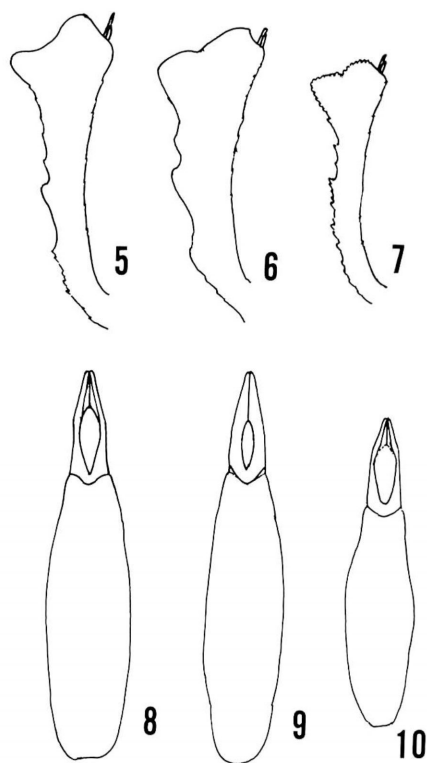
(Figs. 2, 5, 8)

Brownish black, with mouth parts, gula, claws, etc., more or less lighter in colour; each surface gently clothed with very short pale yellowish hairs, dorsal surface feebly sericeously shining, ventral one gently shining. Oblong-oval, moderately convex above.

*Male.* Head somewhat transverse hexagonal, gently declined to apex, weakly rugoso-punctate and asperate; apical margin of clypeus indented at the middle, rounded on each side; outer margin of gena obliquely arcuate; eyes rather small when seen from above; interocular space wide and about 6 times transverse diameter of an eye, with a rounded ridge partially overlying each eye. Mentum subpentagonal and coarsely asperate, with apex roundly pointed; gula triangular and feebly alutaceous, with a short impression in anterior portion on each side; terminal segment of maxillary palpus rather short and securiform. Antennae reaching the middle of pronotum; ratio of the length of each segment from basal to apical as follows: 0.7, 0.22, 0.7, 0.3, 0.3, 0.3, 0.35, 0.35, 0.35, 0.3, 0.27.

Pronotum about twice as wide as long, widest at base though almost subparallel-sided in basal half, then roundly narrowed towards apex; apex gently and widely emarginate, finely rimmed in each lateral 1/3; base widely bisinuate, finely impressed along margin, the impression interrupted in medial 1/5; sides gradually declined to lateral margins, which are more distinctly rimmed than apex; front angles obtuse, hind ones a little acute and pointed postero-laterad; disc transversely and gently convex and more or less micro-shagreened, closely though weakly rugoso-punctate, the rugosity mostly forming short longitudinal ridges, with a faint impression at base on each side. Scutellum semicircular and smooth, though mostly hidden beneath the pronotum or its fringing hairs.

Elytra a little more than 1.3 times as long as wide, about 2.8 times length and 1.1 times width of pronotum, widest at the middle though the basal half is almost subparallel, roundly narrowed in apical half; dorsum moderately convex, often faintly depressed behind scutellum, thickest a little before the middle; disc feebly micro-shagreened, weakly punctato-striate though the punctures are often indistinct; intervals feebly convex with sutural intervals mostly ridge-like, granulate and micro-



Figs. 5-10. — 5-7. Male protibiae in ventral view; 5, *B. iwojima* sp. nov.; 6, *B. rectangulum* (GEBIEN); 7, *B. palauense* (KULZER). — 8-10. Male genitalia in dorsal view; 8, *B. iwojima* sp. nov.; 9, *B. rectangulum* (GEBIEN); 10, *B. palauense* (KULZER).

scopically haired, the hairs being scale-like on the disc but becoming longer in lateral portions; sides rather steeply declined to lateral margins, which envelop the hind body and are finely rimmed, the rims being microscopically serrate and fringed with hairs.

Prosternum coarsely asperate, apical margin barely bordered, with prosternal process fairly large and obtusely produced posteriad; mesosternum extremely short, with a triangular excavation at posterior margin; metasternum medium-sized, coarsely punctate and shortly haired, with a median line in posterior 1/3. Abdomen asperate, clothed with short bent hairs.

Protibia gently curved inwards, rather distinctly widened to apex, which is subtruncate, outer margin with a large tooth in middle, and also with a few small ones in basal 2/5 (see Fig. 5); ratio of the length of pro-, meso- and metatarsomeres from basal to apical: 0.4, 0.25, 0.26, 0.28, 1.2; 0.7, 0.32, 0.36, 0.34, 1.22; 1.27, 0.55, 0.38, 1.28.

Male genitalia subfusiform, with lateral lobes weakly prolonged.

*Female.* Protibia wider than in male though less distinctly curved.

Body length. 7.5-8.5 mm.

*Type series.* Holotype. ♂, Iwojima Is., Volcano Islands, Japan, 30-IX-1990,

K. MASUMOTO leg. Paratypes. 116 exs., same data as for the holotype; 5 exs., Iwojima Is., 17-X-1989, K. MASUMOTO leg.

*Notes.* This new species resembles *Brachyididium rectangulum* (GEBIEN), originally described from the Philippines, but can be distinguished from the latter by the dorsal surface more distinctly asperate and more densely clothed with fine hairs, the pronotum with more remarkably angulate front angles; the elytra less clearly punctato-striate, and the differently shaped protibiae and genitalia in the male. From *B. palauense* (KULZER), whose locality is not far from Iwojima Is., the new species can be easily discriminated by the larger and subparallel-sided body, the dorsal surface more distinctly granulate and haired, and differently shaped protibiae and genitalia in the male.

### 要 約

益本仁雄：日本産ゴミムシダマシの2新種。——八重山列島石垣島で沢田和宏氏により採集された、小型で眼間に1対の短角のあるキノコゴミムシダマシを新種と認め、*Platydema sawadai* sp. nov. として記載した。また、火山列島硫黄島で著者が採集したニセマルチビゴミムシダマシは、フィリピンに産する *Brachyididium rectangulum* (GEBIEN) に近似するが、表面構造や前胸背板、前脛節、♂交尾器などの形状で区別できること、さらに地域的にみて近いパラオ島から記載された *Caedius palauensis* KULZER = *Brachyididium palauense* (KULZER) とは一見して分けられることから、*Brachyididium iwojima* sp. nov. として新種記載した。

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