TENEBRIONIDAE OF THE NANSEI ISLANDS VIII
(COLEOPTERA)

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TENEBRIONIDAE OF THE NANSEI ISLANDS VIII (COLEOPTERA)*

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Abstract

Three new species, Scaphidema aikoae from Yakushima Is., Uloma ishigakiensis from Ishigakijima Is. and U. takarai from Iriomotejima Is. are described.

Scaphidema aikoae sp. nov.

Oval, yellowish brown, 4th to apical segments of antenna and elytra except for fasciae blackish brown, interocular area to neck and pronotum except for side marginal area dark brown, elytral fasciae yellow.

Head very gently convex, sparsely, strongly punctate; preocular area narrowly, shallowly raided into eye, outside feebly rounded; clypeus projecting forwards, parallel-sided, front corner obtusely angulate, apical margin transversely truncate; frontal suture fine, distinct, median part of interocular area shallowly depressed. Eye rather transverse, relatively strongly prominent outwards.

Antenna reaching middle coxal cavity, 1st segment thick, 4th to apical segments loosely clavate, 4th to penultimate ones nearly equal to each other in shape and size, apical one oblong oval, relative length of each segment (base to apex) 6 : 3 : 8 : 5 : 5 : 5 : 5 : 5 : 5 : 5 : 11. Apical segment of maxillary palpus nearly cylindrical, apex obliquely truncate. Mentum transversely trapezoidal, a pair of small foveae on both sides. Tempola to gula roughly carved, gular suture invisible.

Pronotum weakly convex, strongly, sparsely punctate, transverse (5 : 8), widest at. base, gently narrowed forwards; front margin very narrowly margined, deeply sinuate in u-shape, median 3/5 nearly straight; front corner rounded; side margin very weakly warped outwards, wholly, narrowly margined and reflexed, apical 1/5 obliquely truncate; hind corner obtusely angulate; hind margin not marginate, middle 2/4 gently, roundly expanded backwards. Prosternum gently convex, front margin narrowly marginate,

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slightly reflexed, front submarginal area widely rugose; prosternal process strongly widened backwards, apex widely rounded. Propleuron very sparsely punctate. Scutellum tongue-shaped, very sparsely punctate.

Elytra gently convex, a little wider than base of pronotum at base, widest at middle part; punctate-striate, interstices weakly convex, sparsely aciculate, very sparsely, irregularly wrinkled; shoulder obtusely angulate, relatively widely marginate, side margin widely marginate and roundly reflexed nearly at base, very narrowly, simply marginate nearly at apex; elytral fasciae as shown in Fig. 1 A. Epipleuron widest at basal part, gradually narrowed backwards, not reaching apex of elytron. Mesosternum glassy at median part, V-shaped receptor of prosternal process shallowly, very widely opened forwards. Metasternum strongly sparsely punctate at inter-coxal area and side marginal area, median part widely smooth; metepisternum densely, strongly punctate, longitudinally wrinkled. First to penultimate visible abdominal sternites densely, strongly punctate, last one very sparsely, weakly punctate, every one with shallow depression on submarginal part.

Every femur gently flattened, front femur with very shallow femoral groove at apical half. Every tibia slender, slightly thickened towards apex, relatively short; front tibia obliquely truncate at apex, sparsely, finely punctate. Every tarsus very slender, relatively long; relative length of each tarsal segment (base to apex) 4: 3: 2: 3: 12 in front leg, 7: 4: 3: 3: 14 in
middle one, 15 : 4 : 4 : 14 in hind one.

Length : 5.4 mm. Width : 2.7 mm.

Distribution: Yakushima Island (Nansei Isls., Japan).

Type material: Holotype ♀ (Type No. 2416, Kyushu Univ.), Mt. Aiko-dake, Yakushima Is., Japan, 11. v. 1983, Y. Sawada leg.

This species is closely allied to S. kondoi Nakane, 1968 from Amami-Oshima Is., but is easily distinguished from the latter by the following characters: body larger, punctures on head and pronotum much larger and deeper, front margin more deeply sinuate, elytral fasciae much wider and differently figured, and every tibia slenderer.

_Uloma ishigakiensis_ sp. nov.

Nearly oblong oval, parallel-sided, gently convex, uniformly dark brown, legs rather paler.

Male: Head transverse, weakly convex, sparsely punctate, Y-shaped depression relatively deep, front margin roundly bent downwards, very shallowly sinuate; preocular area slightly, roundly expanded outwards. Eye nearly rounded, weakly roundly expanded outwards. Mentum widely depressed along median line. Tempora to gula strongly roughly carved. Gular suture invisible.

Antenna rather stout, short, not reaching basal margin of prosternum; 5th to penultimate segments gradually widened, penultimate one widest, apical one nearly semicircular; relative length of each segment (base to apex) 5 : 3 : 4 : 3 : 4 : 4 : 4 : 4 : 5 : 5 : 6.

Pronotum transverse (2.8 : 4.0), gently roundly convex, rather densely punctate, pronotal depression semicircular, very shallow, all protuberances rather invisible; front margin very shallowly sinuate, very narrowly marginate, front corner weakly rounded, side margin roundly expanded outwards, narrowly marginate, hind corner very weakly rounded, hind margin very shallowly bisinuate, median 2/4 narrowly marginate, each 1/4 of both sides not marginate. Prosternum very roughly rugose, medianly rising, inter-coxal area roundly convex, nearly parallel-sided, prosternal process roundly bent downwards, apex not prominent backwards. Propodeum rather densely punctate and wrinkled. Scutellum semicircular, side margin slightly rounded, very minutely aciculate.

Elytra nearly parallel-sided, moderately convex, strongly punctate-striate, interstices relatively strongly convex, sparsely aciculate, sparsely, transversely wrinkled; shoulder obtusely angulate, weakly marginate, side margin narrowly marginate, margin rather vestigial near apex. Epipleuron rather narrow, densely punctate near shoulder, not reaching apex of elytron. Meso-sternum very strongly punctate, V-shaped receptor of prosternal process vertically depressed, mesepisternum sparsely, very strongly punctate. Meta-
sternum gently, roundly convex, median line very shallowly, rather broadly depressed, sparsely, strongly punctate outside; sparse punctures on metepisternum very large, shallow.

Every femur very thick, middle and hind ones flattened. Front tibia comparatively slender, gradually widened towards apex, very weakly bent inwards, upper surface very sparsely, irregularly, shallowly carved, tibial spurs thick, stout, roundly bent downwards, under surface with many irregular, short prominences, apical margin with a row of short spines; hind one flattened, gently widened towards apex, upper surface nearly smooth, under surface with sparse, very fine hairs. Front tarsus with very sparse, fine hairs on under side, basal four segments nearly equal to each other in length, apical segment nearly as long as basal four segments put together. Relative length of each hind tarsal segment (base to apex) 10 : 4 : 4 : 13.

Side margin of 1st to 4th visible abdominal sternites narrowly marginate, 3rd to last ones with small, very shallow fovea on submarginal area. Apical half of paramere of male genitalia very characteristic as seen in Figs. 2 A & 2B.

**Female:** Y-shaped depression on head very shallow, preocular area not expanded outwards, pronotum with no depression and protuberance, upper surface of front tibia very sparsely, weakly punctate.

Length: 6.3-6.5 mm. Width: 2.6-2.7 mm.
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**Distribution**: Ishigakijima Island (Nansei Isls., Japan).


This species is very close to *U. marseuli* Nakane, from Japan, but is easily distinguished from the latter by the following characters: body much smaller, antenna slenderer, mentum deeply scooped at median part, punctures on pronotum finer and denser, pronotal depression much shallower, inside of front tibia simple, and apical half of paramere of male genitalia very differently figured.

**Uloma takarai sp. nov.**

Uniformly ferruginous, oblong oval, nearly parallel-sided.

**Male**: Head transverse, middle part with Y-shaped shallow depression, vertex and part of Y-shaped depression sparsely, strongly punctate. Clypeus very weakly, sparsely aciculate, apical margin very weakly, roundly expanded forwards and roundly bent downwards, clypeal suture relatively deep at oblique part of both sides. Preocular area weakly, roundly convex, sparsely, weakly aciculate, nearly parallel-sided at basal 1/4. Eye transverse, very weakly expanded outwards, about 1/3 times as wide as interocular area, roughly facetted. Apical segment of maxillary palpus secundiform.

Antenna rather stout, not reaching basal margin of pronotum, gradually widened and flattened towards apex; relative length of each segment (base to apex) 10 : 4 : 5 : 5 : 5 : 6 : 6 : 6 : 8, 9th segment nearly twice as wide as long, 9th and penultimate ones nearly equal to each other in size and shape, apical one nearly semicircular. Tempula to gula strongly, roughly carved. Gular suture visible. Middle part of mentum convex, metamorphous hexagonal in shape, surface of it smooth and glabrous.

**Pronotum** transverse (2 : 3), gently convex, finely, sparsely punctate, gently narrowed forwards; front margin relatively deeply sinuate, very narrowly, completely tmarginate, front corner widely rounded, side margin gently, roundly expanded, narrowly marginate, hind corner not angulate, hind margin a little narrower than elytra, not marginate. Prosternum very rugose, intercoxal area nearly parallel-sided, weakly, roundly convex; prosternal process roundly bent down towards apex, apex rounded. Scutellum very smooth, subtriangular.

Elytra gently convex, basal half nearly parallel-sided and then gradually tapered towards apex, with deep punctate-striae; interstices relatively strongly convex, minutely, very sparsely aciculate; shoulder rounded, narrowly marginate; side margin except for apex narrowly marginate. Epipleuron relatively narrow, not reaching apex of elytron, basal 1/3 strongly punctate.
Mesepisternum densely, very strongly punctate. Mesosternum with V-shaped receptor of prosternal process gently depressed, widely opened towards base. Metepisternum sparsely, very strongly punctate. Metasternum gently, roundly convex, outside sparsely, very strongly punctate, middle part sparsely aciculate.

Every femur thick, femoral groove complete, comparatively wide. Front tibia widened and flattened towards apex, shallowly, sparsely punctate, inside gently curved inwards, only subbasal 1/3 very gently expanded, apical margin gently bent downwards; outside strongly serrate, every apex of denticle obtuse, weakly bent downwards; under surface with many irregular, small processes. Middle tibia moderately widened and weakly flattened towards apex, outside comparatively weakly serrate, every denticle with short spine at apex, apical margin with a row of short spines, inside with sparse brushy hairs. Hind tibia gently widened and flattened towards apex, apical half with very sparse brushy hairs, outside with a short spur at 5/6 from base. Front tarsus stout, apical segment a little shorter than 1st to penultimate ones put together, 1st one nearly as long as apical one, 2nd nearly equal to penultimate one in shape and length.

Visible abdominal sternites sparsely punctate, longitudinally, densely wrinkled, punctures and wrinkles gradually sparser towards median part; apical margin of last segment widely rounded. Apical half of paramere of
male genitalia very narrow, nearly parallel-sided, apex rounded.

**Female:** Inter-ocular area very slightly depressed at median part. Pronotum simple, without pronotal depression and protuberance, front margin very shallowly, widely sinuate. Upper surface of front tibia nearly smooth.

Length: 7.3-7.7 mm. Width: 2.9-3.2 mm.

**Distribution:** Iriomotejima Island (Nansei Isls., Japan).


This species is closely related to *U. ishigakiensis* sp. nov., from Japan, but is distinguished from the latter by the following characters: body smaller and narrower, Y-shaped depression on head much shallower, antenna shorter, pronotal depression much shallower, pronotal protuberances rather obscure, and apical half of paramere very differently formed.

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