Elytra, Tokyo, New Series, **1**(2): 275–294
December 31, 2011

New or Little-known Tenebrionid Beetles (Coleoptera, Tenebrionidae) from Japan

(11) Descriptions of Seven New Species, Up-grading of a Subspecies to the Species Rank, and a New Distributional Record of a Species

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Abstract Seven new species, *Tarpela kawabatai* sp. nov., *Allecula* (*Allecula) tsudai* sp. nov., *A.* (*A.*) *yasakai* sp. nov., *A.* (*Upinella*) *ukenensis* sp. nov., *A.* (*U.*) *hirokii* sp. nov., *A.* (*U.*) *akiyamai* sp. nov., and *A.* (*U.*) *yaeyamaensis* sp. nov. are described from Japan. *Tarpela kimurai* MASUMOTO, 1996 is newly recorded from Okinawa-jima Is., *Allecula* (*Upinella*) *okinawaensis* MAEDA et NAKANE, 1988, stat. nov. is up-graded from a subspecies of *A. amamiensis* MAEDA et NAKANE, 1988. Keys to the relatives of *Allecuala melanaria* and also to those of *A. fuliginosa* from Japan are provided on the basis of males.

As the eleventh part of the present series about our on-going study concerning the tenebrionid fauna of Japan, we are going to describe seven new species, one belonging to the subfamily Tenebrioninae, and six to the subfamily Alleculinae. Besides, we are also going to grade up the taxonomic position of an alleculine subspecies to the species rank. Further, we are going to record a new distribution of a tenebrionid species.

We wish to express our cordial thanks to Mr. Yoshiteru KAWABATA (Tokyo), Mr. Hiroshi FUJITA (Tokyo), Dr. Masatoshi TAKAKUWA (Kanagawa), Mr. Yukihiko HIRANO (Kanagawa), Mr. Shigeo TSUYUKI (Kanagawa), Mr. Masaaki KIMURA (Okinawa), Mr. Masato MORI (Hyôgo), Mr. Takashi SHIMADA (Shizuoka), Mr. Masahiro SAITÔ (Fukui), Mr. Itsurô KAWASHIMA (Kanagawa), Mr. Hiroshi OOKI (Tokyo), Dr. Katsuo TSUDA (Kagoshima Univ.), the late Mr. Makoto YASAKA (Gunma), Mr. Hiroki SATÔ (Tokyo), Dr. Yoshio HIRAI (Shizuoka), Mr. Akihiro SEKI (Tokyo), Mr. Masashi MATSUMURA (Okinawa), Dr. Jun-ichi AOKI (Tokyo), Mr. Tatsurô HANATANI (Okinawa), Mr. Kôichi FUJISHIRO (Tokyo), and the late Mr. Isamu HIRAI (Saitama), for offering materials for the present study. Thanks are also due to Dr. Masahiro ÔHARA, the Hokkaido University Museum, for permitting us to examine the NAKANE Collection, and Mr. Maxwell V. L. BARCLAY, the Natural History Museum, London, for loaning the Lewis types. We also express our gratitude to Dr. Makoto KIUCHI, for taking many beautiful photographs inserted in this paper. Finally, we deeply thank Dr. Shun-Ichi UÉNO, Emeritus curator of the National Museum of Nature and Science, Tokyo, for critical reading the manuscript.

The holotypes will be deposited in the collection of the National Museum of Nature and Science, Tokyo (NSMT).

Tenebrioninae

Helopini

Tarpela kawabatai sp. nov.

[Japanese name: Hachijô-marumune-gomimushidamashi]

(Figs. 2–3, 17–20)

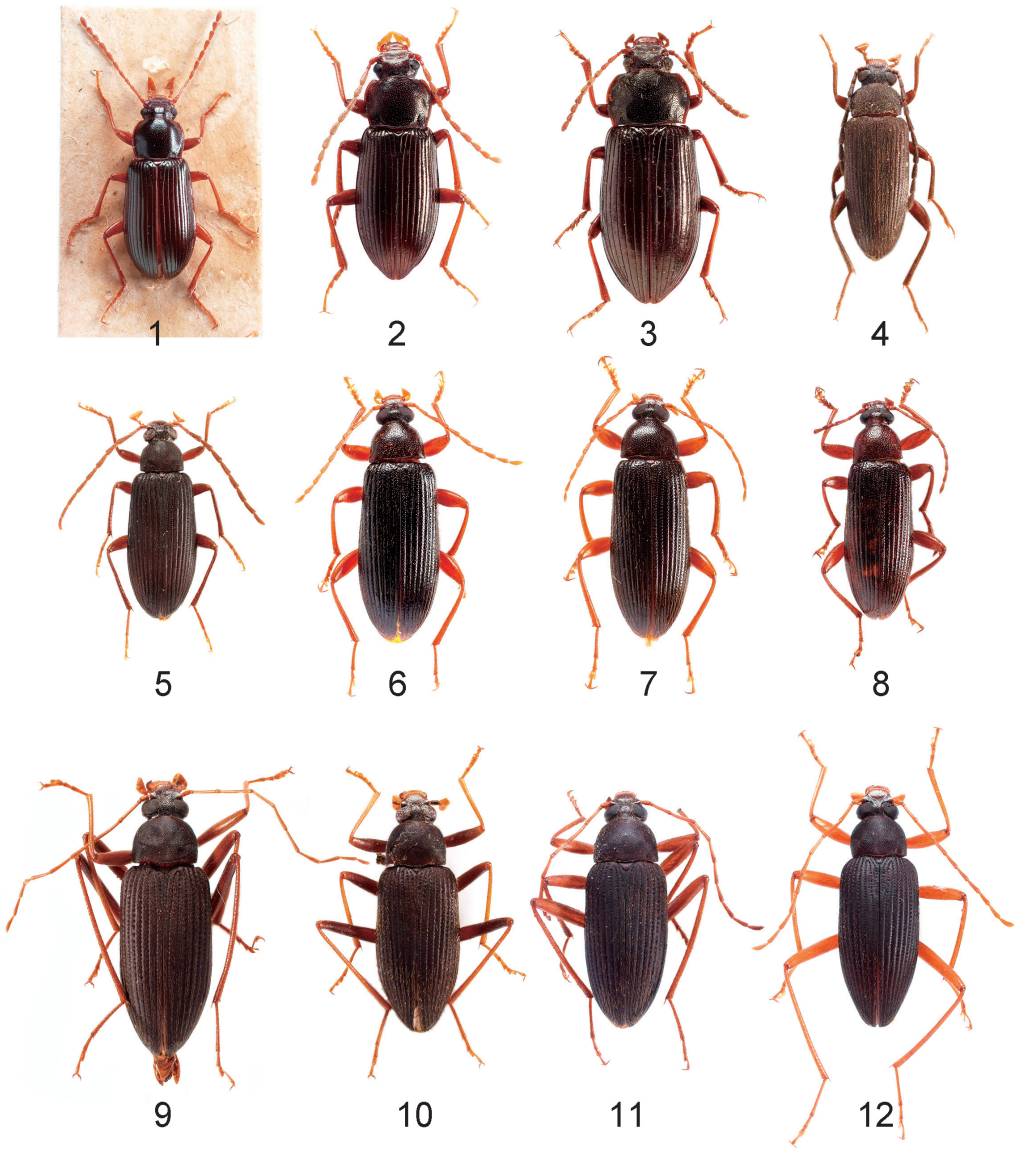
Dark brown, lateral margins of pronotum, and femora dark reddish brown, antennae and tibiae yellowish brown, mouth-parts and tarsi brownish yellow, hairs on antennae, apico-interior portions of tibiae, and tarsi pale yellow; dorsal surface rather strongly shining, ventral surface feebly shining; major portions of body glabrous, except for the portions mentioned above. Body oblong ovate, gently widened and convex posteriad.

M a l e: Head somewhat transversely subdecagonal, though the basal portion is concealed under the pronotum, weakly convex in basal part, very weakly covered with microsculpture, rather closely punctate; clypeus transversely hexagonal, weakly depressed, with apex truncate; genae moderately raised, with exterior margin obliquely straight in anterior part, roundly narrowed in posterior part; frons rather gently inclined anteriad and rather strongly so laterad, with punctures frequently fused with one another in medial part; fronto-clypeal border widely V-shaped, and shallowly, boldly grooved. Eyes transverse and slightly oblique, rather strongly convex laterad, roundly inlaid into head, diatone (distance between eyes) 2.88 times the width of the transverse diameter of an eye. Antennae filiform, apex reaching basal 3/7 of elytra, ratio of the length of each segment from base to apex: 0.50, 0.22, 0.72, 0.61, 0.63. 0.59, 0.54, 0.54, 0.51, 0.49, 0.60.

Pronotum subquadrate with rounded sides, 1.33 times as wide as long, widest slightly before the middle; apex feebly produced anteriad, rimmed, the rim tapering laterad and punctulate; base gently sinuous in lateral portions, finely rimmed; sides gently declined to lateral margins, which are finely rimmed, and very slightly sinuous before base; front angles roundly produced anteriad, hind angles obtuse; disc rather gently convex dorsad, weakly covered with isodiametric microsculpture, rather closely, irregularly punctate, the punctures small but slightly larger than those on pronotum, with a pair of weak impressions at the middle near lateral margins, and also with a pair of oblique impressions near hind angles close to base. Scutellum subcordate, flattened, sparsely scattered with minute punctures.

Elytra 1.80 times as long as wide, 3.00 times the length and 1.32 times the width of pronotum, widest at basal 4/9; dorsum moderately convex, highest at basal 1/3, feebly depressed in areas from scutellar strioles to the second striae near base; disc finely punctato-striate, the punctures on striae small and sparsely set; intervals gently convex, weakly covered with isodiametric microsculpture, sparsely scattered with minute punctures, rather transversely aciculate or rugulose on each incline, the aciculation or rugulosity become more notable in antero-lateral portions of elytra; sides steeply declined to lateral margins, which are slightly, obliquely expanded, with fine rims; humeri weakly swollen; apices weakly but obviously produced posteriad.

Terminal segment of maxillary palpus strongly dilated apicad and nearly rectangular, with feebly curved exterior side about 2.3 times the length of the nearly straight interior, and almost of the same length as the moderately produced apex. Mentum obtrapezoidal, convex in apico-medial part, depressed and rugulose in lateral parts, roundly impressed in latero-basal parts; ventral



Figs. 1–12. Habitus. —— 1, *Tarpela elegantula* (LEWIS, 1894), lectotype, ♂; 2, *T. kawabatai* sp. nov., holotype, ♂; 3, ditto, paratype, ♀; 4, *Allecula* (*Allecula*) *tsudai* sp. nov., holotype, ♂; 5, *A.* (*A.*) *yasakai* sp. nov., holotype, ♂; 6, *A.* (*Upinella*) *melanaria* MÄKLIN, 1875, ♂; 7, *A.* (*U.*) *ukenensis* sp. nov., holotype, ♂; 8, *A.* (*U.*) *hirokii* sp. nov., holotype, ♂; 9, *A.* (*U.*) *amamiensis* MAEDA et NAKANE, 1988, holotype, ♂; 10, *A.* (*U.*) *akiyamai* sp. nov., holotype, ♂; 11, *A.* (*U.*) *okinawaensis* MAEDA et NAKANE, 1988, stat. nov., holotype, ♂; 12, *A.* (*U.*) *yaeyamaensis* sp. nov., holotype, ♂.

portion of neck rather noticeably transversely wrinkled and sparsely haired; gula bordered from neck by fine sulcus, transversely wrinkled.

Prosternum weakly covered with microsculpture, rimmed along apex, rugulose in anterior portion, rather sparsely and irregularly punctate in middle, strongly raised and almost impunctate

in posterior portion, rimmed along procoxae; prosternal process rather steeply inclined, weakly, roundly produced, and finely rugulose, with apex feebly pointed above; mesosternum short, depressed and closely, minutely punctate in anterior portion, rather strongly, triangularly raised, rather smooth and sparsely punctate in posterior portion, rugoso-punctate along intero-anterior margins of mesocoxae; metasternum rather short, strongly bordered and rugoso-punctate along anterior margin, rather sparsely scattered with minute punctures having decumbent hairs broadly in middle, impressed in posterior 2/3 on the midline, weakly convex on both sides of the impression, obliquely rugose towards the midline in medio-posterior portion.

Abdomen weakly covered with isodiametric microsculpture, closely, minutely punctate, the punctures becoming smaller apicad, and each with a fine decumbent hair, basal parts of sternites I–III wrinkled, lateral margins of sternites I–IV bordered and reflexed; anal sternite closely, finely punctate, lateral margins bordered and reflexed along basal 2/5, apex feebly roundly produced.

Legs of ordinary size as in the other members of this genus; femora subclavate; protibiae feebly curved ventrad, haired on ventral face, the hairs becoming longer apicad, with a spine at exterior tip; mesotibiae weakly curved ventrad and interiad, haired on ventral face, the hairs becoming longer apicad; metatibiae very weakly curved dorsad, haired on ventral face, the hairs becoming longer apicad; tarsi dilated and flattened, penultimate segments small, ratios of the lengths of pro-, meso- and metatarsal segments: 0.27, 0.25, 0.24, 0.13, 0.62; 0.37, 0.33, 0.31, 0.19, 0.58; 0.57, 0.31, 0.22, 0.78.

Male genitalia elongated subfusiform, 1.75 mm in length, rather strongly curved in lateral view; fused lateral lobes 0.62 mm in length, rather flattened, gently narrowed in basal 3/5, then rather strongly so apicad, with apices weakly prolonged and feebly hooked.

F e m a l e: Compared with male, the body larger and more robust; antennae shorter; eyes smaller, diatone 3.00 times the width of the transverse diameter of an eye; pronotum with lateral portions widened; elytra less noticeably produced apicad.

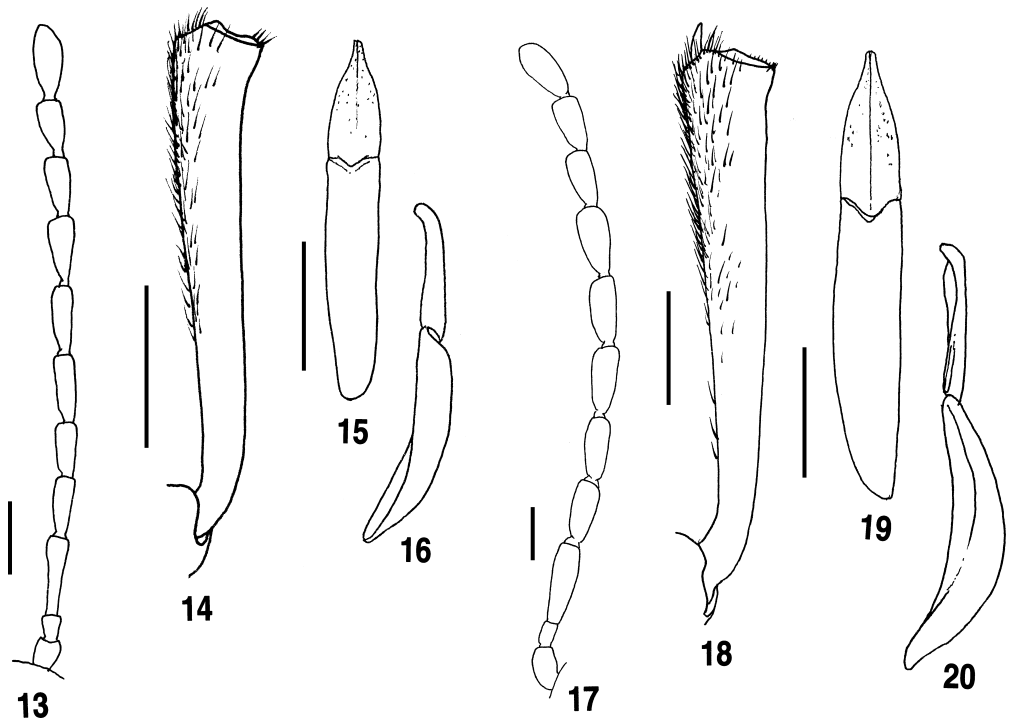
Body length: 6.9–10.1 mm (♂), 9.3–12.0 mm (♀).

Distribution. Izu Islands: To-shima Is., Miyake-jima Is., Mikura-jima Is., Hachijô-jima Is. (Ôshima Is. is excluded from the distributional area of the present new species).

Type series. Holotype: ♂, "No. 2347 / Hachijo Is / Mitune / 12. II. 2000 / Y. Kawabata". (NSMT). Paratypes: — Hachijô-jima Is.: 1 ♀, Mitsune, 24–III–2001, Y. KAWABATA leg; 1 ♂, 3 ♀♀, Mitsune, 15–I–2001, Y. KAWABATA leg.; 2 ♀♀, Mitsune, 6–V–2001, Y. KAWABATA leg.; 1 ♀, Mitsune, 20–V–2001, Y. KAWABATA leg.; 1 ♀, Sueyoshi, 1–VI–2003, Y. KAWABATA leg.; 1 ♀, 16–VII–2001, Y. KAWABATA leg.; 2 ♀♀, Igôna, Bôei-dô, 23–V–1996, Y. KAWABATA leg.; 1 ♀, Mitsune, Noboryô-dôro, 15–VI–1996, Y. KAWABATA leg.; 1 ♀, Mitsune, Sokodo-campsite, 21–VII–1998, Y. KAWABATA leg.; 1 ♀, Kashitate, Igôna, 4–VII–1996, Y. KAWABATA leg.; 1 ♀, Kashitate, Mukaizato, 21–VII–1998, Y. KAWABATA leg.; 1 ♀, Ôgagô, Kanadogawa, 7–VI–1997, Y. KAWABATA leg.; 1 ♀, Kashitate, 2–VII–1988, Y. HIRANO leg.; 1 ♀, Mitsune, 30–IV–1971, Y. HIRANO leg.; 1 ♀, Noboryô-tôge, 4–IV–1981, H. FUJITA leg.; 1 ♀, Noboryô-tôge, 19–VII–2000, H. FUJITA leg.; 1 ♀, Nakanogô, 5–IV–1981, H. FUJITA leg. Mikura-jima Is.: 1 ♀, Nanbu-shii-rin, 12–VI–2010, J. AOKI leg.; 1 ♀, Nangou, 5–VII–2010, M. TAKAKUWA leg. Miyake-jima Is.: 1 ♀, Kamitsuki, 11–VI–2010, M. TAKAKUWA leg. To-shima Is.: 2 ♀♀, 5〜6–VI–2011, H. FUJITA leg.

Notes. This new species closely resembles *Tarpela elegantula* (LEWIS, 1894)* (Figs. 1, 13–16)

* LEWIS recorded Hakone, Miyanoshita, Nikko and Kashiwagi as the localities of *T. elegantula*. According to MASUMOTO (1993, p. 131), the cotypes were a mélange of various species, from which he selected a male specimen from Hakone as the lectotype.



Figs. 13–20. *Tarpela* spp., ♂♂. —— 13–16, *T. elegantula* (LEWIS, 1894), lectotype; 17–20, *T. kawabatai* sp. nov., holotype. —— 13, 17, antenna; 14, 18, protibiae; 15, 19, male genitalia (dorsal view); 16, 20, ditto (lateral view). Scales: 0.5 mm.

particularly in females, but can be distinguished from the latter by the following characteristics.

Body more strongly shining; antennae bolder. Pronotum with width in the new species in male 1.30–1.31 times wider than long, in female 1.36–1.39 times wider than long, while in *T. elegantula*, it is 1.18 times in male (the holotype), and 1.27 times in female; widest points in the new species in male at apical 1/3 (in small individuals) to 1/4, while in *T. elegantula*, the middle (in both species widest slightly before the middle in female); punctures in the new species larger and denser. Elytra with intervals more strongly convex, more strongly, transversely rugulose to aciculate, with apices feebly produced; male genitalia differently shaped.

In the holotype, the front angles are roundly produced anteriad, but in small male specimens they are not produced. This character varies also in females.

Examining the specimens collected from To-shima Is., Miyake-jima Is. and Mikura-jima Is., we concluded that they belong to a new species. Specimens in these areas have been determined as *T. brunnea* (MARSEUL, 1876) for a long time. In our research, they presumably belong to the new species. In females it is difficult to distinguish this new species from the known species.

In most of *Tarpela*, female specimens are collected in late autumn to the next summer; on the other hand, males appear in late autumn to early spring. We have opportunities to examine only a few male specimens in personal and public collections. Therefore, it has taken a very long time to confirm the existence of the present new species.

In the present study, we can confirm that true *T. elegantula* is collected from rather narrow areas in Hakone and West Tanzawa (close to Hakone area), the Izu Peninsula, and northern part

of the Izu Islands (Ôshima Is.).

Specimens examined of Tarpela elengantula. Kanagawa Pref.: 1 ♂, Hakone, Lectotype (The Natural History Museum, London); 1 ♀, Ohmata-zawa (W. Tanzawa Mts.), 19–VI–1969, M. TAKAKUWA leg.; 1 ♀, Kojiri, Hakone, 19–V–1973, Y. HIRANO leg.; 1 ♀, Sengoku, Hakone, 4–V–1969, Y. HIRANO leg. Shizuoka Pref.: 1 ♀, Cape Tarai, Tôji-Izu, 30–IV–1990, S. TSUYUKI leg. Ôshima Is.: 2 ♀♀, 19–V–1974, Y. HIRANO leg.

Etymology. The specific name is given in honor of Mr. Yoshiteru KAWABATA, who collected the holotype.

Tarpela kimurai MASUMOTO, 1996

[Japanese name: Kumejima-marumune-gomimushidamashi]

Tarpela kimurai MASUMOTO, 1996, 213. (Type locality: Mt. Ueshiro-dake, Kume-jima Is.).

Distribution. The Ryukyus: Kume-jima Is., Okinawa-jima Is. (New record).

Specimens examined from Okinawa-jima Is. 1 ♂, Nakijin-son, Nakijin-jôshi, 2–II–2011, Y. HIRANO leg.; 1 ♀, Chinufuku Path, 15–IV–2002. S. TSUYUKI leg.; 2 ♀♀, Yomitan-son, Zamami-jôshi-kôen, 18–IV–2006, Y. HIRANO leg.; 1 ♀, near Arakawa Dam, 16–IV–2003, Team GA-SHOW leg.; 1 ♀, Nago-shi, Kyoda, 1～3–II–2005, Team GA-SHOW leg.; 1 ♂, Kayô-rindô, 11–IV–1993, M. MORI leg.; 1 ♀, ditto, 18–V–2011, T. YAMAZAKI leg.; 1 ♀, Kunigami-son, Benoki, 4–V–1990, M. SAITÔ leg.; 1 ♀, Benoki-dam, 20–V–2006, T. SHIMADA leg.; 1 ♀, Higashi-son, Miyagi, Hokubu-ensyûrin (N-5), 3–III–2003, Team GA-SHOW leg.; 1 ♀, Nago-shi, Nago-jô, 24–IV–1996, I. KAWASHIMA leg.

Alleculinae

Alleculini

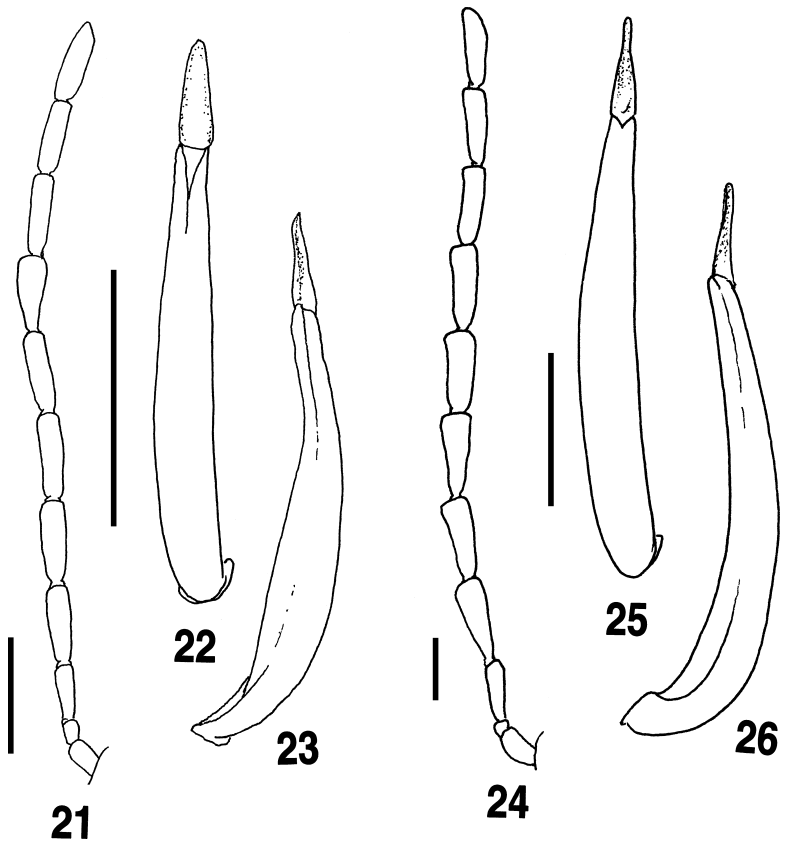
Allecula (*Allecula*) *tsudai* sp. nov.

[Japanese name: Yakushima-chibi-kuchikimushi]

(Figs. 4, 21–23)

M a l e. Body elongated fusiform, moderately convex longitudinally, weakly flattened in medial portion. Light brown, head except for clypeus blackish brown, clypeus, antennae, pronotum, scutellum and elytra dark brown with feeble reddish tinge, mouth-parts and hairs on surface brownish yellow; clypeus and meso- and metasterna gently shining, head, prosternum and legs weakly so, pronotum and elytra rather mat; head and ventral surface except abdomen almost glabrous, pronotum, scutellum, elytra, abdomen and legs covered with yellowish decumbent hairs.

Head somewhat rhombic, though the basal part is concealed under the pronotum; clypeus subelliptical, weakly convex in middle, closely punctate, each puncture with a rather long decumbent hair; fronto-clypeal border finely impressed and gently curved posteriad in medial part; genae rather triangular, gently depressed in areas before eyes, closely punctate, the punctures smaller than those on clypeus, and each with a fine decumbent hair; with exterior margins feebly produced before eyes; frons weakly convex in middle, gently inclined in front, closely punctate, the punctures in the major medial portion being round and with a minute hair at each centre,



Figs. 21–26. *Allecula* (*Allecula*) spp., ♂♂. —— 21–23, *A.* (*A.*) *tsudai* sp. nov., holotype; 24–26, *A.* (*A.*) *yasakai* sp. nov., holotype. —— 21, 24, antenna; 22, 25, male genitalia (dorsal view); 23, 26, ditto (lateral view). Scales: 0.5 mm.

those in lateral portions becoming irregularly shaped and rugulose; vertex gradually inclined posteriad, closely punctate, the punctures often fused with one another. Eyes rather large, rather strongly convex laterad, weakly inlaid into head, with diatone 1.36 times width of the transverse diameter of an eye. Antennae filiform, the tip of terminal segment extending beyond the middle of elytra, ratio of the length of each segment from base to apex: 0.17, 0.11, 0.27, 0.31, 0.29, 0.31, 0.30, 0.31, 0.31, 0.30, 0.31.

Pronotum subquadrate with rounded sides and wider than long (6 : 4); apex nearly straight, finely rimmed; base weakly produced in medial portion, rather noticeably sinuous in lateral portions, finely rimmed; front angles rounded, hind angles obtuse in dorsal view; sides moderately, then steeply declined to lateral margins, which are finely rimmed, the rim hardly visible from above; disc moderately convex broadly in middle, feebly covered with isodiametric microsculpture, rather closely, shallowly punctate, each puncture with a decumbent hair, those in medial portion fine, and those in lateral portions becoming bolder and more noticeable than in medial portion. Scutellum triangular, slightly elevate and feebly convex broadly in middle, very weakly covered with microsculpture, sparsely scattered with shallow punctures and finely haired.

Elytra 2.22 times as long as wide, 4.00 times the length and 1.38 times the width of pronotum,

widest near base; dorsum moderately convex, highest at basal 1/4, very weakly flattened in medio-basal portion; disc with rows of punctures, which are closely set and shallowly grooved; intervals feebly convex, covered with microsculpture, scattered with small granulate punctures, each with a decumbent hair; humeri rounded; apices feebly, roundly produced.

Terminal segment of maxillary palpus strongly dilated apicad, with straight exterior side 0.80 times the length of the curved interior, 0.63 times the length of the nearly straight apical; mentum subhexagonal, convex in antero-medial part, smooth in medial part and rugulose in the remaining parts; gula triangular, bordered from ventral side of head by obsolete sulci. Prosternum rather narrow, rimmed along apex, granulo-rugulose in anterior portion, raised posteriad, prosternal process with upper face rather spatulate and flat, which is nearly vertically declined to the round lower face; mesosternum short, strongly depressed and ruguloso-punctate in anterior portion, strongly raised in somewhat Y-shape, sparsely punctate and haired in posterior portion; metasternum rather sparsely punctate and covered with decumbent hairs, deeply impressed on the midline in posterior half, the impression becoming shallower anteriad. Abdomen rather closely punctate, covered with long decumbent hairs, the punctures and hairs becoming finer apicad.

Legs moderate-sized as in the other members of this genus and ordinary in shape, covered with fine hairs; protibiae nearly of the same length as protarsi; tarsi with penultimate segment lobed ventrad; ratios of lengths of pro-, meso- and metatarsal segments: 0.25, 0.12, 0.06, 0.04, 0.27; 0.41, 0.12, 0.06, 0.02, 0.20; 0.67, 0.14, 0.03, 0.26.

Male genitalia extremely slender, 1.12 mm in length and 0.13 mm in width, gently curved in lateral view; fused lateral lobes 0.24 mm in length and elongated nib-shaped.

Body length: 4.5–4.7 mm.

F e m a l e. unknown.

Distribution. Yaku-shima Is.

Type series. Holotype: ♂, "JAPAN: Yaku-shima Is. / Shiratani- / unsuikyô Vall. / 18. VII. 2008 / Hiroshi OOKI leg. // K. AKITA / Collection / KAC 52779." (NSMT). Paratypes: 1 ♂, same data as the holotype; 1 ♂, "Yaku-shima Is., Ooko-rindô, ca 300 m, 23〜24–VII–2007, Katsuo TSUDA leg."

Notes. This new species is unique in the shape of the robust body, with the antennae and legs rather bold, the eyes fairly small, and the slender male genitalia. We have never found any related species from the neighboring areas of Japan.

Etymology. The specific name is given in honor of Dr. Katsuo TSUDA, who collected one of the types.

Allecula (*Upinella*) *yasakai* sp. nov.

[Japanese name: Yasaka-kuchikimushi]

(Figs. 5, 24–26)

M a l e. Body elongated oval, moderately convex longitudinally, weakly flattened in medial portion. Dark reddish brown, head except clypeus and scutellum brownish black, pronotum and elytra brownish black with feeble dusty tinge, antennae and mouth-parts yellowish brown, legs reddish brown, hairs on surface pale yellow; head moderately shining, pronotum and elytra rather mat, scutellum, legs and ventral surface gently shining; head and scutellum clothed with short fine hairs, pronotum and elytra clothed with fine decumbent hairs, antennae, legs and ventral face also clothed with fine hairs.

Head somewhat complicatedly shaped; clypeus semicircular, depressed in basal portion, and projected antero-ventrad, rather closely punctate, each puncture with a rather long hair; fronto-clypeal border roundly grooved; genae weakly raised antero-laterad, triangularly projected anteriad in lateral parts, weakly depressed in anterior parts of eyes, rather closely punctate, the punctures mostly ovate, and each with a rather long fine hair, with exterior margins weakly produced laterad and then sinuous before eyes; frons weakly convex, rather steeply inclined towards the fronto-clypeal border, closely, irregularly punctate, the punctures mostly ovate with decumbent hairs, the interior borders of eyes shallowly grooved; vertex gradually inclined posteriad, closely punctate. Eyes large and transversely subovate, strongly convex laterad, feebly obliquely, and roundly inlaid into head, with diatone 0.90 times the transverse diameter of an eye. Antennae filiform, the tip of terminal segment reaching basal 1/3 of elytra, ratio of the length of each segment from base to apex: 0.27, 0.12, 0.37, 0.57, 0.56, 0.58, 0.57, 0.57, 0.56, 0.57, 0.55.

Pronotum subtrapezoidal in dorsal view, wider than long (7 : 5), widest at base, feebly narrowed anteriad in basal half, then roundly narrowed apicad; apex very feebly produced and rimmed, finely bordered in lateral portions; base feebly produced in medial portion, gently sinuous in lateral portions, finely bordered and finely rimmed; front angles rounded in dorsal view, hind angles rectangular with rounded corners; sides declined gently in basal portions, and steeply so in antero-lateral portions to lateral margins, which are finely rimmed, the rim hardly visible from above; disc gently convex broadly in middle, covered with microsculpture, closely punctate, each puncture with a decumbent hair. Scutellum subcordate, slightly elevate and feebly convex, finely punctate, the punctures finely haired, often fused with one another, and forming transverse rugulosities.

Elytra 2.12 times as long as wide, 4.52 times the length and 1.43 times the width of pronotum, widest at the middle; dorsum moderately convex, highest at basal 2/5, very weakly flattened in medio-basal portion; disc punctate-grooved, the punctures are closely set, each with a minute hair; intervals convex, covered with microsculpture, scattered with granulated punctures, each with a rather long, decumbent hair; humeri feebly swollen; apices slightly roundly produced.

Terminal segment of maxillary palpus strongly dilated apicad, with nearly straight exterior side 0.83 times the length of the curved interior, 0.64 times the length of the feebly produced apical; mentum rather obtrapezoidal, ridged on the midline, depressed in lateral parts, rugulose-punctate, with lateral margins weakly reflexed; gula parabolically bordered from ventral side of head, transversely rugulose in whole part, with impressions along the border. Prosternum rimmed along apex, ruguloso-punctate and finely haired in anterior portion, strongly raised posteriad, then steeply declined to prosternal process, which is subcordate, strongly depressed, transversely rugulose, with apical margin rimmed; mesosternum short, strongly depressed, ruguloso-punctate and haired in anterior portion, strongly raised in somewhat Y-shape, ruguloso-punctate and haired in posterior portion; metasternum rather closely punctate and clothed with decumbent hairs, the punctures and hairs becoming closer and finer posteriad, deeply impressed on the midline in posterior half, the impression becoming shallower anteriad. Abdomen closely punctate, covered with long decumbent hairs, the punctures and hairs becoming finer apicad, anal sternite weakly subelliptically depressed in middle close to apex.

Legs slender and rather simple in shape, covered with fine decumbent hairs; femora subclavate; protibiae feebly curved exteriad, mesotibiae feebly curved dorsad, with interior face weakly becoming bolder and curved intero-ventrad in apical half, metatibiae nearly straight, with interior face becoming weakly bolder in apical 2/5; tarsi with each segment dilated to apex, pro- and mesotarsi with segments III and IV noticeably lobed ventrad, metatarsi with segment III

lobed ventrad; ratios of lengths of pro-, meso- and metatarsal segments: 0.39, 0.15, 0.11, 0.06, 0.50; 0.67, 0.28, 0.17, 0.04, 0.52; 1.12, 0.27, 0.06, 0.56.

Male genitalia somewhat strongly prolonged fusiform, 1.68 mm in length and 0.23 mm in width, basal piece curved in lateral view; fused lateral lobes 0.30 mm in length, oblique against basal piece in lateral view, tapering apicad, minutely punctate in apical parts, with apex feebly prolonged.

Body length: 7.5 mm.

F e m a l e. Unknown.

Distribution. C. Honshu.

Type series. Holotype: "♂, JAPAN: Gunma-ken / Katashina-mura / Mt. Hotaka-san / 22. VII. 2004 / Makoto YASAKA leg. // Collection of / Yukihiko Hirano" (NSMT).

Notes. This new species somewhat resembles *Allecula* (*Allecula*) *akitai* HANATSUKA, MASUMOTO et KON, 2006 in the size and coloration, but can be easily distinguished from the latter by the body more robust, the pronotum transverse, and the antennae longer and wider.

Etymology. The specific name is given in honor of the late Mr. Makoto YASAKA who collected the holotype.

Allecula (*Upinella*) *ukenensis* sp. nov.

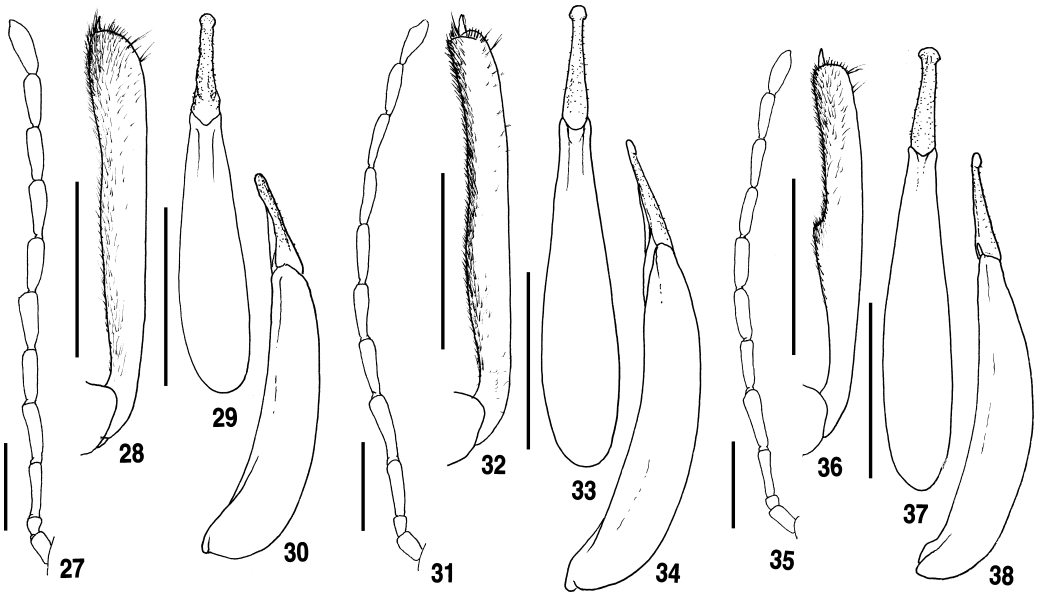
[Japanese name: Uken-kuchikimushi]

(Figs. 7, 31–34)

M a l e. Body elongated fusiform, moderately convex longitudinally, weakly flattened in medial portion. Blackish brown to reddish brown, head with clypeus and genae, antennae and legs yellowish brown with feeble reddish tinge, head with posterior portion and pronotum blackish brown, scutellum dark reddish brown, elytra brownish black, hairs on surfaces reddish yellow; dorsal surface moderately, feebly vitreously shining, ventral surface except prosternum moderately shining, prosternum weakly shining, femora moderately shining, tibiae, tarsi and antennae weakly shining; head nearly glabrous, pronotum and elytra rather noticeably haired, metasternum, abdomen, and legs moderately haired, antennae finely haired.

Head somewhat triangular, though the apical part is truncate (apex of clypeus); clypeus subelliptical, feebly convex in middle, bent ventrad in the front, weakly produced apicad, punctate, each puncture with a rather long hair; fronto-clypeal border finely impressed and gently curved posteriad in medial part; genae rather triangular, weakly raised antero-laterad, feebly depressed along the borders of clypeus and frons, and also depressed in anterior parts of eyes, rather closely punctate, the punctures smaller than those on clypeus, and each with a rather long fine hair, with exterior margins feebly produced before eyes; frons weakly convex, gently inclined anteriad, strongly punctate, the punctures with a long hair at each centre, the interior borders of eyes grooved; vertex gradually inclined posteriad, closely punctate, the punctures often fused with one another. Eyes large and obliquely subovate, strongly convex laterad, obliquely inlaid into head, with diatone 0.37 times the transverse diameter of an eye. Antennae filiform, the tip of terminal segment reaching basal 2/5 of elytra, ratio of the length of each segment from base to apex: 0.48, 0.19, 0.55, 0.57, 0.53, 0.52, 0.52, 0.53, 0.54, 0.52, 0.51.

Pronotum subtrapezoidal in dorsal view, wider than long (4 : 3), widest at base, subparallel-sided in basal 3/7, then roundly narrowed apicad; apex feebly produced, rimmed, the rim finely punctate and tapering laterad; base feebly produced in medial portion, gently sinuous in lateral



Figs. 27–38. *Allecula* (*Upinella*) spp., ♂♂. —— 27–30, *A.* (*U.*) *melanaria* MÄKLIN, 1875; 31–34, *A.* (*U.*) *ukenensis* sp. nov., holotype; 35–38, *A.* (*U.*) *hirokii* sp. nov., holotype. —— 27, 31, 35, antenna; 28, 32, 36, protibiae; 29, 33, 37, male genitalia (dorsal view); 30, 34, 38, ditto (lateral view). Scales: 1.0 mm.

portions, bordered and finely rimmed; front angles rounded in dorsal view, hind angles rectangular with rounded corners, also with tufts of long hairs; sides gently, then steeply declined to lateral margins, which are finely rimmed, the rim mostly visible, though the anterior parts are invisible due to front angles slightly produced ventrad; disc gently convex broadly in middle, rather closely punctate, each puncture with a decumbent hair at the centre, with oblique impression in lateral portions close to base. Scutellum semicircular, slightly elevate and feebly convex, scattered with shallow punctures and finely haired.

Elytra 2.22 times as long as wide, 4.21 times the length and 1.38 times the width of pronotum, widest at the middle; dorsum moderately convex, highest at basal 3/8, very weakly flattened in medio-basal portion; disc with rows of punctures, which are closely set and connected by fine striae; intervals feebly convex, with two rows of small punctures, each with a long hair; humeri feebly swollen; apices weakly roundly produced.

Terminal segment of maxillary palpus strongly dilated apicad, with nearly straight exterior side 1.67 times the length of the curved interior, 0.74 times the length of the nearly straight apical; mentum rather obtrapezoidal, gently convex in antero-medial part, feebly ridged on the midline, depressed in lateral parts, feebly covered with sculpture, sparsely haired, with lateral margins weakly reflexed; gula parabolically bordered from ventral side of head, feebly coriaceous, transversely rugulose in apical part, with a pair of short impressions near apex. Prosternum rimmed along apex, rugulose in anterior portion, rugoso-punctate in the remaining portions, strongly raised posteriad, then steeply declined to prosternal process, which is subcordate, strongly depressed, rugoso-punctate, with apical margin rimmed; mesosternum short, strongly depressed and ruguloso-punctate in anterior portion, strongly raised somewhat in Y-shape, granulo-punctate and haired in posterior portion; metasternum weakly covered with microsculp-

ture, rather closely punctate and clothed with decumbent hairs, the punctures and hairs becoming closer posteriad, with an impression on the midline in posterior 3/4. Abdomen rather closely punctate, covered with long decumbent hairs, the punctures and hairs becoming finer apicad.

Legs moderate-sized as in the other members of this genus and ordinary in shape; profemora on anterior face and meso- and metafemora on posterior face with short, blackish spines; protibiae nearly straight, with intero-ventral face slightly gouged in apical half, mesotibiae gently curved intero-ventrad, metatibiae weakly curved ventrad; tarsi with each segment dilated to apex, pro- and mesotarsi with segments III and IV noticeably lobed ventrad, metatarsi with segment III lobed ventrad; ratios of lengths of pro-, meso- and metatarsal segments: 0.31, 0.24, 0.16, 0.33, 0.48; 0.55, 0.23, 0.16, 0.08, 0.59; 1.22, 0.36, 0.06, 0.70.

Male genitalia somewhat strongly prolonged fusiform, 2.58 mm in length and 0.47 mm in width, gently curved in lateral view; fused lateral lobes 0.74 mm in length, tapering apicad, with apex somewhat spatulate and rather noticeably round.

Body length: 11.5 mm.

F e m a l e. Unknown.

Distribution. The Ryukyus: Amami-ôshima Is.

Type series. Holotype: ♂, "JAPAN, Ryukyus / Amami-ôshima Is. / Uken-son, Chûô-rindô / 150–300 m, 6–8. V. 1999 / Katsumi AKITA leg. // K. AKITA / Collection / KAC 57606." (NSMT).

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

Allecula (*Upinella*) *hirokii* sp. nov.

[Japanese name: Satô-kuchikimushi]

(Figs. 8, 35–38)

Body elongated fusiform, moderately convex longitudinally, weakly flattened in medial portion. Dark reddish brown, elytra brownish black, hairs on surfaces light reddish brown to yellow with feeble brownish tinge; dorsal surface moderately, feebly vitreously shining, prosternum and tibiae weakly shining, meso- and metasterna, abdomen, and femora moderately shining; head nearly glabrous, pronotum and elytra rather noticeably haired, metasternum, abdomen, and legs moderately haired, antennae finely haired.

M a l e. Head somewhat pentagonal, though the basal part is concealed under the pronotum; clypeus semicircular, gently inclined anteriad, and then bent ventrad in the front, rather closely scattered with punctures, each with a decumbent hair; fronto-clypeal border nearly straightly, finely impressed in middle, and gently curved antero-laterad; genae triangular, weakly raised antero-laterad, feebly depressed along the borders of clypeus and frons, and also depressed in the bordering areas of eyes, rather closely punctate, the punctures smaller than those on clypeus, and each with a fine hair, with exterior margins feebly produced before eyes; frons weakly convex, gently inclined anteriad, closely punctate in the front, sparsely so in medial portion, the punctures with a fine hair, the interior borders of eyes grooved; vertex gradually inclined posteriad, closely punctate, each puncture with a minute hair. Eyes obliquely subovate in dorsal view, strongly convex laterad, obliquely inlaid into head, with diatone 0.36 times the width of the transverse diameter of an eye. Antennae filiform, the tip of terminal segment reaching a little before the middle of elytra, ratio of the length of each segment from base to apex: 0.35, 0.19, 0.47, 0.60, 0.54, 0.56, 0.52, 0.54, 0.48, 0.45, 0.47.

Pronotum subtrapezoidal in dorsal view, wider than long (5 : 4), widest at base, feebly

narrowed towards the middle, then roundly narrowed apicad; apex gently produced, finely rimmed, the rim tapering laterad; base feebly produced in middle, gently sinuous and then weakly produced in lateral portions, bordered and finely rimmed; front angles obtuse in dorsal view, hind angles rectangular with rounded corners; sides gently moderately, then steeply declined to lateral margins, which are finely rimmed, the rim visible in posterior half and invisible in anterior half from above; disc moderately convex broadly in middle, rather closely punctate, each puncture with a decumbent hair, with oblique impression in lateral portions close to base. Scutellum semicircular, slightly elevate, closely scattered with shallow punctures, and sparsely haired.

Elytra 2.25 times as long as wide, 3.91 times the length and 1.51 times the width of pronotum, widest at basal 4/9; dorsum moderately convex, highest at basal 3/8, very weakly flattened in medio-basal portion, with sutural portions weakly ridged; disc with rows of punctures, which are closely set, connected by grooves in interior and posterior portions; intervals gently convex, usually with two rows of sparser and smaller punctures, each with a long hair; humeri indistinct; apices weakly, roundly produced.

Terminal segment of maxillary palpus strongly dilated apicad and clothed with decumbent hairs, with feebly rounded exterior side 1.59 times the length of the curved interior, 0.63 times the length of the weakly curved apical; mentum rather obtrapezoidal, gently convex in antero-medial part, depressed in lateral parts, feebly covered with microsculpture, with lateral margins weakly reflexed; gula parabolically bordered from ventral side of head, microscopically, transversely wrinkled, with a pair of short impressions near apex on the border. Prosternum rimmed along apex, rugoso-punctate in medial portions, strongly raised posteriad in middle, then steeply declined to prosternal process, which is subcordate, strongly depressed, rugoso-punctate, with apical margin rimmed; mesosternum short, strongly depressed and ruguloso-punctate in anterior portion, strongly raised in somewhat Y-shape, which is nearly impunctate in middle, and rugoso-punctate in lateral portions; metasternum closely punctate and clothed with decumbent hairs, the punctures becoming closer and hairs shorter posteriad, sparser and longer laterad, with an impression on the midline in posterior 4/7. Abdomen rather smooth, closely punctate in three basal sternites, the punctures becoming smaller and sparser in the apical two; anal sternite weakly depressed in apical portion, both sides of the depression weakly ridged.

Legs moderate-sized as in the other members of this genus and ordinary in shape, rather closely finely punctate and haired; protibiae very slightly curved, with intero-ventral face noticeably angular at the middle, anterior portion of the angulation gouged and haired, mesotibiae gently curved intero-ventrad, metatibiae nearly straight; tarsi with each segment dilated to apex, protarsi with each segment widened to each apex, mesotarsi with segments III and IV lobed ventrad, metatarsi with the penultimate lobed ventrad; ratios of lengths of pro-, meso- and metatarsal segments: 0.40, 0.24, 0.20, 0.04, 0.61; 0.67, 0.22, 0.23, 0.04, 0.50; 1.22, 0.39, 0.12, 0.51.

Male genitalia somewhat strongly prolonged fusiform, 2.60 mm in length and 0.38 mm in width, gently curved in lateral view; fused lateral lobes 0.59 mm in length, tapering apicad, with apex rather semicircularly projected.

F e m a l e. Body bolder and shorter; eyes smaller, with diatone 0.57 times the width of the transverse diameter of an eye; antennae bolder; legs shorter; protibiae not modified; protarsi with each segment less widened.

Body length: 9.5–10.3 mm.

Distribution. The Ryukyus: Iriomote-jima Is., Yonaguni-jima Is.

Type series. Holotype: ♂, "JAPAN, Ryukyus / Iriomote-jima Is. / Ootomi-rindô / 28–29. IV. 2003 / Hiroki SATÔ leg. // K. AKITA / Collection / KAC 34892." (NSMT). Paratypes:

1 ♂, Yonaguni-jima Is., Mandaburu, 26–III–2001, S. TSUYUKI leg.; 1 ♀, Iriomote-jima Is., Kanpirei Fall, 21–III–2002, Y. HIRAI leg.

Etymology. The specific name is given in honor of Mr. Hiroki SATÔ, who collected the holotype.

Notes. The holotype with the anterior portion of the head a little deformed; therefore, we used partly the male paratype for this description.

Key to the Relatives of *Allecuala melanaria* from Japan on the Basis of Males

1 (2) Dorsal surface brownish; protibiae with interior face gouged in anterior halves, and noticeably angular at the middle. Body length: 9.5–10.3 mm. Iriomote-jima Is., Yonaguni-jima Is. ..... ***A. hirokii*** sp. nov.

2 (1) Dorsal surface almost black; protibiae not modified. 3

3 (4) Antennae and legs light reddish brown; eyes larger, with diatone 0.37 times the width of an eye diameter; antennae slenderer; male genitalia larger (2.6 mm) and slenderer, lateral lobes with round apex. Body length: 11.5 mm. Amami-ôshima Is. ..... ***A. ukenensis*** sp. nov.

4 (3) Antennae and legs dark reddish brown; eyes smaller, with diatone 0.51–0.59 times the width of an eye diameter; antennae bolder; male genitalia smaller (2.2 mm) and more robust, lateral lobes with semicircular apex. Body length: 10–12 mm. Hokkaido*, Honshu, Shikoku, Kyushu, Izu Isls., Oki Isls.*, Gotô Isls.*, Danjo Isls., Koshiki-jima Isls.*, Tsushima Isls.*, S. Korea*, SE. China* (Figs. 6, 27–30). ..... ***A. melanaria*** MÄKLIN

Allecula (*Upinella*) *akiyamai* sp. nov.

[Japanese name: Tokunoshima-kuro-oo-kuchikimushi]

(Figs. 10, 41–42)

M a l e. Body oblong-ovate, moderately convex longitudinally, weakly flattened in antero-medial portion. Reddish brown, posterior portion of head, pronotum and elytra brownish black with feeble reddish tinge, anterior portion of head and femora dark reddish brown, mouth-parts, tibiae and tarsi brownish yellow, hairs on surfaces light brownish yellow; anterior portion of head moderately shining, posterior portion of head and scutellum weakly so, pronotum and elytra feebly, somewhat sericeously shining, prosternum and tibiae weakly shining, meso- and metasterna, abdomen, and femora moderately shining, tibiae feebly and antennae hardly shining; head nearly glabrous, pronotum and elytra rather noticeably haired, metasternum, abdomen, and legs moderately haired, antennae finely haired.

Head moderately convex, gently inclined anteriad, very weakly covered with microsculpture; clypeus semicircular, very weakly depressed in basal part, inclined anteriad, weakly bent ventrad in the front and rather strongly so laterad, rather closely scattered with punctures, each rather directed anteriad and with a long hair; fronto-clypeal border curved, impressed in middle, and gently curved antero-laterad; genae subtriangular, weakly raised antero-laterad, feebly depressed along the borders of frons, and also depressed in the bordering areas of eyes, punctate, the punctures smaller than those on clypeus, and each with a fine hair, with exterior margins feebly

* Although occurrence of this species in these countries and areas has been recorded in the preceding articles, we were unable to confirm it.

produced before eyes, feebly angularly projected in bordering areas of clypeus; frons weakly convex, gently inclined anteriad, rather closely punctate, each puncture with a nearly erect hair, interior margins of eyes indefinitely bordered; vertex gradually inclined posteriad, sparsely punctate, the punctures smaller than those on frons and each with a minute hair. Eyes bold subreniform in dorsal view, strongly convex laterad, obliquely, roundly inlaid into head, with distance about 0.66 times the width of the transverse diameter of an eye. Antennae missing segments III–XI in the holotype, ratio of the length of each segment from base to second: 0.37, 0.12, –, –, –, –, –, –, –, –, –.

Pronotum subtrapezoidal in dorsal view, wider than long (9 : 7), widest at the middle, feebly narrowed basad, roundly narrowed apicad; apex gently produced, finely rimmed, the rim minutely punctate and tapering laterad; base gently produced in middle, sinuous in lateral portions, bordered and finely rimmed; front angles obtuse in dorsal view, hind angles rectangular with rounded corners; sides gently, then steeply declined to lateral margins, which are finely rimmed, the rim visible almost from above, though the areas near front angles are hardly visible; disc moderately convex broadly in middle, covered with microsculpture, shallowly punctate, sparsely clothed with curved hairs. Scutellum triangular, slightly elevated, weakly raised in medial part, very weakly covered with microsculpture, sparsely scattered with finely haired punctures.

Elytra 1.87 times as long as wide, 3.48 times the length and 1.54 times the width of pronotum, widest at basal 3/7; dorsum moderately convex, highest at basal 2/7, very weakly flattened in medio-basal portion; disc with rows of small punctures, which are grooved and closely set; intervals gently convex, minutely granulo-punctate, each puncture in lateral and posterior portions with a rather long hair; humeri feebly swollen; apices weakly, roundly produced.

Terminal segment of maxillary palpus extremely dilated apicad and clothed with decumbent hairs, with weakly curved exterior side 0.59 times the length of the gently curved interior, 0.38 times the length of the weakly emarginate apical (ventral) margin; mentum obtrapezoidal and produced antero-laterad, rather strongly convex, feebly covered with microsculpture, and somewhat sericeous in antero-medial part, depressed and smooth in lateral parts, with lateral margins reflexed; gula parabolically bordered from ventral side of head, smooth, microscopically, transversely wrinkled, with a pair of short crescent-shaped impressions near apex. Prosternum rimmed along apex, coriaceous and granular in anterior and medial portions, strongly raised posteriad in middle (posterior portion including prosternal process missing in the holotype); mesosternum short, covered with microsculpture, and clothed with decumbent hairs, strongly depressed, granulo-punctate in anterior portion, strongly raised in a Y-shape, rugoso-punctate in posterior portion; metasternum rather short, covered with microsuclupture, rather closely punctate and clothed with decumbent hairs, with a longitudinal impression on the midline in posterior half. Abdomen covered with microsculpture, rather closely punctate, each puncture with a granule at anterior side and a decumbent long hair; anal sternite weakly flattened in posterior portion, with apex nearly truncate.

Legs slender as in the other members of this genus and rather simple in shape, rather closely punctate and finely haired; protibiae very slightly curved ventrad, mesotibiae gently curved intero-ventrad, metatibiae nearly straight; tarsi rather slender, with penultimate segments in pro- and metatarsi noticeably lobed, and segments III feebly and IV noticeably lobed in mesotarsus; ratios of lengths of pro-, meso- and metatarsal segments: 0.37, 0.25, 0.12, 0.04, 0.53; 0.90, 0.36, 0.19, 0.03, 0.49; 1.51, 0.41, 0.12, 0.58.

Male genitalia somewhat strongly prolonged ovate, 1.82 mm in length and 0.34 mm in width, gently curved in lateral view; fused lateral lobes 0.64 mm in length, bold in basal parts, tapering

apicad, with apex rather semicircular.

Body length: 10.3 mm.

F e m a l e. Unknown.

Distribution. The Ryukyus: Tokuno-shima Is.

Type series. Holotype: ♂, "JAPAN, Ryukyus / Tokunoshima Is. / Mt. Amagi-dake / Teterindô, 1–5. X. 2000 / M. Akiyama // K. AKITA / Collection / KAC 57694." (NSMT).

Etymology. The specific name is given in honor of Mr. Makoto AKIYAMA, who collected the holotype.

Allecula (*Upinella*) *okinawaensis* MAEDA et NAKANE, 1988, stat. nov.

[Japanese name: Okinawa-kuro-oo-kuchikimushi]

(Figs. 11, 43–44)

Allecula amamiensis okinawaensis MAEDA et NAKANE, 1988, 2 (type locality: Sesoko-jima Is., Okinawa Pref.).

Distribution. The Ryukyus: Sesoko-jima Is., Okinawa-jima Is., Kume-jima Is.

Specimens examined. 1 ♂, "HOLOTYPE // Sesokojima, Okinawa. 28–31. v. / '82. Nak. et al. // Allecula / amamiensis / okinawaensis / Maeda & m. / Det. T. Nakane // NAKANE Coll. / SEHU JAPAN / 1999 // 0000003935 / Sys. Ent / Hokkaido Univ. / JAPAN [SEHU]". Okinawa-jima Is.: 1 ♂, 4 ♀♀, Kunigami-son, Ada, 27–I–2010, J. AOKI leg.; 1 ♀, ditto, 19–II–2010, J. AOKI leg.; 1 ♂, Kunigami-son, Shioya～Higashi-son, 23–V–2008, J. AOKI leg.; 1 ♀, Ôgimi-son, Kuganidake, 24–I–2010, M. MATSUMURA leg. Kume-jima Is.: 1 ♀, Torinokuchi-rindô, 4–II–2010, J. AOKI leg.; 1 ♂, Mt. Daruma-yama, 25–VIII–1987, K. AKITA leg.

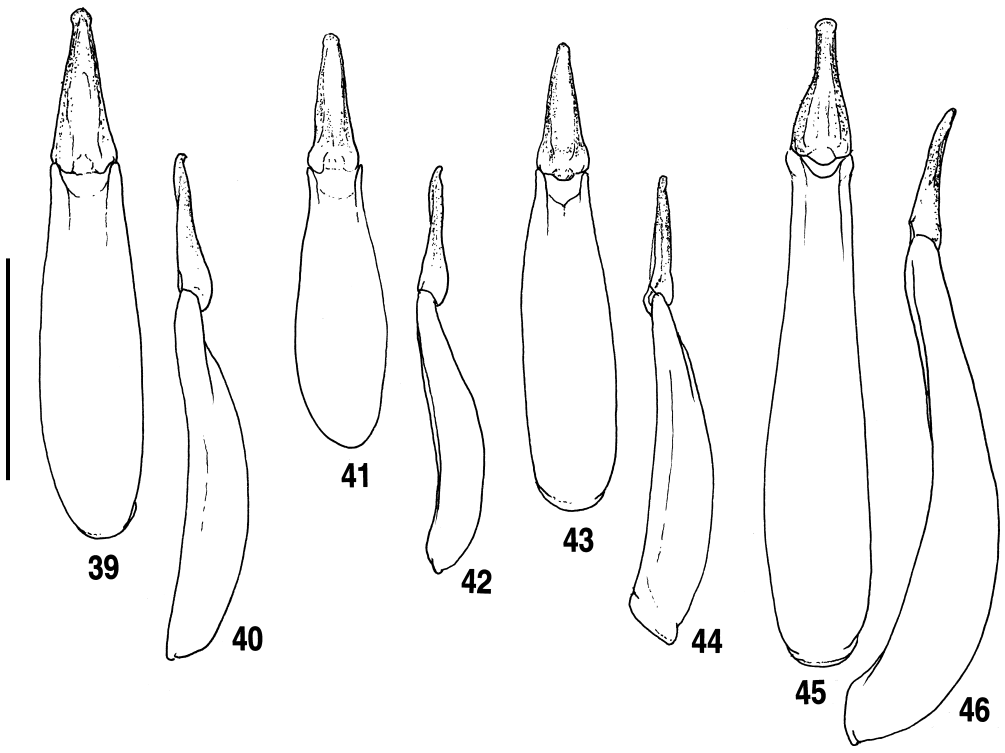
Allecula (*Upinella*) *yaeyamaensis* sp. nov.

[Japanese name: Yaeyama-kuro-oo-kuchikimushi]

(Figs. 12, 45–46)

Body oblong ovate, moderately convex longitudinally, weakly flattened in antero-medial portion. Blackish brown with reddish tinge, posterior portion of head, pronotum and elytra brownish black, anterior portion of head and mouth-parts reddish brown, antennae, maxillary palpi, legs and two apical sternites of abdomen yellowish brown, hairs on surfaces mostly brownish yellow; head and femora moderately shining, pronotum, scutellum and elytra feebly, somewhat sericeously shining, prosternum, tibiae and antennae weakly shining, meso- and metasterna, and abdomen moderately, partly somewhat vitreously shining; head nearly glabrous, pronotum and elytra clothed with rather long hairs, metasternum, abdomen, and legs clothed with rather short hairs, antennae and legs clothed with fine hairs.

M a l e. Head weakly convex, gently inclined anteriad, very weakly covered with microsculpture; clypeus semicircular, very weakly depressed in basal part, inclined anteriad, weakly bent ventrad in the front and rather strongly so laterad, closely scattered with punctures, each rather directed anteriad and with a fine hair; fronto-clypeal border finely impressed and roundly curved; genae subtriangular, weakly raised antero-laterad, feebly depressed along the borders of frons, and also depressed in the bordering areas of eyes, rather sparsely punctate, the punctures smaller and closer than those on clypeus, often fused with one another, and each with a minute hair, with exterior margins feebly produced before eyes; frons weakly convex, gently inclined anteriad, rather closely punctate, each puncture with a fine hair, the interior margins of eyes bordered;



Figs. 39–46. *Allecula* (*Upinella*) spp., ♂♂. —— 39–40, *A.* (*U.*) *amamiensis* MAEDA et NAKANE, 1988; 41–42, *A.* (*U.*) *akiyamai* sp. nov., holotype; 43–44, *A.* (*U.*) *okinawaensis* MAEDA et NAKANE, 1988, stat. nov.; 45–46, *A.* (*U.*) *yaeyamaensis* sp. nov., holotype. —— 39, 41, 43, 45, male genitalia (dorsal view); 40, 42, 44, 46, ditto (lateral view). Scale: 1.0 mm.

vertex gradually inclined posteriad, sparsely punctate, the punctures smaller than those on frons and each with a fine hair. Eyes large and bold, subreniform in dorsal view, strongly convex laterad, roundly inlaid into head, with diatone 0.58 times the width of the transverse diameter of an eye. Antennae filiform and slender, tip of terminal segment reaching apical 2/7 of elytra, ratio of the length of each segment from base to apex: 0.40, 0.13, 1.07, 1.22, 0.98, 0.93, 0.83, 0.77, 0.74, 0.72, 0.68.

Pronotum subquadrate in dorsal view, feebly wider than long (6 : 5), widest at apical 2/5, gently narrowed basad, roundly so apicad; apex gently produced, rimmed, the rim minutely punctate and tapering laterad; base gently produced in middle, sinuous in lateral portions, bordered and finely rimmed; front angles rounded in dorsal view, hind angles rectangular with rounded corners; sides moderately, then steeply declined to lateral margins, which are finely rimmed, the rim visible in medial portion from above, the remaining areas hardly visible due to weak convexities; disc moderately convex, covered with microsculpture, rather closely, shallowly punctate, each puncture with a rather long, fine hair. Scutellum triangular, slightly depressed, weakly raised medially, very weakly covered with microsculpture, sparsely scattered with finely haired punctures.

Elytra elongated ovate, though the basal portion is concealed under the pronotum, 2.11 times as long as wide, nearly twice the length and 1.46 times the width of pronotum, widest at basal 4/9;

dorsum rather strongly convex, highest at basal 3/8, very weakly flattened in medio-basal portion; disc with rows of small punctures, which are closely set, grooved, and connected with one another by fine striae; intervals rather strongly convex, covered with microsculpture, often very weakly aciculate, scattered with minute punctures, each with a rather long curved hair; humeri feebly swollen; apices weakly, roundly produced.

Terminal segment of maxillary palpus extremely dilated apicad and clothed with fine, decumbent hairs, with feebly curved exterior side 0.57 times the length of the gently curved interior, 0.40 times the length of the nearly straight apical; mentum obtrapezoidal, weakly raised anteriad, feebly ridged on the midline, slightly depressed laterad, very feebly covered with microsculpture, scattered with small punctures, each with a fine decumbent hair; gula parabolically bordered from ventral side of head by fine sulcus, rather vitreously smooth, with a pair of short crescent-shaped impressions near apex. Prosternum finely rimmed along apex, covered with microsculpture, granulo-punctate in anterior and medial portions, strongly raised posteriad in middle, then steeply declined to prosternal process, which is roundly produced, strongly depressed and ruguloso-granular; mesosternum short, weakly covered with microsculpture, strongly depressed, granulo-punctate and rugulose in anterior portion, strongly raised in a Y-shape and clothed with decumbent hairs in posterior portion; metasternum rather short, covered with microsculpture, rather closely punctate, the punctures somewhat ovate, and clothed with decumbent hairs, with a longitudinal impression on the midline in posterior 3/5. Abdomen covered with microsculpture, which becomes weaker apicad, closely punctate, the punctures becoming finer apicad, each with a long decumbent hair; anal sternite weakly flattened in posterior portion, with apex feebly emarginate.

Legs slender as in the other members of this genus and rather simple in shape, closely punctate and finely haired; protibiae very slightly curved exteriad, mesotibiae gently curved intero-ventrad, metatibiae very feebly curved intero-dorsad; tarsi rather slender, pro- and mesotarsi with the third and penultimate segments lobed, metatarsi with the penultimate lobed; ratios of lengths of pro-, meso- and metatarsal segments: 0.59, 0.30, 0.14, 0.04, 0.68; 1.02, 0.40, 0.12, 0.06, 0.75; 1.73, 0.61, 0.14, 0.78.

Male genitalia rather slender, 2.87 mm in length and 0.46 mm in width, gently curved in lateral view; basal piece tapering to apical parts, which are a little widened; fused lateral lobes 0.67 mm in length, bold in basal parts, tapering apicad, with apex semicircularly widened.

F e m a l e. Head narrower, with eyes smaller and less strongly convex laterad; elytra with slightly deeper grooves, intervals feebly wider and a little more strongly convex; maxillary palpi less strongly dilated; legs shorter.

Body length: 10.8–12.2 mm.

Distribution. The Ryukyus: Ishigaki-jima Is., Iriomote-jima Is.

Type series. Holotype: ♂, "JAPAN, Ryukyus / Ishigaki-jima Is. / Mt. Omoto-dake, 150- / 250 m, 13. V. 2010 // Katsumi AKITA leg. // K. AKITA / Collection / KAC 55909." (NSMT). Paratypes: — Ishigaki-jima Is.: 1 ♀, Hamazaki-chô, 14–III–2007, A. SEKI leg.; 1 ♂, Takedarindô, 20〜25–III–1991, T. HANATANI leg.; 1 ♀, Mt. Omoto-dake, 8–IV–1994, I. HIRAI leg.; 1 ♀, Banna-kôen, 31–I–2010, J. AOKI leg. Iriomote-jima Is.: 1 ♂, Kampire-no-taki, 2–I–2002, K. FUJISHIRO leg.

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

Key to the Relatives of *Allecuala fuliginosa* from Japan on the Basis of Males

1 (2) Body larger (13.0–15.8 mm); eyes smaller, with diatone 0.71–0.81 times the width of an eye; lateral lobes linguiform, not spatulate at apex. Hokkaido, Honshu, Shikoku, Kyushu, Yaku-shima Is.* ..... ***A.*** **(*U.*)** ***fuliginosa*** MÄKLIN

2 (1) Body smaller (10.6–14.5 mm); eyes larger, with diatone 0.56–0.66 times the width of an eye; lateral lobes more or less spatulate at apex. The Ryukyus. 3

3 (4) Pronotum widest at apical 2/5; male genitalia longer (2.87 mm), with lateral lobes short (0.23 times the total length of genitalia). Body length: 10.8–12.2 mm. Ishigaki-jima Is., Iriomote-jima Is. ..... ***A.*** **(*U.*)** ***yaeyamaensis*** sp. nov.

4 (3) Pronotum widest at the middle to the base; male genitalia shorter (1.82–2.40 mm), with lateral lobes long (0.28–0.35 times the total length of genitalia). 5

5 (6) Body, legs, and antennae rather slender; elytra widest near base; antennae with 11th segment obviously longer; male genitalia 2.40 mm in length, with lateral lobes 0.32 times the total length of genitalia. Body length: 11.3–14.5 mm. Amami-ôshima Is. ..... ***A.*** **(*U.*)** ***amamiensis*** MAEDA et NAKANE

6 (5) Body, legs, and antennae rather robust or bold; elytra widest at the middle; antennae with 11th segment nearly of the same length as 10th (except for ***A.*** **(*U.*)** ***akiyamai*** due to damage). 7

7 (8) Femora dark reddish brown, tibiae and tarsi brownish yellow; elytra with punctures in grooves larger; male genitalia shorter (1.82 mm), with lateral lobes longer (0.35 times the total length of genitalia). Body length: 10.6 mm. Tokuno-shima Is. ..... ***A.*** **(*U.*)** ***akiyamai*** sp. nov.

8 (7) Legs wholly yellowish brown; elytra with punctures in grooves smaller; male genitalia longer (2.13 mm), with lateral lobes shorter (0.28 times the total length of genitalia). Body length: 11.8–12.6 mm. Sesoko-jima Is. Okinawa-jima Is., Kume-jima Is. ..... ***A.*** **(*U.*)** ***okinawaensis*** MAEDA et NAKANE, stat. nov.

要　　約

秋田勝己・益本仁雄：日本産ゴミムシダマシ科甲虫の新種・稀少種（第 11 報）．日本産ゴミムシダマシ科甲虫の 7 新種，1 昇格種，1 新分布種．――― 伊豆諸島（八丈島，御蔵島，三宅島，利島）から，ハチジョウマルムネゴミムシダマシ *Tarpela kawabatai* sp. nov.（ゴミムシダマシ亜科，マルムネゴミムシダマシ族）を新種記載した．この種は箱根，西丹沢，伊豆半島，伊豆大島に分布するヒメマルムネゴミムシダマシ *T. elegantula* (LEWIS, 1894) に近縁である．また，これまで久米島のみから記録されていたクメジママルムネゴミムシダマシ *T. kimurai* MASUMOTO, 1996 を沖縄島から記録した．

さらに，クチキムシ亜科クチキムシ族を検討し，屋久島からヤクシマチビクチキムシ *Allecula* (*Allecula*) *tsudai* sp. nov., 群馬県武尊山からヤサカクチキムシ *A.* (*A.*) *yasakai* sp. nov. を，また，クチキムシ *A.* (*Upinella*) *melanaria* MÄKLIN 種群のウケンクチキムシ *A.* (*U.*) *ukenensis* sp. nov.（奄美大島），サトウクチキムシ *A.* (*U.*) *hirokii* sp. nov.（西表島，与那国島）を，クロオオクチキムシ（＝オオクチキムシ）*A.* (*U.*) *fuliginosa* MÄKLIN 種群のトクノシマクロオオクチキムシ *A.* (*U.*) *akiyamai* sp. nov.（徳之島），ヤエヤマクロオオクチキムシ *A.* (*U.*) *yaeyamaensis* sp. nov.（石垣島，西表島）を新種記載した．アマミクロオオクチキムシ（和名新称）*A.* (*U.*) *amamiensis* MAEDA et NAKANE, 1988 の沖縄亜種としてあつかわれてきたものを独立種として認め，オキナワクロオオクチキムシ *A.* (*U.*) *okinawensis* MAEDA et NAKANE, 1988 stat. nov.（瀬底島，沖縄島，久米島）とした．クチキムシ種群，クロオオクチキムシ種群についてはそれぞれの検索表を付けた．

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Manuscript received 15 September 2011;
revised and accepted 14 October 2011.