

## New or Little-Known Tenebrionid Species (Coleoptera) from Japan

(14) Six New Species and Three New Subspecies from Various Areas in Japan

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**Abstract** Six new species and three new subspecies of Tenebrionidae from Japan are described: *Gonocephalum aokii* sp. nov., *Enanea nakandakarii* sp. nov., *Tyrtaeus ishigakiensis* sp. nov., *Ades nishii* sp. nov., *Gnesis naitoi* sp. nov., *G. onoderai* sp. nov., *G. helopioides fujitai* subsp. nov., *G. purpurascens tokaranus* subsp. nov., and *G. p. adachii* subsp. nov. *Gnesis helopioides purpurascens* (NAKANE, 1968) is upgraded to the species rank.

As the fourteenth part of the series concerning the Japanese tenebrionid species, we are going to describe six new species and three new subspecies of genera *Gonocephalum*, *Enanea*, *Tyrtaeus*, *Ades* and *Gnesis*.

We would like to express our cordial thanks to Dr. Jun-ichi AOKI (Tokyo), Mr. Makoto NAKAN-DAKARI (Okinawa), Mr. Tadafumi NAKATA (Okinawa), Mr. Masahiro NISHI (Kagoshima), Dr. Jun-ya NAITÔ (Chiba), Mr. Hidehiro ONODERA (Ibaraki), the late Mr. Isamu HIRAI (Saitama), Mr. Haruki KARUBE (Kanagawa), Mr. Hiroshi FUJITA (Tokyo), Dr. Masatoshi TAKAKUWA (Kanagawa), Mr. Kazuo ADACHI (Fukuoka), Mr. Shigeo TSUYUKI (Kanagawa), Mr. Seiji MORITA (Tokyo), Mr. Isao MATOBA (Wakayama), Mr. Hisayuki ARIMOTO (Osaka), Mr. Yoshihiko KANNO (Kanagawa), Dr. Takeshi YORO (Kanagawa), Mr. Satoru NII (Osaka), Mr. Nobuki MATSUOKA (Tokyo), Dr. Keiichi TAKAHASHI (Ibaraki) and Dr. Kiyoshi ANDO (Osaka), for offering invaluable specimens for this study. We thank Dr. Ottó MERKL, of the Hungarian Natural History Museum, Budapest, for assisting us in various ways. We also thank Dr. Makoto KIUCHI (Ibaraki), for taking clear photographs inserted in this paper.

Finally, special thanks should be expressed to Emeritus Curator Dr. Shun-Ichi UÉNO, of the National Museum of Nature and Science, Tsukuba, for his constant guidance to our taxonomic study.

All the holotypes to be designated will be deposited in the National Museum of Nature and Science, Tsukuba (NSMT).

### Descriptions of New Taxa

#### Subfamily Tenebrioninae

#### Tribe Opatrini

*Gonocephalum aokii* AKITA et MASUMOTO, sp. nov.

[Japanese name: Daitô-suna-gomimushidamashi]

(Fig. 1)

**F e m a l e:** Body oblong-ovate, weakly constricted at the border of the fore and hind bodies, gently convex postero-dorsad; brownish black, antennae except the terminal segments lighter in color, mouth parts and tarsi dark reddish brown, setae on surfaces mostly brownish yellow, those in area be-

hind eyes black; dorsal and ventral surfaces weakly, somewhat tallowily shining, though the former surface is covered with a sort of secretion, antennal segments IV–VII and tarsi weakly shining; head and pronotum with decumbent scale-like hairs, each becoming slightly bolder apicad, scutellum with minute hairs, elytra also with decumbent scale-like hairs, but are obviously longer than those on the head and pronotum, legs rather densely with setiferous hairs; antennae finely haired.

Head somewhat transversely elliptical, though the apical margin is emarginate at the middle, and the basal portion is concealed under the pronotum, clothed with fine decumbent scale-like hairs; clypeus weakly depressed and coarsely granulo-punctate in basal part, inclined and closely granular in anterior part, roundly emarginate at the middle of apex, each side of the emargination obliquely produced laterad and weakly reflexed; fronto-clypeal border nearly straight in middle, oblique in lateral parts and reaching to exterior margins; genae obtusely produced anteriorly and rather strongly and roundly so laterad, rather strongly depressed before eyes, closely, finely granular; frons subquadrate, granulo-punctate and irregularly rugose, gently convex in middle, impressed at the antero-medial part and medio-lateral parts near eyes, with a short coarse ridge close to each eye. Eyes securiform with rounded exterior margins in dorsal view, with diameter about 5.5 times the width of the transverse diameter of an eye. Antennae slightly subclavate, terminal segment the widest, tip of terminal segment reaching at basal 1/4 of pronotum, ratio of the length of each segment from base to apex (holotype=female): 0.24, 0.09, 0.27, 0.20, 0.14, 0.13, 0.15, 0.15, 0.15, 0.16, 0.18.

Pronotum subquadrate with crenulate lateral margins, wider than long (8 : 5), widest at basal 3/8; apex very slightly narrower than base, widely emarginate, nearly straight widely in middle, obliquely bent anteriorly and inconspicuously margined in lateral portions; base weakly produced and truncate in medial portion, strongly sinuous in lateral portions; sides gently inclined laterad, widely explanate, the explanations microsculptured, ruguloso-granular and clothed with minute scales; front angles acutely produced anteriorly, hind angles more acutely produced postero-laterad than front angles; disc gently convex, very weakly micro-granular, rather noticeably granulo-punctate and clothed with decumbent scales in medial portion, ridged in V-shape in postero-medial portion, also nearly straightly ridged in postero-lateral parts, the areas between ridges weakly, obliquely concave. Scutellum subpentagonal with sides weakly rounded, slightly convex and raised posteriorly, microsculptured and ruguloso-punctate.

Elytra oblong-ovate, though the basal portion is truncate, 1.33 times as long as wide, 2.80 times the length and 1.09 times the width of pronotum, widest at basal 3/8, weakly narrowed anteriorly and roundly so posteriorly; dorsum gently convex, highest at the middle, weakly flattened in antero-medial portion; disc with rows of punctures, which are rather closely set, slightly ocellate, and finely striate or grooved; intervals gently convex, very weakly microsculptured, transversely micro-aciculate or wrinkled, micro-granular, each granule with a decumbent scale-like hair, which are larger than those on the pronotum, and mostly directed posteriorly; sides steeply declined to lateral margins, which are strongly grooved, obliquely impressed, and finely rimmed, the rims slightly serrate and with minute scale-like hairs; humeri weakly swollen; apices weakly, roundly produced.

Terminal segment of maxillary palpus nearly securiform, with rounded exterior side nearly twice the length of the rounded interior, 1.2 times longer than the nearly straight apical. Mentum somewhat obtrapezoidal, raised medio-anteriorly and produced apicad, finely ridged on the midline, depressed on both sides of medial ridge, subparabolically ridged in lateral parts, rather strongly depressed and nearly explanate in exterior parts of the ridges, which are setiferously haired; lateral margins rounded and widened anteriorly; base vaguely truncate and apex roundly emarginate. Gula triangular, slightly convex, transversely wrinkled, with a pair of straight impressions on the lateral borders.

Prosternum medium in size, with apex moderately emarginate and weakly ridged, microsculp-



Figs. 1–9. Habitus, holotype. — 1, *Gonocephalum aokii* sp. nov., ♀; 2, *Enanea nakandakarii* sp. nov., ♂; 3, *Tyrtaeus ishigakiensis* sp. nov., ♂; 4, *Ades nishii* sp. nov., ♂; 5, *Gnesis naitoi* sp. nov., ♂; 6, *G. onoderai* sp. nov., ♂; 7, *G. heliopioides fujitai* subsp. nov., ♂; 8, *G. purpurascens tokaranus* subsp. nov., ♂; 9, *G. p. adachii* subsp. nov. ♂.

tured, rugulose and granular, sparsely clothed with decumbent setiferous hairs whose tips mostly directed posteriad, weakly depressed in anterior portion, raised posteriad in medial portion, interprocoxal space strongly raised, sparsely punctate and granular; prosternal process blunt, strongly depressed posteriad, widened in lateral parts, sparsely punctate, granular, sparsely clothed with fine setiferous hairs. Mesoventrite short, strongly, triangularly depressed, strongly punctate in anterior portion, strongly raised in wide-V-shape, microsculptured, granular, rugulose and sparsely clothed with

setiferous hairs in posterior portion. Metaventricle short and wide, impressed in posterior 2/3 on the midline, gently convex in postero-lateral portions, punctate and granular, each granule with a decumbent setiferous hair. Abdominal ventrites medium in size, very weakly microsculptured, scattered with somewhat transversely punctures, each with a minute granule at the basal side and a decumbent setiferous hair; anal ventrite gently convex in middle, coarsely margined along exterior margin, microsculptured, coarsely scattered with umbilicate punctures, each with a decumbent setiferous hair at the center.

Legs medium in size; femora and tibiae coarsely punctate and clothed with setiferous hairs; protibiae beneath without any modification; ratios of the lengths of pro-, meso- and metatarsal segments: 0.14, 0.09, 0.10, 0.10, 0.29; 0.30, 0.17, 0.14, 0.08, 0.39; 0.46, 0.18, 0.16, 0.45.

Body length: 8.6 mm.

**Male:** Unknown.

*Distribution.* Daitō Is.: Kitadaitō-jima Is.

*Type seires.* Holotype: ♀, "JAPAN: Ryukyus / Kitadaitō-jima Is. 西港南方 / 26. V. 2008 / Jun-ichi AOKI leg. // K. AKITA / Collection / KAC 83309" (NSMT).

*Etymology.* The specific name is given in honor of Dr. Jun-ichi AOKI who collected the holotype.

*Notes.* This new species somewhat resembles *Gonocephalum subspinosum* (FAIRMAIRE, 1894), which is widely distributed in Sri Lanka, N. India, Indochina, S. China, Taiwan, Indonesia, etc. However, it can be distinguished from the latter by the body slenderer with the dorsal surface more strongly sculptured, the head more strongly impressed in the area of the fronto-clypeal border, the pronotum narrower, with the disc more strongly convex and lateral margins more noticeably crenulate, the scutellum slightly narrower and longer, and the elytra narrower with rows of punctures stronger.

## Subfamily **Diaperinae**

### Tribe **Gnathidiini**

#### ***Enanea nakandakarii*** AKITA et MASUMOTO, sp. nov.

[Japanese name: Okinawa-kiiro-chibi-gomimushidamashi]

(Figs. 2, 10–14)

**Male:** Body oblong-ovate, gently convex dorsad and longitudinally; brownish yellow, partly darker in color; dorsal and ventral surfaces rather strongly, slightly vitreously shining, four apical segments of antennae rather mat, hairs pale yellow; seven apical segments of antennae finely haired, antero-interior faces of tibiae and ventral sides of tarsi rather densely haired, ventral side of body microscopically haired.

Head somewhat widely hexagonal, though the basal portion is concealed under the pronotum, weakly microsculptured; clypeus rather short and wide, sparsely punctate, gently inclined apicad, with exterior margin nearly truncate in front, very weakly emarginate in middle, and weakly angularly in lateral parts; fronto-clypeal border finely sulcate, the sulcation rather extremely wide-U-shaped; genae narrow and oblique, obliquely raised in middle; frons weakly concave in antero-medial portion, weakly raised around the concavity, with an impression at postero-medial part; vertex convex, sparsely punctulate; areas between genae and eyes with nearly upright horns, which are weakly curved posteriad. Eyes longitudinally subovate in dorsal view, gently convex laterad, weakly, roundly inlaid into head, with diatone about 11 times the width of the transverse diameter of an eye. Antenna 10-segmented, rather strongly clavate, tip of terminal segment hardly reaching basal 1/4 of pronotum, segment IX the

widest, terminal one nearly round, ratio of the length of each segment from base to apex: 0.08, 0.04, 0.04, 0.04, 0.05, 0.05, 0.07, 0.10, 0.09, 0.14.

Pronotum subquadrate with rounded sides, wider than long (8 : 5), widest at the middle; apex weakly emarginate and finely rimmed, very slightly produced in middle; base very weakly, evenly produced, finely bordered by a groove and rim; sides rather steeply declined to lateral margins, which are explanate and sparsely serrate; front angles weakly reflexed, subrectangular and produced antero-laterad, hind angles slightly, obtusely angular; disc broadly convex, punctate, each puncture with a microscopic scale-like hair (barely visible by high extension). Scutellum semicircular, weakly convex in medio-basal part, sparsely, irregularly scattered with microscopic punctures.

Elytra 1.51 times as long as wide, about twice the length and almost of the same width of pronotum, widest at basal 1/4, very weakly narrowed anteriorly and roundly so posteriorly, very weakly constricted at basal 1/7; dorsum gently convex and very weakly flattened in antero-medial portion, highest at basal 2/5; disc with rows of punctures, each with a microscopic hair at each center; intervals weakly convex, very sparsely scattered with smaller punctures; sides steeply declined to lateral margins, which are narrowly explanate (particularly noticeably produced antero-laterad in humeral parts) and finely rimmed, the rims sparsely, minutely serrate, visible in basal 3/5 from above; humeri weakly swollen; apices very slightly, roundly produced.

Terminal segment of maxillary palpus nearly securiform, with rounded exterior side nearly twice the length of the rounded interior, 1.4 times longer than the nearly straight apical. Mentum obtrapezoidal, apex and base weakly emarginate, strongly convex in postero-medial part, weakly depressed in lateral parts. Gula elongated triangular.

Prosternum rather wide, apex widely emarginate and rimmed, weakly produced in middle of the emargination, gently raised in medial portion, covered with microsculpture, obscurely punctate; inter-procoxal space narrow and elevated; prosternal process elliptic, depressed in medial part, with a tubercle at the middle of apex. Mesoventrite transversely triangular, rimmed along apex, microsculptured, sparsely and obscurely scattered with punctures. Metaventrite short, well-convex towards medial part, longitudinally impressed in posterior 5/6 on the midline, microsculptured, sparsely punctate, each puncture with a fine hair. Abdominal ventrites microsculptured, finely and sparsely punctate, the punctures becoming larger laterad, each puncture with a fine hair; anal ventrite weakly microsculptured, finely and very sparsely punctate, shallowly transversely depressed in posterior part, provided with large punctures along apex, which is widely, triangularly produced, though its apical corner is rounded.

Legs normal in size; femora short-clavate and finely haired; tibiae more or less widened apicad, punctate and finely haired, closely punctulate and clothed with setiferous hairs on apico-interior faces; tarsi in 4-4-4 formula, compared with femora and tibia rather long, ratios of the lengths of pro-, meso- and metatarsal segments: 0.06, 0.02, 0.02, 0.16; 0.06, 0.02, 0.01, 0.15; 0.06, 0.02, 0.01, 0.18.

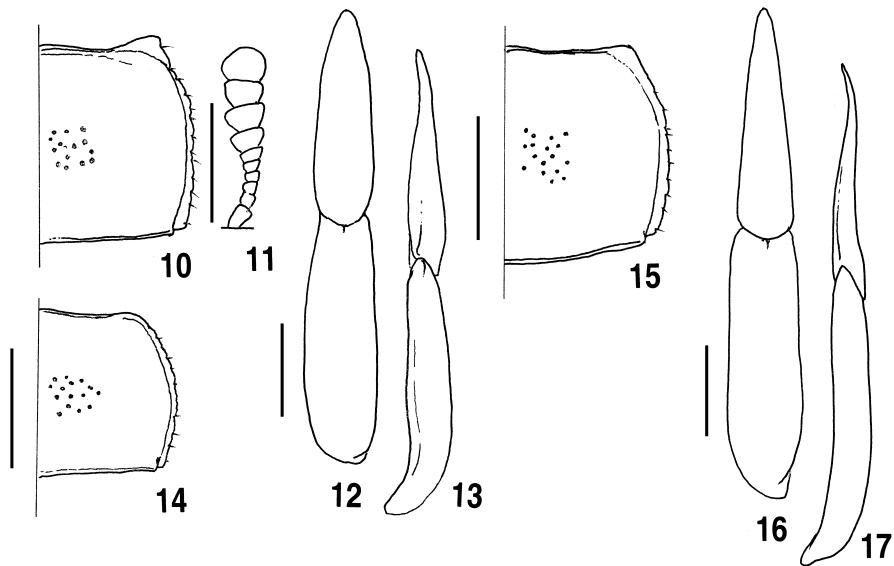
Male genitalia slender, 0.38 mm in length, 0.04 mm in width; basale rather strongly curved in middle in lateral view, gently tapering anteriorly; apicale 0.19 mm in length, subparallel-sided in basal 2/3, then narrowed apicad, with apex fused and weakly bent.

**F e m a l e:** Head without horns; clypeus not angular in lateral parts; antennae rather slender; front angles of pronotum weakly, roundly produced anteriorly; legs shorter.

Body length: 2.4-3.4 mm.

*Distribution.* The Ryukyus: Okinawa-jima Is.

*Type series.* Holotype: ♂, "JAPAN; Ryukyus / Okinawa-jima Is. / Kunigami-son, Okuma / 28. XI. 2007 / M. NAKANDAKARI leg. // K. AKITA / Collection / KAC 20001" (NSMT). Paratypes: 9 ♂♂, 4 ♀♀, same collecting data as for the holotype.



Figs. 10–17. *Enanea* spp. — 10–13, *E. nakandakarii* sp. nov., holotype, ♂; 14, ditto, paratype, ♀; 15–17, *E. chujoi* ANDO et M. T. CHÛJÔ, ♂; 10, 14, 15, pronotum; 11, antennae; 12, 16, male genitalia (dorsal view); 13, 17, ditto (lateral view). Scales: 0.5 mm for 10, 11, 14, 15; 0.1 mm for 12, 13, 16, 17.

*Etymology.* The specific name is given in honor of Mr. Makoto NAKANDAKARI who collected the type series.

*Notes.* This new species closely resembles *Enanea chujoi* ANDO et M. T. CHÛJÔ, 2005 (Figs. 15–17) originally described from Amami-ôshima Is., but can be distinguished from the latter by the clypeus with the front margin weakly emarginate (almost straight in *E. chujoi*), front angles of the pronotum subrectangular and produced antero-laterad (obtusely rounded and a little produced in *E. chujoi*), and the male genitalia different in shape.

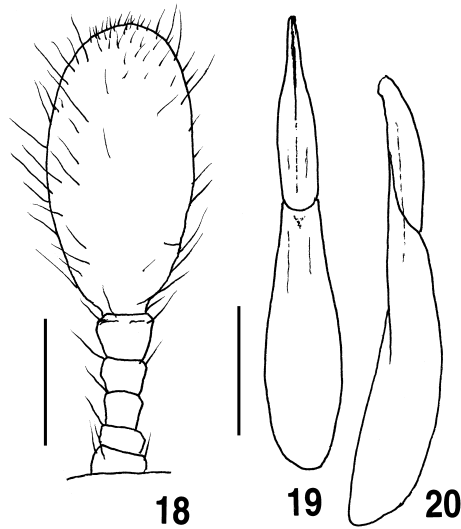
***Tyrtaeus ishigakiensis* AKITA et MASUMOTO sp. nov.**

[Japanese name: Tamahige-chibi-gomimushidamashi]

(Figs. 3, 18–20)

Body oblong-ovate, gently convex longitudinally and dorsad; yellowish brown, basal parts of antennae, maxillary palpi, labial palpi and legs paler in color, hairs on surface pale brown; head, pronotum, scutellum, mesoventrite and legs moderately shining, elytra a little more strongly, slightly vitreously shining, ventral surface, except mesoventrite, weakly shining; antennae densely, microscopically haired, each body surface sparsely, finely haired.

*Male:* Head somewhat transversely elliptical, though the basal portion is concealed under the pronotum, gently inclined antierad and rather steeply so laterad; clypeus subquadrate, feebly convex in middle, scattered with small punctures, sparsely so in medial part, a little closely so in lateral parts, apex gently rounded; fronto-clypeal border finely lined in blackish brown, with rows of punctures, nearly straight in medial part, obliquely bent in lateral parts, and reaching external margins; labrum chitinous, roundly produced antierad, weakly convex in middle, finely pubescent; genae oblique and rather narrow, indefinitely bordered from frons, obliquely lined in blackish brown, scattered with



Figs. 18–20. *Tyrtaeus ishigakiensis* sp. nov., holotype, ♂. — 18, Antennae; 19, male genitalia (dorsal view); 20, ditto (lateral view). Scales: 0.1 mm.

small punctures; frons rather wide, gently convex, scattered with larger punctures than those on clypeus and genae. Eyes longitudinally subovate in dorsal view, gently convex laterad, weakly inlaid into head, with diatone about five times the width of the transverse diameter of an eye. Antennae 9-segmented, with three apical segments fused with each other and forming a large club, tip of club barely reaching basal 1/5 of pronotum, ratio of the length of each segment from base to club: 0.26, 0.13, 0.12, 0.10, 0.13, 0.78.

Pronotum subquadrate with rounded sides, about 1.5 times as wide as long, widest at the middle; apex weakly produced and very finely margined; base weakly produced, bordered by nearly straightly groove, margined and flattened in middle, sparsely punctate in lateral parts; sides gently declined to lateral margins, which are explanate and crenulate; front angles slightly obtuse with corners rounded; hind angles slightly produced postero-laterad; disc broadly convex, almost impunctate in antero-medial portion, irregularly punctate in lateral portions, the punctures various in size, and becoming larger and coarser laterad. Scutellum semicircular, weakly convex in middle, sparsely scattered with small punctures, which are often fused with one another.

Elytra 1.75 times as long as wide, 3.05 times the length and 1.21 times the width of pronotum, widest at basal 3/7, gently narrowed anteriorly and roundly so posteriorly; dorsum gently convex, weakly flattened broadly in middle, highest at basal 1/7; disc with rows of rather large punctures, each with a fine hair; intervals weakly convex, very sparsely scattered with smaller punctures; sides steeply declined to lateral margins, which are rather strongly grooved and finely explanate, minutely crenulate in humeral 2/5, humeri weakly swollen; apices slightly roundly produced.

Terminal segment of maxillary palpi elongated subconical. Mentum slightly transversely quadrate, weakly convex in antero-medial part, weakly depressed in lateral parts; gula with the border traceable in subparabola shape.

Prosternum somewhat wide-triangle, very shallowly emarginate and bordered along apex, gently, longitudinally raised in medial portion, sparsely scattered with punctures in lateral portions, inter-procoxal space narrow and tapering posteriorly, forming a sharp triangle; prosternal process nearly regu-

lar-triangular, slightly depressed, flattened and smooth, with two basal angles slightly acute. Mesoven-trite with major anterior portion depressed (concealed under the prosternum in repose), depressed in lateral portions, irregularly, sparsely scattered with coarse punctures, also with posterior portion (inter-mesocoxal part) weakly raised, sparsely scattered with punctures. Metaventrte rather short and wide, convex in each lateral portion, very weakly microsculptured, rather coarsely punctate, longitudinally impressed in posterior 2/5 on the midline. Abdominal ventrites with five visible segments, medium in size, weakly microsculptured, scattered with smaller punctures in medial portion and larger and coarse punctures in lateral portions, each puncture with a fine hair; anal ventrite hardly or sparsely punctate, shallowly, transversely depressed in posterior part, with apex slightly, wide-triangularly produced, though the tip is rounded.

Femora short-clavate, sparsely scattered with small punctures and finely haired; tibiae gently becoming bolder apicad, scattered with small punctures and more densely haired than femora, with setiferous hairs on exterior face; tarsi in 4-4-4 formula; ratios of the lengths of pro-, meso- and metatarsal segments: 0.02, 0.01, 0.01, 0.03; 0.06, 0.02, 0.02, 0.07; 0.03, 0.01, 0.01, 0.10.

Male genitalia somewhat elongated fusiform with anterior part noticeably tapering apicad, 0.33 mm in length, 0.06 mm in width, gently curved in lateral view; basale rather elongated subovate in dorsal view; apicale 0.13 mm in length, ridged on the midline, with apex fused.

**F e m a l e:** Compared with male, the antennae shorter, the labrum less strongly produced apicad, the pronotum more coarsely punctate.

Body length: ca. 1.8 mm.

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

*Type series.* Holotype: ♂, "JAPAN: Ryukyu / Ishigaki-jima Is. / Mt. Yarabu-dake / 21. I. 2003 / Tadafumi NAKATA leg. // K. AKITA / Collection / KAC 12707" (NSMT). Paratypes: 2 ♂♂, 2 ♀♀, same collecting data as for the holotype; 1 ♂, 1 ♀, same locality, 8-I-2003, T. NAKATA leg.; 1 ♂, Iriomote-jima Is., Komi, 0~5 m, 22-V-2010, K. AKITA leg.

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

*Notes.* This new species closely resembles *Tyrtaeus dobsoni* HINTON, 1947, but can be distinguished from the latter by the body shorter and rounded, with the dorsal surface less haired and less strongly punctate. Up until now, the latter was the only species of the subtribe Anopidiina known from Asia, although it has been recently introduced to Florida.

The genus *Tyrtaeus* was originally described in the family Colydiidae, and then transferred to the family Tenebrionidae (subtribe Anopidiina) by DOYEN and LAWRENCE (1979).

### Tribe **Leiochrinini**

#### *Ades nishii* AKITA et MASUMOTO, sp. nov.

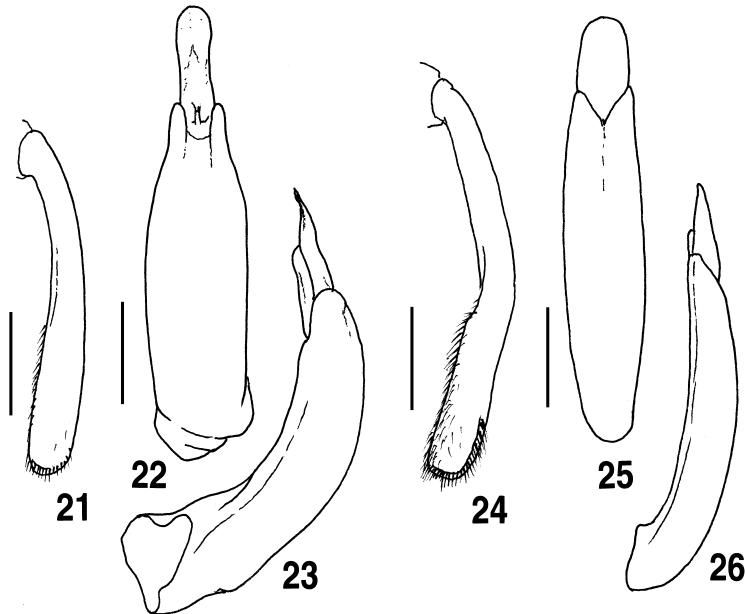
[Japanese name: Amami-kuro-tentô-gomimushidamashi]

(Figs. 4, 21-23)

**M a l e:** Body hemispherical. Blackish brown, antennae, lateral margins of pronotum and elytra, ventral side of head, prosternum and legs yellowish brown, hairs in apical portion of head pale yellow; dorsal surface wholly strongly and rather vitreously shining, antennae, prosternum and tarsi nearly mat, meso- and metaventrtes, abdominal ventrites and legs moderately shining; major portion of head, pronotum, scutellum, elytra glabrous, ventral surface and femora almost glabrous, antennae, labrum, apical part of head, tibiae and tarsi finely haired.

Head somewhat transversely elliptical; clypeus weakly produced antero-ventrad, rugoso-punctate





Figs. 21–26. *Ades* spp. ♂♂. — 21–23, *A. nishii* sp. nov., holotype; 24–26, *A. convexus* (LEWIS, 1894); 21, 24, metatibia; 22, 25, male genitalia (dorsal view); 23, 26, ditto (lateral view). Scales: 0.2 mm.

and pubescent, weakly depressed in lateral parts, with lateral margins bordered and rimmed; fronto-clypeal border not defined; genae rather strongly convex, roundly produced laterad, hardly punctate; frons broad, steeply inclined anteriorly, nearly impunctate. Eyes transversely subquadrate in dorsal view, weakly convex laterad, with diameter 5.32 times the width of transverse diameter of an eye. Antennae becoming bolder apically, tip of terminal segment fairly reaching basal 1/10 of elytra, ratio of the length of each segment from base to apex: 0.18, 0.05, 0.08, 0.06, 0.07, 0.08, 0.08, 0.08, 0.09, 0.08, 0.09.

Pronotum subtrapezoidal in dorsal view; apex widely emarginate, finely bordered; base gently rounded, weakly produced posteriorly in medial portion, feebly sinuous in lateral portions, not margined; sides rather steeply inclined laterad, rather boldly grooved and weakly reflexed in anterior portions of lateral margins; front angles obtuse with rounded corners, hind angles slightly obtuse with slightly acute corners; disc strongly, rather transversely convex, smooth, very sparsely scattered with microscopic punctures. Scutellum slightly wide-triangular, flattened, smooth.

Elytra wider than long (5 : 4), about 2.35 times the length and 1.16 times the width of pronotum, widest at basal 1/4, roundly narrowed anteriorly and posteriorly; dorsum strongly convex, highest at basal 1/3; disc very smooth, hardly punctate, steeply declined to lateral margins, which are rather boldly grooved and finely rimmed, the grooves and rims becoming narrower posteriorly; humeri with swellings indistinct; epipleura very wide in basal parts, rather steeply tapering apically, with surface rather alutaceous.

Terminal segment of maxillary palpi subelliptical, with exterior margin slightly longer and more moderately curved than the interior. Mentum nearly trapezoidal, flattened; gula narrow with subparallel margins in apical part, triangular in basal part, though the major basal part is concealed under the prosternum.

Prosternum rather short and weakly microsculptured, somewhat obtriangular and gently raised in

anterior portion, narrowly subquadrate and weakly concave in posterior portion; prosternal process roundly truncate at apex. Mesoventrite extremely short, rugulose and transversely depressed. Metaventrite rather short and wide, weakly aciculate and sparsely scattered with punctures, without longitudinal impression on the midline. Abdominal ventrites rather short, weakly convex in medial portions, ventrite I with medio-basal part transversely ruguloso-punctulate, and also with latero-basal parts somewhat longitudinally wrinkled, ventrites II–IV each with a transverse row of small punctures, which are sparsely set; anal ventrite rather broad, almost smooth, sparsely scattered with microscopic punctures, punctate in a row and impressed along posterior margin, with apex widely rounded.

Legs rather short; femora somewhat short-clavate, sparsely, minutely punctate, with fine setiferous hairs along posterior margins of meso- and metafemora; tibiae gently curved interiad, protibia finely haired, the hairs becoming denser and longer toward intero-apical parts, mesotibia wholly impressed and haired, metatibia rather slender and weakly flattened, rather noticeably widened and haired on intero-apical face; tarsi rather long compared with femora and tibiae, weakly widened toward each apex; ratios of the lengths of pro-, meso- and metatarsal segments: 0.08, 0.02, 0.01, 0.01, 0.19; 0.08, 0.04, 0.04, 0.01, 0.18; 0.08, 0.01, 0.01, 0.10.

Male genitalia 0.83 mm in length, 0.16 mm in width, rather strongly curved in lateral view; basale parallel-sided in major basal part, rather strongly narrowed in apical part, fused apicale subspatulate, 0.19 mm in length, connected with basale with a round joint-formed part.

**F e m a l e:** Similar to male in external shape.

**Body length:** 2.2–2.3 mm.

**Distributions.** The Ryukyus: Amami-ôshima Is.

**Type series.** Holotype: ♂, "Japan, Amami / Sumiyo, Nishinakama / 29. XII. 2011 / M. NISHI leg. (NSMT). Paratypes: 1 ♂, 4 ♀♀, same data as for the holotype.

**Etymology.** The specific name is given in honor of Mr. Masahiro NISHI who has been offering his collections to our study for a long time and collected the type series of the present new species.

**Notes.** The new species closely resembles *Ades convexus* (LEWIS, 1894) (Figs. 24–26), originally described from Honshu ("Kioto") and Kyushu ("Nagasaki"), but can be distinguished from the latter by the smaller (about 3 mm in *A. convexus*) and more round-shaped body, tibia finely and sparsely haired, but not modified in metatibia (curved interiad, with interior face gouged at basal 4/7 in *A. convexus*), and the male genitalia different in shape.

### Subfamily **Stenochiinae**

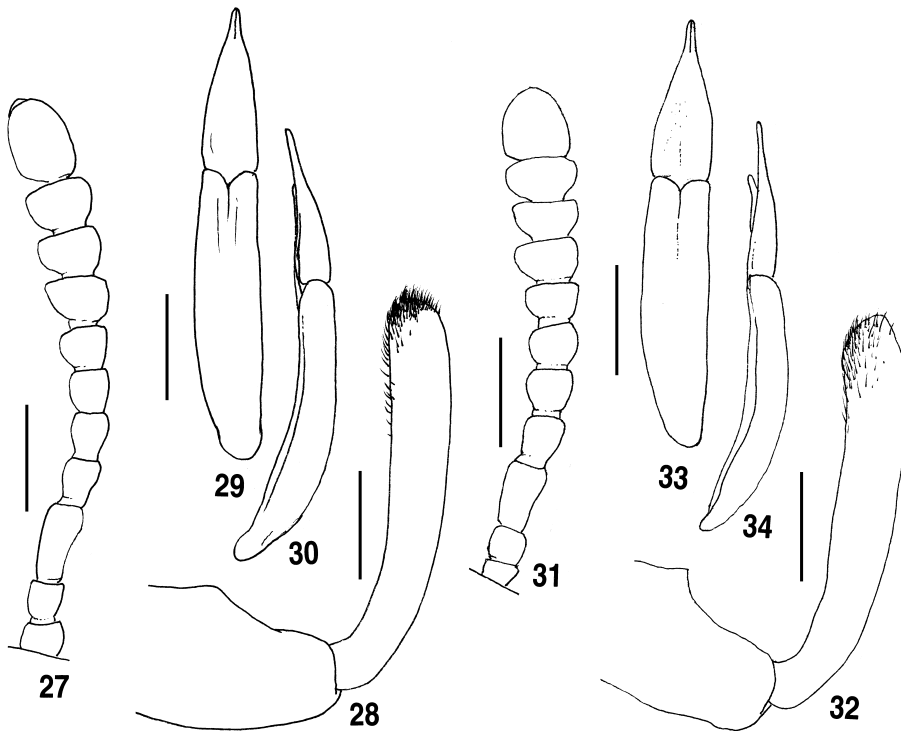
#### Tribe **Cnodalonini**

***Gnesis naitoi*** AKITA et MASUMOTO, sp. nov.

[Japanese name: Iriomote-zubiro-kimawarimodoki]

(Figs. 5, 28–30)

**M a l e:** Body oblong-ovate, convex dorsad and posteriad; brownish black, postero-medial portion of head, pronotum and elytra with dark purplish reflection under nature light, two basal segments of antennae and posterior halves of the third and fourth, basal parts of tibiae and claws lighter in color, mouth parts, ventral side of head, prepisternum, mesoventrite, etc., dark reddish brown, hairs on antennae, mentum, apico-ventral faces of tibiae and ventral sides of tarsi grayish white to brownish yellow; dorsal surface metallicly, slightly sericeously shining, seven basal segments of antennae, legs and abdomen moderately shining, prosternum to metaventrite rather weakly sericeously shining; each surface of body almost glabrous, except for apical parts of mentum, four apical segments of antennae,



Figs. 27–34. *Gnesis* spp. ♂♂. — 27–30, *G. naitoi* sp. nov., holotype; 31–34, *G. onoderai* sp. nov.; 27, 31, antennae; 28, 32, profemur and tibiae; 29, 33, male genitalia (dorsal view); 30, 34, ditto (lateral view). Scales: 0.5 mm.

apico-ventral faces of tibiae and ventral sides of tarsi haired.

Head subquadrate, gently inclined anteriorly and laterally, very weakly microsculptured; clypeus rather transversely hexagonal, gently convex in medial part, weakly depressed in basal part before the fronto-clypeal border, finely punctate, the punctures in anterior part small and close, those in medio-basal part larger and sparser, and those in latero-basal parts shallowly rugulose, apical margin slightly truncate widely in middle, obliquely rounded laterally, and connecting genal margins in lateral parts; fronto-clypeal border sulcate in somewhat wide-U-shape, weakly bulged anteriorly in middle; genae gently dilated antero-laterally, flattened, weakly depressed before eyes, closely, finely punctate, with exterior margin rounded; frons wide, gently convex, weakly depressed in postero-medial part, irregularly punctate, weakly sulcate along eyes. Eyes subquadrate in dorsal view, gently convex laterally, transversely and roundly inlaid into head, with diameter about six times the width of the transverse diameter of an eye. Antennae weakly thickened apically, barely reaching base of pronotum, ratio of the length of each segment from base to apex: 0.15 0.11, 0.30, 0.17, 0.15, 0.14, 0.17, 0.22, 0.21, 0.23, 0.31.

Pronotum subquadrate with rounded sides, wider than long (5 : 4), widest at the middle, weakly microsculptured; apex weakly produced, slightly narrower than base, finely rimmed in lateral parts; base weakly produced in wide-triangle, bordered by a groove and a fine rim, very slightly sinuous in lateral parts; sides rather steeply declined to lateral margins, which are bordered by fine grooves and rims, and fairly visible from above; front angles rounded, hind angles obtusely angular; disc gently

convex, rather closely, irregularly punctate, and also sparsely scattered with minute punctures, with a pair of vague oblique impressions close to base. Scutellum wide-triangular, weakly raised posteriad, rather strongly microsculptured in basal part, rather smooth in apical part.

Elytra 1.56 times as long as wide, 2.69 times the length and 1.26 times the width of pronotum, widest at the middle, weakly narrowed anteriad, rounded and gradually narrowed posteriad, very slightly constricted at basal 1/4; dorsum strongly convex, highest at basal 2/7; disc with rows of punctures, the punctures round to ovate, often finely striate, those in lateral portions rather foveae; intervals weakly convex, microsculptured, scattered with microscopic punctures, weakly micro-aciculate; sides steeply declined to lateral margins, and weakly enveloping hind body in anterior portions, bordered by punctate-grooves, and finely rimmed, the rims invisible from above in basal 3/5 (except humeral parts); epipleura rather wide in basal portions, tapering apicad, very finely impressed along interior margins; humeri very weakly swollen; apices roundly produced.

Terminal segment of maxillary palpi subsecuriform, with rounded exterior side about twice the length of the rounded interior, nearly the same length of the weakly rounded apical. Mentum subpentagonal though the posterior part is truncate, strongly ridged on the midline, weakly depressed postero-laterad, closely punctulate in lateral parts, sparsely pubescent in front; gula gently convex, weakly sericeous, weakly, somewhat transversely rugulose, with a pair of short, oblique impressions on the borders near apex.

Prosternum somewhat obtrapezoidal, apex very slightly emarginate and rather crenulately margined, anterior portion ruguloso-punctate, inter-procoxal space and prosternal process continuously raised, longitudinally grooved, sparsely scattered with small punctures; prosternal process roundly projected posteriad. Mesoventrite short, strongly depressed, rugulose and finely haired in anterior portion, strongly raised in posterior portions, ridged in V-shape, the V-ridges ruguloso-punctate along intero-anterior parts. Metaventrite short, weakly covered with microsculpture, scattered with rather large but shallow punctures, weakly, obliquely wrinkled in posterior portion, with a longitudinal impression in posterior 1/3. Abdominal ventrites moderate in size, very weakly microsculptured, rather closely punctate, the punctures becoming finer apicad, ventrites I–III with basal and lateral parts longitudinally wrinkled; anal ventrite with apical margin rounded.

Legs normal in size; femora somewhat short-clavate, rather closely, finely punctate, profemur with an angular projection (not acute) at apical 1/3 on frontal face; tibiae more or less curved interiad and haired in about apical 1/3 on interior faces, protibia rather strongly curved and very weakly gouged in basal half on interior face; tarsi rather stout, ratios of the lengths of pro-, meso- and metatarsal segments: 0.27, 0.18, 0.16, 0.14, 0.58; 0.29, 0.19, 0.19, 0.16, 0.56; 0.40, 0.21, 0.15, 0.61.

Male genitalia slender, gently curved in lateral view, 1.82 mm in length, 0.25 mm in width; basale widest at basal 2/5, weakly narrowed anteriad and roundly so posteriad; fused apicale 0.67 mm in length, subovate, convex in middle, minutely punctate in anterior part, with apices prolonged and acute.

*F e m a l e*: Unknown.

*Body length*: 8.5–8.8 mm.

*Distribution*. The Ryukyus: Iriomote-jima Is.

*Type seires*. Holotype: ♂, "JAPAN: Ryukyus / Iriomote-jima Is. / Funauki / 2. V. 2010 / Jun-ya NAITÔ leg. // K. AKITA / Collection / KAC 72874" (NSMT). Paratype: 1 ♂, Funauki (Nishidano-hama), 18–V–2013, J. NAITÔ leg.

*Etymology*. The specific name is given in honor of Dr. Jun-ya NAITÔ who collected the holotype.

*Notes*. This new species can be distinguished from others by the characteristics mentioned in

the lately succeeding key.

*Gnesis onoderai* AKITA et MASUMOTO, sp. nov.

[Japanese name: Ishigaki-zubiro-kimawarimodoki]

(Figs. 6, 31–34)

**Male:** Body oblong-ovate, convex dorsad and rather longitudinally; brownish black, major medial portion of head, pronotum, scutellum and legs with dark purplish reflection and elytra with dark greenish reflection under natural light, apical halves of antennal segment XI, mouth parts, gula, coxae and claws brown, hairs on antennae, mentum, apico-ventral faces of tibiae and ventral sides of tarsi brownish yellow; dorsal surface metallicly, feebly sericeously shining, seven basal segments of antennae, legs and abdomen moderately shining; each surface almost glabrous, except for apical parts of mentum, five apical segments of antennae, apico-ventral faces of tibiae and ventral sides of tarsi haired.

Head transversely subhexagonal, gently inclined anteriad and more steeply so laterad, very weakly microsculptured; clypeus transverse, weakly convex widely in middle, rather steeply inclined in front, impressed at the middle close to the fronto-clypeal border, punctate, the punctures in anterior and lateral parts small and close, those in medio-basal part becoming larger and sparser, apical margin nearly straight in middle, obliquely and slightly roundly narrowed toward genae in lateral parts; fronto-clypeal border sulcate in extremely wide-U-shape; genae gently dilated antero-laterad, flattened, weakly depressed before eyes, closely, finely punctate, with exterior margin rounded; frons wide, gently raised posteriad, weakly flattened in major antero-medial part, sparsely punctate, rather steeply inclined laterad, very weakly sulcate along eyes, with a vague impression in postero-medial part. Eyes subsecuriform in dorsal view, weakly convex laterad, rather obliquely inlaid into head, with diatone about four times the width of the transverse diameter of an eye. Antennae subclavate and gently flattened, hardly reaching base of pronotum, segment IX the widest, ratio of the length of each segment from base to apex: 0.28 0.10, 0.26, 0.18, 0.17, 0.17, 0.17, 0.18, 0.18, 0.19, 0.27.

Pronotum subquadrate with weakly rounded sides, wider than long (4 : 3), widest at basal 1/3, weakly microsculptured; apex weakly produced, slightly narrower than base, finely margined in lateral parts; base weakly produced, very slightly sinuous in lateral parts, bordered by a minutely punctate groove and a rim, the latter sparsely punctulate; sides rather steeply declined to lateral margins, which are bordered by fine grooves and rims, which are fairly visible from above; front angles rounded, hind angles obtusely angular with the corners acute; disc rather strongly convex, irregularly punctate, the punctures in apical and lateral portions becoming smaller and closer, with a pair of impressions along lateral margins close to base. Scutellum slightly wide-triangular, slightly convex in middle, weakly microsculptured, sparsely scattered with microscopic punctures.

Elytra 1.64 times as long as wide, 2.50 times the length and 1.22 times the width of pronotum, widest at basal 2/5, weakly narrowed anteriad, rounded and gradually narrowed posteriad, very slightly constricted at basal 1/5; dorsum strongly convex, highest at basal 1/5; disc with rows of punctures, which are round to ovate, mostly finely striate, and rather foveate in lateral portions; intervals gently convex, microsculptured, scattered with microscopic punctures, weakly micro-aciculate; sides steeply declined to lateral margins, which are very weakly envelope the hind body in basal 2/3, and are bordered by sparsely punctate grooves, and finely rimmed, the rims invisible from above in basal 2/3 (except humeral parts); epipleura rather wide in basal portions, tapering apicad, very finely impressed along interior margins; humeri very weakly swollen; apices roundly produced.

Terminal segment of maxillary palpi subsecuriform, with nearly straight exterior side 1.43 times

the length of the feebly rounded interior, 0.89 times the length of the rounded apical. Mentum shaped in somewhat a cross-section of a tea-cup, strongly raised medio-anteriad and pointed at the middle of apex, rather strongly depressed postero-laterad, ruguloso-punctate; gula gently convex, rather smooth, rather transversely aciculate, with a pair of somewhat crescent-shaped impressions on the borders near apex.

Prosternum somewhat obtrapezoidal, apex very slightly emarginate with fine hairs along margin, anterior portion rather coarsely rugulose, inter-procoxal space and prosternal process continuously narrowed posteriad, ridged along lateral margins, and longitudinally grooved medially, the ridges sparsely, minutely punctate, and the groove flattened, rugulose in anterior part and sparsely minutely punctate in posterior (=apical) part; prosternal process acutely projected in medial part, weakly depressed and roundly produced in lateral parts. Mesoventrite short, strongly depressed and coarsely rugulose in anterior portion, strongly raised in posterior portions, ridged in V-shape, the V-ridges ruguloso-punctate along intero-anterior parts. Metaventrite short, weakly covered with microsculpture, scattered with shallow punctures, weakly, obliquely wrinkled in posterior portion, with a longitudinal impression in posterior half. Abdominal ventrites moderate in size, rather closely punctate, which become finer apicad, ventrites I–III longitudinally wrinkled in basal and lateral parts; anal ventrite with apical margin rounded.

Legs stout; femora rather short-clavate, finely punctulate, profemur with a spine at apical 1/3 on frontal face; tibiae more or less curved interiad and finely haired in about apical 1/4 on interior faces, protibia very weakly gouged in basal 1/3 on interior face; tarsi rather long, ratios of the lengths of pro-, meso- and metatarsal segments: 0.20, 0.13, 0.15, 0.13, 0.54; 0.26, 0.21, 0.22, 0.14, 0.55; 0.45, 0.19, 0.12, 0.57.

Male genitalia slender, gently curved in lateral view, 1.88 mm in length, 0.26 mm in width; basale widest at basal 2/5, weakly narrowed anteriad and roundly so posteriad; fused apicale 0.74 mm in length, subovate in dorsal view, gently convex medially, sparsely, minutely punctate in anterior part, with apices prolonged and acute.

*F e m a l e*: The body more robust, the head wider, the antennae and the legs shorter.

Body length: 8.0–8.5 mm.

*Distribution*. The Ryukyus: Ishigaki-jima Is.

*Type seires*. Holotype: ♂, "JAPAN: Ryukyus / Ishigaki-jima Is. / Omoto, 17. IV. 1993 / H. ONODERA leg. // K. AKITA / Collection / KAC 71927" (NSMT). Paratypes: 1 ♀, same collecting data as for the holotype; 1 ♂, Mt. Omoto-dake, 8–IV–1994, I. HIRAI leg.; 1 ♂, Mt. Omoto-dake, 28–IV–1995, H. KARUBE leg.

*Etymology*. The specific name is given in honor of Mr. Hidehiro ONODERA who collected the holotype.

*Notes*. This new species can be distinguished from others by characteristics mentioned in the lately succeeding key.

***Gnesis helopioides fujitai* AKITA et MASUMOTO, ssp. nov.**

(Figs. 7, 35–39)

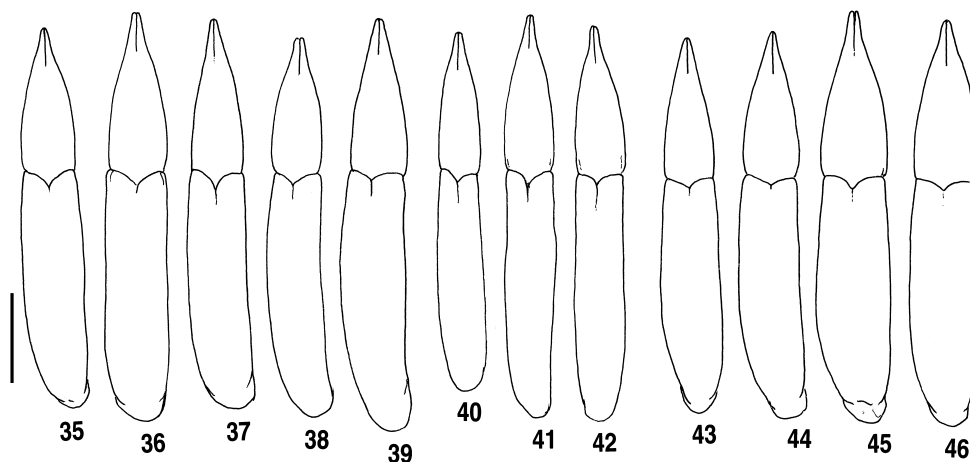
Compared with *G. helopioides helopioides* PASCOE, 1866, (Figs. 40–42) originally described from "Mantchuria", and distributed in main islands of Japan (except Hokkaido), Tsushima and NE. China, this new subspecies possesses the body and legs slenderer; the elytral intervals less convex, with the punctures smaller; the basale of male genitalia wider, 0.24 to 0.26 times as wide as long (*G. h. helopioides*: 0.20 to 0.21 times as wide as long).

Body length: 8.0–11.8 mm.

*Distribution.* Izu Is.: Ô-shima Is., To-shima Is., Nii-jima Is., Shikine-jima Is., Kôzu-shima Is., Miyake-jima Is., Mikura-jima Is., Hachijô-jima Is.

*Type series.* Holotype: ♂, “[SATO~BOROSAWA] / Is. Mikura-jima / Tôkyô Met. / 8th June 1983 / H. FUJITA leg. // K. AKITA / Collection / KAC 84163” (NSMT). Paratypes: Ô-shima Is.: 1 ♀, 4–VII–1971, M. TAKAKUWA leg.; 2 ♂♂, 1 ♀, Motomachi~Okada, 23~24–VI–2012, H. FUJITA leg.; To-shima Is.: 6 ♂♂, 7 ♀♀, 5~6–VI–2011, H. FUJITA leg.; 1 ♀, 13–V–2012, H. FUJITA leg.; 1 ♂, Miyazuka-yama, 10–VII–2010, J. AOKI leg.; 1 ♀, Miyazuka-yama, 6~7–VIII–2013, N. MATSUOKA leg.; Nii-jima Is.: 1 ♂, 27~28–V–1978, S. MORITA leg.; 1 ♂, 21–VI–1995, H. FUJITA leg.; 6 ♂♂, 3 ♀♀, Miyazuka-yama, 5–VII–2012, H. FUJITA leg.; 2 ♀♀, Motomura, 4–VII–2012, H. FUJITA leg.; Shikine-jima Is.: 3 ♀♀, 10–V–2012, H. FUJITA leg.; 2 ♀♀, 6–VII–2012, H. FUJITA leg.; Kôzu-shima Is., 1 ♀, Southern part, 30–VI–2011, H. FUJITA leg.; Miyake-jima Is.: 1 ♂, Tsubota, 14~15–VI–2011, H. FUJITA leg.; Mikura-jima Is.: 1 ♀, 7–VII–1972, K. SAKAI leg.; 1 ♂, 26–VII–1968, T. OHKI leg.; 1 ♂, 3–VIII–1968 T. OHKI leg.; 1 ♀, 4–VIII–1968 T. OHKI leg.; 1 ♂, 1 ♀, 30–IV–1973, M. TAKAKUWA leg.; 1 ♂, VII–1973, M. TAKAKUWA leg.; 2 ♂♂, Sato, 10–VI–1983, H. FUJITA leg.; 1 ♀, ditto, 4~7–VII–2010, M. TAKAKUWA leg.; 1 ♀, Sato~Kawada, 18–V–1986, M. KIMURA leg.; 1 ♂, 2 ♀♀, ditto, 18~19–VI–2011, H. FUJITA leg.; 2 ♂♂, Sato~Kurosakitakao, 16~17–VII–2012, H. FUJITA leg.; 1 ♂, Inane-jinja, 6–VIII–2011, H. FUJITA leg.; 1 ♀, Borosawa, 12–VI–2010, M. TAKAKUWA leg.; 1 ♀, Nangô, 13–VI–2010, M. TAKAKUWA leg.; 1 ♀, 7–VII–1972, K. SAKAI leg.; 3 ♂♂, 1 ♀, 31–VII~1–VII–2003, K. ANDO leg.; Hachijô-jima Is.: 1 ♀, Sueyoshi~Noboryô Pass, 18~22–VII–1985, M. NISHIMURA leg.; 1 ♀, Sueyoshi, 11–VII–1993, S. TSUYUKI leg.; 1 ♀, 5–VI–1995, H. ONODERA leg.

*Etymology.* The specific name is given in honor of Mr. Hiroshi FUJITA who collected many specimens of the type series.



Figs. 35–46. *Gnesis* spp., male genitalia. — 35–39, *G. helopioides fujitai* subsp. nov. (35, Ô-shima Is.; 36, To-shima Is.; 37, Nii-jima Is.; 38, Miyake-jima Is.; 39, Mikura-jima Is.; 35–38, paratypes; 39, holotype); 40–42, *G. helopioides helopioides* PASCOE, 1866 (40, Tsushima; 41, Shikoku, Kôchi; 42, Honshu, Mié); 43, *G. purpurascens okinawanus* (NAKANE, 1968) (Okinawa-jima Is.); 44, *G. p. amamianus* (M. T. CHÛJÔ, 1977) (Amami-ôshima Is.); 45, *G. p. tokaranus* subsp. nov. (Akuseki-jima Is., holotype); 46, *G. p. adachii* subsp. nov., (Me-shima Is., holotype). Scales: 0.5 mm.

***Gnesis purpurascens purpurascens* (NAKANE, 1968)**

[Japanese name: Ryūkyū-zubiro-kimawarimodoki]

*Phaedis helioides purpurascens* NAKANE, 1968, 79 (Type locality: Tokuno-shima, Is.\*).*Distribution.* The Ryukyus: Tokuno-shima Is.*Specimens examined.* 1 ♂, “徳之島三京 (= Tokuno-shima Is., Mikyō) / 11–IV. 1964 / T. NAKAMURA leg. // PARATYPE // *Phaedis helioides* / ssp. *purpurascens* / Det. T. NAKANE 1968 // *Gnesis h. / purpurascens* (N.) / Det. K. MASUMOTO 1993”; 1 ♂, 1 ♀, Mt. Amagi-dake, 1–IV–2013, K. ADACHI leg.*Notes.* NAKANE (1968) described the subspecies *purpurascens* from Tokuno-shima Island and the subspecies *okinawanus* from Okinawa-jima Island under the species *Phaedis helioides* PASCOE, 1866. Later, CHŪJŌ (1977) also described the subspecies *amamianus* under the same species from Amami-ōshima Island.*Gnesis helioides purpurascens* can be distinguished from the nominotypical subspecies, *G. helioides helioides*, by the body rather elongate and less strongly convex, with the dorsal surface bearing purplish reflection, the legs longer and slenderer, and the male genitalia different in shape. We think that it is sufficient to recognize the specific differences by such characteristics. Therefore, we here raise the subspecies *G. helioides purpurascens* up to the species.***Gnesis purpurascens okinawanus* (NAKANE, 1968)**

(Fig. 43)

*Phaedis helioides okinawanus* NAKANE, 1968, 80 (Type locality: Okinawa-jima Is.).*Distribution.* The Ryukyus: Okinoerabu-jima Is. (new record), Okinawa-jima Is., Kume-jima Is., Iheya-jima Is. (new record).*Specimens examined.* Okinoerabu-jima Is.: 1 ♀, Mt. Oo-yama, 7–VIII–1983, H. FUJITA leg.; Okinawa-jima Is.: 1 ♀, Hiji, 6–IV–1970, M. MIYAHARA leg.; 1 ♀, Yonaha-dake, 2–IV–1973, S. NAGAO leg.; 1 ♀, Yona, 8–IV–1973, I. MATOBA leg.; 1 ♀, Chinen-son, Kudeken, 27–V–1998, H. ONODERA leg.; 1 ♀, Kunigami-son, 5–31–VII–1995 emerg., H. ONODERA leg.; 1 ♀, Kunigami-son, Shioya ~ Higashi-son, 23–V–2008, J. AOKI leg.; 1 ♂, Ookawa-rindō, 23–IV–2008, H. ARIMOTO leg.; Iheya-jima Is.: 1 ♂, 24–27–X–2000, A. NISHIYAMA leg.; Kume-jima Is.: 3 ♂♂, 3 ♀♀, Uegusuku-dake, 8–IV–1973, M. MIYAHARA leg.; 2 ♂♂, Mt. Oo-take, 24–25–VIII–1987, K. AKITA leg.; 1 ♂, Kanegusuku, 14–V–1998, H. ONODERA leg.***Gnesis purpurascens amamianus* (M. T. CHŪJŌ, 1977)**

(Fig. 44)

*Phaedis helioides amamianus* M. T. CHŪJŌ, 1977, 12 (Type locality: Yuwan-dake, Amami-ōshima Is.).*Distribution.* The Ryukyus : Amami-ōshima Is.*Specimens examined.* 1 ♂, Akatsuchi-yama, 2–VII–1999, I. HIRAI leg.; 1 ♂, 3 ♀♀, Setouchi-chūō-rindō, 300–500 m, 5–V–1999, K. AKITA leg.; 1 ♂, Yamato-son, Fukumoto, 400–500 m, 21–VII–1999, K. AKITA leg.; 1 ♂, Akatsuchi-yama, 30–VI–2003, Y. KANNO leg.; 1 ♂, Kominato, 20–IV–2013, M. NISHI leg.

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\* In his original description, NAKANE (1968) mentioned the type locality of *Phaedis helioides purpurascens* is “Tokunoshima, Amami Is.”. We examined the type series and confirmed that this is not only incorrect but also inconsistent with the correct locality: “Tokuno-shima Is., Mikyō”.



***Gnesis purpurascens tokaranus*** AKITA et MASUMOTO, ssp. nov.

(Figs. 8, 45)

Compared with *G. purpurascens amamianus* (M. T. CHÛJÔ, 1977), distributed in Amami-ôshima Is., this new subspecies possesses the elytra with a very feeble purplish reflection, and the elytral intervals more strongly convex, and scattered with larger punctures.

Body length: 7.8–9.4 mm.

*Distribution.* Tokara Isls.: Akuseki-jima Is., Nakano-shima Is.

*Type series.* Holotype: ♂, "Omine Forestroad / Akuseki-jima Is. / Tokara Isls., JAPAN / 23. VII. 1986 / Katsumi AKITA leg. // K. AKITA / Collection / KAC 84012" (NSMT). Paratypes: Akuseki-jima Is.: 1 ♀, same collecting data as for the holotype; 1 ♀, 1-IX-2002, S. YOSHIMICHI leg.; Nakano-shima Is.: 1 ♂, 23-V-1988, H. FUJITA leg.; 1 ♀, nr. Satomura, 4-VIII-1980, H. FUJIWARA leg.

*Etymology.* The subspecific name is given after the place where this subspecies is distributed.

***Gnesis purpurascens adachii*** AKITA et MASUMOTO, ssp. nov.

(Figs. 9, 46)

Compared with *G. purpurascens tokaranus* subsp. nov., distributed in Tokara Isls., this new subspecies possesses the elytra almost black without purplish reflection, the intervals more convex, the antennae and the legs blackish brown, the head and pronotum scattered with larger punctures, and the spine of profemur less strongly produced.

Body length: 8.0–10.3 mm.

*Distribution.* Danjo-guntô Isls.: Me-shima Is., O-shima Is.

*Type series.* Holotype: ♂, "Meshima Is. / Danjo Isls. / Nagasaki, JAPAN / 5.V.2007. / Kazuo Adachi leg. // K. AKITA / Collection / KAC 32727" (NSMT). Paratypes: 2 ♀♀, O-shima Is., 14-VI-2002, K. ADACHI leg.

*Etymology.* The specific name is given in honor of Mr. Kazuo ADACHI who collected the type series.

**Key to the Species of the Genus *Gnesis* from Japan**

- 1(2) Profemur with an angular projection not acute (Fig. 28). The Ryukyus (Iriomote-jima Is.).  
..... *G. naitoi* sp. nov.
- 2(1) Profemur with an acute spine. .... 3
- 3(4) Elytra with rows of foveae, which are often fused with one another; intervals raised, often transversely connected with one another. The Ryukyus (Miyako-jima Is., Ishigaki-jima Is., Iriomote-jima Is. and Yonaguni-jima Is.). .... *G. magnipunctatus* (M. T. CHÛJÔ).
- 4(3) Elytra with punctate-striae. .... 5
- 5(6) Dorsal surface almost black, without purplish reflection; body rather short, more strongly convex; legs shorter and more robust; profemur with a spine larger and more acute. Japan (Honshu, Sado, Izu Isls., Oki Isls., Shikoku, Kyushu, Hirado-jima Is., Tsushima, Gotô Isls., Koshiki Isls., Ôsumi-kuro-shima Is., Tanega-shima Is., Yaku-shima Is. and Senkaku Isls.), NE China, Taiwan. .... *G. helopioides* PASCOE.
- 6(5) Dorsal surface with purplish reflection (only *G. purpurascens adachii* subsp. nov. without purplish reflection); body rather elongate, less strongly convex; legs longer and slenderer. ... 7
- 7(8) Body slenderer, less convex; antennae shorter (hardly reaching base of pronotum in male) and

- wider; elytra more strongly shining, widest at basal 2/5, with punctures in rows larger and deeper; legs rather longer, profemur with a spine more acute. The Ryukyus (Ishigaki-jima Is.).  
 ..... *G. onoderai* sp. nov.
- 8(7) Body bolder, more convex; antennae longer (reaching base of pronotum in male) and slenderer; elytra less strongly shining, widest at the middle to apical 2/5, with punctures in rows smaller and shallower; legs rather shorter, profemur with a spine less acute. Danjo Isls. (Me-shima Is. and O-shima Is.), Tokara Isls. (Nakano-shima Is. and Akuseki-jima Is.), the Ryukyus (Amami-ôshima Is., Tokuno-shima Is., Okinoerabu-jima Is., Okinawa-jima Is. and Kume-jima Is.).  
 ..... *G. purpurascens* (NAKANE).

## 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14報)6新種, 3新亜種。——日本産ゴミムシダマシ科甲虫のうち, 北大東島からダイトウスナゴミムシダマシ *Gonocephalum aokii* sp. nov., 沖縄島からオキナワキイロチビゴミムシダマシ *Enanea nakandakarii* sp. nov., 石垣島および西表島からタマヒゲチビゴミムシダマシ *Tyrtaeus ishigakiensis* sp. nov., 奄美大島からアマミクロテントウゴミムシダマシ *Ades nishii* sp. nov. を命名記載した。このうち, タマヒゲチビゴミムシダマシ属はこれまで北米から1種のみが知られていた属で, アジアからは最初の発見となる。

また, ズビロキマワリ属を検討し, 西表島からイリオモテズビロキマワリモドキ *Gnesis naitoi* sp. nov., 石垣島からイシガキズビロキマワリモドキ *G. onoderai* sp. nov., 伊豆諸島からズビロキマワリモドキの亜種 *G. helopioides fujitai* ssp. nov. を記載した。また, 徳之島の *G. helopioides purpurascens* (NAKANE, 1968) を独立種リュウキュウズビロキマワリモドキ *G. purpurascens* (NAKANE, 1968) と認め, それにともない沖縄島の亜種 *G. helopioides okinawanus* (NAKANE, 1968) を *G. purpurascens okinawanus* (NAKANE, 1968) 奄美大島の *G. helopioides amamianus* (M. T. CHÛJÔ, 1977) を *G. purpurascens amamianus* (M. T. CHÛJÔ, 1977) とし, 沖永良部島(初記録), 久米島, 伊平屋島(初記録)の個体群を前者に含めた。さらに, この種の亜種として *G. purpurascens tokaranus* subsp. nov. (トカラ列島: 中之島, 悪石島), *G. p. adachii* subsp. nov. (男女群島: 女島, 男島) を命名記載した。最後に, 日本に分布する本属の種までの検索表を付けた。

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