

CHRYSOMELID-BEETLES OF LOO-CHOO ARCHIPELAGO (III)¹

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The chrysomelid-beetles of the Island Amami-Oshima, Loo-Choo Archipelago, enumerated in this paper are the collection of the Entomological Laboratory of Matsuyama Agricultural College, Ehime Pref., Japan. The collectors of those specimens are Messrs. S. Hisamatsu, T. Edashige, T. Mohri, S. Ueda and J. Fukui of that Laboratory and the collecting-trips of them were performed on March, April and July of the year 1954. The numbers of the species are 22 and of which 4 species are new to science, 5 species (with *-marking) are new to the fauna of Loo-Choo Archipelago and 6 species (with †-marking) are new to the fauna of Amami-Ôshima.

Before going further, I wish to express my gratitude to Prof. Dr. T. Ishihara, chief of that Laboratory, who so kindly gave me this desirable opportunity to examine these interesting species and also to pay my respects to the above-mentioned collectors for their precious contributions to our knowledges on the chrysomelid-fauna of the Loo-Choo Archipelago.

Family CHRYSOMELIDAE

Subfamily LAMPROSOMINAE

1. *Lamprosoma cupreatum* Baly

Localities: Sutaru-tôge (1 Ex., 22. vii); Koniya (1 Ex., 22. vii).

Subfamily EUMOLPINAE

2. *Basilepta amamiense* sp. nov. (Fig. 1)

Body oblong, lustrous. Head deep yellow-brown to red-brown; antennae yellow-brown, with the terminal segments slightly infuscated; mandibles with the apical parts piceous; palpi yellow-brown. Pronotum: ♂, red-brown, with a small and longitudinal blackish patch on the middle; ♀, black, with the medio-anterior area red-brown. Scutellum reddish (♂) or blackish (♀). (These differences of the colorations of pronotum and scutellum in the present examples—only a single male and female—may not be a decisive fact between the sexes, but may be an individual variation). Elytra yellow-brown, with the lateral and sutural margins (except the apical part of each one) black; each elytron with a smaller black spot on the middle of basal area and a larger black spot on the middle (this larger spot contiguous to the black lateral margin). Underside: head red-brown; thorax

¹ (I) Trans. Nat. Hist. Soc. Formosa, XXV, 136-139, pp. 69-89 (April, 1935).

(II) Trans. Nat. Hist. Soc. Formosa, XXV, 142, pp. 203-211 (July, 1935).

black; abdomen black, but one or more apical sternites more or less tinged with dark yellow- or red-brown. Legs yellow-brown, with the trochanters, procoxae and mesocoxae red-brown, and the metacoxae mostly black.

Head exposed, strongly and deeply punctured; vertex markedly convex; frons flattish, with a very short longitudinal sulcus in the centre; clypeus not limited from frons, with the anterior border deeply emarginated; labrum transverse, somewhat narrowed anteriorly, rounded at the front corners, somewhat emarginate-depressed at the anterior border, flattish on the most part of the surface, with a few pubescent-punctures on the middle and also on each side. Antennae filiform, sparsely clothed with long but fine pubescence and moreover thickly clothed with very fine pubescence (excepted the two basal segments); 1st segment the thickest, somewhat curved downwardly; 2nd rather similar in shape to, but much narrower and shorter than, the 1st; 3rd most slender, slightly shorter than the 1st; from the 3rd to 10th the segments gradually increasing their thickness, but slightly decreasing the length; 11th nearly equal in thickness to, but longer than, the 10th and pointed at the apex. Pronotum broader than long, narrowed in front, widest at a little behind the middle and very obtusely angulated at this portion; front border nearly straight, immarginated; four angles tuberculated, with a seta-bearing pore on each; lateral borders rather broadly marginated, basal border narrowly but distinctly marginated, gently arched posteriorly at the median part, but slightly arched anteriorly at each side; dorsal surface strongly convex from side to side, with the latero-anterior areas strongly declined, strongly and closely punctured,

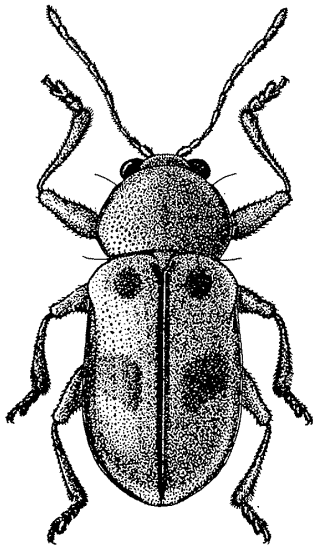


Fig. 1. *Basilepta amamiense*
Chûjô, sp. nov.

but the medio-anterior area more finely and sparsely punctured. Scutellum narrowed posteriorly, rounded at the apex, slightly convex on the dorsal surface, impunctate and smooth. Elytra elongate, a little broader than pronotum, subparallel-sided, rounded at the apex; dorsal surface strongly convex, with a shallow depression just behind the basilar area of each elytron, regularly punctate-striate, but the punctures rather obscure on the apical two-fifths area, interstices of the striae of punctures extremely finely but sparsely punctulate under a high power lens; humeri distinctly elevated, impunctate and smooth. Underside rather sparsely clothed with very fine pubescence and punctures, the punctures on the thorax very large, but on the abdomen very fine; pro-episterna with the anterior border nearly straight. Legs: femora dilated medially and unarmed with a denticle at the underside of each, tibiae dilated terminally, meso- and metatibiae emarginated at each dorso-apical part, 3rd tarsal segment bilobed, claws appendiculate.

♂: Body narrower than the female, especially the width of elytra distinctly narrower than that of the pronotum, and protibiae more strongly dilated terminally.

Length: 3.0 mm (Holotype, ♂), 3.25 mm (Allotopotype, ♀).

Holotype: ♂, Shin-mura, Amami-Ôshima (22. vii. 1954, T. Edashige leg.).

Allotopotype: ♀, do.

This new species is somewhat allied to *Basilepta ovalum* (Weise) from China (Kansu), but may be distinguished from it by the following characters: Body not oval, but oblong, antennae with the terminal segments slightly infuscated, elytral punctures not infuscated, sutural and lateral borders of elytra broadly tinged with black, underside of body mostly black, etc.

The holotype is deposited in the Entomological Laboratory of Matsuyama Agricultural College and the allotopotype is in the author's cabinet.

3.† **Basilepta hirayamai** (Chûjô)

Loc.: Shin-mura (1 Ex., 18. vii).

4. **Colasposoma oberthûri** Jacoby

Loc.: Shin-mura (1 Ex., 18. vii); Naze (1 Ex., 27. vii).

5.* **Pagria signata** (Motschulsky)

Loc.: Naze (1 Ex., 26. vii).

Subfamily GALERUCINAE

6. **Aulacophora bicolor** (Weber) var. **sexpunctata** (Olivier)

Loc.: Nishinakama (1 Ex., 25. iii); Koniya (1 Ex., 27. iii); Shin-mura (1 Ex., 23. vii).

7.† **Aulacophora cattigarensis** (Weise)

Loc.: Yuwan (1 Ex., 2. iv).

8. **Aulacophora femoralis** (Motschulsky)

Loc.: Nishinakama (1 Ex., 25. iii); Shin-mura (1 Ex., 26. iii; 1 Ex., 17. vii; 1 Ex., 18. vii; 1 Ex., 22. vii); Koniya (2 Exs., 27. iii) Yuwan (1 Ex., 2. iv); Gusuku (1 Ex., 22. vii).

9. **Aulacophora nigripennis nitidipennis** Chûjô, comb. nov.

Aulacophora (*Ceratia*) *nitidipennis* Chûjô, Trans. Nat. Hist. Soc. Formosa, XXV, 136-139, pp. 82-83 (1935) (Loo-Choo: Naze, Nago, Iriomote-jima); l. c., 142, pp. 206, 210 (1935) (Loo-Choo: Iriomote-jima, Ishigaki-jima, Okinawa Is., Amami-Oshima).

Loc.: Shin-mura (2 Exs., 18. vii; 1 Ex., 20. vii; 1 Ex., 23. vii); Sutaru-tôge~Naze (1 Ex., 24. vii).

Remarks: According to my later studies, it became clear that *A. nitidipennis* Chûjô is an insular subspecies of *A. nigripennis* Motschulsky (Etud. Ent., V, p. 38, 1857, from Japan), viz.—*A. nitidipennis* is quite conformable with *A. nigripennis* in its general structure and coloration (except the coloration of the elytra which is shining deep blue and often has a purplish shimmer) of the body, together with the shape of male aedeagus.

10. **Morphosphaera coerulea** (Schönfeldt)

Loc.: Sutaru-tôge (1 Ex., 23. iii); Shin-mura (1 Ex., 25. iii); Koniya (1 Ex., 27. iii; 1 Ex., 28. iii).

Subfamily ALTICINAE

11.* *Altica cyanea* Weber

Loc.: Shin-mura (1 Ex., 19. vii).

12.† *Aphthona formosana* Chen

Loc.: Sutaru-tôge (2 Ex., 23. iii; 1 Ex., 22. vii); Naze (1 Ex., 26. vii);
Sutaru-tôge~Naze (1 Ex., 24. vii).

13. *Aphthonomorpha fulva* sp. nov.

Body rather narrowly oval. General colour shining yellow-brown, with the antennae, elytra and legs rather lighter in the coloration than the other parts, and the labrum and apical parts of mandibles somewhat infuscated.

Head: vertex and frons commonly convex, impunctate and smooth; frontal tubercles obliquely placed, distinctly limited from frons by a sharp sulcus, widely separated to each other by the posterior portion of clypeus; clypeus triangular, somewhat raised, very finely but not closely pubescent-punctate. Antennae filiform about three-fifths as long as the body-length, very finely and closely pubescent, with the two or three basal segments which are sparsely pubescent; 1st segment somewhat thickened, a little curved downwardly; 2nd also rather thickened, but much thinner and shorter than the 1st; 3rd the shortest; 4th slightly thicker and rather markedly longer than the 3rd; 5th slightly thicker and rather longer than the 4th; 6th slightly shorter than the 5th, but very slightly longer than the 4th; 7th and 8th subequal to each other, very slightly thicker than, but nearly equal in length to, the 5th; 9th nearly equal in length to, but rather thicker than, the 8th; 10th rather thicker but shorter than the 9th; 11th thicker than the 9th, rather thinner but slightly longer than the 1st, pointed at the apex. Pronotum more than 1.5 times as wide as it is long, rather wider at the anterior marginal area than the basal area and gently rounded at each side; anterior margin nearly straight, not bordered; anterior corners obliquely truncated, with its posterior end sharply angulated and furnished a large fovea-like puncture which bears a fine but very long seta; lateral margins narrowly but distinctly bordered; basal corners with a small tubercle which bears a seta-bearing puncture at each tip; basal margin gently arched posteriorly, not bordered; dorsal surface distinctly convex from side to side, impunctate and smooth. Scutellum obtriangular, with the apex rounded; dorsal surface flat, impunctate and smooth. Elytra somewhat broader than long, only a little widened posteriorly, rounded at behind; dorsal surface strongly convex; each elytron with eleven longitudinal rows of punctures (including a short scutellar row and an external marginal row), the punctures very fine and obsolete at the posterior area, and the rows not striated; humeri distinctly raised, impunctate; elytral epipleurae finely but sparsely pubescent at the posterior part. Underside finely but not closely punctulate; acetabulae open behind. Legs: metatibiae each armed with a short but robust spur; 1st segment of metatarsus longer than the two following segments combined together; 3rd tarsal segment with the apical margin slightly emarginated, but the dorsal surface strongly longitudinally furrowed; claws appendiculated.

♂: Last visible sternite of abdomen gently narrowed posteriorly, with its apical margin much broader than that of the female.

♀: Last visible sternite of abdomen strongly narrowed posterior, so the apical part very narrow.

Length: ca. 1.5 mm.

Holotype: ♂, Sutaru-tôge, Amami-Ôshima (23. iii. 1954, T. Mohri leg.).

Allotopotype: ♀, do.

This new species is separated from *Aphthonomorpha minuta* Chen from Tonkin by the following characters: Body larger and the coloration not deep red or light piceous, frontal tubercles not contiguous, pronotum and interstices of the striate-punctures of elytra not punctulate, etc.

The holotype is preserved in the Entomological Laboratory of Matsuyama Agricultural College and the allotopotype is in the author's cabinet.

14. *Batophila latissima* sp. nov.

Body comparatively broad, oblong, markedly constricted between the pronotum and elytra. General colour black, shining, with a cupreous shimmer on the dorsum; clypeus with the anterior part piceous or red-brown; mouth-parts red-brown, with the apical parts of mandibles piceous or black, the labrum often piceous and the palpi always yellow-brown; antennae yellow-brown, but the 1st segment piceous or black with the basal and apical parts red-brown, and the terminal segments often more or less infuscated; abdomen with the apical part more or less piceous or dark red-brown; legs yellow-brown, with the coxae black and the metafemora piceous or pitchy black (except the apical part reddish or yellowish brown), sometimes the pro- and mesofemora more or less infuscated at their median parts.

Head well exposed, extremely finely shagreened; vertex and frons commonly gently convex, with some very large pubescent-punctures on each side near the eye; frontal tubercles rather absolutely delimited from frons by a transverse linear impression, contiguous, somewhat elevated, together with the interantennal area, and shallowly and longitudinally depressed at the middle; clypeus sparsely pubescent-punctate. Antennae rather robust, rather more than half as long as the body-length, very finely and thickly pubescent (except the two basal segments) and moreover very sparsely clothed with rather longer pubescence on the whole segments; 1st segment the thickest, club-shaped, somewhat curved; 2nd somewhat thickened, but much smaller than the 1st; 3rd most slender, very slightly shorter than the 2nd; 4th nearly equal in length to, but much thinner than the 2nd, slightly thicker and longer than the 3rd; 5th distinctly longer but much thinner than the 2nd; 6th nearly equal in length to, but slightly thicker than, the 4th; 7th to 10th each subequal in length to, but much thicker than, the 6th; 11th subequal in thickness to, but rather longer than, the 10th, rather smaller than the 1st, sharply pointed at the apex. Pronotum transverse, more than 1.5 times as wide as it is long; front border nearly straight, immarginated; front corners obliquely truncated, the truncated part sharply angulated at the posterior end which bears a large seta-bearing pore on it; lateral borders distinctly marginated, nearly straight, narrowed posteriorly; basal corners larger than 90° in the angulation, with a fine seta-bearing pore on it; basal border slightly arched posteriorly, very narrowly but distinctly marginated at each side, but immarginated at the middle;

dorsal surface strongly convex from side to side, without any depression, finely shagreened throughout, rather closely punctured. Scutellum minute, nearly semicircular, flat and smooth on the surface. Elytra nearly oval in outline, but the basal border straight; each elytron with the files of punctures (including an external marginal file) which are very much larger and deeper than those of the pronotum, interstices of these files of punctures impunctate, nearly flat on the inner disc, but more or less costate on the outer disc; humeri not elevated. Hind membranous wings absent. Underside: thorax coarsely punctured and finely but sparsely pubescent; abdomen finely but sparsely pubescent-punctulate; acetabulae open behind; pygidium (the last visible tergite) exposed, nearly semicircular, finely pubescent along the lateral and apical borders. Legs: metatibiae very slightly emarginated at their dorso-apical part, furnished with a robust and sharply pointed spur; tarsi with each 3rd segment distinctly bilobed; metatarsi with each 1st segment rather longer than the two following segments combined together; claws appendiculated.

♂: Last visible sternite of abdomen rather longer than the three preceding sternites (which are markedly constricted medially) combined together, deeply and broadly emarginated at the apical border; a small tergite often exposed between this last sternite and pygidium.

♀: Last visible sternite of abdomen rather shorter than the three preceding sternites (which are not constricted medially as in the male) combined together, gently rounded at the apex.

Length: ca. 1.5 mm.

Holotype: ♂, Sutaru-tôge, Amami-Ôshima (23. iii. 1954, T. Edashige leg.).

Allotype: ♀, Shin-mura, Amami-Ôshima (22. vii. 1954, S. Hisamatsu leg.).

Paratypes: ♂, Higashinakama, Amami-Ôshima (24. iii. 1954, T. Edashige leg.); ♂, Yuwan, Amami-Ôshima (19. iv. 1954, J. Fukui leg.); 2 ♂ ♂, Shin-mura, Amami-Ôshima (22. vii. 1954, S. Hisamatsu leg.).

The present new species is somewhat allied to *Batophila acutangula* Heikertinger from China, Formosa and Japan by the fact that the body is much broader, especially the pronotum distinctly wider, the interstices of the files of punctures (which are much smaller and more sparsely settled) not costate on the inner disc and more weakly elevated on the outer disc, etc.

The holotype and three paratypes are preserved in the Entomological Laboratory of Matsuyama Agricultural College, and the allotype and one paratype are in the author's cabinet.

15.† *Chaetocnema* (s. str.) **basalis** Baly

Loc.: Shin-mura (1 Ex., 26. iii).

16.* *Chaetocnema* (s. str.) **concinnicollis** (Baly)

Loc.: Shin-mura (1 Ex., 17. vii).

17.* *Chaetocnema* (*Tlanoma*) **granulosa** (Baly)

Loc.: Shin-mura (1 Ex., 26. iii).

18. *Nonarthra amamianum* sp. nov. (Figs. 2 & 3)

Body rounded-oval, somewhat convex on the dorsum, lustrous. Head black,

with a slight bronzy shimmer; mouth-parts deep yellow-brown to red-brown, with the labrum blackish; antennae rather pale red-brown, with the two basal segments somewhat infuscated. Pronotum pale yellow-brown. Scutellum black. Elytra metallic blue-black, but the lateral margins very narrowly yellow-brown, with a broad red-brown band just before the middle, the band not completely reaching the sutural margin (which is completely black from the base to apex), but perfectly reaching the lateral margin and extending to the apical part of sutural margin along the lateral and latero-apical margins of the elytron in some width. Underside: head and thorax black, but the lateral areas of prothorax yellow-brown; abdomen deep yellow-brown. Legs yellow-brown, with the pro- and mesocoxae more or less infuscated and the metacoxae black; metafemora with the apical parts black; metatibiae with the dorso-apical ridge and denticles piceous, but the ventro-apical denticles black.

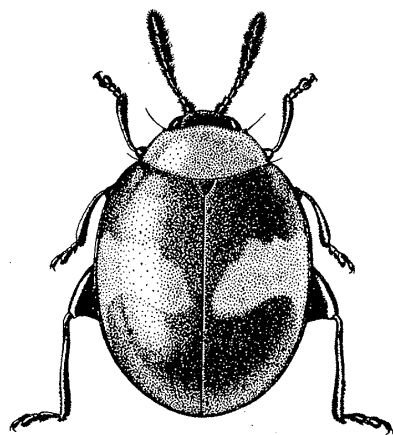


Fig. 2. *Nonarthra amamianum* Chûjô, sp. nov.

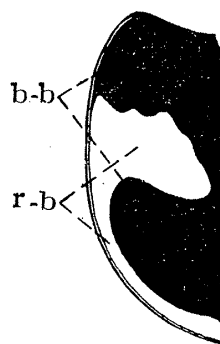


Fig. 3. *Nonarthra amamianum* Chûjô, sp. nov. Diagrammatic scheme of the elytral coloration.

b-b: blue-black;
r-b: red-brown.

Head: vertex somewhat convex, very finely but sparsely punctured; frons slightly convex, finely but sparsely punctured, the punctures larger and deeper than those on the vertex; frontal tubercles large, subtriangular, contiguous to each other at each inferio-posterior corner, distinctly limited from frons by a shallow transverse impression which is filled with large and closely settled punctures, impunctate and smooth on the surface; clypeus subpentagonal, finely but not very closely punctulate, strongly depressed and sparsely pubescent at each side and also at the anterior marginal area; labrum transverse, somewhat narrowed anteriorly, rounded at the anterior corners, gently emarginated at the anterior border, slightly transversely convex on the surface with a few pubescent-punctures in a transverse line. Antennae robust, nine-segmented, finely and thickly pubescent with the exception of three basal segments which are sparsely pubescent; 1st segment dilated, clubated, somewhat curved downwardly; 2nd the shortest, nearly truncate-obconical; 3rd slenderer and thinner but rather longer than the 2nd; 4th nearly equal in length to the 3rd, but strongly triangularly expanded terminally; 5th more strongly expanded terminally than the 4th; 5th to 8th subequal in shape

to each other but usually the latter segment a little broader than the former one among them; 9th nearly equal in width to, but longer than, the 8th, not triangular in outline but nearly oblong with the apex bluntly pointed. Pronotum transverse, more than three times as wide as it is long, strongly narrowed anteriorly, very narrowly margined all round the borders; anterior border straight at the median part, but turned obliquo-forwardly at each side; four angles rather larger than 90° in the angulation, not acuminate at each apex; lateral borders very gently rounded; basal border markedly arched posteriorly; dorsal surface transversely convex, very finely but rather sparsely punctulate under a high power lens, with a large fovea-like puncture (which bears a fine but long seta) on each corner. Scutellum obtriangular, very finely punctured as on the pronotum. Elytra very broadly oblong, with the basal border arched posteriorly, moderately convex and finely but not very closely punctured on the dorsal surface, the punctures much larger than those on the pronotum and confusedly placed, finely but sparsely pubescent along the lateral borders; humeri gently raised. Underside and legs very finely shagreened or extremely minutely strigose, finely and rather closely pubescent; acetabulae closed behind; metatibiae curved downwardly, ridged and denticulated at each side of the apical half of anterior face, without spur but denticulate at the apex; metatarsi with the 1st segment rather longer than the two succeeding segments combined together; 3rd tarsal segments bilobed; claws appendiculated.

Length: 3.25 mm.

Holotype: ♀, Naze, Amami-Ōshima (26. vii. 1954, S. Ueda leg.).

The present new species is nearly related to *Nonarthra variabile* Baly from India, Indo-China, China and Formosa, but may be distinguished from it by the following characters: Head with a bronzy shimmer; elytral coloration consisted of blue-black and red-brown (these two colours differently settled compared with *variabile*); antennae with the terminal segments not infuscated, the basal segments not paler than the terminal segments, but, on the contrary, much darker than the latter, etc.

The holotype is preserved in the Entomological Laboratory of Matsuyama Agricultural College.

19.† *Phyllotreta vittata* (Fabricius)

Loc.: Shin-mura (5 Exs., 23. iii).

20. *Sebaethe balyi* Bates var. *cinctipennis* Weise

Loc.: Shin-mura (2 Exs., 26. iii; 1 Ex., 18. vii; 1 Ex., 19. vii; 1 Ex., 21. vii; 1 Ex., 22. vii); Koniya (1 Ex., 28. iii); Sutaru-tōge~Naze (1 Ex., 24. vii); Naze (1 Ex., 26. vii); Yuwan (1 Ex., 21. iv).

Subfamily CASSIDINAE

21.* *Cassida* (s. str.) *piperata* Hope

Loc.: Shin-mura (5 Exs., 27. iii); Asado (1 Ex., 24. vii).

22.† *Cassida* (*Taiwania*) *circumdata* Herbst

Loc.: Koniya (1 Ex., 27. iii); Yuwan (1 Ex., 29. iii).