

THE CERAMBYCIDAE (COLEOPT.) OF THE RYUKYU ARCHIPELAGO I¹

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Abstract: This is the first of two papers on the longicorn beetle fauna of the Ryukyu Is. This article treats the subfamilies Parandrinae, Prioninae, Spondylinae, Aseminae, Lepturinae and Cerambycinae. The second article, treating the Lamiinae, immediately follows this one. Fifty genera and 80 species (and subspecies) are treated in the first 6 subfamilies. Of these, 3 are described as new species.

This article, the first of two, concerns the subfamilies Parandrinae, Prioninae, Spondylinae, Aseminae, Lepturinae and Cerambycinae. Part 2, immediately following this article, treats the Lamiinae. These papers largely deal with specimens collected in 1963 and 1964 by Japanese and American entomologists on the United States—Japan Science Cooperation Program, supported by the respective governments. This material was largely collected by J. L. Gressitt, John Harrell, Yoshihiro Hirashima, Hiroshi Inoue, Shinsaku Kimoto, Yoshihiko Kurosawa, Syoiti Miyamoto, Yorio Miyatake, Katsura Morimoto, Toyohi Okada, G. A. Samuelson, Takashi Shirozu, Shuniti Ueno, Tsukane Yamasaki and Carl Yoshimoto. Other available material is also included in the study. Among the various sources are collections of: the University of the Ryukyus, largely collected by Prof. Tetsuo Takara; Mr S. Azuma of the Ryukyu Plant Quarantine Service; the 1963 Kyushu University expedition to the Ryukyus (Y. Miyatake); G. E. Bohart and R. M. Bohart in 1951 or 1952, as well as some unreported material taken by them on Okinawa in 1945; Gressitt on various islands in 1932, 1934 and 1945; Jun-ichi Aoki of Tokyo University (1963); United States National Museum; National Science Museum, Tokyo.

Much of the earlier material collected by Gressitt (1932, 1934) was reported by him in a previous review of the Ryukyu longicorn fauna [Gressitt, 1951, Philippine J. Sci. 79 (2): 193-235, 5 figs]. Since the publication of that paper, quite a series of articles has treated the Ryukyu fauna. Many of these are by Masao Hayashi and some by Kazuo Ohbayashi or others. Gressitt's earlier review enumerated 40 species of 24 genera for the subfamilies treated in this first paper of the present review (not counting those recorded from Yakushima and Tanegashima). The present revision enumerates 80 species and subspecies of 50 genera. This represents an increase of 100% in the known fauna since 1951. Three new species are added at this time. Some specimens could not be conclusively identified at present, so further additions or corrections will undoubtedly be necessary later. Also,

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it is very likely that a number of additional species still remain to be collected on these islands.

In this report synonymies and references are not complete. Those cited are in general those referring specifically to Ryukyu records. Not all synonyms and combinations are included for widely distributed species. For genera, citations and synonymy are largely excluded. In some respects, this and the following paper form supplements to the "Longicorn beetles of China" (Gressitt, 1951, *Longicornia* 2: 1-667, 22 pls), superseding Gressitt's 1951 Ryukyu paper, which was also supplementary to the China paper. Thus, after each generic name is given only the original citation, plus the reference to that genus in Gressitt's China monograph. Only in case the genus was not included in that work, or in case there is additional or revised synonymy, is such given in the present two papers.

In the keys to genera, or species, those in parentheses have been recorded from just outside the Ryukyu chain, such as from Yakushima, Tanegashima, or in a few cases from southernmost Kyushu or Taiwan, or represent questionable records needing verification.

The trinominals occurring in the headings and keys indicate subspecies. New names are indicated in the keys by asterisks (*).

The collections are largely housed in the following collections or institutions. The abbreviations indicate the symbols used in the text:

- AMNH (American Museum of Natural History, New York)
BELGIUM (Institut Royal des Sciences Naturelles de Belgique)
BISHOP (Bishop Museum, Honolulu)
BMNH (British Museum, Nat. Hist., London)
CAS (California Academy of Sciences, San Francisco)
FES (Forestry Experiment Station, Tokyo)
HU (Hokkaido University, Sapporo)
KU (Kyushu University, Fukuoka)
NIAS (National Institute of Agricultural Sciences, Tokyo)
NSM (National Science Museum, Ueno, Tokyo)
OM (Osaka Municipal Museum)
TARI (Taiwan Agriculture Research Institute, Taipei).
TAU (Tokyo Agricultural University)
TKU (Tokyo Kyoiku University)
UR (University of the Ryukyus, Shuri, Naha)
USNM (United States National Museum, Washington)

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Museum by Setsuko Nakata, Carol Nakashige, Joan Tursellino, J. S. W. Marr, Helen Tong and Barbara Downs. The last three prepared most of the illustrations.

ZOOGEOGRAPHY

The Ryukyu fauna has been termed a dominantly Oriental, depauperate intergradation between Oriental and Palearctic fauna along the insular fringe of the Asiatic continent (Gressitt, 1957, Proc. Eighth Pac. Sci. Congr. 3A : 1533-38). The Ryukyu Archipelago has at different times had different connections with neighboring areas, such as southern Japan, Taiwan, or the mainland of S China. It has been connected with these both jointly and separately. For instance, it has joined Japan and Taiwan, and it has extended as an eastward peninsula of S China, through Taiwan or independent of Taiwan. In some groups, more of its affinities appear to be with Japan, and this is to some degree the situation in the Cerambycidae, although relationships with Taiwan and S China are also obvious and very strong. In any case, the representation is largely Oriental.

The islands have been partially submerged to greater or lesser degrees at various periods. As a peninsula, of course, they are greatly submerged now. Extensive parts of the present isles consist of raised coral rock, indicating former greater subsidence. In spite of depauperization from subsidence, the coleopterous fauna is not particularly poor, and additional species are constantly coming to light. Thus the islands could not have been completely submerged in very recent times. Of course much recolonization could have taken place by means of air currents, birds, drift and man, but the fact that many large, heavy and delicate species are present (in other words a very harmonic fauna), indicates that the fauna is essentially continental and not primarily dispersed over sea. The fauna of the island chain seems to represent almost 25-30% as many species as occur in Taiwan or Japan in the respective groups. This is considerable in the light of the small relative land areas of the Ryukyu chain. Different endemic elements in the fauna, sometimes of unrelated species in the same genus, are probably the result of intrusions at different periods during different land connections.

In comparing the vertebrate and insect faunas, the greater poverty of the former is apparent, particularly with the mammals, which are most vulnerable to environmental change, are liable to extinction from effects of dense human population, and are least adapted for crossing water barriers. The reptiles, however, are quite well represented in the Ryukyus as compared with Japan. On the other hand, reptiles are notably poor in species in Japan as compared with most groups, and are of course scarcer in cooler countries.

It is generally accepted that the Ryukyu Is. are a part of the Oriental Region, with the northern limit of the Region at the upper end of the Ryukyu Chain between Amami-Oshima and Yakushima (just above the Tokara Is.), or between Yakushima and Kyushu. This may suggest conflict with the idea that the Ryukyu fauna is closer, or fully as close, to that of Japan as to that of Taiwan. Although Japan is Palearctic, it nevertheless has many Oriental intrusions, through the Ryukyus, China, Korea or otherwise. It is primarily with these Oriental elements in Japan that the Ryukyu fauna has so much affinity. When this is added to the affinities with representatives in Taiwan and S China, a dominant Oriental constituency appears strongly evident. This also suggests that the Ryukyu Chain, when it was an isthmus between S China (and Taiwan) and Japan, was an important avenue of

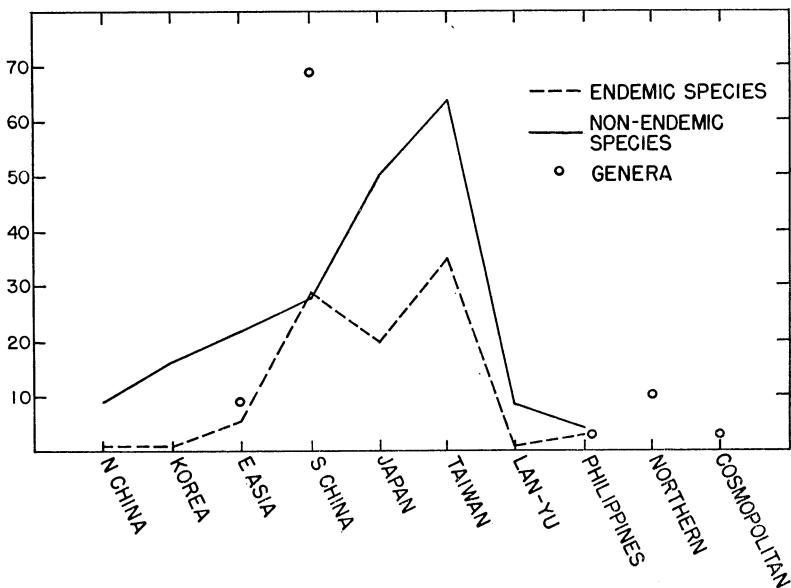


Fig. 1. Graph showing relationships of Ryukyu longicorns. Vertical scale is number of species or genera (in common with various areas, or dominantly of certain distribution). Solid line indicates distribution of non-endemic species. Dashed line indicates location of close relatives of endemic Ryukyu species.

immigration of Oriental elements to Japan.

In the following discussion, the entire family Cerambycidae is considered, thus applying to both this paper and the next.

Of the 96 Ryukyu genera of Cerambycidae (entire family), 69 are primarily Oriental in distribution (though a number of them are Oriental genera extending into southern Japan), 9 are East Asian, 3 are cosmopolitan, 1 is Old World, 3 are primarily Philippine, 1 of wide southern distribution, and 10 of wide northern distribution (Holarctic or Palearctic). As might be expected, the influence from Japan is conspicuously strongest in the Amami group, and that from Taiwan in the Sakishima group, both on generic and species levels.

Of the 3 endemic genera, all are Oriental in their relationships.

Of the 101 non-endemic species, 9 occur in N China, 16 in Korea, 27 in S China, 50 in Japan (mostly southern Japan), 64 in Taiwan, 8 on Lan-yu (Botel-Tobago) and 4 in the Philippines. Also, 10 occur on Hainan I., 6 in Micronesia, 7 in SE Asia, 9 in Burma-India and 1 in Europe. Of the 97 endemic species, 5 have their relationships in E Asia, 1 in N China, 1 in Korea, 63 in S China or Taiwan (28 more particularly in S China and 35 more particularly in Taiwan), 20 in Japan, 1 on Lan-yu (Botel-Tobago) and 3 in the Philippines. These relationships are crudely indicated in the graph (fig. 1). It shows, numerically, the geographical occurrence of the non-endemic species, the concentrations of closest relatives of the endemic species, and the dominant ranges of the Ryukyu genera.

The above represent a total of 198 kinds, consisting of 178 different species, and 20 additional subspecies. Of the latter, 19 are endemic and 1 is non-endemic.

KEY TO SUBFAMILIES

1. Tarsi pentamerous, lacking pads, segment 3 not dilated 2
Tarsi pseudotetramerous, with pads, segment 3 dilated 3
2. Pronotum with lateral margins Parandrinae
Pronotum lacking lateral margins Spondylinae
3. Head generally obliquely inclined anteriorly; protibia without mesial sinus; last maxillary palpal segment obtuse or truncate apically 4
Head vertical or retracted; protibia with mesial sinus; last segment of maxillary palpus pointed apically Lamiinae
4. Pronotum lacking lateral margins; labrum free 5
Pronotum with lateral margins; labrum fused with epistoma Prioninae
5. Stridulatory plate of mesonotum divided by a median line; wing frequently with a closed cell in anal sector 6
Stridulatory plate of mesonotum large, undivided; wing without closed cell in anal sector Cerambycinae
6. Head short, not narrowed behind eyes; procoxa subglobular; antennal segment 2 longer than broad Aseminae
Head elongate, narrowed behind eyes; procoxa conical; antennal segment 2 not longer than broad, much less than 1/2 as long as 3 Lepturinae

Subfamily PARANDRINAE

Genus **Parandra** Latreille

Parandra Latr., 1804, Hist. Nat. Crust. Ins. 11: 252.—Gress., 1951, Longic. 2: 9.

- Elytron with 2 strongly raised costae; anterolateral angle of prothorax strongly angulate; ♂ with lateral margins of pronotum nearly parallel on anterior 2/3; length 18–20 mm..... *formosana*
- Elytron with costae not strongly raised; anterolateral angle of prothorax weakly angulate; ♂ with pronotum broadest apically, with lateral margins weakly narrowed posteriorly on anterior 2/3; length 18–22 mm *shibatai*

Parandra formosana Miwa and Mitono

P. formosana Miwa & Mit., 1939, Trans. Nat. Hist. Soc. Formosa 29 (187): 92, fig. (C Formosa; TARI).—Hay., 1963, Ent. Rev. Japan 15 (2): 51, pl. 7, fig. 1 (Ishigaki).

DISTRIBUTION: Ryukyus (Ishigaki), Taiwan.

Parandra shibatai Hayashi

P. janus: Kano, 1938, Annot. Zool. Japon. 17: 115, pl. 8, fig. 1 (Botel Tobago).—Hay., 1961, Ent. Rev. Japan 13 (2): 36, pl. 9, fig. 1 (Amami-Oshima).

P. shibatai Hay., 1963, Ibid. 15 (2): 50 (Amami-Oshima; Shibata).

DISTRIBUTION: Ryukyus (Amami-Oshima), Lan-yu (Orchid I.).

Subfamily PRIONINAE

1. Metepisternum subparallel-sided 2

- Metepisternum distinctly and gradually narrowed posteriorly 3
2. Lateral margin of prothorax entire, not strongly toothed, or with a single tooth ;
scape short (Eurypodini) **Eurypoda**
- Lateral margin of prothorax with many teeth ; scape long (Macrotomini) **Macrotoma**
3. Antenna cylindrical, segment 3 several times as long as 1 ; prothorax generally un-
toothed ; elytron entire (Megopidini) **Megopis**
- Antenna flattened ; segment 3 only a little longer than 1 ; prothorax with a basal
tooth at side ; elytron abbreviated (Anacolini) **Psephactus**

Tribe MACROTOMINI

Genus **Macrotoma** Serville

Macrotoma S., 1832, Ann. Soc. Ent. France **1**: 137.—Gress., 1951, Longic. **2**: 10.

Macrotoma (Bandar) fisheri obscuribrunnea Hayashi

M. (B.) fisheri ssp. *obscuribrunnea* Hay., 1962, Ent. Rev. Japan **15** (1) : 2, pl. 1, fig. 1 (Ishigaki; Hayashi coll.).

DISTRIBUTION: Ryukyus (Ishigaki).

Tribe EURYPODINI

Genus **Eurypoda** W. Saunders

Eurypoda Saund., 1853, Trans. Ent. Soc. Lond. ser. 2, **2**: 109.—Gress., 1951, Longic. **2**: 12.

Eurypoda (Neopriion) batesi Gahan

E. batesi Gah., 1894, Ann. Mag. Nat. Hist. ser. 6, **14**: 225 (Japan: Yamaguchiya; BMNH).
E. (Neopriion) batesi: Hay., 1961, Ent. Rev. Japan **13** (2) : 36 (Amami-Oshima).

MATERIAL EXAMINED: Tokunoshima: 1, Mikyo, 160 m, 24.VII.1963, Inoue (TAU).

DISTRIBUTION: Japan (Honshu, Shikoku, Yakushima), Ryukyus (Amami-Oshima, Tokunoshima, Okinawa), SW China, N Vietnam.

Tribe MEGOPIDINI

Genus **Megopis** Serville

Megopis Serv., 1832, Ann. Soc. Ent. France **1**: 161.—Gress., 1951, Longic. **2**: 9.

Spinimegopis Ohbay., 1963, Fragmenta Col. **2** : 7.

1. Prothorax not distinctly toothed at lateral angles (*Aegosoma*) 2
- Prothorax distinctly toothed at lateral angles (*Spinimegopis*) ; entire dorsum reddish brown ; length 41 mm **kawazoei**
2. Prothorax subtrapeziform ; dorsum red-brown to dull brown ; antenna moderately tuberculate ; length 30–55 mm **sinica**
- Prothorax strongly rounded at side, strongly convex ; elytron rather pale ; antenna strongly tuberculate ; length 65 mm **validicornis**

Megopis (Aegosoma) sinica (White)

Aegosoma sinicum Wh., 1853, Cat. Col. Brit. Mus. 7: 30 (China: Shanghai; BMNH).

Megopis sinica: Kato, 1933, Three Color Ill. Ins. Japan 9: pl. 16, fig. 12.—Mitono, 1940, Cat. Col. Japonic. 8: 6 (Amami-Oshima, Okinawa).

M. (A.) sinica sinica: Gress., 1951, Phil. J. Sci. 79 (2): 205.

Hosts: *Populus*, *Fraxinus*, *Mallotus*, *Salix*, *Pinus*.

DISTRIBUTION: Japan, Ryukyus (Amami-Oshima, Okinawa), Taiwan, Korea, China, Burma.

Megopis (Aegosoma) validicornis Gressitt

M. (A.) validicornis Gr., 1951, Phil. J. Sci. 79 (2): 205 (Ishigaki; TARI).

DISTRIBUTION: Ryukyus (Ishigaki).

Megopis (Spinimegopis) kawazoei Hayashi

M. (Aegosoma) kawazoei Hay., 1961, Ent. Rev. Japan 13 (2): 36, pl. 9, fig. 2 (Amami-Oshima; Hayashi coll.).

M. (S.) kawazoei: Ohbay., 1963, Icon. Ins. Japon. Nat. Ed. 2: 267, pl. 134, fig. 6.

DISTRIBUTION: Ryukyus (Amami-Oshima).

Tribe ANACOLINI

Genus **Psephactus** Harold

Psephactus Har., 1879, Dtsch. Ent. Zschr. 23: 367.—Gress., 1951, Longic. 2: 28.

Psephactus remiger insularis Hayashi

P. remiger insularis Hay., 1961, Ent. Rev. Japan 13 (2): 37, pl. 9, fig. 3 (Amami-Oshima; Shibata coll.; also Yakushima).

MATERIAL EXAMINED: Amami-Oshima: 4, Yuwan-dake, 550 m, 16, 17. VII. 1963, Kurosawa (1, NSM), Yoshimoto (3, BISHOP).

DISTRIBUTION: Japan (Yakushima), Ryukyus (Amami-Oshima).

Subfamily SPONDYLINAE

Genus **Spondylis** Fabricius

Spondylis Fabr., 1775, Syst. Ent., 159.—Gress., 1951, Longic. 2: 32.

Spondylis buprestoides (Linnaeus)

Attelabus buprestoides L., 1758, Syst. Nat. ed. 10, 388 (Europe).

S. buprestoides: Mitono, 1940, Cat. Col. Japonic. 8: 1 (Okinawa).—Gress., 1951, Phil. J. Sci. 79 (2): 206.

MATERIAL EXAMINED: Amami-Oshima: Iki-jima, 1. X. 1910, J. C. Thompson (CAS). Okinawa: 2 (UR).

Host: *Pinus*.

DISTRIBUTION: Europe, Siberia, China, Korea, Japan, Ryukyus (Amami-Oshima, Okinawa).

Subfamily ASEMINAE

Genus **Arhopalus** Serville

Arhopalus Serv., 1834, Ann. Soc. Ent. France 3: 77.—Gress., 1951, Longic. 2: 33.

Arhopalus (Cephallalus) unicolor (Gahan)

Criocephalus unicolor Gah., 1906, Fauna India, Ceramb., 97 (Assam).

?*A. sharpi*: Kawasaki, 1955, Shin Konchū 8(5): 14.—Hay., 1960, Ent. Rev. Japan 11(1): 22.
A. (Cephallalus) unicolor: Hay., 1960, l. c., 21 (Amami-Oshima); 1961, Ibid. 13 (2): 37.

MATERIAL EXAMINED: Okinawa: 1, 13. IV. 1955, Takara; 1, Naha, 16. V. 1963, Takara (UR). Minami-Daito: 1, "S. Borodino I.", 15. IV. 1960, Takara; 3, 11. III. 1964, Taira (BISHOP, UR). New to Okinawa and Minami-Daito.

Host: *Pinus khasya*.

DISTRIBUTION: Assam, S China, Korea, Japan (Tsushima, Honshu, Shikoku, Kyushu), Ryukyus (Amami-Oshima, Okinawa, Minami-Daito).

Subfamily LEPTURINAE

1. Elytron not greatly abbreviated; hind wing folded posteriorly 2
Elytron greatly abbreviated in both sexes; rounded behind; hind wing not folded **Necydalis**
2. First metatarsal segment as long as, or longer than, remainder combined 3
First metatarsal segment shorter than remainder combined; prothorax trapeziform, not distinctly collared; antennal segment 3=4, shorter than 1 **Neosalpinia**
3. Antennal segments slender, not tufted with hairs; elytron narrowed postmedially.....4
Antennal segments stout, tufted with hairs at apices of segments; elytron as broad postmedially as near base **Formosopyrrhona**
4. Prothorax broad at base, with basal angles produced over humeri 5
Prothorax narrow at base, with basal angles not produced over humeri; elytron depressed just behind base, rounded apically **Pseudalosterna**
5. Abdomen not much narrower than metathorax; elytron not extremely narrow.....6
Abdomen cylindrical, much narrower than metathorax; elytron narrow 8
6. Antennal segments with ectoapical angles not strongly and acutely produced 7
Antennal segments with ectoapical angles strongly and acutely produced; body largely red **Ephies**
7. Elytron somewhat rounded or subtruncate apically, fairly short **Aredolpona**
Elytron large, generally obliquely truncate apically **Leptura**
8. Antennal segments slender, cylindrical **Strangalia**
Antennal segments slightly thickened preapically, oblique apically **Pygostrangalia**

Genus **Neosalpinia** Matsushita

Neosalpinia Mats., 1934, J. Fac. Agr. Hokkaido Univ. 34: 303 (type: *N. lepturoides* Mats.;

Okinawa). Placed in Callidiopini by Matsushita.

Neosalpinia lepturoides Matsushita

N. lepturoides Mats., 1933, J. Fac. Agr. Hokkaido Univ. **34**: 34, pl. 2, fig. 15 ab (Okinawa; HU).—Hay., 1960, Ent. Rev. Japan **11** (1): 22 (Amami-Oshima); 1961, *Ibid.* **13** (2): 37 (Tokunoshima).

Caraphia lepturoides: Ohbay., 1963, Icon. Ins. Japon. Col. Nat. Ed. **2** (Col.): pl. 135, fig. 11.

MATERIAL EXAMINED: Okinawa: 12, Shuri, 50–100 m, 29. IV–2. VI. 1959, Takara (BISHOP, UR); 3, same loc., 20. IV–18. V. 1960, Takara; 3, Koza, 18. V. 1961, Takara.

DISTRIBUTION: Japan (Honshu, Shikoku, Kyushu, Yakushima), Ryukyus (Amami-Oshima, Tokunoshima, Okinawa).

Genus **Pseudallosterna** Plavilstshikov

Pseudallosterna Plav., 1934, Ent. Blätter. **30**: 131 (type: *P. orientalis* Plav.).

Leptura (*Pseudallosterna*): Tamanuki, 1942, Fauna Japonica **2**: 66, 84, 85.

Anoplodera (*Anoploderomorpha*): Gress., 1951, Longic. **2**: 77, 78, 82 (part).

Pseudallosterna takagii Hayashi

P. takagii Hay., 1961, Ent. Rev. Japan **13** (2): 38 in key, pl. 9, fig. 4 (Amami-Oshima; HU).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Genus **Aredolpona** Nakane and Ohbayashi

Anoplodera: Gress., 1951, Longic. **2**: 81 (part).

Aredolpona Nak. & Ohbay., 1957, Sci. Rep. Saikyo Univ. **2** (4): A 244 (50) (type: *Leptura rubra* Linn.). Synonyms or subgenera are *Corymbia*, *Brachyleptura*, *Marthaleptura*.

Body shiny, red or black; length 12–13 mm *hirayamai*

Body opaque, red or black; length 10–10.5 mm *dissimilis*

Aredolpona dissimilis (Fairmaire)

Leptura dissimilis Fairm., 1900, Ann. Soc. Ent. France **68**: 639 (China: Fukien).

A. dissimilis: Hay., 1961, Ent. Rev. Japan **13** (2): 39 (Amami-Oshima).

A. dissimilis f. *rubromarginata* Hay., 1961, l. c. (Amami-Oshima; NIAS).

DISTRIBUTION: China (Fukien, Sikang), Ryukyus (Amami-Oshima).

Aredolpona hirayamai (Matsushita and Tamanuki)

Leptura hirayamai Mats. & Tam., 1942, Dobutsugaku Zasshi **54** (2): 80, fig. 2 (Formosa, not Japan; HU).

A. hirayamai: Hay., 1961, Ent. Rev. Japan **13** (2): 39, pl. 9, fig. 6 (Amami-Oshima).

A. hirayamai f. *atrofusca* Hay., 1961, l. c. (Amami-Oshima; HU).

DISTRIBUTION: Ryukyus (Amami-Oshima), Taiwan.

Genus **Leptura** Linnaeus

Leptura L., 1758, Syst. Nat. ed. 10, 397.—Gress., 1951, Longic. 2: 92.

- Undersides of tarsal segments 1–2 lacking a smooth narrow groove (*Leptura*) ; elytron golden banded with black *amamiana*
 Undersides of tarsal segments 1–2 with a smooth narrow groove (*Pedostrangalia*) ; elytron red *coccinea*

Leptura (Leptura) amamiana amamiana Hayashi

L. auratopilosa ssp. *amamiana* Hay., 1960, Ent. Rev. Japan 11 (1) : 22, text fig. 2 (Amami-Oshima).

L. (L.) amamiana : Hay., 1961, Ibid. 13 (2) : 39, pl. 9, fig. 7 (Amami-Oshima).

Hosts: flowers of *Ardisia sieboldi* and *Wendlandia formosana*.

DISTRIBUTION: Ryukyus (Amami-Oshima).

Leptura (Leptura) amamiana watanabei Hayashi

L. (L.) amamiana ssp. *watanabei* Hay., 1962, Ibid. 15 (1) : 2, pl. 1, fig. 2 (Okinawa; Kojima coll.).

DISTRIBUTION: Ryukyus (Okinawa).

Leptura (Pedostrangalia) coccinea (Mitono)

Strangalia (s. s.) *coccinea* Mit., 1936, Trans. Nat. Hist. Soc. Formosa 26: 423 (N Formosa; TARI).

S. (Paranaspia) coccinea : Tamanuki, 1942, Fauna Nipponica 10: 8, 15, 165, fig. 202 (Ryukyu).

L. (P.) coccinea : Gress., 1951, Phil. J. Sci. 79 (2) : 207.

DISTRIBUTION: Taiwan, Ryukyus (island not specified).

Genus **Strangalia** Serville

Strangalia Serv., 1835, Ann. Soc. Ent. France 4: 220.—Gress., 1951, Longic. 2: 104.

Sulcatostrangalia Ohbayashi, 1961, Ent. Rev. Japan 12 (1) : 17 (type: *Strangalia gracilis* Gress.).

Insularestrangalia Hayashi, 1961, Ibid. 13 (2) : 40. (type: *Strangalia longicornis* Gress.)

Strangalia (Sulcatostrangalia) gracilis Gressitt

S. (Strangalina) gracilis Gr., 1934, Phil. J. Sci. 55: 381 (Amami-Oshima; CAS).

S. (s. s.) gracilis : Gr., 1951, Ibid. 79 (2) : 207.

S. (Sulcatostrangalia) gracilis : Hay., 1961, Ent. Rev. Japan 13 (2) : 41, pl. 9, figs. 9, 13, 16 (Amami-Oshima).

Hosts: flowers of *Ardisia sieboldi*, *Wendlandia formosana*.

DISTRIBUTION: Ryukyus (Amami-Oshima).

Strangalia (Insularestrangalia) longicornis Gressitt

S. (Strangalina) longicorne Gr., 1934, Phil. J. Sci. 55: 382 (Amami-Oshima; USNM).

S. (s. s.) longicornis: Gr., 1951, *Ibid.* **79** (2) : 207.

S. (Insularestrangalia) longicornis: Hay., 1961, Ent. Rev. Japan **13** (2) : 40, pl. 9, figs. 8.

Mimostrangalia longicornis: Ohbay., 1963, Icon. Ins. Japon. Col. Nat. Ed. 2 (Col.): pl. 142, fig. 3.

Hosts: flowers of *Ardisia sieboldi*, *Wendlandia formosana*.

DISTRIBUTION: Ryukyus (Amami-Oshima).

Genus **Pygostrangalia** Pic

Strangalia (Pygostrangalia) Pic, 1957 (April), Bonner Zool. Beitr. **8** (1) : 76 [type: *S. (P.) invittaticollis* Pic, 1957; Fukien].

Idiostrangalia Nakane & Ohbayashi, 1957 (August), Sci. Rep. Saikyo Univ. **2** (4) : 49 (type: *Strangalia contracta* Bates, 1884; Japan).

Pygostrangalia: Hayashi, 1959, Ent. Rev. Japan **10** (2) : 61; 1960, Niponius **1** (6) : 18.

Nanostrangalia Nakane & Ohbay., 1959, Sci. Rep. Kyoto Pref. Univ. **3** (1) : 65 [type: *Strangalia (Strangalina) chujoi* Mitono, 1938; Taiwan].

Pygostrangalia (Idiostrangalia) maruokai Hayashi

P. (I.) maruokai Hay., 1963, Ent. Rev. Japan **15** (2) : 52, pl. 7, fig. 2 (Amami-Oshima; Hayashi coll.).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Genus **Ephies** Pascoe

Ephies Pasc., 1866, Proc. Zool. Soc. Lond. **1866** : 506.—Gress., 1951, Longic. **2** : 120.

Ephies sp.

Nakane & Ohbayashi (1961, Fragmenta Coleopt. **1** : 6) record as specimen of this genus from Amami-Oshima, without antennae, in the Imperial Institute of Biology. The specimen appears to be different from both *E. japonicus* Nakane & Ohbayashi and *E. coccineus* Gahan.

DISTRIBUTION: Ryukyus (Amami-Oshima).

Genus **Formosopyrrhona** Hayashi

Formosopyrrhona Hay., 1957, Akitu **6** : 37 (type: *Corennyss cinnabarina* Gress.).

Formosopyrrhona satoi (Hayashi)

Pyrocalymma satoi Hay., 1957, Ent. Rev. Japan **8** (2) : 45, fig. 1 (Amami-Oshima; Hayashi coll.).

F. satoi: Hay., 1961, *Ibid.* **13** (2) : 41 (Amami-Oshima).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Subfamily CERAMBYCINAE

- | | | |
|----|--|----|
| 1. | Eyes coarsely faceted (with an exception in Obriini couplet 15)..... | 2 |
| | Eyes finely faceted..... | 17 |

- 2 (1). Mesocoaxal cavity open externally to epimeron..... 3
 Mesocoaxal cavity closed externally 9
- 3 (2). Prosternal process broad, strongly widened apically (Cerambycini) 4
 Prosternal process weakly broadened apically, or at least very narrow between coxae..... 6
- 4 (3). Procoxal cavities rounded externally 5
 Procoxal cavities strongly angulate exteriorly; prothorax rounded laterally; elytron smooth and evenly pubescent..... (*Mallambyx*)
- 5 (4). Prothorax tuberculate laterally; elytral pubescence irregular; antenna of ♂ more than 2× as long as body *Pseudaeolesthes*
 Prothorax not tuberculate laterally; elytral pubescence fairly regular; antenna of ♂ less than 2× as long as body *Margites*
- 6 (3). Procoxal cavity more or less angulate externally; antenna always ciliate beneath... 7
 Procoxal cavity strongly angulate externally, exposing trochantin; antenna slender, not conspicuously ciliate beneath; ligula corneous (*Methiini*); pronotum smooth above, feebly nodose at side..... *Comusia*
- 7 (6). Maxillary palpus hardly longer than labial palpus; ligula membranous (*Hesperophanini*) 8
 Maxillary palpus distinctly longer than labial palpus; ligula corneous; prothorax not tuberculate laterally (*Achrysonini*); pronotum with 3 longitudinal raised areas on disc..... *Nortia*
- 8 (7). Head with a deep arcuate impression between clypeus and frons; mandible of ♂ with a dorsal crest or carina *Gnatholea*
 Head lacking a deep arcuate impression between clypeus and frons; mandible of ♂ lacking a crest or carina; antennal supports angulate or spined internally *Stromatium*
- 9 (2). Antennal segments not spined..... 10
 Some of basal antennal segments spined distally (*Phoracanthini*); generally antennal segments 3–5 or 3–6 spined endoapically *Allotraeus*
- 10 (9). Abdominal segment 1 normal, not greatly enlarged, 2–5 not greatly reduced (*Callidiopini*) 11
 Abdominal segment 1 greatly enlarged, often as long as 2–5 combined, some of which are greatly reduced and modified (*Obriini*) 15
- 11 (10). Prothorax longer than broad, cylindrical or feebly rounded at side..... 12
 Prothorax broader than long, strongly rounded at side; antenna densely ciliated (*Gelonaetha*)
- 12 (11). Tibiae curved..... 13
 Tibiae straight 14
- 13 (12). Pronotum rather smooth above; femora pedunculate-clavate; antenna shorter than body in ♀ *Stenyrinum*
 Pronotum tuberculate above; femora gradually swollen; antenna longer than body in ♀ *Parasalpinia*
- 14 (12). Prothorax nearly 2× as long as broad; antenna and legs very slender; antenna distinctly longer than body; meso- and metafemora clavate for less than distal 1/2 of each..... *Stenodryas*
 Prothorax not nearly 2× as long as broad, at most slightly longer than broad;

- antenna and legs not very slender; antenna rarely more than slightly longer than body; meso- and metafemora clavate for more than distal 1/2 of each *Ceresium*
- 15 (10). Eyes coarsely facetted..... 16
 Eyes finely facetted; prothorax subcylindrical, weakly swollen at middle; femora pedunculate-clavate..... *Pseudidphra*
- 16 (15). Antennal segment 3 about as long as 4, bearing strong bristles; prothorax not much longer than broad, tuberculate at side..... *Stenhomalus*
 Antennal segment 3 longer than 4, both generally bearing strong bristles on inner side of apex; prothorax much longer than broad, narrowed towards base, weakly swollen near middle *Longipalpus*
- 17 (1). Mesocoxal cavity open externally to epimeron 18
 Mesocoxal cavity closed externally (Cleomenini) 37
- 18 (17). Procoxal cavity angulate externally..... 19
 Procoxal cavity rounded externally..... 25
- 19 (18). Procoxa not projecting above intercoxal process, its cavity open posteriorly (Rosaliini)..... 20
 Procoxa prominent, strongly projecting above intercoxal process, more or less cylindrical; elytron abbreviated (Molorchini)..... 21
- 20 (19). Body flattish, red or blue, mat, above, with black spots; metafemur not reaching elytral apex; antenna tufted..... *Rosalia*
 Body slender, not flattened, banded with silvery pubescence; metafemur reaching elytral apex; antenna hardly tufted..... *Acrocyrtidus*
- 21 (19). Elytron abbreviated, not reaching abdominal apex, or at least strongly dehiscent... 22
 Elytron not abbreviated, reaching apex of abdomen *Kurarua*
- 22 (21). Elytron very short, rounded posteriorly..... 23
 Elytron strongly narrowed and dehiscent; metafemur suddenly swollen apically *Merionoeda*
- 23 (22). Elytron about 1/3 as long as abdomen, or shorter; prothorax rounded at side... 24
 Elytron about 1/2 as long as abdomen; prothorax often tuberculate at side...
 *Molorchus*
- 24 (23). Prothorax with evenly rounded side; body 4-5× as long as broad; metafemur gradually clavate..... *Epania*
 Prothorax with a large cavity at side; body at least 6× as long as broad... *Leptepania*
- 25 (18). Scutellum relatively small, not strongly angulate posteriorly 26
 Scutellum large, angulate posteriorly; metasternum with scent pores at posterior angles (Callichromini); antenna much longer than body *Chloridolum*
- 26 (25). Procoxal cavity open posteriorly..... 27
 Procoxal cavity closed posteriorly; legs short; metafemur not nearly reaching elytral apex (Pyrestini); body reddish..... *Pyrestes*
- 27 (26). Elytra not strongly dehiscent..... 28
 Elytra strongly dehiscent; prothorax raised above with a swelling on each side of disc behind middle (Thraniini) *Thranius*
- 28 (27). Body dorsally flattened; frons very short; antennal segment 2 as long as broad (Callidini)..... 29
 Body narrow, somewhat laterally compressed; frons not extremely short; an-

- tennal segment 2 shorter than broad..... 31
- 29 (28). Intercoxal process of prosternum abbreviated, not reaching to posterior borders of procoxal cavities; mesosternal process angulate 30
- Intercoxal process of prosternum long, reaching to about posterior borders of procoxal cavities; antennal segment 3=4, or shorter than 4 **Semanotus**
- 30 (29). Pronotum convex, finely punctured and sometimes with raised smooth areas; elytron finely punctured..... **Phymatodes**
- Pronotum flattened, punctured or rugulose, rarely with callosities; elytron rugose, often metallic..... **Palaeocallidium**
- 31 (28). Metepimeron produced over angle of abdominal sternite 1 and adjacent to metacoxa; metepisternum usually broad (Clytini)..... 32
- Metepimeron not produced over abdominal sternite 1; elytron gibbous at base; metepisternum narrow (Anaglyptini) **Anaglyptus**
- 32 (31). Antennae more or less distantly inserted with intervening space fairly even; metepisternum broad, 2-3 \times as long as broad..... 33
- Antennae rather closely inserted, intervening space elevated in part; metepisternum narrower, at least 4 \times as long as broad..... 35
- 33 (32). Front of head lacking distinct carinae..... 34
- Front of head with 1 or more vertical or branching carinae; side of frons also carinate..... **Xylotrechus**
- 34 (33). Metatarsal segment 1 generally at least 2 \times as long as 2+3; metafemur usually exceeding elytral apex..... **Perissus**
- Metatarsal segment 1 less than 2 \times as long as 2+3; metafemur of ♀ not exceeding elytral apex; antenna shorter than body **Clytus**
- 35 (32). Metatarsal segment 1 about as long as 2-5 combined 36
- Metatarsal segment 1 is 1.5-2.0 \times as long as 2-5 combined; antennal segments 3 & 4 spined internally at apices **Demonax**
- 36 (35). Antenna very slender; segment 3 longer than 1; antennal insertions not extremely close **Raphuma**
- Antennae not very slender, generally much shorter than body, their insertions close; segment 3 not longer than 1..... **Chlorophorus**
- 37 (17). Prothorax generally shiny, non-pubescent; elytron smooth above; legs with very long erect hairs; abdominal segment 1 longer than 2+3..... **Artimpaza**
- Prothorax dull or pubescent; elytron ridged; legs without very long erect hairs; abdominal segment 1 shorter than 2+3..... **Cleomenes**

Tribe METHINI (=OEMINI)

Genus **Comusia** Thomson

Comusia Th., 1864, Syst. Ceramb., 249 (type: *C. obriumoides* Th.; Mindanao).

Ciopera Pascoe, 1866, Proc. Zool. Soc. Lond. 1866: 510 (type: *C. decolorata* Pasc.; Penang).

Ogasawara Gress., 1937, Kontyû 11: 320 (type: *O. testacea* Gr.; Bonin Is.).

Oemospilooides Fisher, 1940, Ind. For. Rec. (n. s.) Ent. 6: 197 (type: *O. bengalensis* Fish.; India.).

Comusia testacea (Gressitt)

Ogasawara testacea Gr., 1937, Kontyū **11**: 321, fig. 2 (Bonins); 1956, Ins. Micronesia **17**: 102, fig. 10a.

Ciopera testacea: Gr., 1959, Pacific Ins. **1**: 88.

Comusia testacea: Hay., 1962, Ent. Rev. Japan **15** (1): 3 (Amami-Oshima).

MATERIAL EXAMINED: Amami-Oshima: 1♀, Mt Yuwan, 550 m, 18.VII.1963, Yoshimoto (BISHOP).

DISTRIBUTION: Bonin Is., Ryukyu (Amami-Oshima).

Tribe ACHRYSONINI

Genus **Nortia** Thomson

Nortia Th., 1864, Syst. Ceramb., 252.—Gress., 1951, Longic. **2**: 132.

Nortia pruinicollis Gressitt, n. sp. Fig. 2.

♂. Dark reddish brown to pitchy, darker on head and prothorax, moderately dark on tibiae and elytron, somewhat paler reddish brown on antenna and still paler on tarsi. Body moderately clothed with short golden to buff pubescence, shorter and closer on pronotum, giving a somewhat pruinose effect; antenna with moderately long oblique hairs on inner sides of segments 2-8; femora with rather little pubescence above.

Head short, slightly narrower than prothorax; neck granulose to punctate; interantennal and interocular areas not very distinctly punctured; frons very short and transversely concave; eye deeply emarginate; gena 1/5 as deep as eye. Antenna 1/3 longer than body, slightly flat; segment 1 moderately stout, finely punctured; 2 slightly longer than broad; 3 nearly 2× as long as 1, slightly longer than 4; 4-10 decreasing gradually in length and thickness; 11 barely longer than 10. Prothorax slightly longer than greatest breadth, slightly broader just behind apex than just anterior to base; side subevenly rounded except near apex where it is obtuse; disc finely and weakly punctured, with a median raised strip on posterior 1/2 and an arcuate raised area parallel and slightly anterior to it, slightly closer to median line than to lateral border and broader anteriorly than posteriorly, that on right side appearing something like a comma. Scutellum broader than long, rounded behind. Elytron nearly 6× as long as broad, subparallel, becoming slightly narrower posteriorly, and narrowly rounded apically; disc deeply and subasperately punctured, the punctures quite dense on basal 1/2 and becoming gradually sparser and weaker posteriorly. Ventral surfaces in large part weakly punctured, somewhat pruinose. Legs with femora fusiform and somewhat flattened, weakly and sparsely punctured; hind tibia weakly sinuate, slightly flat; hind tarsus less than 2/3 as long as hind tibia, segment 1 longer than 2+3 combined and longer than last. Length 13 mm; breadth 3.

Paratypes: Length 11.5-12.8 mm; breadth 2.7-3.1.

Holotype ♂ (NSM), Mt Yuwan, 550 m, Amami-Oshima I., 16.VII.1963, Y. Kurosawa; paratopotype ♂ (KU), 30.VII.1963, Y. Hirashima; paratopotype ♂ (BISHOP), 17.VII.1963, Kurosawa.

Differs from *N. carinicollis* Schw. in being much smaller, darker brown, with pronotum more rounded, with fewer punctures and less distinctly raised carinae; elytron with far

fewer punctures, just over 1/2 as many along a given line (about 14 across elytron at end of basal 1/3 instead of about 26), and proportionately still fewer on apical portion.

This may be the same as that recorded by Hayashi as *N. carinicollis* Schw. from Amami-Oshima (1961, Ent. Rev. Japan 13 (2) : 41). We are not certain about Matsushita's Okinawa record (1938).

Tribe CERAMBYCINI

Genus **Pseudaeolesthes** Plavilstshikov

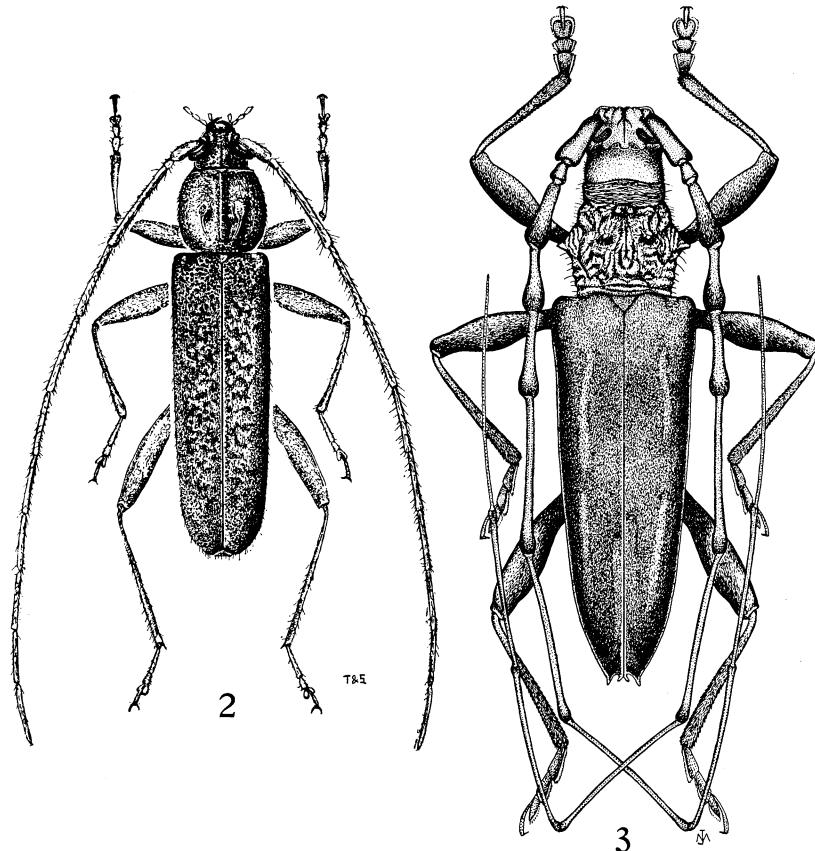
Pseudaeolesthes Pl., 1931, Best.-Tab. Eur. Col. 100 : 73.—Gress., 1951, Longic. 2 : 136.

Pseudaelesthes kurosawai Gressitt, n. sp. Fig. 3.

♂. Body reddish brown, pitchy to nearly blackish on parts of basal antennal segments, anterior and posterior margins of prothorax, parts of head, and tarsal claws. Dorsum rather thinly clothed with tawny brown pubescence, partly lying in different directions, but not forming a striking pattern (specimen probably somewhat rubbed); ventral surfaces more heavily clothed with pubescence, particularly along side; legs a little more thinly clothed, with some longer pubescence on upper edge of hind femur.

Head longer than broad, distinctly narrower than prothorax, deeply impressed on each side of frontoclypeus, narrowly grooved between antennal supports, somewhat ridged between upper eye lobes, grooved just behind eye, and bearing numerous short transverse ridges on occiput and postocciput; upper eye lobe narrow, lower lobe rounded-triangular; gena nearly as deep as wide, smooth and finely punctured, deeply emarginate anteriorly. *Antenna* 2.25× as long as body, swollen at apices of segments 3–5, somewhat enlarged and broadened at apices of 6–8, slightly flattened on remainder; 1 subcylindrical, slightly longer than 3; 3 barely longer than 4; 5 slightly longer than 1; 6 as long as 4+5; 6–10 decreasing slightly in length; 11 longest, quite narrow and becoming narrower towards apex. *Prothorax* a little longer than broad, narrower at apex than at base; side obtusely broadened behind anterior collar, with an obtuse swelling at middle bearing an acute tubercle gradually narrowed to base; anterior collar very weakly ridged transversely; basal collar less cylindrical and more strongly ridged transversely; disc highly irregular, grossly vermiculose on each side, with 6 tubercles in 3 pairs on central portion surrounding a median raised area which is grooved anteriorly. *Scutellum* short, triangular, feebly punctured. *Elytron* long, gradually narrowed, oblique apically with inner and outer angles strongly and acutely toothed, outer angle extending farther posteriorly; disc somewhat shiny, slightly uneven, rather finely and uniformly punctured, a little less distinctly so near apex. *Ventral surfaces* rather smooth, minutely punctured; last abdominal sternite weakly emarginate-truncate apically. *Legs* rather long; femora slender and somewhat flattened; hind tibia nearly straight, slender; hind tarsus 2/3 as long as tibia, segment 1 longer than 2+3 and slightly longer than 5. Length 33.5 mm; breadth 8.5.

♀. Body somewhat paler reddish but pitchy along central portion of elytral suture; pubescence denser and a little more golden; prothorax with lateral tubercle a little shorter and dorsal tubercles a little more accentuated; elytral apex oblique, but inner spine extending almost as far backward as outer spine; antenna slightly longer than body. Length 32 mm; breadth 7.5.



Figs. 2-3. 2, *Nortia pruinicollis*, n. sp., paratype ♂; 3, *Pseudeoesthes kurosawai*, n. sp., holotype ♂.

Holotype ♂ (BISHOP 3687), Mikyo, 130 m, Tokunoshima I., Amami Group, N Ryukyu Is., 24. VII. 1963, Yoshimoto. Allotype ♀ (NSM), Mt Yuwan, 550 m, Amami-Oshima I., 17. VII. 1963, Kurosawa. Both collected on Japan—United States Science Cooperation Program.

Differs from *P. chrysotrix* (Bates) in being a little more slender, with elytron longer, with central raised area of pronotum not transversely ridged, and dorsal pubescence much thinner, duller and not forming striking patterns.

Genus *Margites* Gahan

Margites Gah., 1891, Ann. Mag. Nat. Hist., ser. 6, 7: 26.—Gress., 1951, Longic. 2: 143.

Margites fulvidus (Pascoe)

Cerambyx fulvidus P., 1858, Trans. Ent. Soc. Lond. ser. 2, 4: 236 ("N. China"; BMNH).
M. fulvidus: Gah., 1891, Ann. Mag. Nat. Hist. ser. 6, 7: 26.—Gress., 1951, Phil. J. Sci. 79

(2) : 207 (Okinawa); 1951, Longic. 2: 144.—Hay., 1961, Ent. Rev. Japan 13 (2) : 41 (Amami-Oshima).

MATERIAL EXAMINED: Amami-Oshima: 3, Mt Yuwan, 550 m, 17–18.VII.1963, Yoshimoto, Kurosawa (BISHOP, NSM)

DISTRIBUTION: S China, Japan (Honshu, Shikoku, Kyushu), Ryukyus (Amami-Oshima, Okinawa), Taiwan.

Tribe HESPEROPHANINI

Genus **Gnatholea** Thomson

Gnatholea Th., 1861, Classif. Ceramb., 375.—Gressitt, 1951, Longic. 2: 150.

Gnatholea biseburata Mitono

G. biseburata Mit., 1939, Mushi 12: 148 (Taiwan; TARI).

G. eburiifera biseburata: Gress., 1951, Longic. 2: 151.

This should probably stand as a full species.

MATERIAL EXAMINED: Ishigaki: 1♂, Yonehara, 30–80 m, 21.V.1964, Gressitt.

DISTRIBUTION: Ryukyus (Ishigaki), Taiwan.

Genus **Stromatium** Serville

Stromatium Serv., 1834, Ann. Soc. Ent. France 3: 80.—Gress., 1951, Longic. 2: 150.

Stromatium longicorne (Newman)

Arhopalus longicornis Newm., 1842, Ent. 1: 246 (Manila).

S. asperulum White, 1855, Cat. Col. Brit. Mus. 8: 300 (Hong Kong).

S. longicorne: Gahan, 1906, Fauna India, Col. Ceramb., 115 (India, SE Asia, Indonesia, etc.).—Yashiro, 1927, Okinawa Sugar Exper. Sta. Bull. 1: 8 (Okinawa).—Gress., 1940, Phil. J. Sci. 72 (1–2) : 50 (Hainan I.); 1951, *Ibid.* 79 (2) : 196, 207 (Iriomote, Amami-Oshima, Daito-jima); 1951, Longic. 2: 150 (China, Taiwan).—Hay., 1961, Ent. Rev. Japan 13 (2) : 41 (Tokunoshima, Okinoerabu, Yoronto).

MATERIAL EXAMINED: Numerous specimens from Amami-Oshima, Tokunoshima, Okinoerabu I., Okinawa and Ishigaki, by Kurosawa, Yamasaki, Okada, Takara, Yoshimoto and Gressitt.

DISTRIBUTION: All major islands of Ryukyus, Bonin Is., Taiwan, Hainan, S China, Philippines, Indonesia, E Asia, Burma, India.

Tribe PHORACANTHINI

Genus **Allotraeus** Bates

Allotraeus B., 1887, Ent. Mon. Mag. 14: 37.—Gress., 1951, Longic. 2: 151.

Matsushita recorded *asiaticus* (Schwarzer) from Okinawa. However, we have re-examined what is probably the specimen in question and consider it referable to *amamiensis* Hayashi.

1. Elytron not very long; femora pedunculate-clavate (*Nysina*) 2
Elytron very long; femora gradually thickened (*Allotraeus*) [sphaerioninus Bates]
2. Antennal segments 3-6 toothed endoapically 3
Antennal segments 3-5 toothed endoapically; body reddish brown... [asiaticus (Schw.)]
3. Body quite slender, dull testaceous to pale brown; 1st antennal segment 3/5 as long as 3rd *amamiensis*
Body less slender, darker reddish brown; 1st antennal segment less than 3/5 as long as 3 *insularis*

Allotraeus (Nysina) amamiensis Hayashi

A. (*N.*) *amamiensis* Hay., 1961, Ent. Rev. Japan **13** (2): 42, pl. 10, fig. 10 (Amami-Oshima; Hayashi coll.)

MATERIAL EXAMINED: Amami-Oshima: 1, Mt Yuwan, 550 m, 17.VII.1963, Yoshimoto (BISHOP). Okinawa: 1, no other data, Sakaguchi (HU).

DISTRIBUTION: Ryukyus (Amami-Oshima, Okinawa).

Allotraeus (Nysina) insularis (Mitono)

Pseudallotraeus insularis Mit., 1947, Mushi **18**: 25 (Iriomote; TARI).

A. *insularis*: Gress., 1951, Phil. J. Sci. **79** (2): 208.—Hay., 1961, Ent. Rev. Japan **13** (2): 42.

DISTRIBUTION: Ryukyus (Iriomote).

Tribe CALLIDIOPINI

Genus **Ceresium** Newman

Ceresium Newm., 1842, Ent. **1**: 322.—Gress., 1951, Longic. **2**: 154.

1. Antennal segment 3 subequal to 4; segment 1 longer than 3 2
Antennal segment 3 longer than 4; segment 1 not longer than 3 4
2. Elytral punctures becoming gradually smaller posteriorly; pronotum moderately to densely clothed with pale pubescence; dorsum reddish brown 3
Elytral punctures heavy and subuniform to beginning of posterior 1/5; pronotum very thinly pubescent, heavily punctured, with raised median line; body pale, dull brown, or pitchy with legs paler *fuscum*
3. Pronotum rather densely pubescent at side, with some conspicuous glabrous punctures near basal angle; sutural angle of elytral apex distinctly rounded *sinicum*
Pronotum moderately pubescent at side, without conspicuous glabrous dots; sutural angle of elytral apex nearly forming a right angle *holophaeum*
4. Antennal segment 3 longer than 1; elytron with suddenly much finer puncturation starting posterior to middle; pronotum with 2 or 3 small tubercles 5
Antennal segment 3 no longer than 1; elytron with puncturation more or less gradually weaker posteriorly; pronotum more or less rugose 6
5. Antenna of ♂ more than 1.5× as long as body; body slender; prothorax somewhat longer than broad, with a small tubercle on each side of median line anterior to middle, and median line often raised *longicorne* ♂
Antenna about 1.25× as long as body; body not extremely slender; prothorax bare-

- ly longer than broad, subtuberculate at side, with a pair of anterior tubercles and central portion of median line also raised.....*longicorne* ♀
6. Prothorax barely longer than broad, irregularly rugose, reddish, sparsely pubescent but with denser hairs at side.....*simile*
- Prothorax about $1.25 \times$ as long as broad, with raised broad median line bordered on each side with large punctures and with an irregular callosity near each corner of central portion of disc; central area of pronotum nearly glabrous, pitchy to reddish, sides densely pubescent.....*elongatum*

Ceresium elongatum Matsushita

C. elongatum Matsush., 1933, J. Fac. Agr. Hokkaido Univ. **34**: 301 (Okinawa; HU).
C. zeylanicum: Hayashi, 1961, Ent. Rev. Japan **13** (2): 43 (Amami-Oshima).

MATERIAL EXAMINED: Types (lectotype, Okinawa, selected in Hokkaido Univ. coll., J. L.G.). Amami-Oshima: 16, Mt Yuwan, 550 m, 16-17.VII.1963, Hirashima, Kurosawa, Yoshimoto (KU, NSM, BISHOP). Okinawa: 1, 25.VI.1958, Takara; 1, Katsuyama, 18.V.1955, Takara (UR); 1, Shuri, 20.VII.1959, Takara. Kume I.: 1, 75 km W of Okinawa, 29.VI. 1958, Takara.

Hosts: *Morus alba*, *Citrus*.

DISTRIBUTION: Ryukyu Is (Amami-Oshima, Okinawa, Kume, Ishigaki, Iriomote).

Ceresium flavipes (Fabricius)

Callidium flavipes F., 1792, Ent. Syst. **12**: 327 ("Cape of Good Hope").

?*Ceresium brunneum* Sakaguchi, 1927, Prov. Lists Ins. Okinawa. *nom. nud.*

Ceresium flavipes: Miwa, 1933, Trans. Nat. Hist. Soc. Formosa **23**: 13 (Iriomote).—Matsu-shita, 1933, Ins. Matsumur. **7**: 67 (Okinawa, Ishigaki).—Gress., 1951, Phil. J. Sci. **79** (2): 208 (Okinawa).—Hay., 1960, Ent. Rev. Japan **11** (1): 23 (Okinawa).

It is somewhat questionable whether this species actually occurs in the Ryukyu Is.

DISTRIBUTION: S. Asia, Philippines, Hong Kong, Taiwan, ?Ishigaki, ?Okinawa.

Ceresium fuscum Matsumura and Matsushita

?*C. okinawensis* Matsumura", Sakaguchi, 1927, Prov. Lists Ins. Okinawa. *nom. nud.*

C. fuscum Matsum. & Matsush., 1932, Ins. Matsumur. **7**: 67, fig. 1 (Okinawa; HU).—Gress., 1951, Phil. J. Sci. **79** (2): 209 (Okinawa, Ishigaki, Iriomote).—Hay., 1956, Publ. Osaka Mun. Mus. Nat. Hist. **9**: 12, 19 (Tokara Is.); 1961, Ent. Rev. Japan **13** (2): 43 (Ama-mi-Oshima, Tokunoshima, Okinoerabu).

C. elongatum: Gress., 1951, Phil. J. Sci. **79** (2): 208 (Okinawa).

MATERIAL EXAMINED: Types (lectotype, Okinawa, selected in Hokkaido Univ. coll., J. L.G.). Amami-Oshima: 4, Mt Yuwan, 550 m, 16-18.VII.1963, Yoshimoto, Inoue, Yamasaki (BISHOP, TAU, TKU). Okinawa: 4. V. 1955, Takara; Kude-Ken, 20. III. 1964, Miyatake (KU); 17, Shuri, 50-100 m, 23. IV-10. V. 1959, 29. III-16. V. 1960, 3.IV.1962, 22.V.1963, Takara (BISHOP, UR); 1, Koza, 18.V.1961, Takara; 1, Nago, 28.IV.1962, Takara (UR). Ishigaki: 1, "spm #116", 1.IV.1958, Azuma (Az. coll.); 2, Kara-yama, 14.III.1964, Miyatake; 1, same loc., Malaise trap, 14-18.III.1964, Yoshimoto & Harrell; 1, Yonehara, 15.III.1964, Yoshimoto & Harrell; 1, Mt Omoto, 16.III.1964, Miyatake; 3, Toro-gawa, 17. III. 1964, Miyatake; 4, Mt

Banna, 70 m, 20–23.V.1964, Gressitt (BISHOP). Iriomote: 1, Shirahama, 8.III.1964, Miyatake; 2, Ushikumori, 425 m, 2. III. 1964, Yoshimoto & Harrell; 2, Shirahama, 20 m, 6. III. 1964, Shirozu (KU); 1, Shirahama, 6.III.1964, Azuma.

DISTRIBUTION: Ryukyus (Tokara Is., Amami-Oshima, Tokunoshima, Okinoerabu, Okinawa, Ishigaki, Iriomote).

Ceresium holophaeum Bates

C. holophaeum B., 1873, Ann. Mag. Nat. Hist. ser. 4, **12**: 153 (Japan; BMNH).—Matsush., 1933, J. Fac. Agr. Hokkaido Univ. **34**: 301 (Okinawa).—Gress., 1951, Phil. J. Sci. **79** (2): 209.

MATERIAL EXAMINED: (Specimens from Cape Hata, S Kyushu). Okinawa: 1, Shuri, 8. VI.1959, Takara (UR). The specimen is questionably assigned.

DISTRIBUTION: Japan (Honshu, Shikoku, Kyushu), Ryukyus (Tokara Is., ?Okinawa).

Ceresium longicorne Pic

C. longicorne Pic, 1926, Mel. Exot. Ent. **45**: 24 (Formosa).—Matsush., 1933, J. Fac. Agr. Hokkaido Univ. **34**: 302 (Okinawa).—Mitono, 1940, Cat. Col. Japonic. **8**: 69.—Hay., 1961, Ent. Rev. Japan **13** (2): 43 (Amami-Oshima, Tokunoshima).

C. zeylanicum longicorne: Gress., 1951, Phil. J. Sci. **79** (2): 209 (Iriomote).

MATERIAL EXAMINED: Many specimens, from both coastal and mountain areas on Iriomote, Ishigaki and Okinawa, III, VIII, X, XI. 1934, Gressitt; 1955, Takara; 1963–64, Morimoto, Miyatake, Hirashima, Miyamoto, Samuelson, Gressitt, Ueno.

DISTRIBUTION: Japan (Kyushu), Ryukyus (Amami-Oshima, Tokunoshima, Okinawa, Minami-Daito, Ishigaki, Iriomote), Taiwan, Lan-yu.

Ceresium simile Gahan

C. simile Gah., 1890, Ann. Mag. Nat. Hist. ser. 6, **5**: 169 (Bonin Is.; BMNH).—Mitono, 1940, Cat. Col. Japonic. **8**: 69 (Hachijo, Miyake).—Gress., 1956, Ins. Micronesia **17** (2): 91.—Hay., 1956, Publ. Osaka Mun. Mus. Nat. Hist. **9**: 12 (Tokara Is.); 1961, Ent. Rev. Japan **13** (2): 43 (Amami-Oshima).

MATERIAL EXAMINED: Amami-Oshima: 12, Mt Yuwan, 550 m, 16–18.VII.1963, Yoshimoto, 1 by Kurosawa (BISHOP, NSM). Okinawa: 1, 1951, Doty (UR).

DISTRIBUTION: Japan (Hachijo-jima, Miyake-shima), Ryukyus (Tokara Is., Amami-Oshima, Okinawa), Bonin Is.

Ceresium sinicum White

C. sinicum Wh., 1855, Cat. Col. Brit. Mus. **8**: 245 (N. China; BMNH).—Gress., 1951, Phil. J. Sci. **79** (2): 209 (Ishigaki); 1951, Longic. **2**: 156 (Formosa).

?*C. sinicum*: Sakaguchi, 1927, Prov. Lists Ins. Okinawa.

C. sinicum ssp. *shirakii* Hay., 1963, Ent. Rev. Japan **15** (2): 53 (Ishigaki; NIAS).

Possibly many of the specimens identified as this species are actually *fuscum*.

DISTRIBUTION: China, Thailand, Taiwan, Ryukyus (Okinawa, Ishigaki, Iriomote).

Genus **Stenygrinum** Bates

Stenygrinum Bates, 1873, Ann. Mag. Nat. Hist., ser. 4, **12**: 154.—Gress., 1951, Longic. **2**: 158.

Stenygrinum quadrinotatum Bates

S. quadrinotatum B., 1873, Ann. Mag. Nat. Hist. ser. 4, **12**: 154 (Japan; BMNH).—Mito-no, 1940, Cat. Col. Japonic. **8**: 67 (Tokunoshima).—Gress., 1951, Phil. J. Sci. **79** (2): 208 (Amami-Oshima).—Hay., 1961, Ent. Rev. Japan **13** (2): 43.

MATERIAL EXAMINED: 1 from Amami-Oshima.

Hosts: *Castanea*, *Quercus*.

DISTRIBUTION: China, Korea, Japan, Ryukyus (Amami Group), Taiwan, Burma, N India.

Genus **Stenodryas** Bates

Stenodryas Bates, 1873, Ann. Mag. Nat. Hist. ser. 4, **12**: 154.—Gress., 1951, Longic. **2**: 159.

Stenodryas clavigera Bates

S. clavigera B., 1873, Ann. Mag. Nat. Hist. ser. 4, **12**: 154 (Honshu; BMNH).—Hay., 1961, Ent. Rev. Japan **13** (2): 43 (Amami-Oshima).

MATERIAL EXAMINED: Ishigaki: 1, Okawa, 16.III.1964, Azuma (Az. coll.); 2, Omoto-dake, 100–500 m, 16.III.1964, Miyatake (KU); 1, same data but 17.III, Shirozu (KU); 1, same but 250 m, 22.V.1964, Gressitt. Iriomote: 1, Ushiku-mori, 425 m, 11.III.1964, Miyatake.

DISTRIBUTION: Japan (Honshu, Kyushu), Ryukyus (Amami-Oshima, Ishigaki, Iriomote), Taiwan.

Genus **Parasalpinia** Hayashi

Parasalpinia Hay., 1962, Ent. Rev. Japan **15** (1): 4 (type: *P. kojimai* Hay.; Iriomote).

Parasalpinia kojimai Hayashi

P. kojimai Hay., 1962, l. c., pl. 1, fig. 4 (Iriomote; Kojima coll.).

DISTRIBUTION: Ryukyus (Iriomote).

Tribe OBRIINI

Genus **Longipalpus** Montrouzier

Longipalpus Montr., 1861, Ann. Soc. Ent. France ser. 4, **1**: 275 (type: *L. palazyanus* Montr.).—Gress., 1956, Ins. Micronesia **17** (2): 97.

Iphrobrium Gress., 1935, Ins. Matsumurana **9** (4): 150 (type: *I. dilatipenne* Gr.).

Longipalpus dilatipennis (Gressitt)

Iphrobrium dilatipenne Gr., 1935, l. c., 151 (Iriomote I.; CAS); 1951, Phil. J. Sci. **79** (2): 198, 210 (Okinawa).

L. dilatipennis: Hay., 1963, Ent. Rev. Japan **16** (1) : 10 (Amami-Oshima).

MATERIAL EXAMINED: Okinawa: 3, Izumi, 21.X.1963, Ueno, Hirashima (NSM, KU). Ishigaki: 2, Mt Omoto, 14.X.1963, Hirashima, Miyamoto (KU); 1, Omoto Village, 100 m, 22.V.1964, Gressitt. Iriomote: 2, Shirahama, 6.X-5.XI.1963, Miyamoto, Samuelson.

DISTRIBUTION: Ryukyus (Amami-Oshima, Okinawa, Ishigaki, Iriomote).

Genus **Stenhomalus** White

Stenhomalus White, 1855, Cat. Col. British Mus. **8** : 243.—Gress., 1951, Longic. **2** : 163.

Stenhomalus taiwanus Matsushita

S. taiwanus Matsush., 1933, J. Fac. Agr. Hokkaido Univ. **34** : 307, pl. 1, fig. 13 (Taiwan).

S. cleroides: Gress., 1935, Ins. Matsumur. **9** : 148 (Miyako); 1951, Phil. J. Sci. **79** (2) : 210. —Mitono, 1940, Cat. Col. Japonic. **8** : 65 (Ishigaki).

MATERIAL EXAMINED: Okinawa: 1, Izumi-Gogayama, 22.III.1964, Miyatake (KU); 1, Shuri, 22.III.1964, Azuma (Az. coll.). Ishigaki: 3, Mt Banna, SE, 100 m, 27-31.X.1963, Hirashima, Samuelson.

DISTRIBUTION: Japan, Ryukyus (Okinawa, Miyako, Ishigaki), Taiwan.

Genus **Pseudiphra** Gressitt

Pseudiphra Gress., 1935, Ins. Matsumurana **9** (4) : 152; 1951, Longic. **2** : 165.

Pseudiphra obscura Gressitt

P. obscura Gr., 1951, Phil. J. Sci. **79** (2) : 210, fig. 1 (Amami-Oshima).—Hay., 1961, Ent. Rev. Japan **13** (2) : 43 (♀ allotype).

P. obscura f. *obscurithorax* Hayashi, 1961, l. c., 44 (Amami-Oshima).

MATERIAL EXAMINED: Tokunoshima: 1, Mikyo, 27.VII.1963, Gressitt (BISHOP). Ishigaki: 3, Mt Omoto, 14.X.1963, Morimoto, Hirashima, Miyamoto (KU, FES); 1, Mt Banna trail, 100-200 m, 28.X.1963, Samuelson (BISHOP); 1, Yoshihara, 16.X.1963, Morimoto; 1, Kawara-dake, 28.X.1963, Hirashima. Iriomote: 1, Shirahama, 2.X.1963, Morimoto; 1, Mt Ushiku, 100-300 m, 20.XI.1963, Samuelson.

DISTRIBUTION: Ryukyus (Amami-Oshima, Ishigaki, Iriomote).

Tribe MOLORCHINI

Genus **Epania** Pascoe

Epania Pasc., 1857, Trans. Ent. Soc. Lond. ser. 2, **4** : 237.—Gress., 1951, Longic. **2** : 168.

Elytron with apex obliquely truncate internally, extremity rounded, humerus strongly produced anteriorly; dorsum black; length 12 mm **subglabra**
 Elytron with apex not obliquely truncate, extremity broadly rounded, humerus weakly produced anteriorly; dorsum black; length 6 mm **kumatai**

Epania kumatai Hayashi

E. kumatai Hay., 1961, Ent. Rev. Japan **13** (2) : 45, pl. 10, fig. 19 (Amami-Oshima; HU).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Epania subglabra Gressitt

E. subglabra Gr., 1938, Phil. J. Sci. **65**: 150, pl. 1, fig. 7 (Formosa).—Hay., 1961, Ent. Rev. Japan **13** (2): 46, pl. 10, fig. 20 (Amami-Oshima).

Host: *Diospyros morristana*.

DISTRIBUTION: Ryukyus (Amami-Oshima), Taiwan.

Genus **Leptepania** Heller

Leptepania Hell., 1924, Ent. Blätt. **20**: 27.—Gress., 1951, Longic. **2**: 169.

Leptepania ryukyuana Hayashi

L. ryukyuana Hay., 1963, Ent. Rev. Japan **15** (2): 54, pl. 7, figs. 5, 6 (Amami-Oshima; Kusama coll.).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Genus **Molorchus** Fabricius

Molorchus Fabr., 1792, Ent. Syst. 1, **2**: 366.—Gress., 1951, Longic. **2**: 169.

Kobaneus Hayashi, 1958, Ent. Rev. Japan **9** (2): 46 [type: *Molorchus (Linomius) mizoguchi* Hay.]

1. Antennal scape equal to, or longer than segment 3; eye closely placed near base of mandible (sg. *Linomius*) 2
Antennal scape distinctly shorter than segment 3; eye not closely placed near base of mandible (sg. *Kobaneus*); prothorax with side strongly rounded, base strongly constricted; dorsum dull black, clothed with pale hairs; length 7.0–12.2 mm *simplexus mizoguchii*
2. Punctuation of pronotal disc strongly reticulate 3
Punctuation of pronotal disc not reticulate; dorsum blackish, elytron lacking pale area at middle, disc impressed; length 8 mm *takeuchii ebeninus*
3. Pronotal disc with 3 shiny impunctate areas; dorsum blue; length 9 mm *cobaltinus*
Pronotal disc with an indistinct median glabrous area on basal 1/2; dorsum black, elytron with a pale area at middle near suture; length 9.5 mm *shibatai*

Molorchus (Linomius) cobaltinus Hayashi

M. (L.) cobaltinus Hay., 1963, Ent. Rev. Japan **15** (2): 53, pl. 7, fig. 4 (Amami-Oshima; Maruoka coll.).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Molorchus (Linomius) shibatai Hayashi

M. takeuchii: Seki, 1944, Ins. World, Gifu **48** (562): 12 (Amami-Oshima).

M. (L.) shibatai Hay., 1961, Ent. Rev. Japan **13** (2): 44, pl. 10, fig. 11 (Amami-Oshima; Shibata coll.).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Molorchus (Linomius) takeuchii ebeninus Hayashi

M. (L.) takeuchii ssp. *ebeninus* Hay., 1961, *l. c.*, 45, pl. 10, fig. 12 (Amami-Oshima; HU).

MATERIAL EXAMINED: Okinawa: 1, Nago, 23.III.1964, Miyatake (KU).

DISTRIBUTION: Ryukyus (Amami-Oshima, Okinawa).

Molorchus (Kobaneus) simplexus mizoguchii Hayashi

M. (Linomius) mizoguchii Hay., 1955, Col. Illust. Ins. Japan ed. 1, 51, 54, pl. 19, fig. 204 (Kyushu).

M. (K.) simplexus ssp. *mizoguchii* Hay., 1961, Ent. Rev. Japan 13 (2): 45 (Amami-Oshima).

MATERIAL EXAMINED: Tokunoshima: 1, Mikyo, 200 m, 27.VII.1963, Gressitt. Ishigaki: 1, Toro-gawa, 17.III.1964, Miyatake (KU).

DISTRIBUTION: Japan (Kyushu), Ryukyus (Amami-Oshima, Tokunoshima, Ishigaki).

Genus **Merionoeda** Pascoe

Merionoeda Pasc., 1858, Trans. Ent. Soc. Lond. ser. 2, 4: 238.—Gress., 1951, Longic. 2: 177.

Merionoeda (Ocytasia) septentrionalis rubiventris Hayashi

M. (O.) septentrionalis ssp. *rubiventris* Hay., 1962, Ent. Rev. Japan 14 (1): 8, pl. 2, fig. 1 (Amami-Oshima; ? Shibata coll.).

Host: flowers of *Psychotria serpens*.

DISTRIBUTION: Ryukyus (Amami-Oshima).

Genus **Kurarua** Gressitt

Kurarua Gress., 1936, Phil. J. Sci. 61: 92.—Gress., 1951, Longic. 2: 181.

Kurarua rhopalophoroides Hayashi

K. rhopalophoroides Hay., 1951, Ent. Rev. Japan 5 (2): 78 (Japan; Wada coll.).

MATERIAL EXAMINED: Iriomote: 1, Ushiku-mori, 382 m, 2.III.1964, Miyatake (KU).

DISTRIBUTION: Japan (Honshu), Ryukyus (Iriomote). Previously unrecorded from the Ryukyus.

Tribe **THRANIINI**Genus **Thranius** Pascoe

Thranius Pasc., 1859, Trans. Ent. Soc. Lond. ser. 2, 5: 22.—Gress., 1951, Longic. 2: 182.

Elytron with sutural margin strongly dehiscent; elytral apex rounded; length 14 mm

..... *multinotatus latipennis*
Elytron with sutural margin not or slightly dehiscent; elytral apex acute at sutural angle; length 14–20.5 mm *obscurus*

Thranius multinotatus latipennis Hayashi

T. multinotatus ssp. *latipennis* Hay., 1963, Ent. Rev. Japan 15 (2): 53, pl. 7, fig. 3 (Iri-

omote; Kojima coll.).

MATERIAL EXAMINED: Ishigaki: 1, Mt Omoto, 200 m, 22.V.1964, Gressitt.

DISTRIBUTION: Ryukyus (Ishigaki, Iriomote).

Thranius obscurus Hayashi

T. obscurus Hay., 1962, *Ibid.* **14** (1): 8, pl. 2, fig. 2 (Amami-Oshima; Shibata coll.).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Tribe PYRESTINI

Genus **Pyrestes** Pascoe

Pyrestes Pasc., 1857, *Trans. Ent. Soc. Lond. ser. 2*, **4**: 96.—Gress., 1951, *Longic.* **2**: 184.

Pyrestes inaequalicollis Hayashi

P. inaequalicollis Hay., 1962, *Ent. Rev. Japan* **14** (1): 9, pl. 2, fig. 3 (Amami-Oshima; Shibata coll.).

Host: flowers of *Murraya peniculata*.

DISTRIBUTION: Ryukyus (Amami-Oshima).

Tribe CALLICHROMINI

Genus **Chloridolum** Thomson

Chloridolum Thoms., 1864, *Syst. Ceramb.*, 174.—Gress., 1951, *Longic.* **2**: 203.

Chloridolum loochooanum Gressitt

C. loochooanum "Gressitt" Kato, 1933, *Ent. World* **1**: 557, fig. 3 (*nom. nud.*).—Gress., 1934, *Pan-Pac. Ent.* **9** (4): 163 (Amami-Oshima; CAS); 1939, *Fichier Ent. Chinois* 1, pls 9–10.—Hay., 1962, *Ent. Rev. Japan* **14** (1): 10.

MATERIAL EXAMINED: Amami-Oshima: 1, Mt Yuwan, 17.VI.1963, Aoki (NSM).

Host: *Diospyros maritima*.

DISTRIBUTION: Ryukyus (Amami-Oshima).

Tribe COMPSOCERINI

Genus **Acrocyrtidus** Jordan

Acrocyrtidus Jord., 1894, *Novit. Zool.* **1**: 499 (type: *A. fasciatus* Jord.).—Hay., 1962, *Ent. Rev. Japan* **14** (1): 10, note.

Mausaridaeus Pic, 1903, *Mat. Longic.* **4** (2): 29 (type: *M. diversenotatus* Pic).

Lautitia Matsush., 1933, *J. Fac. Agr. Hokkaido Univ.* **34**: 226 (type: *L. elegantula* M.).

Acrocyrtidus elegantulus longicornis Hayashi

A. elegantulus ssp. *longicornis* Hay., 1962, *Ent. Rev. Japan* **14** (1): 10, pl. 2, fig. 5 (Amami-Oshima; Shibata coll.).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Genus **Rosalia** Serville

Rosalia Serv., 1833, Ann. Soc. Ent. France 2: 561.—Gress., 1951, Longic. 2: 212.

- Antennal segments 3–5 densely tufted with black hairs apically; body narrow; elytron with 4 black spots, with first placed near scutellum and with the others equally spaced along middle of disc; length 24–34 mm *lesnei*
 Antennal segments 3–5 not densely tufted with black hairs; body not very narrow; elytral spots not as above; length 23–32 mm *ferriei*

Rosalia (Eurybatus) ferriei Vuillet

R. (E.) ferriei Vuil., 1911, Insecta 1: 79, fig. (Amami-Oshima).—Gress., 1951, Phil. J. Sci. 79 (2): 212.

E. (E.) ferriei: Hay., 1962, Ent. Rev. Japan 14 (1): 10, pl. 2, fig. 4.

MATERIAL EXAMINED: Amami-Oshima: 4, Mt Yuwan, 17.VII.1963, Kurosawa (NSM, SHOP); 1, same, but 550 m, Kurosawa; 1, same, but 6.VIII.1963, Okada (UM).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Rosalia (Eurybatus) lesnei Boppe

R. lesnei Boppe, 1911, Bull. Soc. Ent. France 1911: 103, figs. 1, 2 (Formosa).

Eurybatus (Eurybatorosalia) lesnei: Plav., 1940, Faune URSS 22: 675.

R. (E.) lesnei: Gress., 1951, Phil. J. Sci. 79 (2): 212 (Ishigaki).

MATERIAL EXAMINED: Ishigaki: 1, V.1910, J. C. Thompson.

DISTRIBUTION: Ryukyus (Ishigaki), Taiwan.

Tribe CALLIDIINI

Genus **Semanotus** Mulsant

Semanotus Muls., 1839, Col. France Long., 100.—Gress., 1951, Longic. 2: 221.

Semanotus japonicus (Lacordaire)

Sympiezocera japonica Lac., 1869, Gen. Col. 9: 47, note 2 (Japan).

Semanotus japonicus: Gress., 1951, Phil. J. Sci. 79 (2): 212 (Okinawa).

Host: *Cryptomeria japonica*.

DISTRIBUTION: Japan, Ryukyus (Okinawa); questionably Taiwan.

Genus **Palaeocallidium** Plavilstshikov

Palaeocallidium Plav., 1940, Faune URSS 22: 291, 694.—Gress., 1951, Longic. 2: 223 (part).

Palaeocallidium rufipenne (Motschulsky)

Callidium rufipenne Mots., 1860, Etudes Ent. 9: 19 (Japan).—Mitono, 1940, Cat. Col. Japon. 8: 103 (Amami-Oshima, Okinawa).

Callidium (P.) rufipenne: Gress., 1951, Phil. J. Sci. 79 (2): 213; 1951, Longic. 2: 225.

P. rufipenne: Hay., 1962, Ent. Rev. Japan 14 (1): 10.

Host: *Cryptomeria japonica*.

DISTRIBUTION: Korea, Sachalin, Japan, Ryukyus (Amami-Oshima, Okinawa), Taiwan.

Genus **Phymatodes** Mulsant

Phymatodes Muls., 1839, Col. France Long., 47.—Gress., 1951, Longic. 2: 226.

Phymatodes (Paraphymatodes) albicinctus Bates

Callidium albofasciatum Mots. (nec Bland), 1866, Bull. Soc. Nat. Moscou 39: 174 (Japan).

P. albicinctus Bates, 1873, Ann. Mag. Nat. Hist. ser. 4, 12: 198 (Japan; BMNH).

P. (P.) albicinctus: Plavilst., 1940, Faune URSS 22: 701 (Ryukyu).

DISTRIBUTION: Korea, Japan, Ryukyus (island not specified); questionably Taiwan.

Tribe CLYTINI

Genus **Xylotrechus** Chevrolat

Xylotrechus Chev., 1860, Ann. Soc. Ent. France ser. 3, 8: 465.—Gress., 1951, Longic. 2: 231.

1. Pronotum rather dull, lacking bright red and yellow bands..... 2
Pronotum crossed by red, orange and black bands; elytron obliquely banded with orange and black basally, apical 1/2 mostly orange; length 15–25 mm **chinensis**
2. Elytron largely dark, with pale markings, but base sometimes largely pale 3
Elytron largely pale, with dark markings; pronotum dark, disc asperate; elytron with dense gray pubescence with the following dark areas: 2 humeral spots, anterior oblique band, and broad posterior band **brevicillus**
3. Frons with sides near middle, because of large size of eye, lateral margins carinate... 4
Frons with sides parallel; dorsum largely black with sparse fine yellowish hairs; elytron with following white markings: basal oblique line extending from base to suture and then to lateral margin, fine transverse line at apical 1/3, sutural margin along apical 1/3 and apical extremity (white elytral markings reduced in f. *reductomaculatus* Hay.); length 10 mm **chujoii**
4. Prothorax angulate at side behind middle; frons with median 2 carinae fused together above and below; pronotum with a small basal spot on each side; length 8–16 mm..... **generosus angulithorax**
Prothorax rounded at side behind middle; frons with 2 median carinae open above, fused below; vertex with acute inverse Y-shaped carina terminating between open ends of median carinae; pronotum lacking basal spots; length 7.8–15.3 mm.....
..... **generosus generosus**

Xylotrechus (Xyloclytus) chinensis (Chevrolat)

Clytus chinensis Chev., 1852, Rev. Mag. Zool. ser. 2, 4: 416 (China).

X. sinensis: Sakaguchi, 1927, Prov. Lists Ins. Okinawa.

X. chinensis: Yashiro, 1927, Okinawa Sugar Exp. Sta. Bull. 1: 8 (Okinawa).—Mitono, 1940, Cat. Col. Japonic. 8: 106 (Tokunoshima).

X. (Xyloclytus) chinensis: Gress., 1951, Phil. J. Sci. 79 (2): 213.

Hosts: *Morus alba*, *Pyrus malus*.

DISTRIBUTION: Korea, Japan, China, Ryukyus (Tokunoshima, Okinawa) Taiwan.

Xylotrechus (s. s.) brevicillus Chevrolat

X. brevicillus Chev., 1863, Mem. Soc. Sci. Liege **18**: 323 (China).—Hay., 1963, Ent. Rev. Japan **16** (1): 10, pl. 2, fig. 1 (Ishigaki).

DISTRIBUTION: China, Ryukyus (Ishigaki).

Xylotrechus (s. s.) chujoi Hayashi

X. chujoi Hay., 1960, *Ibid.* **11** (1): 24, (Okinawa; Chujo coll.).

X. chujoi f. *reductomaculatus* Hay., 1962, *Ibid.* **14** (1): 10, pl. 2, fig. 6 (Amami-Oshima; Shibata coll.).

DISTRIBUTION: Ryukyus (Amami-Oshima, Okinawa).

Xylotrechus (s. s.) generosus generosus Matsushita

X. generosus Matsush., 1933, J. Fac. Agr. Hokkaido Univ. **34**: 270, pl. 11, fig. 1 (Yayeyama; HU).

X. basalis: Miwa, 1933, Trans. Nat. Hist. Soc. Formosa **23**: 13 (Iriomote).

X. basalis angulithorax: Mitono, 1940, Cat. Col. Japonic. **8**: 106.

X. atronotatus angulithorax: Mitono, 1941, Bull. Agr. For. Taihoku Univ. **2**: 91, pl. 7, figs. 6, 7 (Iriomote, Ishigaki, part).

X. (s. s.) atronotatus generosus: Gress., 1951, Phil. J. Sci. **79** (2): 213 (Ishigaki).

MATERIAL EXAMINED: Ishigaki: 1, Mt Omoto, 14.X.1963, Morimoto (FES); 1, Mt Omoto, E. slopes, 100–250 m, under bark, 29.X.1963, Samuelson (BISHOP); 3, Mt Omoto, 200 m, Malaise trap, 17–20.XI.1963, Samuelson; 3, Mt Banna, 70 m, Malaise trap, 22–23.V.1964, Gressitt. Iriomote: 2, Shirahama, 4.X.1963, Hirashima (KU), Morimoto; 2, Mt Ushiku, forest, Malaise trap, 7.X.1963, Hirashima; 1, same, 11.X.1963, Morimoto; 5, Mt Ushiku, nr summit, 350 m, Malaise trap, 3–7.XI.1963, Samuelson; 1, same, but 7–10.XI.1963, Samuelson; 1, same, ex dry leaves, 4.XI.1963, Samuelson; 1, same, but 100–300 m, beating, 10. XI.1963, Samuelson.

DISTRIBUTION: Ryukyus (Ishigaki, Iriomote.)

Xylotrechus (s. s.) generosus angulithorax Gressitt, n. status

X. angulithorax Gr., 1934, Pan-Pac. Ent. **9**: 165 (Amami-Oshima; CAS).—Hay., 1960, Ent. Rev. Japan **11** (1): 23, textfig. 3, pl. 4, figs. 1, 3, 4; 1962, *Ibid.* **14** (1): 10.

X. basalis var. *generosus*: Miwa, 1935, Trans. Kansai Ent. Soc. **6**: 25, pl. 4, fig. 14 (Amami-Oshima, Okinawa).

X. basalis angulithorax: Mitono, 1940, Cat. Col. Japonic. **8**: 106 (Tokunoshima, part).

X. atronotatus angulithorax: Mit., 1941, Bull. Agr. For. Taihoku Univ. **2**: 91, pl. 7, figs. 6, 7 (part).—Gress., 1951, Phil. J. Sci. **79** (2): 213.

MATERIAL EXAMINED: Amami-Oshima: 1, Mt Yuwan, 550 m, 17. VII. 1963, Kurosawa (NSM); 2, same loc., 6.VIII.1963, Okada (BISHOP, UM).

DISTRIBUTION: Ryukyus (Amami-Oshima, Tokunoshima; questionably Okinawa).

Genus **Clytus** Laicharting

Clytus Laich., 1784, Verz. Tyrol. Ins. **2**: 88.—Gress., 1951, Longic. **2**: 252.

Clytus fukienensis Gressitt

C. fukienensis Gr., 1951, Longic. 2: 253, 254, pl. 10, fig. 5 (Fukien; Koenig Mus., Bonn).
—Hay., 1962, Ent. Rev. Japan 14 (1): 11, pl. 2, fig. 7 (Amami-Oshima).

DISTRIBUTION: China (Fukien), Ryukyus (Amami-Oshima).

Genus **Perissus** Chevrolat

Perissus Chevr., 1863, Mem. Soc. Sci. Liege 18: 262 (10).—Gress., 1951, Longic. 2: 264.

Perissus kiusiuensis Ohbayashi

P. kiusiuensis Ohb., 1944, Insect World, Gifu 48 (566): 4 (Kyushu).
P. kiusiuensis f. yamadai Hay., 1962, Ent. Rev. Japan 14 (1): 11 (Amami-Oshima; Shiba-
ta coll.).

MATERIAL EXAMINED: Amami-Oshima: 4, Mt Yuwan, 550 m, Malaise trap, 18.VIII.1963,
Yoshimoto (BISHOP). The Amami specimens differ from S Japan material by having the
dorsum a little darker, the elytral markings narrower, sometimes with the small spots near
the scutellum absent. Length 7–10 mm.

DISTRIBUTION: Japan (Kyushu), Ryukyus (Amami-Oshima).

Genus **Chlorophorus** Chevrolat

Chlorophorus Ch., 1863, Mem. Soc. Sci. Liege 18: 290 (38) (type: *Clytus annularis* Fabr.)
(*nec Chlorophora* Robineau-Desvoidy, 1830, Diptera).—Gress., 1951, Longic. 2: 270.
Chlorophora and *Chlorophorus* are not absolute homonyms; therefore, the latter name
is retained.

1. Elytron with a completely closed basal lunule (basal maculation of disc forming a subcircular outline containing interior pubescent area), or lacking a basal lunule.....2
- Elytron with an open basal lunule.....4
2. Elytron with closed basal lunule.....3
- Elytron lacking lunule, but with a narrow irregular band at base; remainder of disc with distinct median and subapical dark bands; pubescence greenish; length 9–15 mm.....*muscosus*
3. Pronotum with an inverted Y-shaped black mark; basal lunule of rather uniform width and connecting posteriorly to median band, remainder of disc with a large subapical spot; pubescence yellowish; length 9–15 mm.....*annularis*
- Pronotum with 2 anteriorly fused oblique black spots at center and another on each side; basal lunule of irregular width, narrowest laterally or anteriorly, not connecting with median band; pubescence dull yellowish; length 9–15 mm.....*yayeyamensis* (part)
4. Basal lunule broadly open externally.....5
- Basal lunule partly closed anterolaterally, nearly open anteriorly and incomplete posterolaterally (see couplet 3)*yayeyamensis* (part)
5. Pronotum with a nearly complete subtransverse black band; basal lunule of elytron extensive, somewhat irregular, touching suture behind scutellum and joined with median band, remainder of disc pale except for a dark postmedian band;

pubescence yellowish orange; length 13–18 mm..... **quinquefasciatus**
 Pronotum with 2 anteriorly fused oblique black spots at center and another on each side; basal lunule C-shaped (on rt. elytron), not touching suture and not touching median band; pubescence greenish gray; length 10–13 mm..... **signaticollis**

***Chlorophorus annularis* (Fabricius)**

Callidium annulare F., 1787, Mant. Ins. 1: 156 (Siam). *Clytus annularis*: F., 1801, Syst. Eleuth. 2: 352.

Callidium bidens Weber, 1801, Obs. Ent.: 90 ("East Indies").

Chlorophorus annularis: Miwa, 1933, Trans. Nat. Hist. Soc. Formosa 23: 13 (Iriomote).—Matsush., 1933, J. Fac. Agr. Hokkaido Univ. 34: 280 (Okinawa).—Miwa, 1935, Trans. Kansai Ent. Soc. 6: 25 (Amami-Oshima).—Gress., 1951, Phil. J. Sci. 79 (2): 214; 1951, Longic. 2: 275 (China, Formosa).—Hay., 1962, Ent. Rev. Japan 14(1): 11.

Rhaphuma annularis: Ohbay., 1963, Fragmenta Col. 3: 11.

MATERIAL EXAMINED: 1, Okinawa, VI.1945, Bohart (BISHOP).

Host: Bamboos.

DISTRIBUTION: Japan, Ryukyus (Amami-Oshima, Okinawa), Taiwan, China, Hainan, SE Asia, Burma, India, Ceylon.

***Chlorophorus muscosus* (Bates)**

Clytanthus muscosus B., 1873, Ann. Mag. Nat. Hist. ser. 4, 12: 198 (Japan; BMNH).

Chlorophorus bifasciatus Kano, 1933, Kontyû 7: 135 (Izu-Oshima).

Chlorophorus muscosus: Gress., 1937, Ibid. 11: 321 (Amami-Oshima).—Hay., 1962, Ent. Rev. Japan 14 (1): 11.

Rhaphuma muscosa: Ohbay., 1963, Fragmenta Col. 3: 11.

MATERIAL EXAMINED: Amami-Oshima: 1, Mt Yuwan, 550 m, 18.VII.1963, Yoshimoto (BISHOP).

Hosts: *Ardisia sieboldii* (flowers), *Wendlandia formosana* (flowers).

DISTRIBUTION: Japan, Ryukyus (Amami-Oshima), Bonin Is.

***Chlorophorus quinquefasciatus* (Castelnau and Gory)**

Clytus quinquefasciatus Cast. & Gory, 1841, Hist. Nat. Icon. Ins. Col., 101, pl. 19, fig. 120 (Japan).

Chlorophorus quinquefasciatus: Kano, 1927, Trans. Nat. Hist. Soc. Formosa 16: 128 (Loo-choo).—Miwa, 1933, Ibid. 23: 13 (Iriomote).—Matsush., 1933, J. Fac. Agr. Hokkaido Univ. 34: 285 (Okinawa, Ishigaki).—Mitono, 1940, Cat. Col. Japonic. 8: 119 (Amami-Oshima, Miyako).—Hay., 1962, Ent. Rev. Japan 14 (1): 11.

Rhaphuma quinquefasciata: Ohbay., 1963, Fragmenta Col. 3: 11.

MATERIAL EXAMINED: Okinawa: 1, Koza, 25.III.1962, Takara (UR); 1 Nakijin, 15.VIII.1964, Takara (BISHOP). Miyako: 1, Miyako I., 29.V.1960, Takara. Ishigaki: 1, 31.V.1952, Sato (UR); several 20–50 m, Yonehara, 21.V.1954, Gressitt; 3, 21.V.1964, Takara; 12, Mt Omoto, 100–250 m, 22.V.1964, Gressitt.

Host: *Prunus cerasus*.

DISTRIBUTION: Korea, Japan, Ryukyus (Amami-Oshima, Okinawa, Miyako, Ishigaki, Iriomote); questionably Taiwan.

Chlorophorus signaticollis (Castelnau and Gory)

Clytus signaticollis Cast. & Gory, 1841, Hist. Nat. Icon. Ins. Col., 103, pl. 19, fig. 122 ("E. India").

Anthoboscus signaticollis: Chevr., 1863, Mem Soc. Sci. Liege **18**: 303 (51).

Anthoboscus oppositus Chevr., 1863, *l. c.*, 304 (52) (N China).

Clytanthus signaticollis: Gahan, 1894, Trans. Ent. Soc. London **1894**: 482.

Chlorophorus fainanensis Pic, 1918, Mel. Exot. Ent. **28**: 4 (Formosa).

Chlorophorus signaticollis var. *taihorensis* Schwarz., 1925, Ent. Blätt. **21**: 27 (Formosa).

Chlorophorus signaticollis: Miwa, 1933, Trans. Nat. Hist. Soc. Formosa **23**: 13 (Iriomote); 1935, Trans. Kansai Ent. Soc. **6**: 25 (Amami-Oshima, Ishigaki).—Mitono, 1940, Cat. Col. Japonic. **8**: 120 (Okinawa).—Gress., 1951, Phil. J. Sci. **79** (2): 215.—Hay., 1962, Ent. Rev. Japan **14** (1): 11.

Rhaphuma signaticollis: Ohbay., 1963, Fragmenta Col. **3**: 11.

DISTRIBUTION: China, Ryukyus (Amami-Oshima, Okinawa, Ishigaki, Iriomote), Taiwan, Indonesia.

Chlorophorus yayeyamensis Kano

C. yayeyamensis Kano, 1933, Kontyû **7**: 137 (Ishigaki, Iriomote; NSM).—Gress., 1951, Phil. J. Sci. **79** (2): 215 (Amami-Oshima, Miyako).—Hay., 1962, Ent. Rev. Japan **14** (1): 11.

C. douei: Miwa, 1931, Dept. Agr. Govt. Res. Inst. Formosa Rept. **55**: 234.

C. dubius Matsush., 1933, J. Fac. Agr. Hokkaido Univ. **34**: 281, pl. 11, fig. 5 (Okinawa, Formosa; HU).

Rhaphuma yayeyamensis: Ohbay., 1963, Fragmenta Col. **3**: 11.

MATERIAL EXAMINED: Okinawa: 1, "Okinawa", VI.1945, Bohart (BISHOP); 1, ?Yomitan, 24.VI.1952, Sato (UR); 1, Kerama (Zamami), 16.VIII.1955, Azuma (Az. coll.); 3, Naha, VI. 1958, Krauss; 1, Yogi, VI. 1958, Krauss (BISHOP); 1, Nakagasuku Park, 150 m, 25.V. 1964, Gressitt (BISHOP); 2, Motobu, 5.VI.1958, Takara (UR); 4, Shuri, 8.I-23.VI.1959, 11. VI.1960, Takara; 1, Naha, 12.VI.1961, Takara. Minami-Daito: 1, "S. Borodino I.", 27.II. 1960, Takara. Miyako: 2, Miyako I., 18. V. 1960, Gusukube (UR). Ishigaki: 1, Omoto Vill., 100 m, 22.V.1964, Gressitt.

DISTRIBUTION: Ryukyus (Amami-Oshima, Okinawa, Minami-Daito, Miyako, Ishigaki Iriomote), Taiwan.

Genus **Rhaphuma** Pascoe

Rhaphuma Pasc., 1858, Trans. Ent. Soc. Lond. ser. 2, **4**: 240.—Gressitt, 1951, Longic. **2**: 283.

1. Dorsum mostly blackish..... 2
- Dorsum olivaceous; pronotum with 2 discal dark spots; elytron with a dark basal lunule and with dark areas near middle and preapically; length 13–16 mm **virens**
2. Dorsum shiny black, sparsely clothed with gray; pronotum about 1.2× as long as broad; elytron with pale spots basally and with an oblique bar near apical 1/3;

length 5.5–7 mm *diminuta nitens*
 Dorsum subshiny black, moderately clothed with cloed auburn on black parts of elytron; pronotum about 1.1× as long as broad; elytral markings like *nitens*, but basal sutural pale line longer; length 4–8 mm *diminuta diminuta*

Rhaphuma diminuta diminuta (Bates)

Clyanthus diminutus B., 1873, Ann. Mag. Nat. Hist. ser. 4, 12: 199 (Japan; BMNH).—Pic, 1891, Revue d'Ent. 10: 146 (Amur).

Chlorophorus diminutus: Auriv., 1912, Col. Cat. 22 (39): 395.

R. diminuta: Matsush., 1933, J. Fac. Agr. Hokkaido Univ. 34: 288.—Gress., 1951, Longic. 2: 289.

MATERIAL EXAMINED: Okinawa: 2, Yona, Malaise trap, 24–25. III. 1964, Yoshimoto & Harrell (BISHOP); 1, Kami-mori (forest), 25.III.1964, Shirozu (KU); 1, Higashi-mura, 5.IV. 1961, Takara (UR); 7, Hentona, 25.III.1964, Yoshimoto.

DISTRIBUTION: Amur, Japan, Ryukyus (Okinawa).

Rhaphuma diminuta nitens Hayashi

R. diminuta ssp. *nitens* Hay., 1962, Ent. Rev. Japan 14 (1): 12, pl. 2, fig. 9 (Amami-Oshima; Shibata coll.).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Rhaphuma virens Matsushita

R. virens Matsush., 1931, Mitt. Zool. Mus. Berlin 17: 402 (Formosa).—Mitono, 1940, Cat. Col. Japonic. 8: 124 (Amami-Oshima); 1942, Bull. Agr. For. Taihoku Univ. 3: 93, pl. 9, fig. 7.—Gress., 1951, Phil. J. Sci. 79 (2): 215.—Hay., 1962, Ent. Rev. Japan 14 (1): 12, pl. 2, fig. 8.

Hosts: flowers of *Ardisia sieboldii*, *Wendlandia formosana*.

DISTRIBUTION: Ryukyus (Amami-Oshima), Taiwan.

Genus **Demonax** Thomson

Demonax Th., 1860, Classif. Ceram., 226.—Gress., 1951, Longic. 2: 292.

Elytron with basal 2/5 grayish, containing an oblique black area; premedian oblique black band with margins parallel; length 6.8–10 mm *ohbayashii**

Elytron with base black, containing a gray humeral area, and an oblique gray line diverging posterolaterad from suture at base to disc where it is acutely angled to lateral margin at about end of basal 2/5; premedian transverse black band with margins not parallel, anterior margin acutely produced forward along suture and posterior margin subtransverse; length 10 mm *semixeniscus*

Demonax ohbayashii Samuelson, n. sp. Fig. 4.

♂. Rather narrow; elytral margins weakly sinuate, but not strongly narrowed until extreme apex. Dorsum with dark and pale gray coloration of about equal portion; ground color black; head submoderately clothed with gray; antenna piceous, apical segments more

reddish, all segments clothed with gray; pronotum largely gray, with 2 subtransverse maculations narrowly joined at center of disc, basal pale area with about 20 scattered circular dark spots; basal margin not paler than discal pale areas; scutellum black, subglabrous; elytron pale gray with following black areas: basal oblique area directed anterolaterad from disc to lateral margin near humerus, parallel-sided oblique band which with its fellow forms a chevron slightly before middle, preapical subtransverse band slightly narrowed at suture; pubescence of elytral black areas with a faint golden luster. Ventral surfaces and femora piceous, clothed with gray; tibiae and tarsi mostly dark pitchy brown.

Head widest at eyes, breadth exceeding apical margin of prothorax; clypeus subtriangular with apical angles oblique, surface feebly deflexed from frons; frons feebly narrowed between eyes, slightly widened below, surface with a fine median carina; interantennal space weakly and obliquely elevated toward antennal socket, terminating as an acute point; occiput convex, surface with about 8 punctures on each side, granulate basally; eye 2× as deep as gena. **Antenna** about 2/3 as long as body; segments 2–3 with apical spines; spine of segment 3 (perhaps broken) less than 1/4 as long as segment 4; spine on 4 about 4/9 as long as segment 5; relative lengths of segments as follows: 9 : 2.5 : 10 : 9 : 9 : 8 : 6 : 4.5 : 4.5 : 4 : 5. **Prothorax** slightly longer than broad (25 : 23), and 5/14 as long as elytron; sides swollen, widest behind middle, constricted basally and more gradually narrowed apically, disc granulate, strongly convex. **Scutellum** triangular, acute apically, surface finely granulate. **Elytron** 4× as long as broad, widest at humerus, side sinuate; apical 1/5 narrowed to broad, feebly convex, truncate apex; lateral apical angle with a small acute tooth. **Ventral surfaces** with prosternum transversely rugose to granulate, mesepisternum closely punctured, metasternum and abdomen with lengths of sternites as follows: 16 : 9 : 9 : 7 : 8, last sternite exserted beyond apices of elytra, sides moderately narrowed to rounded extremity, surface rather flat. **Legs** long; metafemur with apical 1/6 projecting beyond elytral apex; weakly arched basally, surface densely punctate-granulate; metatibia slightly longer than femur; metatarsus about 1/2 as long as tibia; segment 1 not quite 2× as long as remaining segments (16 : 9), 2 slightly longer than 3, last a little longer than 2+3 together, claw divaricate, each unguis thickened basally.

Length 6.8 mm; breadth 1.5.

♀. Differing from ♂ as follows: antenna 5/8 as long as body, segments 3 and 4 each with an apical spine 1/2 as long as the following segment, relative lengths of segments as follows: 6.5 : 2 : 8 : 6 : 7 : 6 : 5 : 4 : 3.5 : 3 : 4; abdomen with relative lengths of sternites as

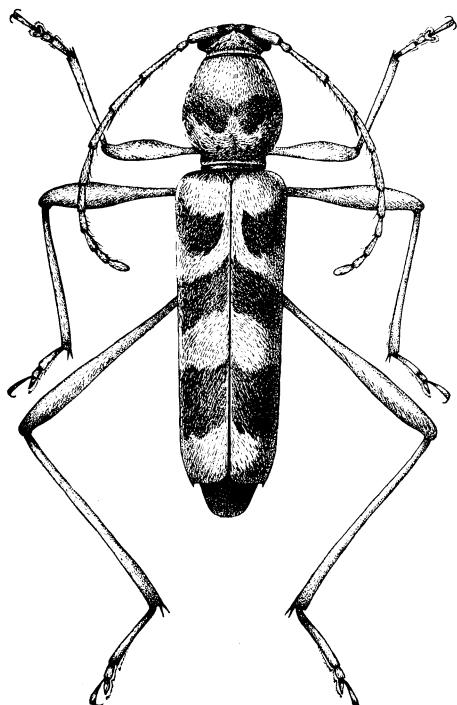


Fig. 4. *Demonax ohbayashii* n. sp. Holotype ♂.

follows: 19 : 12 : 9 : 7 : 7.5; last sternite with sides narrowed to broadly rounded apex, surface weakly depressed preapically.

Length 8.9 mm; breadth 2.0.

Holotype ♂ (KU), Ishigaki: Mt Omoto, 14.X.1963, Hirashima; allotype ♀ (UR), "Ishigaki", 21.V.1964, Takara.

Differs from most East Asian species by possessing an anterolaterad directed basal oblique black area on elytron. Differs from *substitutus* Gress. in having elytron 2.8 instead of 2× as long as prothorax, metafemur shorter, exceeding elytral apex by 1/5 instead of 1/3 its length; from *masatakai* Ohbay. by having elytral base pale instead of dark, apical 3 antennal segments shorter, ectoapical angle of elytron with tooth more pronounced.

The description of *masatakai* was seen too late for inclusion in key and heading (1964, Bull. Japan Ent. Acad. 1 (5) : 23, fig. 4; Iriomote, Ishigaki). The species is named in honor of Dr Kazuo Ohbayashi of Nagoya, who kindly compared our specimens with the other Ryukyu species.

Demonax semixeniscus Hayashi

D. semixeniscus Hay., 1962, Ent. Rev. Japan 14 (1) : 12, pl. 3, fig. 10 (Amami-Oshima; Shibata coll.).

DISTRIBUTION: Ryukyus (Amami-Oshima).

Tribe ANAGLYPTINI

Genus **Anaglyptus** Mulsant

Anaglyptus Muls., 1839, Col. France Long., 91.—Gress., 1951, Longic. 2 : 302.

Anaglyptus arakawae (Kano)

Aglaophis arakawae Kano, 1933, Kontyū 6 (5-6): 276 (Shikoku, Japan; NSM).

Anaglyptus arakawae: Hay., 1962, Ent. Rev. Japan 14 (1): 13 (Amami-Oshima).

DISTRIBUTION: S Japan, Ryukyus (Amami-Oshima).

Tribe CLEOMENINI

Genus **Artimpaza** Thomson

Artimpaza Th., 1864, Syst. Ceram., 160.—Gress., 1951, Longic. 2 : 312.

Artimpaza setigera japonica (Pic.)

Falsodebilis japonica Pic., 1928, Mel. Exot. Ent. 51 : 27 (Japan).

A. setigera: Hay., 1955, Col. Ill. Ins. Japan 1 (Col.): 52, pl. 19, fig. 212; 1956, Ent. Rev. Japan 7 (1) : 15 (Yakushima).

A. setigera nipponica Hay., 1956, Ibid. 7 (2) : 40 (C. Sata)

MATERIAL EXAMINED: Amami-Oshima : 1, Mt Yuwan, 18.VI.1963, Aoki (NSM); 1, same, 550 m, 18.VII.1963, Malaise trap, Yoshimoto (BISHOP).

DISTRIBUTION: S Kyushu, Yakushima, Ryukyus (Amami-Oshima).

THE CERAMBYCIDAE (Coleopt.) OF THE RYUKYU ARCHIPELAGO II, LAMIINAE¹

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Abstract: This paper concerns the longicorn subfamily Lamiinae, and is the second part of a synopsis of the Cerambycidae of the Ryukyu Archipelago. Treated are 46 genera 118 species and subspecies of which 5 are described as new. A small number of nomenclatorial changes are made, including the erection of 1 subgenus.

This is the second part of a synopsis of the Cerambycidae of the Ryukyu Archipelago. The remaining subfamily, Lamiinae, is treated here.

The only previous synopsis of the Ryukyu fauna (all subfamilies) was published by Gressitt in 1951 (*Philippine J. of Science* 79 (2) : 193-235). Therein, 23 genera, 45 species and 3 additional subspecies of Lamiinae are enumerated. The bulk of the numerous additions to the fauna since 1951 has been contributed by Masao Hayashi of Osaka, Japan (mostly in the *Entomological Review of Japan*). In the present study 46 genera, 101 species and 17 additional subspecies are reported, including descriptions of 3 new species and 2 subspecies. This represents an increase (since 1951) of roughly 100% for genera and 145% for species and subspecies.

A large part of the material studied has been collected in 1963-64 by members of the various United States-Japan Binational Entomological Investigations in the Ryukyu Islands. The principal collectors are Jun-ichi Aoki, John C. Harrell, Yoshihiro Hirashima, J. L. Gressitt, Hiroshi Inoue, Yoshihiko Kurosawa, Syoiti Miyamoto, Yorio Miyatake, Katsura Morimoto, Takashi Shirozu, Shuniti Ueno, Tsukane Yamasaki, Koji Yano, Keizo Yasumatsu, Carl M. Yoshimoto and myself. Other material studied includes the collections of G. E. Bohart taken in the S Ryukyus in 1952-1953, Gressitt in 1932 and 1934, S. Azuma (Ryukyu Plant Quarantine Service) from 1952 to present, and a number of specimens from the University of the Ryukyus collected chiefly by Tetsuo Takara during the past ten years.

Geographical terminology. Under the literature cited for species the regional names are usually retained as they appeared in the original. The Japanese suffix *-jima* (or *-shima*) for "island" is generally omitted. The Northern, Central and Southern components of the Ryukyus as categorized under distribution for species are identified as follows:

N. Ryukyu=Tokara-Amami Insular Groups.

C. Ryukyu=Okinawa I. (including the Minami-, Kita-Daito Group [Borodino Is.] which

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