

Studies on Cerambycidae (Coleoptera) of Japan (1)

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日本産カミキリムシの研究 (I)

巖原 寛

In the present paper, the results of my recent studies on Cerambycidae of Japan are presented. A new species, *Exocentrus takakuwai* and a new subspecies, *Glenea iriei heikichii* are described. *Acalolepta okinawensis* BREUNING et OHBAYASHI, 1966 is treated as a synonym of *A. oshimana omoro* HAYASHI, 1963.

Subfamily Lamiinae

Tribe Agniini

Acalolepta oshimana omoro HAYASHI (Figs. 1, 2A, A', 3)

Acalolepta omoro HAYASHI, 1963, Ent. Rev. Japan 16(1): 11.

Acalolepta okinawensis BREUNING et OHBAYASHI, 1966, Bull. Japan ent. Acad. 2 (6): 31, new synonymy.

Acalolepta oshimana omoro: KUSAMA, 1973, New Ins. Collect. 3, Suppl.: 110.

Specimens examined: 2♂♂ 4♀♀, Yona, Okinawa I. of the Ryukyus, 9-13. VIII. 1969, H. MAKIHARA leg.; 2♂♂ 2♀♀, same locality and collector as above, 12-17. VI. 1970; 10♂♂ 4♀♀, same locality and collector as above, 15-17. VII. 1970; 1♂, Oku, Okinawa I., 29. VI. 1976, H. MAKIHARA leg.; 1♂ 1♀, same locality and collector as above, 30. VI. 1976; 2♂♂ 1♀, Yona, Okinawa I., 9-11. VII. 1977, H. MAKIHARA leg.; 1♂, Mt. Yonaha, Okinawa I., 11-12. VII. 1977, H. MAKIHARA leg.

Distribution: Okinawa I. of the Ryukyus.

Diagnosis: *Acalolepta okinawensis* BREUNING et OHBAYASHI from Okinawa I. has been collected only a male specimen, treated as the holotype. And the holotype is a small specimen having the short antenna. *A. okinawensis* is very similar to *A. oshimana omoro* HAYASHI from Okinawa I., and the former is indistinguishable from the latter except for two points, body is small and antenna is short. The results of my recent study on the relationship of antennal length to body of *A. oshimana omoro* are as follows: The ratios of antennal length to body of small specimens

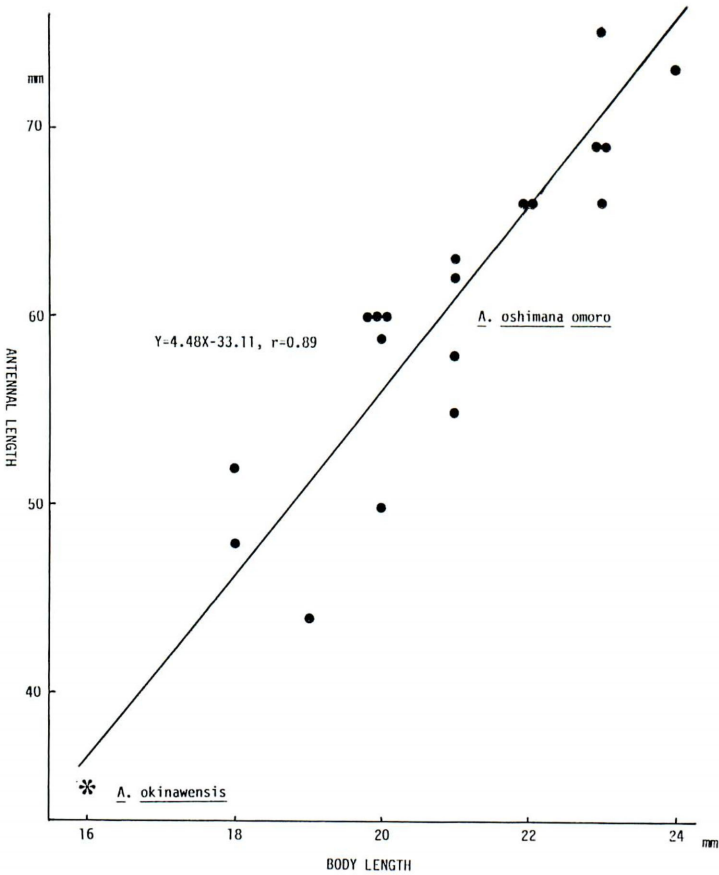


Fig. 1. Relationship of antennae to body of *Acalolepta oshimana omoro* HAYASHI in male.

are lower than them of large specimens (Fig. 1). It is satisfactory to consider that the holotype of *A. okinawensis* is included in variations of *A. oshimana omoro*. And then, I treated *A. okinawensis* as a synonym of *A. oshimana omoro*.

A. oshimana omoro HAYASHI is related to *A. oshimana oshimana* (BREUNING) from Amami-Oshima I., Tokunoshima I. and Okinoerabu I., but differs from it following points.

A. oshimana oshimana: Antennae somewhat long, relative length of antennae to body 2.22 ± 0.05 in female (Fig. 3); apex of 7th abdominal tergite concave in male (Fig. 2B'); lateral lobes (parameres) of male genitalia slender (Fig. 2B).

A. oshimana omoro: Antennae somewhat short, relative length of antennae to body 2.07 ± 0.07 in female (Fig. 3); apex of 7th abdominal tergite not so concave in male (Fig. 2A'); lateral lobes (parameres) of male genitalia not so slender (Fig. 2A).

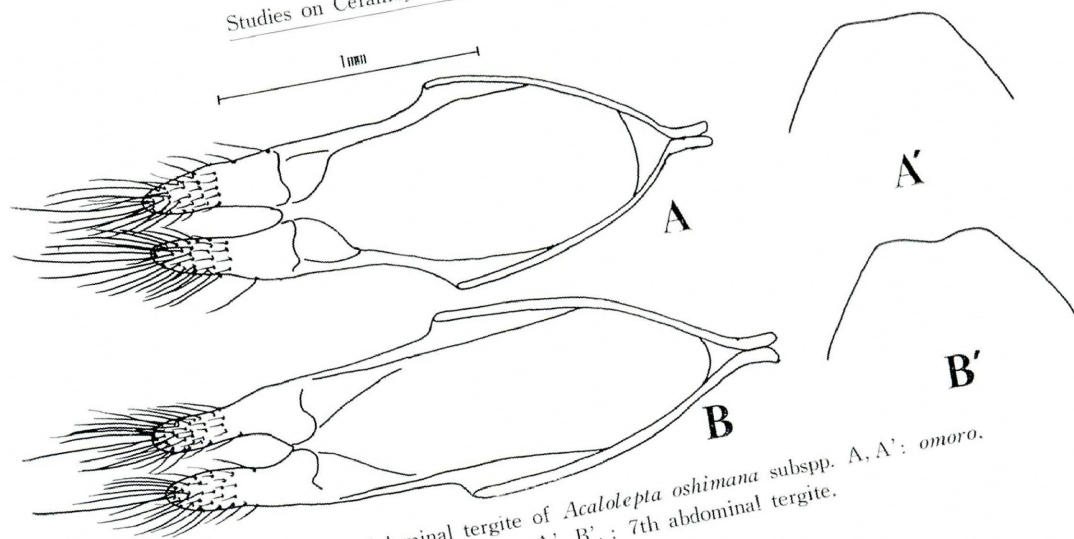


Fig. 2. Tegmen and 7th abdominal tergite of *Acalolepta oshimana* subsp. A, A': *omoro*. B, B': *oshimana*. A, B: Tegmen, A', B': 7th abdominal tergite.

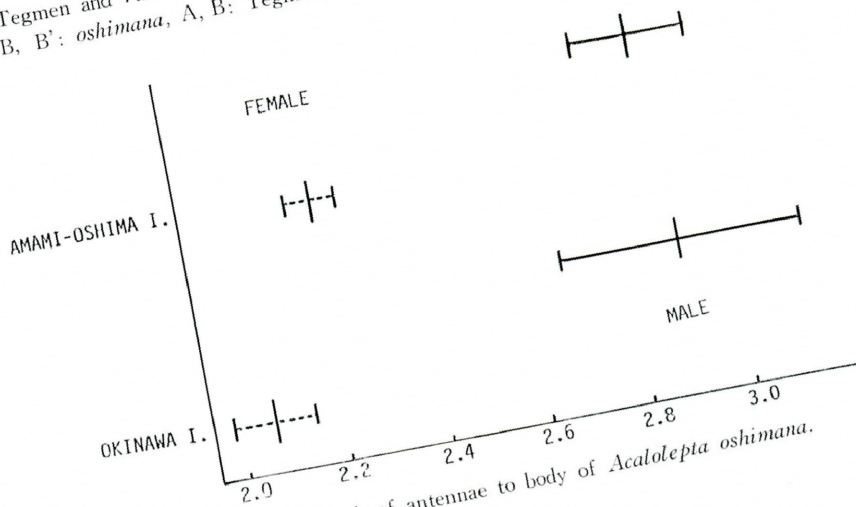


Fig. 3. Relative length of antennae to body of *Acalolepta oshimana*.

Tribe Acanthocinini

***Exocentrus takakuwai* sp. nov.** (Figs. 4A,C,E,G, 5A, 6A,C)
 (Japanese name: Ryukyu-kumogata-keshi-kamikiri)

Body reddish brown to brown. Elytron with five brown pubescent markings, first and second markings not clear and sometimes disappeared at near base and basal 2/5 near suture, third not clear at basal 2/5 near lateral side, fourth large and clear at apical 1/3 and fifth very small and clear at near suture.

Head finely punctured, with dense prostrate golden yellow pubescence and sparse curved bristles. Antennae 1.39 (male), 1.27 (female) times as long as body, relative length of each segment 11.7 : 3.5 : 10.9 : 12.1 : 10.9 : 10.1 : 9.3 : 8.9 : 8.2 : 7.0 : 7.4 (male), 12.3 : 3.5 : 10.6 : 11.6 : 10.9

1.6 : 9.5 : 8.5 : 8.5 : 7.0 : 7.0 (female); 1st segment with rather dense prostrate whitish yellow pubescence, a few suberect short light brown hairs and a few oblique brown bristles; 2nd to 11th segments with rather dense yellowish brown pubescence on basal parts, and these lesser toward apical segment; 3rd to 9th segments with sparse oblique long bristles on inner-undersides; apices of 3rd to 10th segments with two oblique long brown bristles on outer-undersides; 3rd to 10th segments with sparse erect short brown hairs; 2nd to 11th segments except for basal parts with dense prostrate brown pubescence.

Pronotum finely punctured, with dense prostrate whitish yellow pubescence, a few suberect bristles and a few erect long brown hairs. Lateral projections not so strongly developed.

Scutellum trapeziform, with dense prostrate whitish yellow pubescence.

Elytra about 1.8 times as long as broad, with dense prostrate light yellowish brown pubescence irregularly, sparse suberect dark brown somewhat long bristles and these longer toward apices.

Ventral side (except for metasternum and abdominal sternites) with dense prostrate short brown pubescence; metasternum and abdominal sternites with dense prostrate rather long yellowish brown pubescence.

Legs somewhat stout, mid femora not so strongly swelled.

Male genitalia slender. Median lobe with median struts; the ventral edge of median orifice somewhat truncated. Tegmen without basal-piece; lateral lobes (parameres) rather slender, with a few long setae at apices; ringed part geniculated and rather wide.

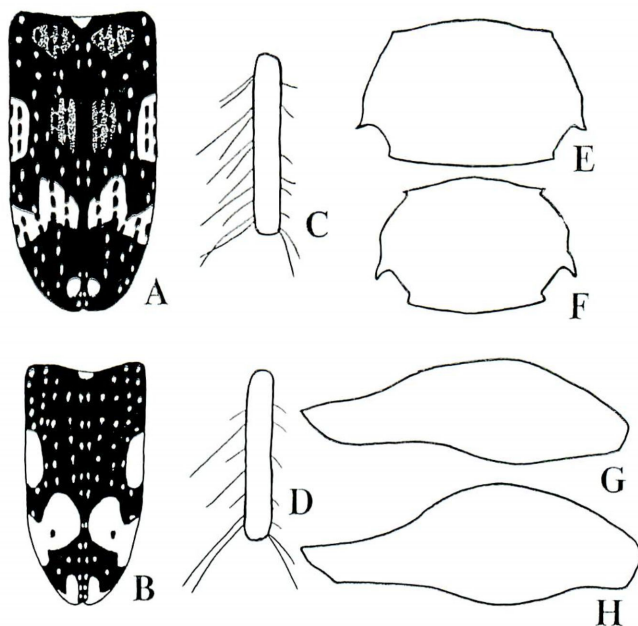


Fig. 4. *Exocentrus* spp. A, C, E, G: *takakuwai* sp. nov., B, D, F, H: *fasciolatus*, A, B: Elytral markings, C, D: 6th antennal segment, E, F: Pronotum, G, H: Mid femora.

Length: 4.6 mm (male), 5.0–5.6 mm (female).

Distribution: Tokunoshima I. of the Ryukyus.

Type material: Holotype ♀ (Type No.2391, Kyushu University), Inokawa, Tokunoshima I. of the Ryukyus, 28–31. V. 1970, H. MAKIHARA leg. Paratypes: 1♂ 1♀, Tokunoshima I., VI. 1972, emerged from cutted tree branches, M. TAKAKUWA leg.

Type depository: The holotype is preserved in the collection of the Entomological Laboratory, Faculty of Agriculture, Kyushu University.

This new species is related to *E. fasciolatus* BATES from Hokkaido, Honshu, Shikoku, Kyushu, Awashima I. (Niigata Pref.), Sado I., Kanmuriyama I., Oki I., Tsushima I., Amakusa I., Awajishima I. and Tanegashima I., but differs from it following points.

E. fasciolatus: Antennae short, 1.19 (male), 1.17 (female) times as long as body; antennal segments 3–10 with sparse oblique long brown bristles on inner-undersides; elytra with sparse erect somewhat short bristles; two brown pubescent markings on elytron, one at near apex and another one at apical 1/3, developed and somewhat large; mid femora strongly swelled (Fig. 4H); lateral lobes (parameres) of male genitalia slender and long; ringed part of male genitalia not so wide.

E. takakuwai sp. nov.: Antennae somewhat long, 1.39 (male), 1.27 (female) times as long as body; antennal segments 3–10 with rather dense oblique long brown bristles on inner-undersides; elytra with sparse erect long bristles; two brown pubescent markings on elytron, one at near apex and another one at apical 1/3, not so developed and small; mid femora not so strongly swelled (Fig. 4G); lateral lobes (parameres) of male genitalia slender but not so long; ringed lateral lobes (parameres) part of male genitalia somewhat wide.

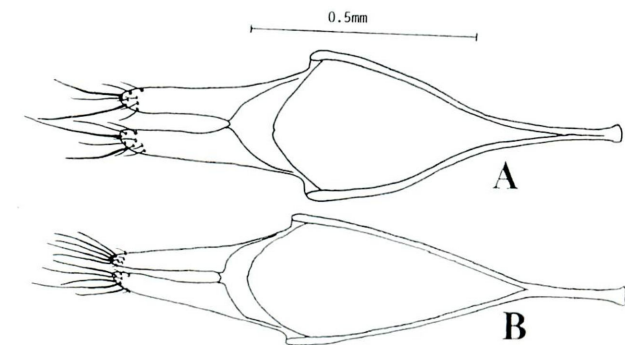


Fig. 5. Tegmen of *Exocentrus* spp. A: *takakuwai* sp. nov., B: *fasciolatus*.

Tribe Saperdini

Glenea iriei heikichii subsp. nov. (Figs. 7A,D, 8C,F)

(Japanese name: Okinawa-monki-kamikiri)

This new subspecies is related to *G. iriei iriei* HAYASHI from Amami-Oshima I. and Tokunoshima I. of the Ryukyus, and somewhat similar to *G. chujoii* MITONO from Taiwan, but differs from them by the following points.

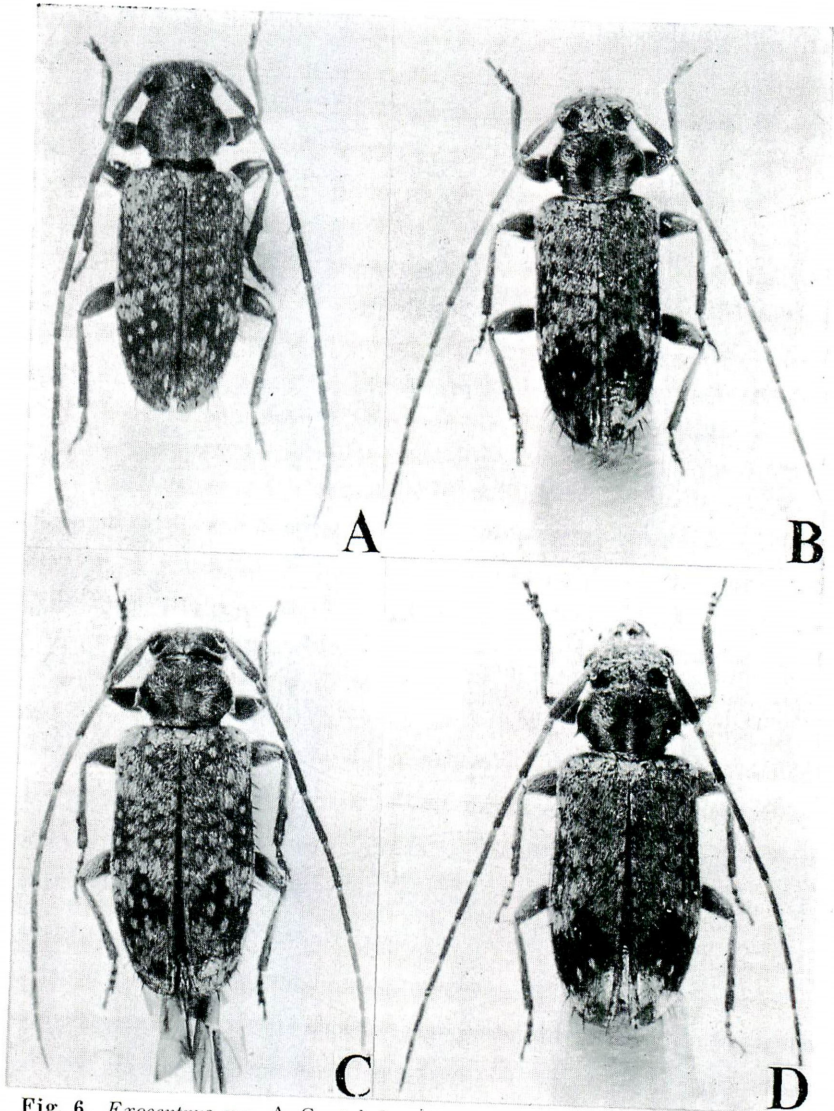


Fig. 6. *Exocentrus* spp. A, C: *takakuwai* sp. nov., B, D: *fasciolatus*, A, B: Male, C, D: Female.

1. Antennae rather short, 1.3 times shorter than body; antennae with dark brown pubescence densely; apices of antennal segments 6-9 with two rather short brown hairs on ventral sides; pronotum rather slender, the ratios of width to length 1.00 (male), 1.05 (female); lateral side of pronotum without marking; scutellum with yellow pubescence; elytra with small dark brown markings; elytra slender, relative length to width 2.43 -2.44 (male), 2.32 (female), elytra with somewhat long suberect yellow hairs sparsely; legs light brown; mesosternal process narrow (Fig. 7A, B); 7th abdominal sternite narrow (Fig. 7D, E) in male; 7th abdominal sternite not so raised at near apex 2
- Antennae long, 1.4 times longer than body; antennal segments 6-11 with silver white pubescence densely; antennal segments 6-9 with two rather short brown hairs on ventral sides; pronotum wide, the ratios of width to length 1.10 (male), 1.22 (female); lateral side of pronotum with a black marking; scutellum dark brown on lateral side near base; elytra with large dark brown markings; elytra not so slender, relative length to width 2.17 (male), 2.16 (female); elytra with somewhat long suberect brown hairs sparsely; legs brown;

- mesosternal process wide (Fig. 7C); 7th abdominal sternite wide in male (Fig. 7F); 7th abdominal sternite strongly raised at near apex..... *G. chujoii* MITONO (Fig. 8A, D)
2. Body with pale orange yellow pubescence; antennae rather short, relative length to body 1.22 (male), 1.09 (female); pronotum and elytra with small dark brown markings; 7th abdominal sternite rather wide at basal part (Fig. 7E)..... *G. iriei iriei* HAYASHI (Fig. 8B, D)
- Body with pale orange yellow pubescence; antennae rather long, relative length to body 1.26 (male), 1.13 (female); pronotum and elytra with very small dark brown markings; 7th abdominal sternite rather narrow at basal part (Fig. 7D) *G. iriei heikichii* subsp. nov.

Length: 9.4-9.7 mm (male), 10.3-11.0 mm (female).

Distribution: Okinawa I. of the Ryukyus.

Type material: Holotype ♂ (Type No. 2392, Kyushu University), Yona, Okinawa I. of the Ryukyus, 1. VII. 1977, H. IRIE leg. Paratypes: 1♂, same data as holotype; 2♀♀, Benoki, Okinawa I., 28. VII. 1977, H. IRIE leg.

Type depository: The holotype is preserved in the collection of the Entomological Laboratory, Faculty of Agriculture, Kyushu University.

Acknowledgement

I wish to express my sincere to Messrs N. OHBAYASHI of Kanagawa Experiment Station, M. TAKAKUWA of Yokohama city and H. IRIE of Fukuoka Pref. for the loan of the valuable specimens as well as the type specimens for my present study.

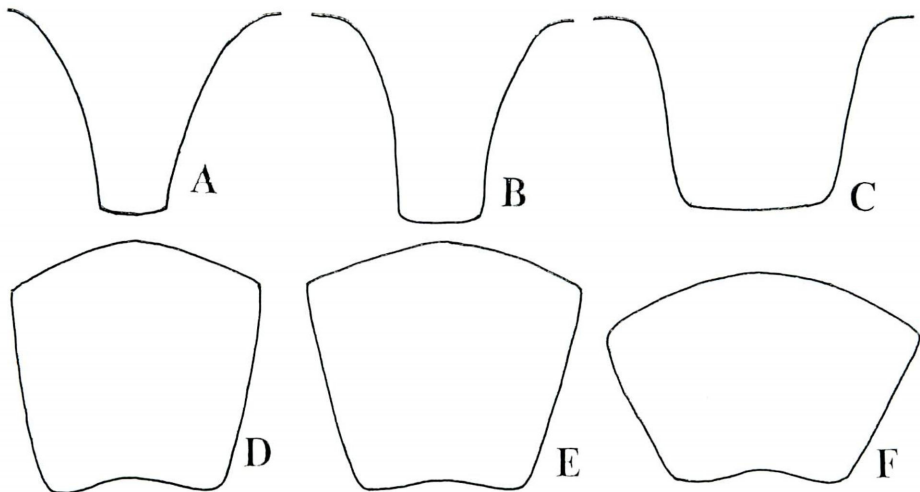


Fig. 7. *Glenea* spp. A, D: *iriei heikichii* subsp. nov., B, E: *iriei iriei*, C, F: *chujoii*, A, B, C: Mesosternal process in male, D, E, F: 7th abdominal sternite.

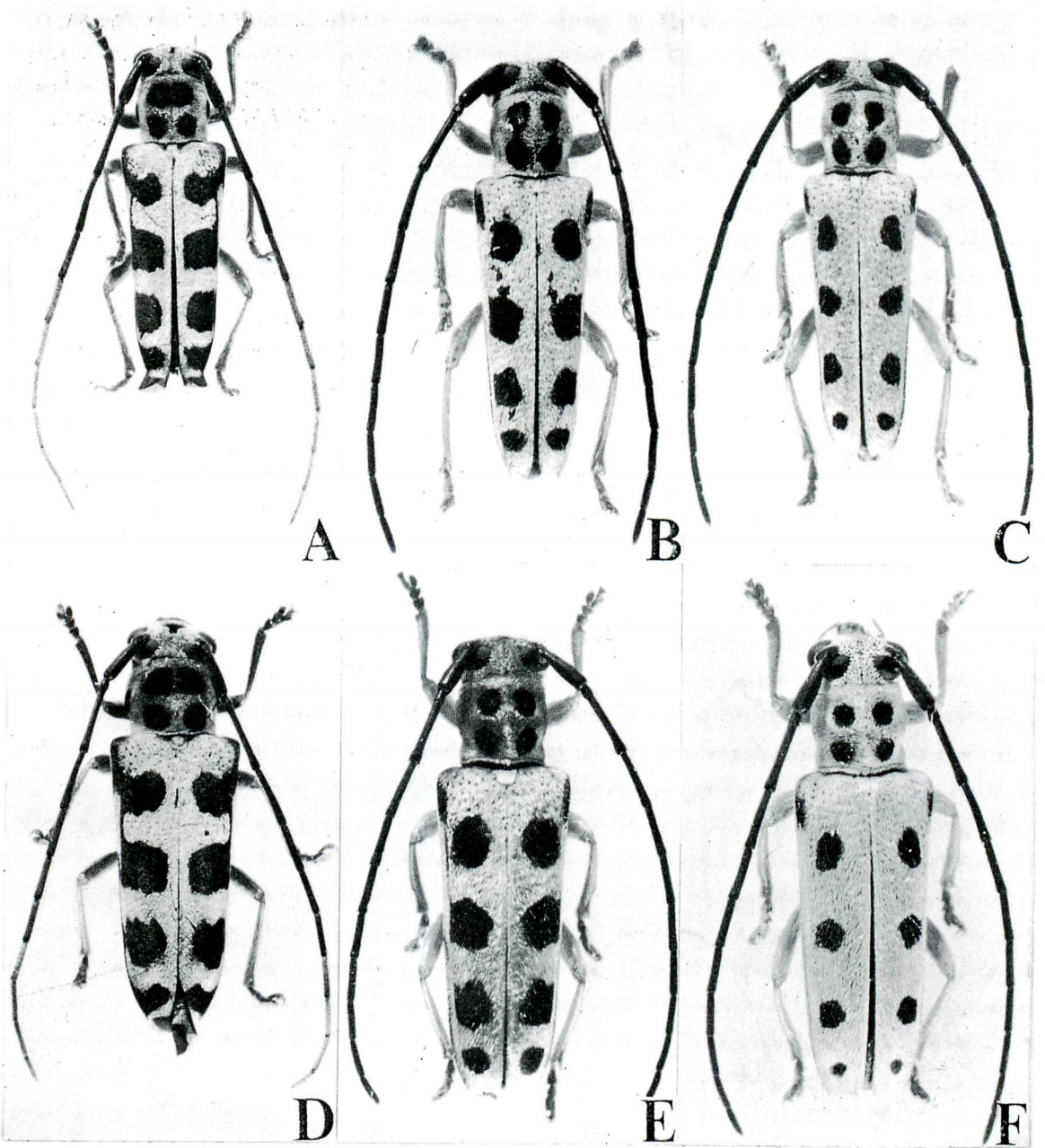


Fig. 8. *Glenea* spp. A, D: *chujoi*, B, E: *iriei iriei*, C, F: *iriei heikichii*. A, B, C: Male, D, E, F: Female.

摘 要

(1) オキナワビロウドカミキリ *Acalolepta okinawensis* BREUNING et OHBAYASHI, 1966 をオモロビロウドカミキリ *A. oshimana omoro* HAYASHI, 1963のシノニムとした。オキナワビロウドカミキリはタイプ標本の雄1頭しか採集されておらず、体長16mmと非常に小型で触角は体長の2.2倍と短いものである。オモロビロウドカミキリの雄は体長18—24mmと大型で触角も体長の2.5—3.3倍と長い。そして、この両種の区別点は触角の長さの相異だけ

である。そこでオモロビロウドカミキリの体長と触角長との相関関係を調べてみると、体が小さくなればなるほど触角と体長との比が小さくなることがわかった。この事からオキナワビロウドカミキリはオモロビロウドカミキリの個体変異と考えられ、オモロビロウドカミキリのシノニムと、扱うのが妥当と考えられる。

(2) 1新種リュウキュウクモガタケシカミキリ *Exocentrus takakuwai* sp. nov. を記載した。この新種は徳之島に特産で、クモガタケシカミキリ *E. fasciolatus* BATES に近縁であるが触角はより長く、触角第3—10節内側下方の剛毛がより多く、中脚の腿節はそれほど強くふくらまないなど、多くの点で区別される。

(3) 1新亜種オキナワモンキカミキリ *Glenea iriei heikichii* subsp. nov. を沖縄島より記載した。この新亜種は奄美大島・徳之島に産するアマミモンキカミキリ *G. iriei iriei* HAYASHI に近縁であるが、触角がより長く、前胸背と翅鞘上の斑紋がより小さいなどの点で区別できる。また、この両亜種に似ている台湾のクワノモンキカミキリ *G. chuioi* MITONO との比較もあわせて行なった。

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