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A NEW GENUS AND SPECIES OF THE PLANT BUG FROM JAPAN (HETEROPTERA, MIRIDAE)*

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Abstract

Eocalocoris hirashimai gen. et sp. nov. is described from Japan. This genus is characteristic in having the large and thick body, the pointed head in front, the incrassate 1st and 2nd antennal segments, the tumid scutellum and the rather short legs. *Eocalocoris* belongs to the tribe Mirini of the subfamily Mirinae, and related to *Calocoris* Fieber and *Parapantilius* Reuter in general appearance.

This paper reports a unique species of the Miridae from Japan, which represents a new genus and species. This mirid, which is one of the largest species of Japan, exhibits unusual features such as brownish body furnished with two types of hairs and the peculiar male genital structure. This species was once reported as Mirini sp. with Japanese name Futo-mekuragame by Tawara (1977).

Before going further the authors wish to express their gratitude to the following entomologists for offering valuable specimens : Dr. T. Ishihara (Ehime Pref.), Dr. H. Hasegawa (Hoya City), Mr. M. Tomokuni (Department of Zoology, National Science Museum), Mr. M. Iga (Ehime Pref.), Mr. I. Ôtsuka (Kumamoto City) and Mr. S. Tawara (Miyazaki Pref.). They are much indebted to Dr. Y. Hirashima, Professor Emeritus of Kyushu University, for his kind help in many ways. The junior author's cordial thanks are due to Prof. K. Morimoto and Assoc. Prof. 0. Tadauchi of Entomological Laboratory, Faculty of Agriculture, Kyushu University, for their constant guidance and encouragement.

Eocalocoris gen. nov.

Type species : *Eocalocoris hirashimai* sp. nov.

Diagnosis. Body 'large, oval ; dorsal surface covered with dark hairs and silvery pubescence. Head oblique, pointed ; eyes almost contiguous to pronotal collar ; vertex with indistinct basal

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transverse carina ; tylus raised. First and 2nd antenna1 segments thick; the former cylindrical, uniformly covered with dark stiff hairs; the latter incrassate towards apex, densely covered with pale short hairs ; the followings shorter and much slenderer ; 3rd segment slightly longer than 1st. Rostrum long, reaching hind coxae.

Pronotum declivous anteriorly, impunctate ; calli indistinct ; collar broad, bearing dark erect hairs ; exposed part of mesonotum depressed medially ; scutellum tumid. Hemelytra impunctate, robust, deflected behind cuneal fracture; cuneus longer than wide. Legs rather short; femora densely covered with black stiff hairs ; tibia1 spines pale, weak.

Male genital segment without tubercle or tooth. Parameres provided with sparse long hairs ; left paramere semicircularly curved, somewhat constricted subapically ; right paramere terminated in apical claw. Vesica bilobed ; each lobe subdivided into several lobules ; one lobe with a compactly spinulose sac apically and a broad claw-like lobe-sclerite ; another lobe with a reversible saw-shaped circular sclerite and a basal blunt-topped lobe-sclerite ; rim around gonopore thick.

REMARKS. *Eocalocoris* is distinct in having the large and robust body, the dark hairs and silvery pubescence on dorsal surface, the raised tylus, the incrassate 1st and 2nd antenna1 segments, the tumid scutellum, the short legs, the indistinct tibia1 spines and the peculiar male genital structure. This genus is allied to *Calocoris* Fieber and *Parapantilius* Reuter in general appearance. However, it is easily distinguished from the former by the body robuster, 2nd antenna1 segment thicker, 3rd and 4th segment shorter, hemelytra much deflected behind cuneal fracture, the femora covered with stiff hairs and the tibia1 spines indistinct, and from the latter by the body more oval and thicker, the vertex not sulcate, the scutellum more tumid, the hemelytra smoother and strongly deflected and the legs shorter.

Eocalocoris hirashimai sp. nov.

Mirini sp. Tawara, 1977, Tatehamodoki, 12 : 5, fig. 4. (Japanese name : Futo-mekuragame.)

Measurements : In males body length 8.0-8.5 mm, head width 1.4 mm, width of pronotum 2.8 -2.9 mm and width across hemelytra 3.3-3.4 mm. In females body length 9.2-9.5 mm, head width 1.4 mm, width of pronotum 3.1-3.2 mm and width across hemelytra 3.9-4.0 mm.

Coloration : Dorsal surface pale chestnut brown, partially tinged with red.

Head pale reddish brown, somewhat shining ; lorum and apical part of tylus sanguineous ; gena and buccula yellowish brown. First and 2nd antenna1 segments chestnut brown, except apical 1/3 of the latter dark brown ; the following segments dark brown, except basal half of 3rd and base of 4th pale brown. Rostrum yellowish brown, shining ; apical half of 4th segment dark brown.

Pronotum pale chestnut brown, somewhat paler laterally and anterior to calli ; exposed part of mesonotum and scutellum pale chestnut brown ; thoracic sides, ostiolar peritreme and coxae widely yellow. Hemelytra reddish chestnut brown; cuneus yellowish brown, except basal 1/3 and apex reddish chestnut brown ; membrane pale grayish brown, rather translucent, with reddish veins. Legs pale brown ; tibia1 spines pale brown ; apex of tibia and apical part of 3rd tarsal segment dark reddish brown.

Abdomen pale brown, except dorsal surface shining dark reddish brown.

Structure : **Head** with long dark erect hairs and short silvery decumbent pubescence ; vertex 0.33 times as wide as head in male, 0.43 times in female. Relative lengths of 1st to 4th antenna1 segments as 1.13 : 3.50 : 1.22 : 0.75 (mm) in male, 1.13 : 3.43 : 1.22 : 0.84 (mm) in female. Relative lengths of 1st to 4th rostra1 segments as 0.94 : 0.86 : 0.81 : 1.03 (mm) in male, 0.97 : 0.91 : 0.81 : 1.03 (mm) in female.

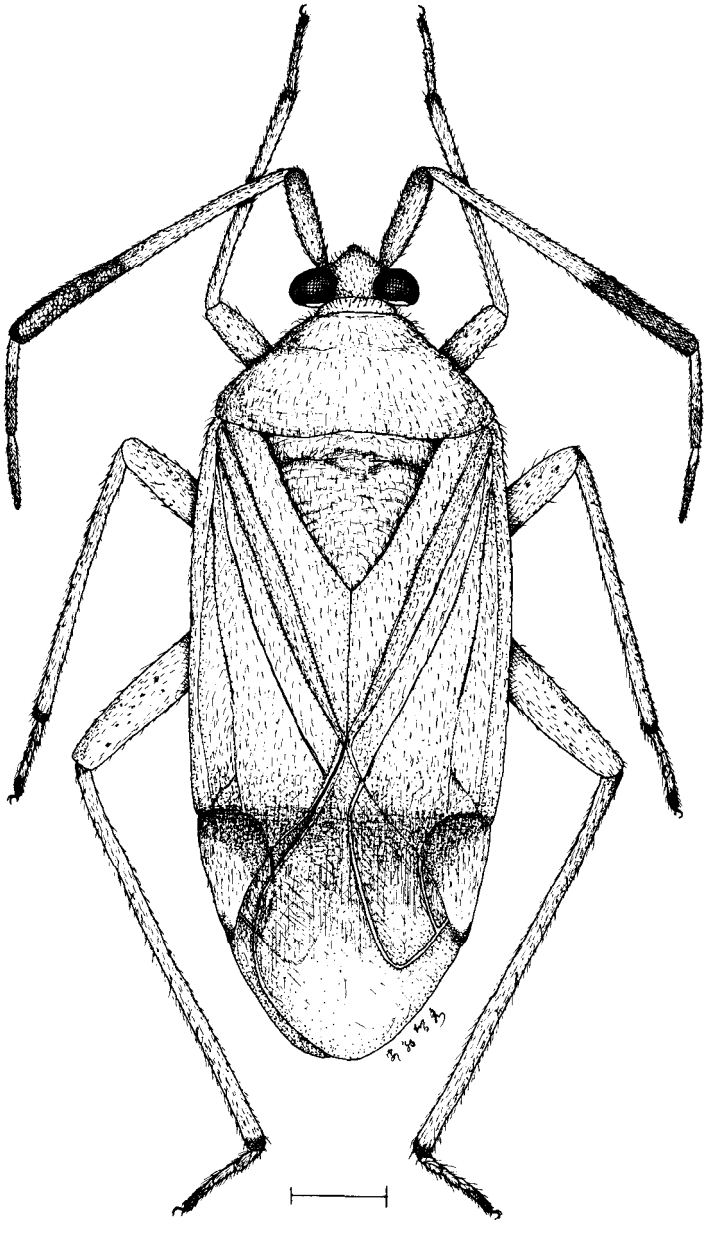

Fig. 1. Male of *Eocalocoris* ***himshimai*** gen. et sp. nov.
Scale : 1 mm.

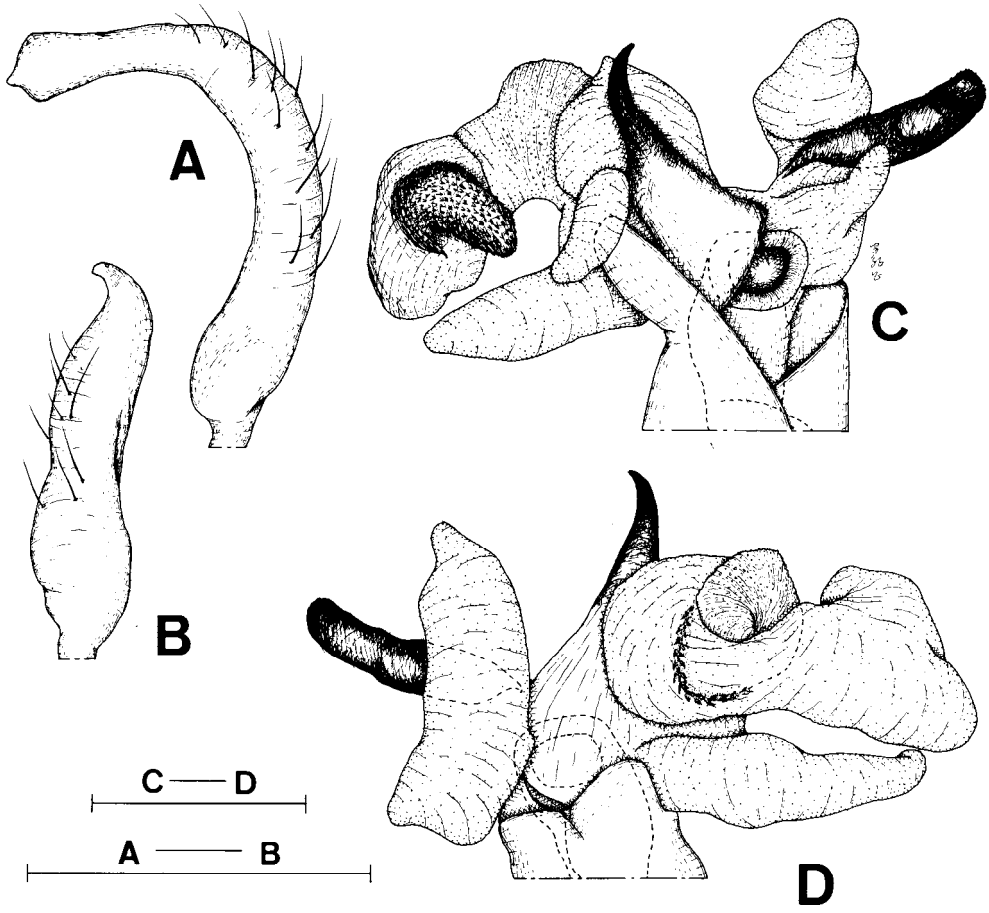

Fig. 2. Male genitalia of *Eocalocoris hirashimai* gen. et sp. nov. A, Left paramere in dorsal view ; B, right paramere in dorsal view ; C, vesica in dorsal view ; D, ditto in ventral view. Scales : 0.5 mm.

Pronotum weakly rugose, uniformly covered with dark suberect hairs and silvery decumbent pubescence ; mesal length of collar thicker than base of 2nd antenna1 segment ; exposed part of mesonotum demarcated from scutellum by a transverse sulcus interrupted at middle, but completely fused with the latter at the medial depressed portion ; scutellum furnished with dark hairs and silvery pubescence and transversely wrinkled. Hemelytra covered with dark suberect hairs and silvery decumbent pubescence ; cuneus about twice as long as basal width. Relative lengths of femur : tibia : trasus in hind pair as 3.13 : 4.50 : 0.81 (mm) in male, 3.44 : 4.75 : 0.91 (mm) in female ; proportion of 1st to 3rd segments of hind tarsus as 5 : 7 : 9 in male, 4 : 5 : 6 in female.

Abdomen wholly covered with silky hairs. Male genitalia as described under generic diagnosis.

Holotype : ♂ (Type No.2771, Kyushu Univ.), Omogokei, Ehime Pref., Shikoku, 14. vii. 1962, T. Ishihara leg.

Paratypes : [Shikoku] 499, Mt. Takashiro, Tokushima Pref., 18. vii. 1978, M. Tomokuni leg. ; 4♂♂2♀♀, Mt. Takashiro (1,450 m), Naka-gun, Tokushima Pref., 29. vii. 1979, M. Yoshida leg. ; lb, Mt. Tsurugi-san (1,400–1,600 m), Tokushima Pref., 15. vii. 1984, M. Sakai leg. ; 1♀, same locality, 16.

vii. 1984, M. Sakai leg. ; 1 ♂, Tsurugi, Minokoshi, 10. viii. 1959, Y. N. leg. ; 1♂, Mt. Tengu-dake, Mts. Ishizuchi, Ehime Pref., 1-4. viii. 1967, M. Iga leg. [Kyushu] lb, Mt. Shiratori, Izumi-mura, Kumamoto Pref., 14. viii. 1976, I. Ôtsuka leg. ; 1♂, Shiiya-toge, Yabe-machi, Kumamoto Pref., 18. vii. 1978, I. Ôtsuka leg. ; 5 ♂♂ 1♀, Mt. Yamaingiri, Izumi-mura, Kumamoto Pref., 21. vii. 1984, I. Ôtsuka leg. ; 1♀, same locality, 5. viii. 1984, I. Ôtsuka leg.

DISTRIBUTION. Japan (Shikoku and Kyushu).

REMARKS. This is a unique species known only from the montane regions of Shikoku and Kyushu, and though it may be a plant feeder, its host plant is unknown. This species is occasionally attracted to light (Tawara, 1977).

Specific name is dedicated to Dr. Yoshihiro Hirashima on the occasion of his retirement from the Entomological Laboratory, Faculty of Agriculture, Kyushu University.

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