

HETEROPTEROUS INSECTS OF FORMOSA COLLECTED
BY DR. SHIRÔZU AND OTHERS, 1961

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A Heteropterous material of Formosa was obtained by some Japanese lepidopterists visited there in 1961, the members were Dr. T. SHIRÔZU, Dr. M. OGATA, Mr. M. WAKABAYASHI and Dr. A. MUTSUURA. The material contained about 90 species under 18 families of the suborder. The lygaeid material was studied by Mr. T. HIDAOKA of the Entomological Laboratory, Kyushu University and the rest of it was left to be examined to the present author. It will be interesting to note that some are newly added to the Formosan fauna, including one new genus and species, but 13 species are omitted in the following list, because of being yet undetermined.

The writer expresses his hearty thanks to Dr. SHIRÔZU who gave him an opportunity to study the Formosan material and also to other members of the team co-operated to collect the material. He was, further, greatly indebted to Dr. W. E. CHINA of the British Museum for his kind examination on some specimens.

PENTATOMIDAE

Scutellerinae

Cantao ocellatus (THUNBERG, 1784)

Cimex ocellatus THUNBERG, 1784, Nov. Ins. Spec. 3: 60, f. 72.

Locality: 1 ♂, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÔZU leg., 1 ♀, the same data, M. WAKABAYASHI leg.

Distribution: Oriental Region, China, Formosa, the Ryukyus, Amami-Oshima, Tanegashima, Yakushima and Satamisaki.

Scutellera amethystina (GERMAR, 1839)

Cimex fasciatus PANZER, 1797, Voet. Besch. Ins. 4: 108, pl. 46, f. 2.

Calliphala amethystina GERMAR, 1837, Zeit. Ent. Germar 1: 124.

Scutellera amethystina: STICHEL, 1962, Verzeich. paläark. Hem.-Het. 4: 208.

Locality: 2 ♂♂, 2 ♀♀, T. SHIRÔZU leg., 1 ♀, M. WAKABAYASHI leg., on *Bischofia javanica* Blume (J. n.: Akagi), Tainan Park, S. Formosa, 29. vi. 1961.

Distribution: Oriental Region, China and Formosa.

Eucorysses grandis (THUNBERG, 1783)

Cimex grandis THUNBERG, 1783, Nov. Ins. Spec. 2: 31, pl. 2, f. 46.

Locality, 1 ♂, Keitô, C. Formosa, 27. vi. 1961, T. SHIRÔZU leg.

Distribution: Oriental Region, China, Formosa, the Ryukyus and Japan.

Pentatominae

Erthesina fullo (THUNBERG, 1783)

Cimex fullo THUNBERG, 1783, Nov. Ins. Spec. 2: 42, pl. 2, f. 57.

Locality: 2♂♂, 8♀♀, on *Grevillea robusta* A. Cunn. (J. n.: Shinobunoki), Tainan, S. Formosa, 29. vi. 1961, T. SHIRÔZU leg.; 2♂♂, the same data, M. OGATA leg.

Distribution: Oriental Region, China, Formosa, the Ryukyus and Japan (Kyushu).

Halyomorpha picus (FABRICIUS, 1794)

Cimex picus FABRICIUS, 1794, Ent. Syst. 4:115.

Locality: 1♀, Urai, N. Formosa, 8. vii. 1961, M. OGATA leg.

Distribution: Oriental Region and Formosa.

Praetextatus typicus DISTANT, 1901

Praetextatus typicus DISTANT, 1901, Trans. Ent. Soc. London: 584.

Locality: 1♀, Urai, N. Formosa, 8. vii. 1961, M. OGATA leg.

Distribution: Burma, Formosa (**new record**), the Ryukyus and Kyushu (Satamisaki).

Tolumnia latipes (DALLAS, 1851)

Pentatoma latipes DALLAS, 1851, List. Hem. 1: 238.

Locality: 1♀, Tenshō, N. Formosa, 3. vii. 1961, T. SHIRÔZU leg.

Distribution: Oriental Region, China and Formosa (**new record**).

Eysarcoris fallax BREDDIN, 1909

Eysarcoris fallax BREDDIN, 1909, Ann. Soc. Ent. Belg. 53: 274, f. 11.

Locality: 1♂, 1♀, Urai-Agyoku, N. Formosa, 11. vii. 1961, T. SHIRÔZU leg.

Distribution: Annam, Formosa and Japan.

Axiagastus rosmarus DALLAS, 1851

Axiagastus rosmarus DALLAS, 1851, List Hem. 1: 222, pl. 8, f. 5.

Locality: 1♀, Urai, N. Formosa, 8. vii. 1961, M. OGATA leg.

Distribution: Oriental Region, Formosa and Iriomote I.

Carbula crassiventris (DALLAS, 1849)

Pentatoma crassiventris DALLAS, 1849, Trans. Ent. Soc. London 5: 189.

Locality: 1♀, Oiwake-Tattaka, C. Formosa, 24. vi. 1961; 1♀, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÔZU leg.

Distribution: Bhutan, Burma, Yunnan, China, Formosa, Okinawa I. and Tokara Is.

Nezara viridula (LINNAEUS, 1758)

Cimex viridula LINNAEUS, 1758, Syst. Nat. 10: 444.

Locality: 1♂, Shōkei, N. Formosa, 5. vii. 1961, T. SHIRÔZU leg.

Distribution: Warm parts of the Palaearctic Region, Oriental, Ethiopian, Australasian, Nearctic and Neotropical Regions.

Plautia fimbriata (FABRICIUS, 1787)

Cimex fimbriata FABRICIUS, 1787, Mant. Ins. 2: 295.

Locality: 3 ♂ ♂, Chipon, E. Formosa, 2. vii. 1961; 1 ♀, Urai, N. Formosa, 7. vii. 1961, T. SHIRÔZU leg.

Distribution: Oriental Region, China and Formosa.

Glaucias beryllus (FABRICIUS, 1787)

Pentatoma bengalensis WESTWOOD, 1837, Hope Cat. 1:36.

Locality: 2 ♀ ♀, Urai, N. Formosa, 7 & 8. vii. 1961, A. MUTSUURA leg.

Distribution: Tranquebar, Assam, China and Formosa.

Menida bengalensis (WESTWOOD, 1837)

Cimex histrio FABRICIUS, 1787, Mant. Ins. 2: 296.

Locality: 1 ♀, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÔZU leg.

Distribution: India, Burma, China, Formosa and Yayeyama Is.

Asopinae

Eocanthecona concinna (WALKER, 1867)

Canthecona concinna WALKER, 1867, Cat. Het. 1: 131.

Locality: 1 ♂, Urai, N. Formosa, 8. vii. 1961, M. OGATA leg.

Distribution: China and Formosa.

On the determination of this species a further study may be needed.

Zicrona caerulea (LINNAEUS, 1758)

Cimex caerulea LINNAEUS, 1758, Syst. Nat. 10: 445.

Locality: 1 ♀, Oiwake, C. Formosa, 24. vi. 1961, T. SHIRÔZU leg.

Distribution: Cosmopolitan.

Tessaratominae

Eurostus validus DALLAS, 1851

Eurostus validus DALLAS, 1851, List Hem. 1: 343, pl. 11, f. 2.

Locality: 1 ♀, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÔZU leg.

Distribution: India, China and Formosa.

Eumenotinae

Eumenotus obscura WESTWOOD, 1847

Eumenotus obscura WESTWOOD, 1847, Trans. Ent. Soc. 4: 247, pl. 18, f. 4.

Locality: 1 ♀, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÔZU leg.; 1 ♀, Urai-Agyoku, N. Formosa, 11. vii. 1961, M. OGATA leg.

Distribution: Oriental Region, Formosa, Okinawa I., Amami-Oshima and Tokara Is.

PHYLLOCEPHALIDAE

Megarhamphus truncatus (WESTWOOD, 1837)

Megarhynchus truncatus WESTWOOD, 1837, Cat. Hope 1: 20.

Locality: 1 ♀, Urai, N. Formosa, 8. vii. 1961, M. OGATA leg.

Distribution: Oriental Region, China and Formosa.

DINIDORIDAE

Cyclopelta parva DISTANT, 1901

Cyclopelta parva DISTANT, 1901, Ann. Mag. Nat. Hist. (7) 6: 220.

Locality: 1 ♂, Tainan, S. Formosa, 29. vi. 1961, T. SHIRÔZU leg.

Distribution: India, China, Formosa and Iriomote I.

ACANTHOSOMATIDAE

Sastragala scutellata (SCOTT, 1874)

Acanthosoma scutellata SCOTT, 1874, Ann. Mag. Nat. Hist. (4) 14: 301.

Locality: 1 ♂, Oiwake-Tattaka, C. Formosa, 24. vi. 1961, T. SHIRÔZU leg.

Distribution: Formosa and Japan.

CYDNIDAE

Parachilocoris minutus (DISTANT, 1901)

Cydnopeltus minutus DISTANT, 1901, Trans. Ent. Soc. London: 105.

Parachilocoris minutus: HORVÁTH, 1919, Ann. Mus. Nat. Hung. 17: 255.

Locality: 1 ♀, Tattaka, C. Formosa, 23. vi. 1961, T. SHIRÔZU leg.

Distribution: Burma and Formosa (**new record**).

Dr. W. E. CHINA kindly compared this specimen with the DISTANT's type and found no superficial differences between them.

COREIDAE

Coreinae

Anoplocnemis castanea (DALLAS, 1852)

Mictis castanea DALLAS, 1852, List Hem. 2: 289.

Locality: 1 ♀, Nanzankei, S. Formosa, 24. vi. 1961, M. OGATA leg.; 1 ♂, Tenshō, E. Formosa, 3. vii. 1961; 1 ♂, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÔZU leg.

Distribution: Oriental Region, China and Formosa

Dalader formosanus ESAKI, 1931

Dalader formosanus ESAKI, 1931, Annot. zool. Jap. 13: 259, f.

Locality: 1 ♀, Chipon, E. Formosa. 1. vii. 1961, A. MUTSUURA leg.

Distribution: Formosa.

Homoeocerus unipunctatus (THUNBERG, 1783)

Cimex unipunctatus THUNBERG, 1783, Nov. Ins. Spec. 2: 38, pl. 2, f. 52.

Locality: 1 ♂, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÔZU leg.

Distribution: Oriental Region, China, Formosa, Okinawa I. and Japan.

Paradasynus formosanus (MATSUMURA, 1913)

Iwasakia formosana MATSUMURA, 1913, Thous. Ins. Jap. Add. 1: 133, pl. 13, f. 16.

Pendulinus nicobarensis: SONAN, 1934, Taiwan Nosakumotsu Bojo-Yoran 2: 62, pl. 9, f. 14.

Iwasakia formosana: MIYAMOTO, 1961, Pulex 28:113.

Locality: 1♂, Urai, N. Formosa, 8. vii. 1961, T. SHIRÖZU leg.

Distribution: Formosa and Kyushu.

The present species may be identical with Sonan's *Pendulinus nicobarensis* from his illustration. Correctness of the name *Iwasakia* was doubted by ESAKI (1926), and thereafter some Japanese authors seemed to ignore the MATSUMURA's name. After Dr. CHINA examined a male specimen from Kyushu, he concluded that this is not belonging to *Pendulinus* Thunberg (synonym of *Galatesus* DALLAS) but to *Paradasynus* CHINA. There may be remained a possibility of resurrection of *Iwasakia*, and in this point a further study should be needed.

Notobitus meleagris (FABRICIUS, 1787)

Cimex meleagris FABRICIUS, 1787, Mant. Ins. 2: 297.

Locality: 2♀ ♀, Shōkei, E. Formosa, 5. vii. 1961; 1♂, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÖZU leg.

Distribution: India, China and Formosa.

Colpura touchei (DISTANT, 1901)

Pachycephalus Touchei DISTANT, 1901, Ann. Mag. Nat. Hist. (7) 7: 19.

Locality: 1♂, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÖZU leg.

Distribution: Sikkim, China and Formosa.

Leptoglossus membranaceus (FABRICIUS, 1781)

Cimex membranaceus FABRICIUS, 1781, Spec. Ins. 2: 351.

Locality: 1♀, Keitō, S. Formosa, 27. vi. 1961, M. OGATA leg.

Distribution: Africa, Australia, Oriental Region, Formosa, the Ryukyus, Amami-Oshima and Neotropical Region.

Cletus bipunctatus (HERRICH-SCHÄFFER, 1840)

Coreus bipunctatus HERRICH-SCHÄFFER, 1840, Wanz. Ins. 6: 9, f. 566.

Locality: 1♀, Shōkei, E. Formosa, 5. vii. 1961, T. SHIRÖZU leg.

Distribution: India, Java, Formosa, the Ryukyus, Amami-Oshima and Japan (Kyushu).

Cletus punctulatus (WESTWOOD, 1842)

Coreus punctulatus WESTWOOD, 1842, Cat. Hope 2: 23.

Locality: 1♂, Keitō, S. Formosa, 27. vi. 1961, T. SHIRÖZU leg.

Distribution: India and Formosa.

Alydinae

Leptocorixa varicornis (FABRICIUS, 1803)

Gerris varicornis FABRICIUS, 1803, Syst. Rhyng.: 260.

Locality: 1♀, Keitō, S. Formosa, 27. vi. 1961, M. OGATA leg.; 1♂, Rimogan, N. Formosa, 9. vii. 1961, T. SHIRÖZU leg.; 1♀, Urai-Agyoku, N. Formosa, 11. vii. 1961, M. OGATA leg.

Distribution: Oriental Region, China, Formosa and the Ryukyus.

Leptocorixa acuta (THUNBERG, 1783)

Cimex acuta THUNBERG, 1783, Nov. Ins. Spec. 2: 34.

Locality: 1 ♂, 1 ♀, Shōkei, E. Formosa, 5. vii. 1961, SHIRŌZU and OGATA leg.

Distribution: Oriental Region, China, Formosa, Yayeyama Is. and Australia.

Riptortus clavatus (THUNBERG, 1783)

Cimex clavatus THUNBERG, 1783, Nov. Ins. Spec. 2: 34, pl. 2, f. 4.

Locality: 1 ♀, Shōkei, E. Formosa, 5. vii. 1961, T. SHIRŌZU leg.

Distribution: China, Formosa, the Ryukyus, Amami-Oshima and Japan.

LARGIDAE

Physopelta cincticollis STÅL, 1863

Physopelta cincticollis STÅL, 1863, Berlin Ent. Zeit. 7: 392.

Locality: 1 ♂, 6 ♀ ♀, T. SHIRŌZU leg., 2 ♂ ♂, A. MUTSUURA leg. and 1 ♀, M. OGATA leg., Urai, N. Formosa, 7. vii. 1961.

Distribution: India, Formosa, the Ryukyus and Japan.

ARADIDAE

Usingerida verrucigera (BERGROTH, 1892)

Brachyrhynchus verrucigera BERGROTH, 1892, Rev. Ent. 11: 261.

Locality: 1 ♂, 1 ♀, Honbukei, S. Formosa, 25. vi. 1961, T. SHIRŌZU leg.

Distribution: Sumatra, Formosa, Japan and Amur.

Mezira taiwanica KORMILEV, 1957

Mezira taiwanica KORMILEV, 1957, Ann. Mag. Nat. Hist. (12) 10: 267, 2 f.

Locality: 1 ♂, 1 ♀, Honbukei, S. Formosa, 25. vi. 1961, T. SHIRŌZU leg.

Distribution: Formosa and Japan.

REDUVIIDAE

Emesinae

Emesopsis nubilus UHLER, 1893

Emesopsis nubilus UHLER, 1893, Proc. Zool. Soc. London: 718.

Locality: 1 ♂, Tainan, S. Formosa, 29. vi. 1961, T. SHIRŌZU leg.

Distribution: Tropical and subtropical Rs., Formosa, the Ryukyus and Mariana Is.

Triatominae

Triatoma rubrofasciata (DE GEER, 1773)

Cimex rubrofasciatus DE GEER, 1773, Mém. 3: 349, pl. 35, f. 12.

Locality: 2 ♀ ♀, Karenkō, E. Formosa, 3. vii. 1961, T. SHIRŌZU leg.

Distribution: Oriental R., China, Formosa, the Ryukyus, Madagascar, Africa, West Indies and S. America.

Harpactorinae***Euagoras plagiatus*** (BURMEISTER, 1834)

Zelus plagiatus BURMEISTER, 1834, Nov. Act. Acad. Leop. Cur. 16, Suppl. 1: 303.

Locality: 1 ♀, Urai-Agyoku, N. Formosa, 8. vii. 1961, T. SHIRÔZU leg.

Distribution: Malaya, Java, Philippines, Formosa and the Ryukyus.

VELOCIPEDIDAE***Velocipeda aliena*** (DISTANT, 1904)

Godefridus alienus DISTANT, 1904, Fauna Brit. Ind. Rhynch. 2: 329.

Locality: 1 ♀, Honbukei, C. Formosa, 25. vi. 1961, T. SHIRÔZU leg.

Distribution: Burma, Sikkim and Formosa.

NABIDAE***Arbela simplicipes*** (POPPIUS, 1914)

Arbelopsis simplicipes POPPIUS, 1914, Arch. Naturg. 80A: 6.

Locality: 1 ♀ & 1 nymph, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÔZU leg.

Distribution: Formosa and Iriomote I.

TINGIDAE***Stephanitis esakii*** TAKEYA, 1931

Stephanitis esakii TAKEYA, 1931, Mushi 4: 72, pl. 8, f. 7-10.

Locality: 1 ♂, Tattaka, C. Formosa, 23. vi. 1961, 1 ♀, Jitsugetsutan, C. Formosa, 26. vi. 1961, T. SHIRÔZU leg.

Distribution: Formosa.

MIRIDAE**Deraeocorinae*****Deraeocoris vittatus*** (REUTER, 1907) ?

Camptobrochis vittatus REUTER, 1907, Ann. Hofm. Wien 22: 188.

Locality: 3 ♂ ♂, 2 ♀ ♀, Oiwake, C. Formosa, 24. vi. 1961, T. SHIRÔZU leg.

Distribution: Oriental Region and Formosa.

Bryocorinae***Monalocoris japonensis*** LINNAVUORI, 1961

Monalocoris japonensis LINNAVUORI, 1961, Ann. Ent. Fenn. 27: 164, f. 3, i & j and f. 4, a.

Locality: 1 ♂, Rimogan-Magan, N. Formosa, 10. vii. 1961, T. SHIRÔZU leg.

Distribution: Formosa and Japan.

Helopeltis cinchonae MANN, 1907

Helopeltis cinchonae MANN, 1907, Mem. Dept. Agr. Ind. Ent. (1) 4: 328.

Locality: 3 ♂ ♂, Keitô, C. Formosa, 27. vi. 1961, T. SHIRÔZU leg.; 1 ♀, the same data, M.

OGATA leg.

Distribution: India, Java and Formosa.

***Helopeltis fasciaticollis* POPPIUS, 1914**

Helopeltis fasciaticollis POPPIUS, 1914, Arch. Naturg. 80 A: 53.

Locality 1 ♂, Urai, N. Formosa, 7. vii. 1961, T. SHIRÔZU leg.

Distribution: Formosa.

Orthotylinae

***Pilophorus typicus obsculipes* POPPIUS, 1914**

Pilophorus typicus var. *obsculipes* POPPIUS, 1914, Arch. Naturg. 80 A: 63.

Locality: 1 ♂, Tenshō, E. Formosa, 3. vii. 1961, T. SHIRÔZU leg.

Distribution: Formosa and Philippines.

***Cyrtorhinus lividipennis* REUTER, 1884**

Cyrtorhinus lividipennis REUTER, 1884, Ent. Tidskr. 5: 199.

Locality: 1 ♂, Urai, N. Formosa, 7. vii. 1961, T. SHIRÔZU leg.

Distribution: Oriental Region, Formosa, Korea, Japan and Micronesia.

***Itacorides** MIYAMOTO, gen. nov.**

Subparallel-sided and covered with sparse hairs on dorsum. Head horizontal, nearly as long as wide across eyes, vertex rather low, with the base carinate, clypeus distinctly produced in front; eyes globular and produced laterally, removed from anterior margin of pronotum by their diameter. Antennae slender, with the basal segment as long as head width with eyes. Rostrum reaching posterior coxae. Pronotum shorter than wide and strongly divergent towards base, with a narrow but distinct collar; scutellum a little wider than long. Hemelytra somewhat transparent; covered with fine punctures; cuneus narrow, about one-third as wide as long. Evaporatory area conspicuously produced. Legs slender, posterior femora thickest near base.

Type-species: *Itacorides shirozui* MIYAMOTO.

In CARVALHO's key (1955, key to the genera of Miridae of the World, Bol. Mus. Goeldi 11 (2): 1-150, 263 ff.), this runs to *Malacocoris* but is differing from the latter in the distinct collar, relatively longer first antennal segment, not less than width across eyes, concavely sinuate sides of pronotum, longer cuneus, stout but more narrowed femora on apical half and denser hairs along costal margins of hemelytra. This genus may be most allied to *Itacoris* CARVALHO from Brazil but separated by distinctly produced clypeus, much swollen apex of head, longer first antennal segment, as long as head width with eyes, distinctly longer third antennal segment than the fourth, much shorter rostrum and relatively longer hind femora. General appearance also similar to that of *Zanchius* DISTANT. 1904. but easily distinguished from it by distinctly produced clypeus and above-mentioned characters.

***Itacorides shirozui* MIYAMOTO, sp. nov. (Fig. 1)**

* The name was introduced from a Brazilian genus, *Itacoris* CARVALHO, 1947 (An. Acad. Brasil. Cien. 19:103).

Measurements in female: Body length approximately 4.8 mm., width across hemelytra ca. 1.4 mm. Head length 0.58 mm., width with eyes 0.6 mm., interocular space 0.28 mm. Antennae: Segment I, 0.62 mm.; II, 1.68 mm.; III, 1.2 mm.; IV, 0.72 mm. Rostrum: Segment I, 0.3 mm.;

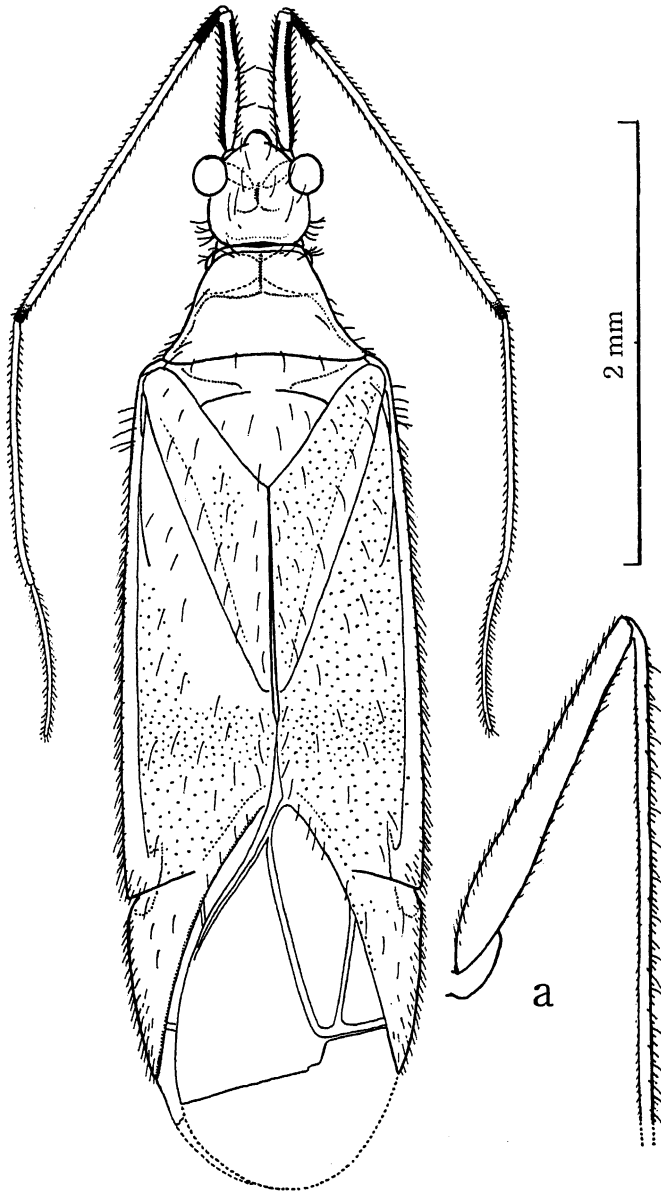


Fig. 1. *Itacorides shirozui* MIYAMOTO, ♀ holotype.
a right-hand posterior leg.

II, 0.35 mm.; III, 0.67 mm.; IV, 0.5 mm. Pronotal length 0.48 mm., width at base 0.91 mm. Anterior femora 1.25 mm., tibiae 1.58 mm.; middle femora 1.3 mm., tibiae 1.75 mm.; posterior femur of right side 1.8 mm., tibia of the same more than 2 mm.

Coloration: Pale brownish yellow and a little shining. Head dark between eyes which are dark brown, with a pair of elliptical shining dark markings between eyes, and dusted on frons and median narrow stripe between the paired markings. First antennal segment except extreme apex with a black fascia on outer side and a shorter one on inner side, both fasciae contiguous with each other near apex on ventral side; second segment broadly black near base and darkened at apex. Calli on pronotal disc brownish, posterior lobe and scutellum pale. Hemelytra more or less transparent, with a very obscure, transverse band near middle, veins on membrane colourless. Body beneath pale brown.

Structure: Elongate, about three times as long as wide. Head relatively narrow, less than half the width across hemelytra, vertex rather flat on dorsum, with a longitudinal median impression between eyes and sides behind eyes swollen. Eyes situated at antero-lateral corners of head, diameter about half as long as distance between eyes. Antennae long, about six-sevenths as long as body; first segment slightly sinuate and the thickest, with two erect bristles on inner side; the second the longest, a little more than two and half times as long as the preceding segment and the fourth fragile and the narrowest. Apical segment of rostrum more than two-thirds the length of the third.

Pronotum smooth, distinctly widened at base, nearly twice as wide as long, collar slightly narrower than width of third antennal segment, the disc with a shallow longitudinal groove between calli and weak submarginal grooves on posterior lobe, those are contiguous with a transverse furrow behind calli. Scutellum smooth and broad. Hemelytra elongate, well surpassing the tip of abdomen and covered sparsely with rather long decumbent hairs on dorsal surface and densely with normal hairs along costal margins. Membrane veins almost straight but the base and a corner, apical cell divergent posteriorly and a little shorter than half the length of basal one. Segments of legs linear and long except for posterior femora (Fig. 1, a) the thickest, widened near base: posterior tibiae the longest segment, with a row of suberect bristles which are as long as the diameter of tibia. Evaporating area distinctly elevated, with anterior margin strongly and the posterior one weakly rounded and angled upwardly.

Holotype ♀. macropterous, Oiwake, C. Formosa, 24. vi. 1961, T. SHIRÖZU leg., apices of membranes, left posterior leg and apical portion of right posterior tibia of the unique specimen had been mutilated. The type is kept in the collection of Entomological Laboratory, Kyushu University.

Mirinae

Tingiotum formosanum POPPIUS, 1914

Tingiotum formosanum POPPIUS, 1914, Arch. Naturg. 80 A: 22.

Locality: 1 ♀, Keitō, S. Formosa, 27. vi. 1961, T. SHIRÖZU leg.

Distribution: Formosa.

Lygus kosempoensis POPPIUS, 1914

Lygus kosempoensis POPPIUS, 1914, Arch. Naturg. 80 A: 26.

Locality: 1 ♂, Keitō, S. Formosa, 27. vi. 1961, T. SHIRŌZU leg.

Distribution: Formosa.

Lygus taiwanus POPPIUS, 1914

Lygus taiwanus POPPIUS, 1914, Arch. Naturg. 80 A: 31.

Locality: 4 ♀ ♀, Oiwake, C. Formosa, 24. vi. 1961, T. SHIRŌZU leg.

Distribution: Formosa.

Hyalopeplns vitripennis (STÅL, 1859)

Capsus vitripennis STÅL, 1859, Freg. Eug. Resa. Ins.: 255.

Locality: 1 ♀, Urai-Agyoku, N. Formosa, 8. vii. 1961, T. SHIRŌZU leg.

Distribution: India, Ceylon, Java, Philippines, Formosa and Queensland.

VELIIDAE

Microvelia horvathi LUNDBLAD, 1933

Microvelia horvathi LUNDBLAD, 1933, Arch. Hydrobiol. Suppl. 12: 358, textf. 115, M & textf. 116.

Locality: Many macropterous specimens, at light, Urai, N. Formosa, 7. vii. 1961, T. SHIRŌZU leg.

Distribution: Thailand (HASEGAWA, 1962), Formosa, E. China and Japan.

GERRIDAE

Metrocoris lituratus (STÅL, 1854)

Halobates lituratus STÅL, 1854, Öfv. Vet. Akad. Förh.: 238.

Locality: 2 ♂ ♂, 3 ♀ ♀, apterous. 1 ♂, 1 ♀, macropterous, Rimogan-Magan, N. Formosa, 10. vii. 1961, SHIRŌZU and OGATA leg.

Distribution: China, Formosa, Yayeyama Is. and Okinawa I.

CORIXIDAE

Corixinae

Sigara nigroventralis (MATSUMURA, 1905) ?

Corixa nigroventralis MATSUMURA, 1905, J. Sapporo Agr. Coll. 2: 60, pl. 1, f. 11.

Callicorixa japonica LUNDBLAD, 1928, Ent. Tidskr. 48: 219, textff. 1-4, pl. 4, f. 2.

By the lacking of male specimen it is difficult to determine this species correctly, but the patterns of pronotum and hemelytra in the present specimen show the characters of *S. nigroventralis*.

Locality: 1 ♀, at light, Urai, N. Formosa, 7. vii. 1961, T. SHIRŌZU leg.

Distribution: Formosa (new record), Tokara Is. and Japan.

Micronectinae

Micronecta taipeiensis CHEN, 1960

Micronecta taipeiensis CHEN, 1960, J. Kansas ent. Soc. 33: 112, pl. 3, ff. 21-25 & pl. 4, f. 18.

Locality: Many macropterous specimens at light, Urai, N. Formosa, 7. vii. 1961, T. SHIRŌZU leg.

Distribution: Formosa.

Micronecta yui CHEN, 1960

Micronecta yui CHEN, 1960, J. Kansas ent. Soc. 33: 114, pl. 3, ff. 11-15 & pl. 4, f. 15.

Locality: 2♂♂, 2♀♀, macropterous, at light, Urai, N. Formosa, 7. vii. 1961, T. SHIRÓZU leg.

Distribution: Formosa.

Paradasynus formosana in this article (p.206) was proved that it is not conspecific with *Iwasakia formosana* MATSUMURA, after the present writer examined the MATSUMURA's type in 1964. He will prepare a paper on the species together with the generic name near future.