



THE HOMOPTERA-AUCHENORRHYNCHA OF THE OZEGAHARA MOOR

Yoshihiro HORI*

The knowledge of Auchenorrhynchan fauna of the Ozegahara moor has not sufficiently been accumulated. Up to present, 48 species were recorded by Hasegawa (1954).

I had a good opportunity to join in 1978/1979 Scientific Survey of the Ozegahara moor and could collect a considerable number of these insects which contain 59 species belonging to six families. These included three new ones and 36 additions to the fauna of the Ozegahara moor.

In the present paper I will enumerate, in total, 87 species and will give descriptions and figures of three new species, *Kelisia asahinai* nov., *Pagaronia shibutsuana* nov. and *Epiacanthus ozegaharensis* nov.

Before going further I wish to express my hearty thanks to Dr. Syoziro Asahina and Prof. Masataka Satô for giving me this fine opportunity, and for their kind guidance and constant encouragement. I would also like to extend my thanks to Mr. Masaaki Tomokuni who helped me in providing with the specimens and valuable advice.

Family Cixiidae Spinola

Kuvera flaviceps (Matsumura, 1900)

Hasegawa, 1954

Specimens examined: 1 ♀, Ozegahara, 21. VIII, 1979, Y. Hori leg.; 1 ♂, 28-31. VIII, 1978, M. Tomokuni leg.; 1 ♀, Hatomachi Pass, 29. VIII, 1978.

Kuvera ligustri (Matsumura, 1914)

Specimens examined: 1 ♂ 1 ♀, Ozegahara, 28-31. VIII, 1978, M. Tomokuni leg.; 60 ♂♂ 17 ♀♀, ditto, 20-23. VIII, 1979, Y. Hori leg.; 1 ♂ 1 ♀, Hatomachi Pass-Ozegahara, 28. VIII, 1978, Y. Hori leg.

Cixius matsumurai (Metcalf, 1936)

Hasegawa, 1954

Cixius nervosus (Linné, 1758)

Hasegawa, 1954

Oliarus apicalis (Uhler, 1896)

Specimens examined: 2 ♀♀, Ozegahara, 30. VIII, 1978, Y. Hori leg.; 1 ♀, ditto, 28-31. VIII, 1978, M. Tomokuni leg.; 4 ♀♀, ditto, 20-23. VIII, 1979, Y. Hori leg.

* Laboratory of Sanitary Zoology, Nagoya City Health Research Institute, Nagoya, Aichi 467.

林
正
美
様

堀
義
之
夫

Family **Delphacidae** Leach

Kelisia asahinai Y. Hori, sp. nov.

♂: Length including tegmina about 3.5 mm, width about 0.9 mm.

Vertex pale brown, eyes dark brownish. Frons, clypeus, labrum and rostrum light brown. Genae somewhat dark with a large black round marking which extends beyond median carina and is occupying entire width. Ocelli reddish brown. Antennae concolous with frons. Pronotum pale brown, with a large brownish black marking outside the lateral carinae, and with a conspicuous small blackish spot on the lateral lobes. Scutellum of the same colour as pronotum; outside the lateral carinae brownish black. Tegulae light brown. Tegmina almost hyaline with a remarkable dark brownish cuneiform marking apically; veins except for R tinged with dark brown. Wings almost hyaline with dark veins. Legs light brown except for the apices which are dark. Genital segments mostly blackish brown.

Vertex about 1.2 times as long as width; median carina clear; mediolateral carinae meeting each other at the apex of vertex, and meeting posteriorly with each lateral carina just before the middle; transverse carina sinuated; lateral carinae slightly divergent basally. Frons widest about the middle, and about twice as long as the largest width which is about 1.2 times as wide as basal width; median carina clear and reaching to the apex; lateral side weakly elevated and tinged with dark brown. Clypeus about as long as wide, with a median carina which is rather weak near the base. Antennae moderate in length, scarcely reaching to apex of frons, first segment short, about 1/3 times as long as the second; second segment about three times as long as width. Pronotum a little shorter than vertex, about 1/3 times as long as width, and provided with a distinct median carina and lateral carinae which are diverging posteriorly. Scutellum as long as vertex and pronotum put together, with lateral carinae which are diverged and slightly curved posteriorly, median carina vanishes before reaching the apex. Tegminal and wing venation as in Figs. 2~3. Approximate ratio of hind tarsal segments I:II:III=10:5:7. Hind femur provided with 2 minute spines laterally and 4 apically, of which outer one is the largest and the length about 1/4 times as long as femur. Spur moderate in size and with 7 minute teeth along the hind margin. Pygofer comparatively large, about 1.8 times as long as the largest width, deeply concave apically in ventral view and sparsely furnished with fine long hairs. Stylus long, apex pointed. Aedeagus long, weakly recurved and protruding beyond the apex of pygofer. Anal segment long.

♀: General coloration same as that of the male except for tegmina which are rather infuscated.

Holotype: ♂, Mt. Shibutsu, Gunma Pref., 29. VIII, 1978, Y. Hori leg.

Allotype: ♀, same data as holotype.

Paratypes: 17♂♂ 15♀♀, same data as holotype; 2♂♂ 2♀♀, Ayamedaira, Oze, Gunma Pref., 31, VIII, 1978, M. Tomokuni leg.

Holotype and allotype are preserved in the collection of the National Science Museum (Nat. Hist.), Tokyo. Two paratypes are preserved in the collection of the Entomological Laboratory, College of Agriculture, Ehime University. The rest of paratypes is deposited in the author's collection.

Distribution: Honshu (Mt. Shibutsu and Ozegahara moor)

The present new species is allied to *K. guttula* (Germar), which is widely distributed in Europe, but may be distinguished from it by the aedeagus that is slightly recurved and lacking laminate projection at the middle of the stem.

This is the first species of the genus recorded from Japan. The name of this new species is dedicated to Dr. Syoziro Asahina.

Stenocranus ozenumensis Ishihara, 1952

Hasegawa, 1954

Specimens examined: 1♂ 1♀, Ozegahara, 30. VIII, 1978, Y. Hori leg.; 1♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.; 10♂♂ 5♀♀, ditto, 20–22. VIII, 1979, Y. Hori leg.; 1♂, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.

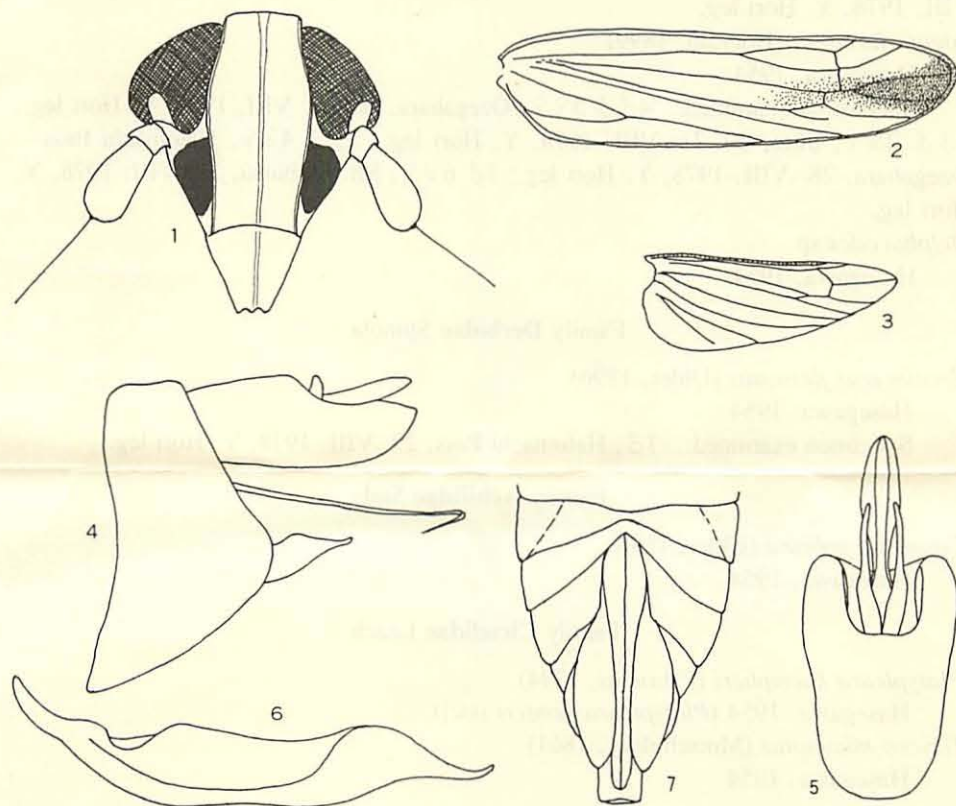
Megamerus notula (Germar, 1930)

Hasegawa, 1954

Specimens examined: 4♂♂, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 47♂♂ 52♀♀, ditto, 21–22. VIII, 1979, Y. Hori leg.

Laodelphax striatellus (Fallén, 1826)

Hasegawa, 1954 (*Delphacodes*)



Figs. 1–7. *Kelisia asahinai* Y. Hori, sp. nov.; 1. head in frontal view, 2. tegmen, 3. wing, 4. male genitalia in lateral view, 5. male genitalia in ventral view, 6. left style, 7. female genitalia in ventral view.



Fig. 8. *Kelisia asahinai* Y. Hori,
sp. nov. ♂.

Specimens examined: 1♂ 1♀, Ozegahara, 21. VIII, 1979, Y. Hori leg.; 5♂♂, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.; 3♂♂, Mt. Shibutsu, 28. VIII, 1978, Y. Hori leg.

Sogata furcifera (Horváth, 1899)

Hasegawa, 1954

Specimens examined: 4♂♂ 5♀♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 2♂♂ 2♀♀, ditto, 20–21, VIII, 1979, Y. Hori leg.; 3♂♂ 4♀♀, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.; 1♂ 6♀♀, Mt. Shibutsu, 29. VIII, 1978, Y. Hori leg.

Delphacodes sp.

Hasegawa, 1954

Family **Derbidae** Spinola

Epotiocerus flexuosus (Uhler, 1896)

Hasegawa, 1954

Specimen examined: 1♂, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.

Family **Achilidae** Stål

Catonidia sobrina (Uhler, 1896)

Hasegawa, 1954

Family **Cicadidae** Leach

Platypleura kaempheri (Fabricius, 1794)

Hasegawa, 1954 (*Platypleura kemferi* [sic])

Tibicen bihamatus (Motschulsky, 1861)

Hasegawa, 1954

Family **Ceropidae** Leach

Lepyromia grossa Uhler, 1896

- Hasegawa, 1954 (*Lepyromia coleopterata*)
Lepyromia okadae (Matsumura, 1903)
 Hasegawa, 1954 (*Euclovia*)
Nikkoptyelus dimidiatus (Matsumura, 1904)
 Hasegawa, 1954 (*Peuceptyelus*)
Peuceptyelus medius Matsumura, 1904
 Specimens examined: 1♂ 1♀, Ozegahara, 28–31. VIII, 1978, M. Tomokuni leg.;
 1♂, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.; 5♂♂ 1♀, Hatomachi
 Pass, 29. VIII, 1978, Y. Hori leg.
Peuceptyelus sp.
 Specimen examined: 1♂, Mt. Shibutsu, 27. VIII, 1978, Y. Hori leg.
Todophora abieti (Matsumura, 1904)
 Hasegawa, 1954 (*Cercopis*)
 Specimen examined: 1♂, Ozegahara, 23. VIII, 1979, Y. Hori leg.
Neophilaenus exclmationis (Thunberg, 1784)
 Hasegawa, 1954 (*Neophilaenus lineatus*)
 Specimens examined: 25♂♂ 31♀♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.;
 2♂♂ 8♀♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.; 6♂♂ 3♂♂, Mt. Shibutsu, 29.
 VIII, 1978, Y. Hori leg.; 14♂♂ 16♀♀, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.
Sinophora maculosa Melichar, 1902
 Hasegawa, 1954
 Specimens examined: 2♂♂, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y.
 Hori leg.; 1♂, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.
Sinophora sp.
 Specimens examined: 4♂♂, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y.
 Hori leg.
Aphrophora alni (Fallén, 1805)
 Hasegawa, 1954
Aphrophora costalis Matsumura, 1903
 Specimen examined: 1♀, 28–31. VIII, 1978, M. Tomokuni leg.
Aphrophora intermedia Uhler, 1896
 Specimens examined: 2♂♂, Ozegahara, 31. VIII, 1978, Y. Hori leg.; 2♂♂ 2♀♀,
 ditto, 28–31. VIII, 1978, M. Tomokuni leg.
Aphrophora obtusa Matsumura, 1903
 Hasegawa, 1954
 Specimens examined: 4♂♂ 3♀♀, Ozegahara, 30–31. VIII, 1978 Y. Hori leg.;
 4♂♂ 5♀♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.; 3♀♀, Ayamedaira, 31. VIII,
 1978, M. Tomokuni leg.
Tobiphora rugosa (Matsumura, 1903)
 Hasegawa, 1954 (*Aphrophora*)
 Specimens examined: 3♂♂ 4♀♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.;
 2♀♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.
Yezophora flavomaculata (Matsumura, 1904)
 Hasegawa, 1954 (*Aphrophora*)

Specimens examined: 13♂♂ 9♀♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 2♂♂ 6♀♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.

Family **Membracidae** Rafinesque

Orthobelus flavipes Uhler, 1896

Hasegawa, 1954

Specimens examined: 1♂ 2♀♀, Ozegahara, 30–31, VIII, 1978, Y. Hori leg.; 1♂ 3♀♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.; 1♂, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.; 1♂, Mt. Shibutsu, 29. VIII, 1978, Y. Hori leg.

Machaerotypus sibiricus (Lethierry, 1876)

Hasegawa, 1954

Family **Cicadellidae** Latreille

Ledra auditura Walker, 1858

Hasegawa, 1954 (*Ledra auritus*)

Specimen examined: 1♀, Ozegahara, 22. VIII, 1979, Y. Hori leg.

Oncopsis alni (Schrank, 1801)

Specimens examined: 3♀♀, Ozegahara, 20–21. VIII, 1979, Y. Hori leg.

Oncopsis mali (Matsumura, 1905)

Specimens examined: 4♀♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 2♀♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.

Macropsis irrorata (Matsumura, 1912)

Specimens examined: 1♂ 2♀♀, Ozegahara, 22–23. VIII, 1979, Y. Hori leg.; 1♀, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.; 1♀, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.

Macropsis prasina (Boheman, 1852)

Specimens examined: 1♂ 1♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 2♀♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.

Macropsis sp. 1

Specimen examined: 1♀, Ozegahara, 28–31. VIII, 1978, M. Tomokuni leg.

Macropsis sp. 2

Specimens examined: 1♀, Ozegahara, 30. VIII, 1978, Y. Hori leg.; 1♂, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.

Japanagallia pteridis (Matsumura, 1905)

Hasegawa, 1954 (*Agallia*)

Onukigallia onukii (Matsumura, 1912)

Specimens examined: 7♂♂ 26♀♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 3♂♂ 10♀♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.; 29♂♂ 62♀♀, ditto, 21–23. VIII, 1979, Y. Hori leg.; 2♂♂ 4♀♀, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.; 1♂ 1♀, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.

Idiocerus ishiyamae Matsumura, 1905

Specimens examined: 4♂♂ 8♀♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 7♂♂ 11♀♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.; 2♂♂ 7♀♀, ditto, 20–23. VIII, 1979, Y. Hori leg.

Idiocerus nigripectus Matsumura, 1911

Specimens examined: 1♂ 2♀♀, Ozegahara, 20–23. VIII, 1979, Y. Hori leg.

Idiocerus vitticollis Matsumura, 1905

Specimens examined: 1♂ 1♀, Ozegahara, 31. VIII, 1978, Y. Hori leg.; 2♂♂ 4♀♀, ditto, 23. VIII, 1979, Y. Hori leg.; 1♀, ditto, 28–31. VIII, 1978, M. Tomokuni leg.; 1♀, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.

Batracomorphus diminutus (Matsumura, 1912)

Specimens examined: 1♂ 1♀, Ozegahara, 30. VIII, 1978, Y. Hori leg.; 4♂♂, ditto, 20–21. VIII, 1979, Y. Hori leg.

Batracomorphus dorsalis (Matsumura, 1912)

Specimens examined: 1♀, Ozegahara, 20. VIII, 1979, Y. Hori leg.; 1♀, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.

Batracomorphus mundus (Uhler, 1896)

Specimens examined: 2♀♀, Ozegahara, 20. VIII, 1979, Y. Hori leg.

Drabescus pallidus Matsumura, 1912

Specimens examined: 4♂♂ 4♀♀, Ozegahara, 21–23, VIII, 1979, Y. Hori leg.

Onukia onukii Matsumura, 1912

Specimens examined: 1♀, Ozegahara, 30. VIII, 1978, Y. Hori leg.; 6♂♂ 5♀♀, ditto, 20–23. VIII, 1979, Y. Hori leg.; 1♂ 2♀♀, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.

Oniella leucocephala Matsumura, 1912

Specimens examined: 2♂♂ 2♀♀, Ozegahara, 31. VIII, 1978, Y. Hori leg.; 6♂♂ 8♀♀, ditto, 20–21. VIII, 1979, Y. Hori leg.; 2♂♂ 1♀, Hatomachi Pass, 29, VIII, 1978, Y. Hori leg.; 2♂♂, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.

Evacanthus interrptus (Linné, 1758)

Hasegawa, 1954 (*Euacanthus* [sic])

Specimens examined: 1♂, Ozegahara, 31. VIII, 1978, Y. Hori leg.; 6♀♀, ditto, 20–23. VIII, 1979, Y. Hori leg.; 1♂, Mt. Shibutsu, 29. VIII, 1978, Y. Hori leg.; 1♀, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.

Bothrogonia japonica Ishihara, 1962

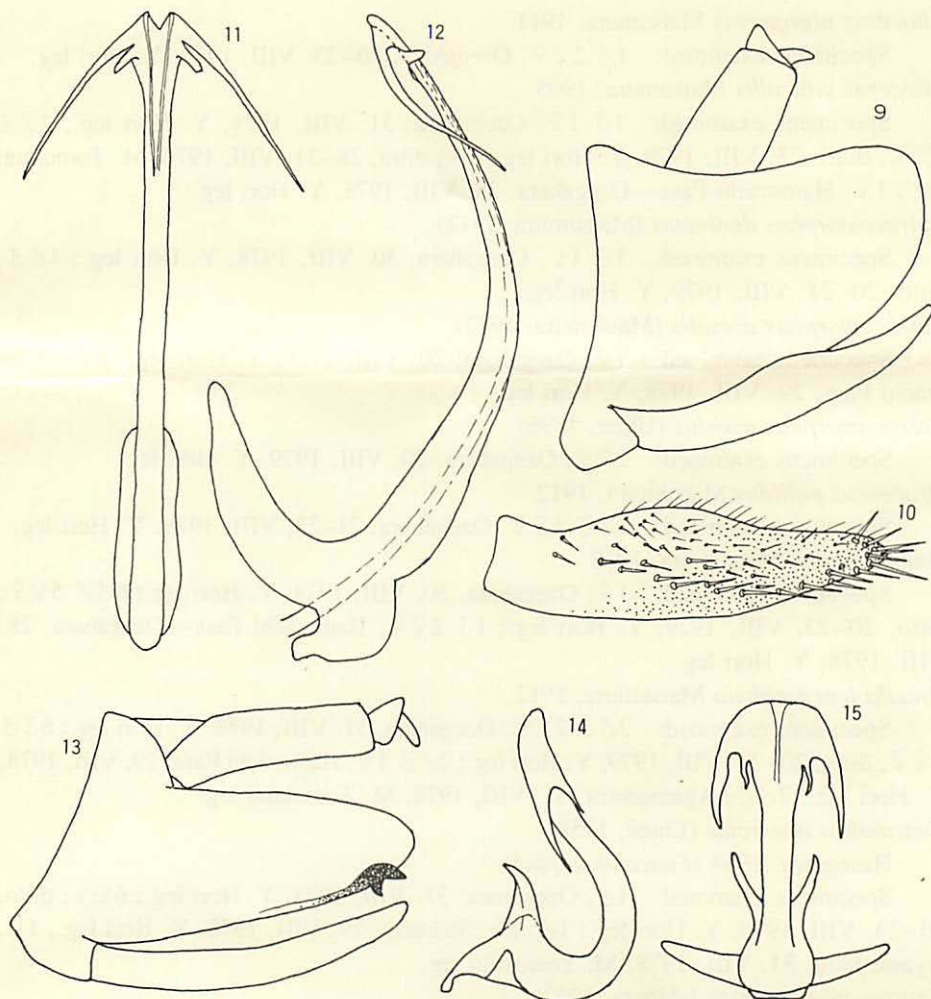
Hasegawa, 1954 (*Megalotettigella ferruginea*)

Pagaronia shibutsuana Y. Hori, sp. nov.

♂: Length including tegmina about 7.5 mm, width about 2 mm.

Vertex yellowish brown with irregular blackish parts along the anterior margin and at each side. Frons yellowish brown, somewhat darker than vertex. Clypeus the same colour as frons. Genae yellowish brown with dark margin. Eyes reddish brown. Pronotum yellowish brown and darkened broadly at each side excepting for postlateral margin which is yellow. Scutellum yellowish brown with a pair of triangular blackish marking. Tegmina pale brown, subhyaline, with three fine longitudinal stripes. Wings subhyaline, infuscated and with darker veins. Legs dark yellowish excepting for tarsi which are brown and for blackish bristles of hind femur.

Vertex apparently shorter than the width. Pronotum about 1.2 times as long as vertex, more or less lustrous at the apical half and provided with fine grooves and punctures at the basal half. Scutellum a little shorter than pronotum in the median line.



Figs. 9-15. 9-12. *Pagaronia shibutsuana* Y. Hori, sp. nov.; 9. male genitalia in lateral view, 10. left style, 11. aedeagus in ventral view, 12. aedeagus in lateral view.
13-15. *Epiacanthus ozenumensis* Y. Hori, sp. nov.; 13. male genitalia in lateral view, 14. aedeagus in lateral view, 15. aedeagus in ventral view.

Approximate ratio of hind tarsal segments I:II:III=5:3:3. Pygofer without any process. Genital plate infuscated apically, elongate and reaching near the apex of pygofer. Aedeagus rather fine; apical process short and simple.

Holotype: ♂, Mt. Shibutsu, Gunma Pref., 29. VIII, 1978, Y. Hori leg.

Paratype: 1♂, same data as holotype.

Holotype is preserved in the collection of the Entomological Laboratory, College of Agriculture, Ehime University. Paratype is deposited in the author's collection.

Distribution: Honshu (Mt. Shibutsu), Japan.

The present species is easily separated from other species of the genus by the coloration of body and the characters of genitalia.

Pagaronia sp.

Specimens examined: 2♀, Ozegahara, 31. VIII, 1978, Y. Hori leg.; 2♀, ditto, 20. VIII, 1979, Y. Hori leg.

Although this species seems to be new to science, the final identification should be postponed until male insects became available.

Epiacanthus ozegaharensis Y. Hori, sp. nov.

Hasegawa, 1954 (*Epiacanthus stramineus*)

♂: Length including tegmina about 8 mm, width about 2 mm.

General colour straw yellow, changing to orange in dried material. Vertex with a pair of conspicuous black spots before the eyes, and a small apical spot which is extending to frons. Frons and clypeus concolourous with vertex. Eyes blackish brown, antennae pale. Pronotum margined with dark tint posteriorly. Tegmina subhyaline, wing infuscated with darker veins, subhyalin. Legs entirely pale orange excepting for claws which are dark brown. Vertex 0.8 times as long as basal width, shallowly concaved above at the middle. Pronotum apparently longer than vertex and about a half times as long as wide. Scutellum as long as vertex. First hind tarsal segment as long as second and third segments put together. Pygofer with simple process. Genital plate elongate and reaching to the apex of pygofer. Aedeagus without basal spine, ventral spine stout and recurved weakly.

Holotype: ♂, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.

The type preserved in the collection of National Science Museum (Nat. Hist.), Tokyo.

This new species is easily separable from the other known congeners by the genital character especially by the recurved ventral spine.

Kurotsuyanus sachalinensis (Oshianian, 1912)

Hasegawa, 1954

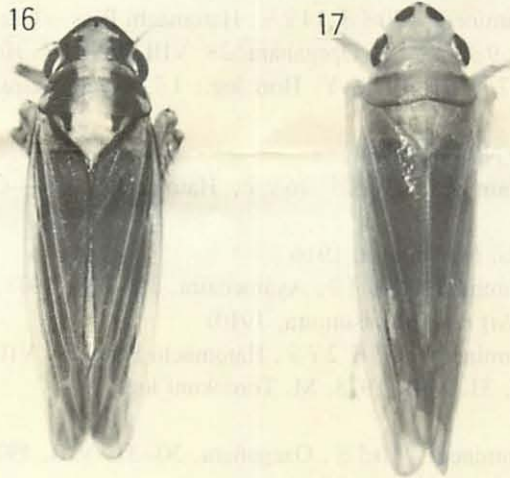


Fig. 16. *Pagaronia shibutsuana* Y. Hori, sp. nov. ♂. Fig. 17. *Epiacanthus ozenumensis* Y. Hori, sp. nov. ♂

- Cicadella atramentaria* (Motschulsky, 1859)
Hasegawa, 1954 (*Ishidaella*)
- Cicadella viridis* (Linné, 1758)
Hasegawa, 1954 (*Tettigella*)
Specimens examined: 3♂♂ 3♀♀, Ozegahara, 28–31. VIII, 1978, M. Tomokuni leg.; 4♀♀, ditto, 23. VIII, 1979, Y. Hori leg.
- Mileeva dorsimaculata* (Melichar, 1902)
Hasegawa, 1954 (*Mileeva margheritae*)
- Dicraneura* sp.
Hasegawa, 1954
- Ishiharaella polyphemus* (Matsumura, 1931)
Specimens examined: 1♂ 1♀, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.
- Empoasca abieti* (Matsumura, 1917)
Specimens examined: 16♂♂ 70♀♀, Mt. Shibutsu, 29. VIII, 1978, Y. Hori leg.
- Empoasca* sp. A
Hasegawa, 1954
- Empoasca* sp. B
Hasegawa, 1954
- Naratettix zonatus* (Matsumura, 1915)
Specimens examined: 2♂♂ 1♀, Ozegahara, 30–31. VIII, 1978 Y. Hori leg.; 1♂ 1♀, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.; 1♀, Mt. Shibutsu, 29. VIII, 1978, Y. Hori leg.
- Eurhadina pulchella* (Fallén, 1806)
Specimens examined: 8♀♀, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.
- Aguriahana quercus* (Matsumura, 1917)
Specimens examined: 1♂ 1♀, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.
- Alnetoides sapporensis* (Matsumura, 1932)
Specimens examined: 20♂♂ 14♀♀, Hatomachi Pass—Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 9♂♂ 3♀♀, Ozegahara, 28. VIII, 1978, Y. Hori leg.; 12♂♂ 7♀♀, Hatomachi Pass, 27. VIII, 1978, Y. Hori leg.; 1♂, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.
- Arboridia apicalis* (Nawa, 1913)
Specimens examined: 11♂♂ 16♀♀, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.
- Erythroneura suzukii* Matsumura, 1916
Specimens examined: 1♂ 1♀, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.
- Erythroneura (Balila) mori* (Matsumura, 1910)
Specimens examined: 3♂♂ 2♀♀, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.; 2♀♀, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.
- Goniagnosthus* sp.
Specimens examined: 16♂♂, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 1♂, ditto, 21. VIII, 1979, Y. Hori leg.
- Macrostes fascifrons* Stål, 1858
Specimens examined: 4♂♂ 1♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.

Macrosteles sexnotatus (Fallén, 1806)

Specimens examined: 30♂♂, 61♀♀, Mt. Shibutsu, 29. VIII, 1978, Y. Hori leg.

Macrosteles variatus (Fallén, 1806)

Hasegawa, 1954

Nephotettix cincticeps Uhler, 1896

Specimens examined: 1♀ Mt. Shibutsu, 29. VIII, 1978, Y. Hori leg.

Orientalis ishidae Matsumura, 1902

Specimens examined: 1♀, Ozegahara, 30. VIII, 1978, Y. Hori leg.; 1♂ 2♀♀, Hatomachi Pass, 29. VIII, 1978, Y. Hori leg.; 2♀♀, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.

Cicadula quadrinotatus (Fabricius, 1794)

Hasegawa, 1954

Specimens examined: 1♂ 15♀♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 13♂♂ 45♀♀, ditto, 20–23. VIII, 1979, Y. Hori leg.; 1♂ 2♀♀, Hatomachi Pass—Ozegahara, 28. VIII, 1978, Y. Hori leg.; 2♂♂ 9♀♀, Mt. Shibutsu, 29. VIII, 1978, Y. Hori leg.; 4♂♂ 2♀♀, Ayamedaira, 31. VIII, 1978, M. Tomokuni leg.

Handianus limbifer (Matsumura, 1902)

Hasegawa, 1954 (*Athysanus*)

Sceleoracus decumanus (Kontkanen, 1949)

Hasegawa, 1954 (*Sceleoracus* [sic] *striatulus*)

Sceleoracus jakowleffi (Lethierry, 1888)

Hasegawa, 1954 (*Athysanus suturalis*)

Euscelis sp.

Hasegawa, 1954

Metalimnus marmoratus (Flor, 1861)

Hasegawa, 1954

Psammotettix striatus (Linné, 1758)

Hasegawa, 1954

Yanocephalus yanoi (Matsumura, 1902)

Specimens examined: 5♂♂ 46♀♀, Ozegahara, 30–31. VIII, 1978, Y. Hori leg.; 20♂♂ 69♀♀, ditto, 20–23. VIII, 1979, Y. Hori leg.

Deltocephalus pascullus (Fallén, 1826)

Hasegawa, 1954

References

- ANUFIRIEV, G. A. (1967) Notes on the genus *Oncopsis* Burmeister, 1838 (Homoptera, Auchenorrhyncha) with description of new species from the Soviet Far East. *Ent. Tidis.*, **88**(3/4): 174–184.
- (1969) Contribution to the knowledge of the genus *Oncopsis* Burm. (Homoptera, Cicadellidae) from China and Far East. *Act. Mus. Moraviae*, **65**: 161–168.
- (1970) Four new species of *Pagaronia* Ball (Homoptera, Cicadellidae) from the Far East, allied to *Tettigonia guttigera* Uhl. *Bull. Acad. Polon. Sci., Sér. Sci. Biol.*, **18**(9): 553–557.
- (1971a) Six new Far Eastern species of leafhoppers (Homoptera, Auchenorrhyncha). *Bull. Acad. Polon. Sci., Sér. Sci. Biol.* **19**(7/8): 517–522.
- (1971b) New and little known Far Eastern species of leafhoppers (Homoptera, Cicadellidae) of the genus *Pagaronia* Ball, 1902. *Bull. Acad. Polon. Sci., Sér. Sci. Biol.*, **19**(5): 335–339.

- (1976) A review of leafhoppers of the genus *Epiacanthus* Matsumura, 1902 (Homopt., Auchenorrhyncha, Cicadellidae). *Rev. Ent. URSS*, **55**(1): 69–75 (in Russian).
- ESAKI, T. and S. ITO (1954) A tentative catalogue of Jassoidea of Japan and her adjacent territories, Japan Soc. Promo. Sci., Tokyo, 315 pp.
- HASEGAWA, H. (1954) An annotated list of Hemiptera from Ozegahara Moor. In: Ozegahara 1954, 746–757. Tokyo (in Japanese).
- ISHIHARA, T. (1949) Revision of the Araeopidae of Japan, Ryukyu Islands and Formosa (Hemiptera). *Sci. Rep. Matsuyama Agr. Coll.*, **2**(1): 1–102, pls. 1–17.
- (1952) Delphacidae of Oze, Honshu, Japan. *Ins. Mats.*, Sapporo, **18**(1/2): 35–37.
- (1953) A tentative check list of Superfamily Cicadelloidea of Japan (Homoptera). *Sci. Rep. Matsuyama Agr. Coll.*, (11): 1–72, pls. 1–17.
- (1954) Homopterous notes. *Sci. Rep. Matsuyama Agr. Coll.*, (14): 1–28.
- (1955a) The family Agallidae of Japan (Insecta: Hemiptera). *Zool. Mag.*, Tokyo, **64**(7): 214–218.
- (1955b) The genus *Idiocerus* Lewis of Japan (Hemiptera, Idioceridae). *Mem. Ehime Univ.*, Sect. VI (Agriculture), **1**(1): 15–21.
- (1966) Homoptera of the Kurile Island. *Trans. Shikoku ent. Soc.*, **9**(2): 31–40.
- MATSUMURA, S. (1903) Monographie der Cercopiden Japans. *Sapporo Coll. Agr. Jour.*, **2**: 15–52.
- (1904) Addition zur Monographie der Cercopiden Japans, mit der Beschreibung eines neues *Cicada*-Art. *Annot. zool. Japon.*, **5**: 31–54, pls. 2–3.
- (1912) Die Acocephalinen und Bythoscopininen Japans. *Jour. Coll. Agr. Tohoku Imp. Univ.*, **4**(7): 279–325.
- MELICHAR, L. (1895) *Cicadinen* (Hemiptera-Homoptera) von Mittel-Europa, Berlin, 364 pp., XII Talfs.
- NAST, J. (1972) Palaearctic Auchenorrhyncha (Homoptera) an annotated check list. *PWN-Polish Sci. Publ.*, Warszawa, 550 pp.
- OKADA, T. (1976) Three new species of *Pagaronia* Ball (Homoptera, Cicadellidae) from Japan. *Kontyu*, Tokyo, **44**(2): 138–141.
- (1978) Twelve new species of *Pagaronia* Ball (Homoptera, Cicadellidae) from Japan. *Kontyu*, Tokyo, **46**(3): 371–384.
- OMAN, P. (1949) The nearctic leafhoppers (Homoptera-Cicadellidae), A generic classification and check list. *Mem. ent. Soc. Washington*, (3): 1–253.
- UHLER, P. R. (1896) Summary of the Hemiptera of Japan presented to the United National Museum by Prof. Mitsukuri. *U. S. nat. Mus. Proc.*, **19**: 255–297.
- USHIJIMA, K. (1979) The cercopid insects collected by Dr. Kintaro Baba in Niigata Prefecture, Japan. *Ins. Niigata Pref.*, 123–133 (in Japanese).
- VILLBASTE, J. (1968) Über die Zikadenfauna des Primorje Gebietes, Tallin, 180 pp. (in Russian with German Summary).
- (1971) Eesti tirdid, Homoptera Cicadinea I, Tallin, 284 pp.