

HETEROMETABOLA III

ORTHOPTERA II
FAM. Tettigoniidae and Gryllacridae

BY

C. WILLEMSE (Eygelshoven, Holland)

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FAM. TETTIGONIIDAE

SUBFAM. SCAPHURINAE.

Genus EUANEROTA KARNY 1927.

Euanerota brevis SERVILLE 1839

New Guinea : Siwi (forêt), 6.III.1929, 2 ♂♂.

Genus DUCETIA STÅL 1874.

Ducetia thymifolia FABRICIUS 1875

Sumatra : Anei kloof, 21.IV.1929, 1 ♀.

(1) The first part, *Orthoptera-Acrididae*, appeared in vol. IV, fasc. 3, 31 juillet 1932. I take this opportunity to make some corrections. In this part I described on page 38, *Piezotettix truncata* nov. sp. In 1908, Hancock described a new genus *Holoarcus* for *Piezotettix arcuatus* de Haan and some other species. (*Trans. Entom. Soc. London*, 1908, p. 392.) Klaus Günther described in 1929 (*Zoolog. Anzeiger*, Bd. 85, p. 40) a new species, *Holoarcus Belingae*. This publication was unknown to me and it proved that *H. Belingae* is the same species as *P. truncata* mihi. The known species of *Holoarcus* are the following : *H. altinotus* Hancock, genotype, Aru Islands, *H. arcuatus* de Haan, *H. Belingae* Günther (= *truncata* Will), *H. intermedia* Will (*op. cit.*, p. 39, *Piezotettix intermedia*) all from New Guinea and *H. sulcatus* Stål from the Philippines.

Genus PSYRA STÅL 1876.

Psyra melanonota STÅL 1876

Sumatra : Kepahiang, 17.IV.1929, 1 ♀.

Psyra unimaculata nov. spec.

♂. Body and legs yellowish (green when alive). Antennae brownish yellow, darker apically. Eyes very prominent, yellowish or yellowish brown.

Disc of pronotum rounded behind, finely bordered with black; lateral lobes higher than long. Tegmina long, one and a half times as wide as the length of pronotum, anterior margin slightly rounded, posterior margin nearly straight, apex rounded, hind margin and more or less the anterior ulnar vein brownish

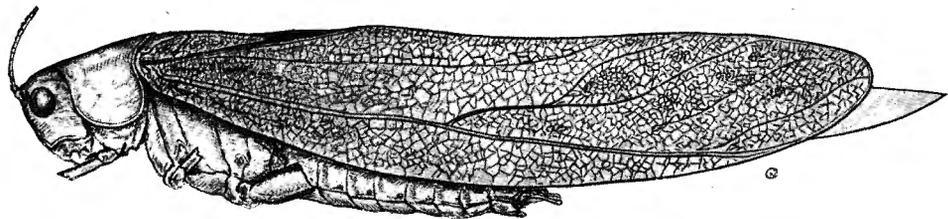


FIG. 1. — *Psyra unimaculata* nov. sp. ♂.

yellow, with a great blackish-brown oval spot at the top of the tympanal area in the left tegmen, in the right tegmen bordered with black on that place.

First radial branch arising much before the middle, than bifurcated about in the middle of the tegmen and both, somewhat undulated branches, freely running into the hind margin; further 2 simple oblique branches to the hind margin.

Basal half of the tegmen with dense reticulation, the apical half with isles of more densely reticulated spots between the veins.

Fore coxae with a long, sharply pointed spine.

All femora with some minute spines beneath; the apical margin of second and third tarsal joints blackish, spines of hind tibiae blackish-brown.

♂. End of abdomen. Supra-analplate roundly pentagonal, somewhat excavated, deflexed between the cerci.

Cerci touching each other at apex or crossing, curved, narrower apically, apex rounded and slightly thickened.

Subgenital plate large, narrowed and with a short median keel in distal part, apex truncate, with two short, articulately inserted, straight styles.

♀ unknown.

This species is differing from all the known species, by the black spot on the tegmina.

	♂
Length of body	26 mm.
Length of pronotum	6 mm.
Length of tegmina	43 mm.
Width of tegmina.	9 mm.
Length of hind femora	22 mm.

New Guinea : Sakoemi, 11.III.1929, 3 ♂♂ (Type Mus. Brussels).

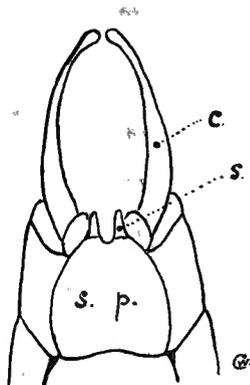


FIG. 2. — *Psyra unimaculata* nov. sp. ♂.
S. p. = Subgenital plate. — C. = Cercus. — S. = Styli.
Top of abdomen from beneath.

Genus PARACAEDICIA BRUNNER VON WATTENWYL 1891.

Paracaedicia sp.

New Guinea : Sakoemi-Moemi, 13.III.1929, 1 ♂ (Top of abdomen mutilated).

Genus SYMPAESTRIA BRUNNER VON WATTENWYL 1878.

Sympaestria acutelobata BRUNNER VON WATTENWYL 1878

Borneo : Samarinda, 9.II.1929, 1 ♀.

Genus PARANEROTA KARNY 1925.

Paranerota gracilis BURMEISTER 1838

Archipel de Banda : Banda, 24.II.1929, 1 ♀.

Genus AGNAPHA BRUNNER VON WATTENWYL 1891.

Agnapha japena nov. sp.

♀. General colour yellowish (probably green when alive).

Antennae with the basal joints yellowish, in the basal half yellowish with the posterior margin of each joint brown, the apical half brownish-black.

Head yellowish, occiput with a reddish-brown longitudinal stripe on each side of the middle and a small spot of the same colour more lateral, near the anterior margin of pronotum.

Pronotum yellowish, metazona somewhat darker coloured, with 3 small blackish spots on each side of the middle, the first one, being the smallest, just behind the anterior margin, the second one of an elongated form, somewhat

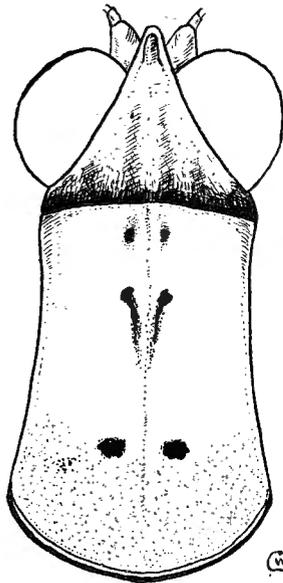


FIG. 3. — *Agnapha japena* nov. sp. ♀.

before the middle and the third one, which is round, in the shallow transverse sulcus behind the middle.

Posterior margin of pronotum rounded; lateral lobes much higher than long.

Tegmina surpassing the hind knees, yellowish, with a brownish stripe along the cubital vein; gradually narrowing towards the apex, apex rounded; costal vein distinct, straight, short, subcostal- and radial vein parallel; first radial branch arising close before the middle of tegmen, forked, fork branches running into the hind margin, further on one simple radial branch in the apical part. Medial vein simple, reaching the hind margin behind the middle. Cubital vein short, straight.

Wings slightly infumated, surpassing the tegmina with about 7 mm. Legs yellowish, spines black or with black tips. Hind femora yellowish, with yellowish knee.

Spines of fore femora 2-3 on inner margin, none on outer margin; middle

femora 2 on outer margin, none on inner margin; hind femora 6-7 on outer, 3-4 on inner margin. Kneelobes of hind femora with short spines.

Fore tibiae with the tympanum open on both sides; from above without, from beneath on both sides with 2-3 spines.

Middle tibiae are missing.

Hind tibiae from above on both sides with a row of spines from the base to the apex, from beneath with a few spines on either side.

Abdomen from above with a black spot on each tergite.

♀. Supra-analplate short, triangular, apex rounded.

Cercus slightly bent inwards, attenuated towards the apex, apex pointed.

Ovipositor strongly compressed, sickle-shaped, somewhat longer than the pronotum, acute at apex, slightly granulated on its surface; upper valves serrate on nearly its whole margin, lower valves only near the apex.

Subgenitalplate short, triangular, apex obtuse.

	♀
Length of body.	22.5 mm.
Length of pronotum	5.5 mm.
Length of tegmina	29 mm.
Width of tegmina	5.5 mm.
Length of hind femora	19 mm.
Length of ovipositor.	7 mm.

Isle of Japan : Saroei, 6.III.1929, 1 ♀ (Type Mus. Brussels).

This species is to be placed in the key of H. Karny ⁽¹⁾ near *A. mediovittata* Karny from New Guinea, differing in the coloration of the disc of pronotum. In *mediovittata* there is a distinct black, longitudinal band on each side, not reaching the hind margin of pronotum, in the new species there are only six black spots. Besides there is a difference in length of the body, that in *mediovittata* is only 18,3 mm.

SUBFAM. PHYLLOPHORINAE.

Genus SASIMA BOLIVAR 1903.

Sasima spinosa BRUNNER VON WATTENWYL 1898

New Guinea : (forêt entre Lomira et lac de Kamakahwalla), 19.III.1929, 1 ♀ nymph.

Sasima sp.

New Guinea : Sakoemi-Moemi, 13.III.1929, 1 ♀ nymph.

(¹) H. H. KARNY, *Malayische Orthopteren XIII*, Treubia, vol. IX, 1926, p. 139.

Genus PHYLLOPHORA THUNBERG 1815.

Phyllophora sp.

Isle of Aroe : S. Manoembai, 25.III.1929, 1 ♀ nymph.

SUBFAM. **PTEROPHYLLINAE.**

Genus PSEUDOPHYLLUS SERVILLE 1831.

Pseudophyllus prasinus PICTET & SAUSSURE 1892

Java : Buitenzorg, 20.XII.1928, 1 ♀.

Genus CLIMACOPTERA BRUNNER VON WATTENWYL 1895.

Climacoptera parallela WALKER

Java : Buitenzorg, 20.XII.1928, 1 ♀.

Genus ONOMARCHUS STÅL 1874.

Onomarchus mandarinus PICTET & SAUSSURE 1892

Sumatra : 1 ♀.

Genus TYMPANOPTERA PICTET & SAUSSURE 1892.

Tympanoptera annulata KARNY 1924

New Guinea : Moemi, 5.III.1929, 1 ♂, 1 ♀.

Tympanoptera Uvarovii KARNY 1924

New Guinea : Sakoemi, 11.III.1929, 1 ♂, 1 ♀.

I am not quite sure about the identification of the above mentioned *Tympanoptera* sp. The genus *Tympanoptera* is without material for comparison, very difficult to identify.

Genus MORSIMUS STÅL.

Morsimus acutelaminatus BRUNNER VON WATTENWYL 1895

Sumatra : avril-mai 1929, 1 ♀; 1 ♀ (Lebrun).

Genus SATHROPHYLLIA STÅL 1874.

Sathrophyllia femorata FABRICIUS 1787

Sumatra : Medan, 1 ♀ (van der Meer Mohr).

Genus TYPHOPTERA KIRBY 1906.

Typhoptera quadrituberculata WESTWOOD

Bornéo : Samarinda, 9.II.1929, 1 ♀.

SUBFAM. **MECOPODINAE.**

Genus SEXAVA WALKER 1870.

Sexava nubila STÅL 1874

New Guinea : Sorong, 1.III.1929, 3 ♂♂, 2 ♀♀; Manokwari, 12-15.III.1929, 2 ♂♂, 2 ♀♀;
Manoi-Salawati, 2.III.1929, 4 ♂♂.

Sexava coriacea LINNAEUS 1764

Isle of Halmaheira : Djailolo, forêt Todowangi, 16.II.1929, 3 ♂♂, 3 ♀♀

Genus MECOPODA SERVILLE 1831.

Mecopoda elongata LINNAEUS 1758

Java : Buitenzorg, 2 ♀♀.

Sumatra : Tandjong Karang, 12.IV.1929, 1 ♂; Kepahiang, 17.IV.1929, 1 ♂ nymph;
Medan, 1 ♀ (van der Meer Mohr).

Mecopoda (Eumecopoda HEBARD 1922) cyrtoscelis KARSCH 1888

Isle of Aroe : S. Manoembai, 26.III.1929, 1 ♂, 1 ♀.

Charisoma Karschi BOLIVAR, I. 1903

New Guinea : Angi Gita, 10.III.1929, 1 ♀.

Genus PARAPHRICTIDEA nov. genus.

♀. Size small, form moderately slender. Margins of antennal scrobes slightly produced between the antennae and rounded, not quite reaching the middle of basal joint of antennae.

Face and cheeks smooth, with some smooth impressions.

Maxillar palpi moderately elongate, apical joint about two times as long as the praeapical one.

Eyes globose and very prominent.

Fastigium of vertex narrow, narrower than width of basal joint of antennae, lamelately produced in the middle, straight, with apex in lateral aspect rounded.

Vertex smooth, convex.

Pronotum coarsely wrinkled on the disc, anterior margin rounded, posterior margin truncate, concavely incised in the middle; median keel indicated by a row of longitudinal tubercels, lateral keels slightly divergent posteriorly, indicated by large, rounded spines in the following way.

The first spine is lying a little behind the anterior margin, the second one is larger, broader and more round and is lying about in the middle of the pronotum, the third one is broad, smaller, conical, with the apex rounded and is lying behind the middle; metazona with divergent obtuse, irregular lateral keels.

Transverse sulci subdistinct on the disc, distinct and deep between the spines and on the lateral lobes.

Lateral lobes vertical, much longer than high, lower margin thickened, straight, ascendant posteriorly; anterior and posterior margin straight; its surface smooth, except near the anterior-and posterior margin where there is some coarse sculpturation.

Tegmina rudimentar, lateral, not reaching beyond the first abdominal tergite, anterior-and posterior margin and apex rounded, veins indistinct, coriaceous.

Wings absent.

Legs relatively long and slender; anterior femora with 4 spines in the apical half on the lower inner margin, outer lower margin and from above without spines; median femora with 3-4 spines on the lower outer margin, inner lower margin and from above without spines; hind femora slender, with a row of 10-11 spines on the outer lower margin, inner margin with 4 spines in the apical half, kneelobes with short spines.

Anterior tibiae with the tympana open, oval, on either side, sulcated from above, with 5 spines on the outer and 3 spines on the inner margin, inner lower margin with 7, outer lower margin with 6-7 spines.

Median tibiae with 4 spines on the outer upper margin, with 6 spines on the inner upper margin; lower inner margin with 9, outer margin with 9 spines.

Hind tibiae with all margins with a row spines.

Prosternum with two, very short, minute spines.

Meso-and metasternum transverse, posterior lateral angles obtuse.

♀. Last abdominal tergite transverse, posterior margin rounded-truncate.

Supra-analplate short, triangular, apex rounded.

Cercus broad at base, slightly curved, gradually narrowing towards apex. apex sharply pointed.

Ovipositor relatively long, upper margin substraight, lower margin slightly curved upwards in the apical half, apex pointed, margins smooth.

Subgenitalplate about as long as broad, distinctly narrowed posteriorly, posterior margin with a deep, rounded incision in the middle.

GENOTYPE : **PARAPHRICTIDEA KARNYI** nov. spec.

This genus differs in many features from all the known genera of the group *Phricta* and may be distinguished at once by the short, rudimentar tegmina.

Paraphrictidea Karnyi nov. sp.

♀. General coloration yellowish-brown with black spots.

Antennae brown, the two basal joints with a black spot, third and some following joints yellowish-brown, the remaining joints reddish-brown, each joint with the apex yellowish-brown.

Head shining black, with a row of irregular yellowish-brown or yellowish spots along the antennal scrobes and two stripes of spots beneath the eyes across the cheeks and with a fine yellow longitudinal stripe behind each eye on the vertex.

Face and clypeus with some irregular yellowish-brown spots. Eyes brown.

Pronotum with the disc brown, the lateral lobes shining black, the lower part somewhat more bright, lower margin yellow in the basal half.

Tegmina reddish-brown, near the posterior margin more blackish-brown, anterior margin bordered with black, posterior margin near the apex bordered with yellow.

Anterior femora yellowish-brown, with small reddish-brown spots from above and at the apex, spines with black spots apposed at their bases; anterior tibiae yellowish-brown with a black spot on each side of the tympanum, tarsi blackish-brown.

Median femora yellowish-brown, from above with 2 small black dots at their base, top of femora blackish-brown, spines with black tips; median tibiae yellowish-brown with some irregular dark stripes and dots, tarsi blackish-brown.

Hind femora yellowish-brown with a row of small transverse black stripes on the outer surface at the base and a pair of items from above; behind the middle with a blackish stripe from above, knee blackish-brown.

Hind tibiae yellowish-brown, spines from the lower margins with black spots apposed at their bases.

Hind tarsi blackish-brown. Sternum blackish-brown with yellow spots or stripes along the sutures.

(¹) Dedicated to my friend Dr. H. H. Karny, who ardently studied the *Tettigoniidae* from the Indo-Malayan Region.

Abdomen brown, with a row of velvety black spots in the middle of the tergites, and small ones on each side, diminishing towards the top of abdomen.

Ovipositor brown, black at the base.

♂ unknown.

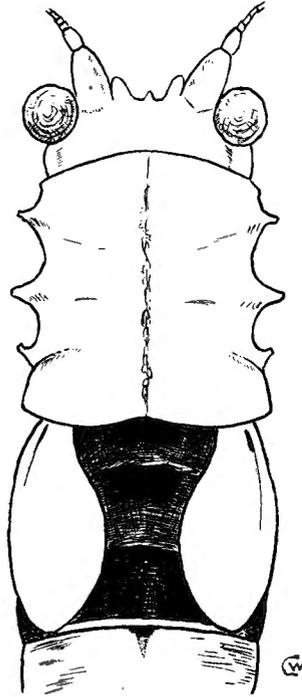


FIG. 4. — *Paraphrictidea Karnyi*, nov. gen. et spec. ♀.

	♀
Length of body	23 mm.
Length of pronotum.	4.5 mm.
Length of tegmina	4 mm.
Length of hind femora	18 mm.
Length of ovipositor	11 mm.

New Guinea : Angi Gita, 10.III.1929, 1 ♀ (Type Mus. Brussels).

SUBFAM. **HEXACENTRINAE.**

Genus **HEXACENTRUS** SERVILLE 1831.

Hexacentrus mundus WALKER 1869

New Guinea : Sakoemi, 11.III.1929, 1 ♂.

Isle of Aroe : S. Manoembai, 25-26.III.1929, 3 ♂♂, 3 ♀♀.

Isle of Japen : Saroei, 6.III.1929, 1 ♂, 5 ♀♀.

Genus PHISIS STÅL 1860.

Phisis rapax REDTENBACHER 1891

New Guinea : Sakoemi, 11.III.1929, 1 ♀, 1 ♂ (in bad condition of conservation).

SUBFAM. **CONOCEPHALINAE.**

Genus XIPHIDION SERVILLE 1831.

Xiphidion longipenne DE HAAN 1842

Borneo : Samarinda, 9.II.1929, 1 ♂, 1 ♀.

Xiphidion maculatum LE GUILLOU 1841

Borneo : Samarinda, 8-9.II.1929, 3 ♀ ♀.

Sumatra : Singalang, 22.IV.1929, 1 ♂; Tandjong-Karang, 12.IV.1929, 1 ♂, 1 ♀; Kepahiang, 17.IV.1929, 1 ♀.

Xiphidion bilineatum ERICHSON 1842

New Guinea : Sakoemi, 11-12.III.1929, 10 ♂ ♂, 2 ♀ ♀.

Isle of Halmaheira : entre baies de Dodinga et de Kaoe, 15.II.1929, 1 ♂.

Isle of Japen : Saroei, 6.III.1929, 2 ♂ ♂, 5 ♀ ♀.

Xiphidion infumatum REDTENBACHER 1891

New Guinea : Sakoemi, 11-12.III.1929, 5 ♂ ♂, 3 ♀ ♀; Siwi (forêt), 6-7-8.III.1929, 1 ♂, 3 ♀ ♀.

Isle of Japen : Saroei, 6.III.1929, 17 ♂ ♂, 32 ♀ ♀.

SUBFAM. **AGRAECIINAE.**

Genus RHYTIDASPIS REDTENBACHER 1891.

Rhytidaspis picta REDTENBACHER 1891

New Guinea : Sakoemi, 11.III.1929, 1 ♀.

Genus SALOMONA BLANCHARD 1855.

Salomona megacephala DE HAAN 1842

New Guinea : Sakoemi, 11.III.1929, 2 ♂ ♂, 1 ♂ and 2 ♀ ♀ nymphae.

Genus PSEUDONICSARA KARNY 1912.

Pseudonicsara Leopoldi nov. spec.

♂. Size small, form slender. Head comparatively narrow, face and genae impresso-punctate, occiput weakly rugulose.

Vertex slenderly, lamellate produced, straight, with apex in lateral aspect, rounded.

Pronotum impresso-punctate with smooth spots, posterior margin slightly concave; median and transverse sulci distinct.

Tegmina and wings reaching a little beyond the apex of hind femora.

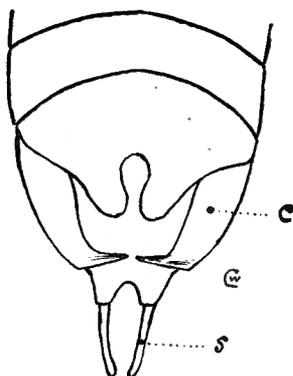


FIG. 5. — *Pseudonicsara Leopoldi* nov. sp. ♂.

Top of abdomen from above.

C. = Cercus. — S. = Stylus

Legs heavy, anterior femora with 6 spines on the inner and 5 on the outer margin, median and hind femora respectively with 2 and 6, 7 and 11 spines.

♂. Anal segment transverse, posteriorly produced into two broadly rounded lobes; strongly excised in the middle.

Cercus short and swollen at base, abruptly acutangularly incurved beyond the middle and there suddenly narrowing into a sharply pointed spine; crossing each other at their apices.

Subgenitalplate broad, convex, posteriorly gradually narrowing, triangularly incised at apex, with slightly curved, cylindrical styles.

General coloration yellowish-brown. Antennae with the basal joints yellowish-brown, the remaining part blackish-brown, with the top of each joint yellowish.

Head yellowish-brown, face reddish-brown, clypeus and mandibles chestnut-brown, the apex and margins of the mandibles black.

Pronotum yellowish, its anterior and posterior margin very finely bordered with black.

Tegmina-brown, with the veins and veinlets yellowish.

Legs yellowish-brown, all spines with black tips, knees darker or blackish-brown, especially the knees of hind femora.

	♂
Length of body	25 mm.
Length of pronotum	7 mm.
Length of tegmina.	20 mm.
Length of hind femora	14 mm.

New Guinea : Sakoemi, 12.III.1929, 1 ♂ (Type Mus. Brussels).

This species is respectfully dedicated to H. R. Prince Léopold of Belgium.

SUBFAM. **COPIPHORINAE.**

Genus **EUCONOCEPHALUS** KARNY 1907.

Euconocephalus cornutus REDTENBACHER 1891

New Guinea : Sakoemi, 12-13.III.1929, 1 ♂; Sakoemi-Moemi, 13.III.1929, 1 ♂; entre Siwi et campement n° 3, 8.III.1929, 1 ♀.

Isle of Aroe : S. Manoembai, 25.III.1929, 1 ♀.

Isle of Japen : Saroei, 6.III.1929, 1 ♀.

Euconocephalus pallidus REDTENBACHER 1891

Isle of Japen : 6.III.1929, 2 ♀ ♀.

Euconocephalus indicus REDTENBACHER 1891

Sumatra : Haran kloof, 23.IV.1929, 1 ♀.

FAM. **GRYLLACRIDAE**

SUBFAM. **GRYLLACRINAE.**

Genus **GRYLLACRIS** SERVILLE 1831.

Gryllacris (Papuogryllacris GRIFFINI 1909) **leeuweni** KARNY 1930 ⁽¹⁾

New Guinea : Sakoemi, 12.III.1929, 1 ♀.

⁽¹⁾ This species is determined by my friend Dr. H. H. Karny, during a visit he made me, when travelling through Holland, at the same time looking through the whole collection of *Tettigoniidae* and giving me some very useful hints about some specimens. I wish to thank him, at this place, for his great kindness. It was by accident, that this *Gryllacris* specimen was sent to me, where Dr. L. Chopard has treated them in vol. IV, fasc. 1, p. 22.
