

Spolia Mentawiensia

Gryllidæ

by L. CHOPARD

(with twenty-four figures)

The *Gryllidæ* fauna of the Mentawi Islands does not present very peculiar characters; it borrows its elements from the neighbouring faunæ of Java and Sumatra. This fauna is particularly rich in *Trigonidiinæ* and *Eneopterinaæ*; the *Nemobiinæ* and the and the true *Gryllinæ*, on the contrary, are less numerous than in the Indian fauna. Among the rather characteristic genera the following are to be mentioned: *Parendacustes*, *Nisitra*, *Cardiodactylus*, *Heterotrypus*, *Itara*, *Pteroplistus*, *Lebinthus*; most of these are purely Malaysian genera, but some of them are also represented in the oceanic region and towards the Philippine islands.

During their visit in 1924 to this group of islands off the west coast of Sumatra¹ Messrs. C. Boden Kloss, N. Smedley and H. H. Karny secured a certain number of new species; but very few of them, if any, should yet be considered as truly endemic species; they will very likely be found again in the neighbouring large islands.

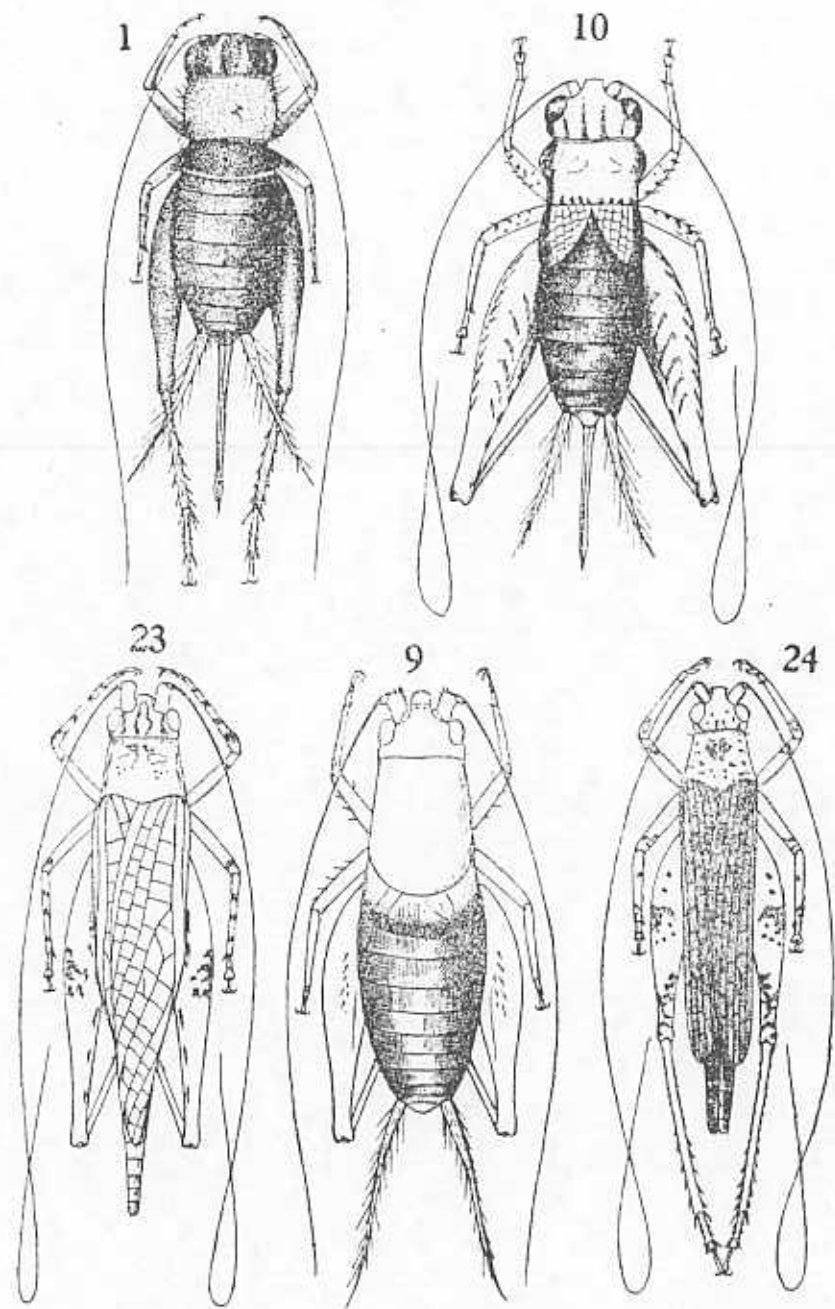
As a whole the Gryllid fauna of the Mentawi Islands is the typical Malaysian fauna, the affinities of which are divided between India and the oceanic fauna but more decided towards the latter than towards the former.²

¹ Vide Bull. Raffles Mus., No. 1, Sept. 1928, pp. 2-4.

² For a discussion of the faunal relations of the Mentawi Islands as shown by their mammals vide Kloss, P. Z. S. 1928, pp. 797-808.

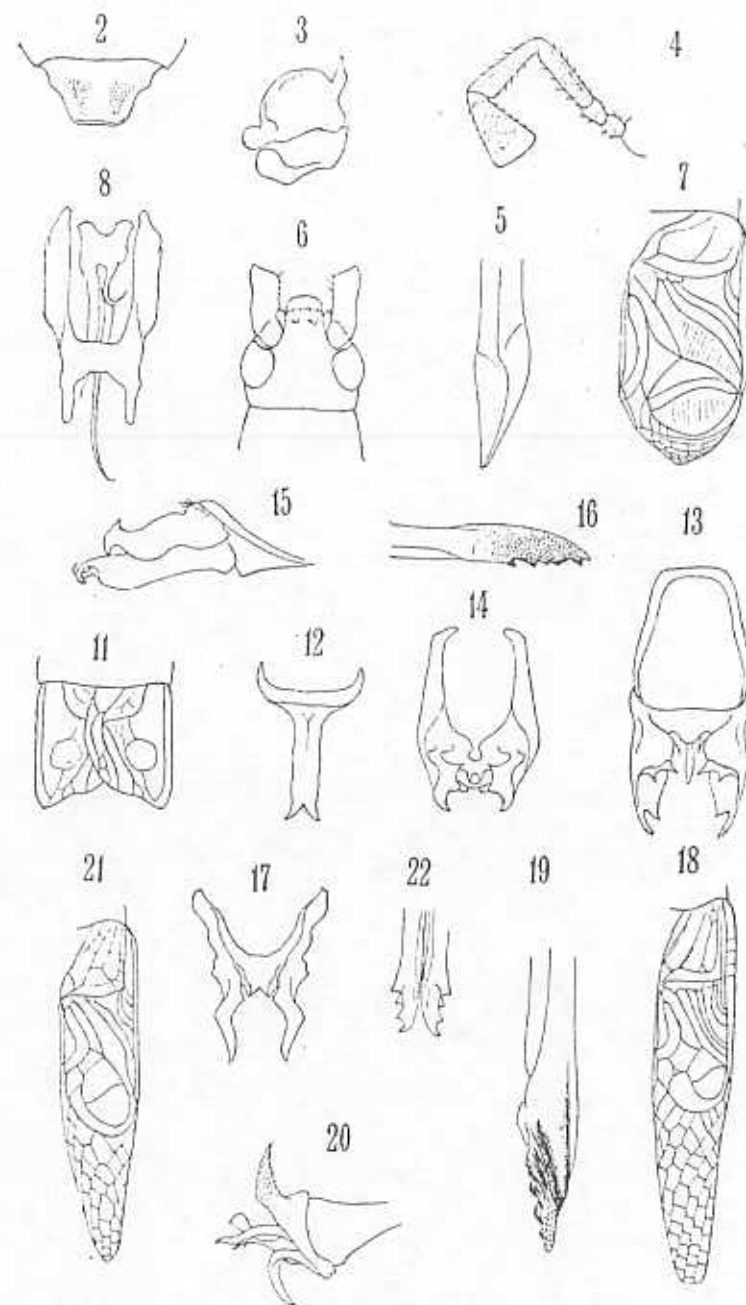
EXPLANATION OF THE FIGURES

- Fig. 1. *Cophogryllus bodenklossi*, n. sp., female.
 Fig. 2. *Pentacentrus annulicornis*, n. sp., supraanal valve of male.
 Fig. 3. *Id.*, genitalia.
 Fig. 4. *Liphoplus minusculus*, n. sp., maxillary palpus.
 Fig. 5. *Liphoplus fuscipennis*, n. sp., apex of ovipositor.
 Fig. 6. *Arachnocephalus breviceps*, n. sp., head.
 Fig. 7. *Pteroplistus platyxiplus* Haan, right elytron of male.
 Fig. 8. *Id.*, genitalia.
 Fig. 9. *Ornebius karnyi*, n. sp., male.
 Fig. 10. *Lebinthus truncatipennis*, n. sp., female.
 Fig. 11. *Lebinthus truncatipennis*, n. sp., elytra of male.
 Fig. 12. *Id.*, genitalia.
 Fig. 13. *Heterotrypus buqueti* Sauss., genitalia.
 Fig. 14. *Heterotrypus karnyi*, n. sp., genitalia.
 Fig. 15. *Itara microcephala* Haan, lateral view of genitalia.
 Fig. 16. *Madasumma karnyi*, n. sp., apex of ovipositor.
 Fig. 17. *Madasumma grandipennis*, n. sp., genitalia.
 Fig. 18. *Id.*, right elytron of male.
 Fig. 19. *Id.*, apex of ovipositor.
 Fig. 20. *Madasumma karnyi*, n. sp., lateral view of genitalia.
 Fig. 21. *Id.*, right elytron of male.
 Fig. 22. *Podoscirtus lineiceps*, n. sp., apex of ovipositor.
 Fig. 23. *Podoscirtus linenceps*, n. sp., female.
 Fig. 24. *Aphonomorphus pallipes*, n. sp., male.



[100]

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[101]

Fam. Gryllidæ

Sub-fam. Gryllotalpinæ

Gen. Gryllotalpa Latr.

1. *Gryllotalpa africana* Beauw.
Sipora, 2 ♂ (H. H. K.).
2. *Gryllotalpa fusca* Chop.
Siberut, 1 ♂, 1 ♀ (C.B.K. and N.S.), 1 ♂ (H.H.K.).
A species recently described from Sarawak.
3. *Gryllotalpa hirsuta* Burm.
Sipora, 1 ♂ (C.B.K. and N.S.).
This big species is known from Java and Borneo.

Sub-fam. NEMOBINÆ

Gen. Pteronemobius.

4. *Pteronemobius taprobanensis infernalis* Sauss.
Siberut, 3 ♂, 5 ♀ (H.H.K.).
A species widely distributed in the Malaysian sub-region.
5. *Pteronemobius vagus* Walk.
Siberut, 2 ♀ and Sipora, 1 ♀ (H.H.K.).
This is the first record of this Indian species in the Malay Archipelago.

Sub-fam. GRYLLINÆ

Gen. Brachytrypes.

6. *Brachytrypes portentosus* Licht.
Padang, West Sumatra, 1 ♀ (H.H.K.).

Gen. Gryllus L.

7. *Gryllus mitratus* Burm.
One young ♂, 2 ♂, 2 ♀ (C.B.K., N.S. and H.H.K.).
8. *Gryllus aspersus* Walk.
Gryllodes berthellus Saussure.
Siberut, 2 ♀; Padang, W. Sumatra, 4 ♀ (H.H.K.).
All these specimens belong to the micropterous form, which had been described by Saussure as *Gryllodes berthellus*; the macropterous individuals present an internal drum on the anterior femora as the true *Gryllus*.

9. *Gryllus confirmatus* Walk.

Siberut, 1 ♀ (C.B.K. and N.S.).

Genus *Cophogryllus* Sauss.10. *Cophogryllus bodenklossi* n. sp. ⁽¹⁾.

Types: 1 ♂, 1 ♀, Siberut, September 1924 (C.B.K. and N.S.); small, rufous brown, looking very much like an apterous female of *Nemobius* (fig. 1). Head as wide as pronotum, wide, almost black, shining; forehead a little sloping, with two feebly visible rufous bands; frontal rostrum very short, rounded. Face short, rufous. Maxillary palpi with 4th joint a little shorter than the 3rd, which is slightly compressed, 5th large, triangular, blackish brown, darker than the other joints. Antennæ brown. Eyes rounded, big, but feebly projecting; ocelli very small, disposed in a triangle.

Pronotum transverse with anterior and posterior margins straight, furnished with long bristles; sides rather strongly convex; disk uniformly rufous; lateral lobes concolorous, strongly ascending backwards. Metanotum rufous with posterior margin narrowly yellowish.

Abdomen rufous, pubescent, feebly dilated in the middle. Ovipositor rather long, slender, with apical valves small, acute.

Legs rather short, rufous. Posterior femora somewhat elongate and weakly dilated; tibiae much shorter than the femora, armed with 4 internal, 5 external spines; superior and median internal spurs equal in length. Metatarsi long, denticulated above.

Length of body 8.2 mm.; pronot. 2 mm.; post. fem. 6.3 mm.; ovipositor 5 mm.

This very small species has exactly the facies of the *Nemobius* of the genus *Scottia*; it is very close to *C. ornatus* Chop. but this one is more brightly colored and has 3 spines only on each margin of the posterior tibiae.

Gen. *Loxoblemmus*11. *Loxoblemmus intermedius* n. sp.

Types: 1 ♂, Sipora, 26 October, '24; 1 ♀ Siberut, 19 September, '24 (H.H.K.).

Size and general aspect of *L. equestris* Sauss. and *L. jacobsoni* Chop., the female being quite impossible to differentiate from those species. Antennæ of male with first joint bearing a process nearly as long as in *L. jacobsoni*; facial shield intermediate in shape between the two above species, forehead simply arcuate as in *L. equestris* but the inferior angles of the shield somewhat projecting

¹ When no special mention is made, the type specimens have been returned to the collectors for disposal; paratype specimens are in my own collection.

although less than in *L. jacobsoni*. Elytra with mirror divided much behind the middle by an angulate vein; four chords, of which the fourth is very small.

The type specimens are both macropterous, but one male from Siberut has elytra extending to the apex of abdomen with short wings and a female, from the same locality, is brachypterous, with elytra extending only to the middle of the abdomen.

Gen. *Duolandrevus* Kirby.

12. *Duolandrevus brachypterus* (Haan.).

One young larva, Siberut, 1 ♂ Sipora (H.H.K.).

Sub-fam. PHALANGOPSINÆ

Gen. *Parendacustes* Chop.

13. *Parendacustes cavicola* Chop.

Ngatau Gadang cave, Padang, West Sumatra (H.H.K.); several examples of both sexes.

14. *Parendacustes pictus* Chop.

3 ♂, 2 ♀, Siberut (H.H.K.).

Sub-fam. PENTACENTRINÆ

Gen. *Pentacentrus* Sauss.

15. *Pentacentrus annulicornis* n. sp.

Type: 1 ♂, Siberut, 20 September, 1924.

Head pubescent, adorned with 4 brown, longitudinal bands. Palpi brown, the 5th joint of the maxillary ones slightly securiform. Antennæ annulated with whitish and brown. Ocelli small, sub-equal. Pronotum transverse, rather strongly pubescent; anterior margin straight, posterior one sub-angular; disk brownish with lighter median line and piriform impressions; lateral lobes dark brown.

Second abdominal tergite presenting a process directed forwards, slightly truncated at apex; supraanal valve nearly quadrangular, wide, rounded at apex, presenting two large regions covered with spinules (fig. 2). Genitalia rather big, rounded with a sharp apical point (fig. 3).

Anterior and median legs rather short, pubescent. Femora dark brown, with a small yellowish ring near the apex; tibiae dark brown, the anterior ones with a large internal tympanum. Posterior femora rather long, dark brown, spotted with yellowish at their external face; tibiae brown, armed with 3 small yellowish spines on each margin; metatarsi very long.

Elytra with dorsal field yellowish, nearly translucent, the transverse veinlets feebly marked with brown, presenting a brown

spot towards the middle and another one near the anal vein; this one neatly marked; besides the dorsal field presents 3 parallel veins and a small, incomplete one; lateral field dark brown with 3 veins, one of which on the edge, furcate at base, the other two joining the marginal one at their apex. Wings yellowish, longer than the elytra.

Length of body 7.5 mm.; length with wings 11 mm.

This species looks much like *P. philippinensis*, Chop., but the elytral venation is quite different. It seems also very close to *P. unifenestratus* Caud., from Java.

Sub-fam. MOGOPISTINÆ

Gen. *Liphoplus* Sauss.

16. *Liphoplus minusculus* n. sp.

Types: 1 ♂, 1 ♀, Sipora, October 1924 (H.H.K.).

Paratypes; same locality (H.H.K.), 4 ♂; (C.B.K. and N.S.) 3 ♀.

♂. Small, Covered with brown scales and white. Head a little flattened; frontal rostrum as wide as 1st antennal joint, rounded; face yellowish with two brown bands on the protuberance which is not furrowed. Palpi yellowish with a few brown spots; 4th joint of the maxillary ones a little shorter than the 3rd, 5th very short and wide, triangular (fig. 4). Antennæ yellow, ringed with brown.

Pronotum rather strongly narrowing in front, feebly produced backwards; disk covered with brown scales except along the posterior margin where they become of a pure white; lateral lobes white with one brown spot in front and one behind. Abdomen brownish with 4 darker small spots on each tergite; inferior side yellowish; sub-genital plate rather large, rounded; supra-anal valve much wider than long with a rather short erected yellowish process. Cerci as long as the body.

Legs varied with brown and whitish, the tibiae rather distinctly annulated. Anterior tibiae perforated with a rather large round tympanum; anterior and median tarsi short, with 3rd joint shorter than the metatarsus. Posterior and median tarsi short, with 3rd joint shorter than the metatarsus. Posterior femora rather stout, little mottled with white; tibial armature weak, medio-internal spur alone rather long; metatarsi darkened at apex, presenting a few small denticles above; 3rd joint very small.

Elytra extending somewhat beyond the posterior margin of pronotum very dark smoky brown with posterior margin nearly black; speculum large, almost completely visible; lateral lobes smoky.

♀. Head as in the male. Pronotum a little longer than wide, feebly narrowing in front, with anterior margin weakly convex; disk rufous brown, convex, posterior margin straight, covered with greyish scales; lateral lobes very small, whitish. Abdomen rufous brown with 4 spots covered with brown scales on each tergite. Ovipositor very short, straight with apical valves rather large, acute, with straight, smooth margins.

Length of body ♂ 7 mm, ♀ 7.5 mm.; post. fem. 4 mm.; elytra ♂ 2 mm.; ovipositor 3 mm.

Small species very close to *L. obscuripennis* Chop., but with 5th joint of maxillary palpi wider; in the male the posterior margin of the pronotum is white and the ovipositor of the female is shorter.

17. *Liphoplus fuscipennis* n. sp.

Types: 1 ♂, Sipora, 14th September, 1924; 1 ♀, Pulau Tello, Batu Islands, 11th September, 1924.

♂. Rather large, rufous. Head as wide as pronotum, flattened above; facial protuberance as wide as 1st antennal joint, rufous, shining, feebly furrowed above; face short, rufous, shining, the mouth-parts darker. Palpi blackish; 4th joint of the maxillary ones equalling the 3rd, 5th a little shorter, triangular. Antennae yellowish.

Pronotum slightly narrowing in front, with posterior margin strongly convex; disk covered with yellowish brown scales, very thick along the posterior margin. Three first abdominal tergites covered with yellowish scales, the following ones with grey scales; inferior side of the abdomen silver grey; supraanal valve small, triangular; sub-genital plate small, black, shining; process of the inferior anal valves long, vertically erected, cylindrical, somewhat swollen at base. Cerci very long, yellowish.

Legs rather long, yellowish, covered with scales and presenting a few erected bristles. Anterior tibiae perforated with a small internal round tympanum; anterior and median metatarsi rather thick, equalling the 3rd joint in length, this one as well as the 2nd joint brownish. Posterior femora rather long, moderately swollen; tibiae much shorter than the femora with external spurs very short, interno-median one rather long, supero-internal shorter than the inferior one.

Elytra extending somewhat beyond the pronotum, smoky with posterior margin blackish, a little pubescent; mirror large, partly concealed under the pronotum; lateral field blackish with extreme margin white.

♀. Head and legs as in male. Pronotum rufous, longer than wide, very slightly narrowing in front. Abdomen blackish; sub-genital plate rather large, rounded, black. Ovipositor rather short, thick, straight, with apical valves smooth, rather narrow (fig. 5).

Length of body ♂ 10.5 mm.; ♀ 11 mm.; pronot. ♀ 4.5 mm. ♀ 3 mm.; post. fem. 7 mm. elytra 2 mm.; ovipositor. 6 mm.

Numerous examples of both sexes of this species have been collected at Sipora; Padang, West Sumatra; and Pulau Tello, Batu Islands.

Gen. *Ornebius* Guer.

18. *Ornebius karnyi* n. sp.

Types: 1 ♂, Sipora, 11 October, 1924; 1 ♀, Siberut, 11 September, 1924.

♂ (fig. 9). Rather large, brown covered with silver grey scales. Head small, strongly flattened; frontal rostrum very narrow, neatly furrowed; face yellowish, the protuberance feebly projecting. Palpi yellowish; 4th joint of the maxillary ones a little shorter than the 3rd, 5th equalling the 3rd, triangular, moderately enlarged. Antennae yellowish with a few distant, very neat, black rings; cheeks yellow, with a very distinct limit behind the eyes.

Pronotum elongate, but simply convex backwards and scarcely wider than in front; lateral lobes narrowly lined with yellow. Abdomen brown above, yellowish beneath. Sub-genital plate rounded; anal valves in very bad state, but showing a hook-like process, curved upwards.

Legs light rufous. Anterior tibiae with a round internal tympanum; anterior and median metatarsi short, equalling the 3rd joint; 2nd joint divided. Posterior femora moderately swollen, rufous; tibiae with apical spurs short, except the medio-internal one; posterior metatarsi long, rather thick presenting 7—8 external, 3—4 internal denticles; 3rd joint small, slender.

Elytra extending a little beyond the pronotum, with posterior margin strongly darkened; mirror concealed up to the anterior third; lateral field yellowish with a brown band.

♀ (immature). Head and legs as in male. Pronotum a little longer than wide, with parallel sides, very slightly narrowing in front. Abdomen feebly dilated. Ovipositor incompletely developed.

Length of body ♂ 12 mm., ♀ 13.5 mm.; pronot. ♂ 4.5 mm.; elytra ♂ 1.9 mm.

Gen. *Arachnocephalus* Costa.

19. *Arachnocephalus breviceps* n. sp.

Types: 1 ♂, Siberut, 22 September, 1924; 1 ♀, Sipora, 15 October, 1924.

Medium size, apterous, covered with numerous whitish, greyish and yellowish brown scales. Head with frontal rostrum wide and extremely short (fig. 6), the face being swollen but without a well

defined protuberance as in the other species. Palpi brown with greyish scales; 4th joint of the maxillary palpi a little shorter than the 3rd and the 5th, the latter feebly enlarged, truncated at apex. Antennae yellowish.

Pronotum elongate, very slightly narrowing in front, with anterior and posterior margins straight, sides a little convex; disk covered with very numerous scales; lateral lobes yellowish white.

Abdomen rather narrow, a little enlarged in the middle, covered with yellowish brown scales. Cerci long, yellowish. δ Supra-anal valve rounded with two tufts of long hairs on the apical margin and two small black spots; inferior valves prolonged by a short, rather thick, cylindrical process directed upwards but entirely concealed under the supra-anal valve; sub-genital plate rather large, sub-acute at apex, blackish, a little shining. φ . Sub-genital plate small, a little notched. Ovipositor short and rather thick, very slightly curved upwards; apical valves small, lanceolate, no wider than the stem.

Legs moderately long, covered with brown and whitish scales. Anterior tibiae non-perforated; anterior metatarsi equalling the 3rd joint. Posterior femora rather thick with an oblique band of whitish scales at their external face; tibiae as long as the femora with external spurs very short, supero-internal shorter than the inferior one, median one rather long; posterior metatarsi long, rather slender, armed with a few small denticles on the superior margins.

Length of body 9 mm.; pronot. 3.2 mm.; post. fem. 6 mm.; ovipositor 3.8 mm.

This species is quite remarkable by the shape of the head which is very different of the other *Arachnocephalus*. Numerous examples have been collected at Sipora; Siberut; and Pulau Tello, Batu Islands.

Sub fam. ACANTHOPLISTINÆ

Gen. *Pteroplistus* Br.

20. *Pteroplistus platycephus* (Haan.).

One δ , 3 φ , 1 δ larva. Sipora, (H.H.K.).

The male of this species had not yet been described. Its general aspect is that of the female. Elytra (fig. 7) extending to the apex of abdomen, widely rounded; speculum wide, angular in front, rounded backwards, divided by two very close veins a little before the middle; 6 chords forming two groups, one of three long ones and one of three short coming from the angle of the anal vein; apical field very short; mediastinal vein with numerous, nearly perpendicular branches. Sub-genital plate large triangular at apex and presenting a small, tuberculiform lobe on each side. Genitalia formed of a large divided piece, two assymetric hooks and a very long style curved upwards (fig. 8).

Sub-fam. TRIGONIDIINÆ

Gen. *Metioche* Stal.

21. *Metioche vittaticollis flavipes* Sauss.

One δ Sipora, 1 φ , Siberut (H.H.K.).

22. *Metioche karnyi* Chop.

Numerous examples of both sexes from Sipora and Siberut (H.H.K.).

This species, described from Sarawak, must be widely distributed in the Malaysian sub-region.

23. *Metioche karnyi* var. *albifrons* n. var.

Types: 1 δ , 1 φ , Siberut, September 1924 (H.H.K.).

Paratypes: numerous specimens from the same locality.

Among the long series of this species collected by Dr. Karny, a certain number of specimens show a very peculiar ivory white coloration of the forehead; they do not differ in other respects from the typical specimens, but this character is sufficiently striking to name this variety.

Gen. *Homœoxipha* Sauss.

24. *Homœoxipha lycoides* (Walk.).

One φ Siberut, (H.H.K.).

Gen. *Anaxipha* Sauss.

25. *Anaxipha longipennis* (Serv.).

Several δ and φ Siberut (H.H.K.).

26. *Anaxipha maritima* (Sauss.).

One φ Sipora; 1 δ , 1 φ , Siberut (H.H.K.).

27. *Anaxipha longealata* Chop.

One φ Siberut (H.H.K.).

This species was known only from the type specimen from Sarawak.

28. *Anaxipha maculipes* n. sp.

Types: 1 δ , Sipora, 15 October, 1924; 1 φ , same locality, 21 October, 1924.

Rather large, elongate, pale yellow with a few reddish brown spots on the legs. Head short; forehead very sloping; eyes rounded. Palpi yellow; 4th joint of the maxillary ones a little shorter than the 3rd, 5th nearly equal to 4th, triangularly widened. Antennae yellow.

Pronotum smooth, pale yellow, very slightly narrowing in front; anterior margin straight, posterior one a little sinuated; lateral lobes yellow. Abdomen and cerci yellow.

Legs rather long, yellow, pubescent. Anterior tibiae perforated either side. Median femora adorned with a small reddish spot near the apex of the external face. Posterior femora with a small spot of the same colour towards the middle and another one near the apex.

♂. Sub-genital plate notched at apex with a small tubercle in the bottom of the notch. Elytra wide, yellow with a slight brown tinge before and behind the mirror; this one is large and wide; diagonal vein rather short, sinuated; lateral field nearly transparent except along the veins which are opaque, whitish; 3 complete and one incomplete veins. Wings caudate, a little darkened.

♀. Ovipositor with apical valves occupying half the total length, rather strongly crenulated. Dorsal field of elytra presenting 4 nearly parallel, rather elevated, united at apex veins; transverse veinlets elevated, forming rectangular areolæ; lateral field as in male. Wings caudate.

Length of body 7 mm.; length with wings 10.5 mm.; post. fem. 5.5 mm.; ovipositor 3 mm.

Gen. *Paratrigonidium* Br.

29. *Paratrigonidium fuscocinctum* Chop.

Five ♂, 2 ♀, Siberut (H.H.K.), 1 ♂, Sipora (C.B.K. and N.S.).

Sub-fam. ENEOPTERINÆ

Gen. *Nisitira* Walk.

30. *Nisitira hyalina* Sauss.

This species seems to be the most common Gryllid on the Mentawi Islands; a great number of specimens from Siberut, Sipora and North Pagi Id. (C.B.K. and N.S.); also 1 ♀ from Padang, West Sumatra (H.H.K.).

Gen. *Cardiodactylus* Sauss.

31. *Cardiodactylus novæ-guinæe* de Haan.

Two ♀, 3 larvæ. Siberut (H.H.K.); 1 young ♂, Sipora (C.B.K. and N.S.); 1 ♂, North Pagi Id. (C.B.K. and N.S.); 1 ♂, 1 ♀, 5 larvæ, Pulau Tello, Batu Islands (H.H.K.); 1 young ♀, Padang, W. Sumatra (H.H.K.).

32. *Lebinthus truncatipennis* n. sp.

Type: 1 ♀, Sipora, 9th October, 1924 (H.H.K.).

Allotype: 1 ♂, Sipora, October 1924 (C.B.K. and N.S.); coll. Chopard.

♀ (fig. 10). Rather small, brownish, finely pubescent. Head a little wider than the pronotum; forehead a little sloping, adorned with four feebly visible brown bands; frontal rostrum short and wide, truncated at apex; face presenting a wide transverse brown band; cheeks yellow. Palpi rather long, testaceous, mottled with brown; 3rd and 4th joints sub-equal in length, 5th scarcely longer, weakly enlarged at apex. Antennæ very slender, yellowish brown. Eyes rather big, rounded; ocelli very small, the anterior one at apex of the rostrum.

Pronotum transverse, with anterior margin feebly concave, posterior margin straight; disk rufo-testaceous with 8 brown spots along the posterior margin; lateral lobes presenting a wide blackish band, their inferior margin ascending backwards. Abdomen brownish, very pubescent. Ovipositor rather long and slender with apical valves small, lanceolate, smooth.

Legs rather short, pubescent, mottled with brown. Anterior tibiae perforated with an external, oval tympanum; metatarsus shorter than the third joint. Posterior femora thick, striated with brown externally; tibiae serrulated and armed with 4 spines on each margin, the external short chiefly the 4th one; medio-internal spur much longer than the superior and inferior ones; external spurs short but the median one a little longer than the other two; metatarsus equalling the other two joints together, brown at apex, armed with two apical spurs and 4 external, 1 internal denticles above.

Elytra short, obliquely truncated at apex. Dorsal field with 5 parallel veins; lateral field rather large, a little darkened in its superior part, presenting 4 parallel, plain veins.

♂. Very similar to the female in its general shape and aspect. Elytra (fig. 11) covering the base of abdomen, somewhat obliquely truncated at apex, with a feebly pubescent surface; anal vein rounded; 3 chords extending up to the apex of elytra; speculum small, round, united to the anal vein by a weak small vein which seems to be the diagonal vein; no apical field; lateral field with 5 parallel, regular veins. Sub-genital plate navicular, feebly truncated at apex; genitalia long and narrow (fig. 12).

Length of body 13 mm.; pronot. 2.6 mm.; post. fem. 11.5 mm.; elytra ♂ 3.8 mm, ♀ 2.1 mm.; ovipositor 9 mm.

This species is very close to *L. bitaniatus* Stål, but the male elytron presents a small, rounded mirror which is quite obliterated in *bitaniatus* and the elytra of the female are shorter and more obliquely truncated.

Gen. *Hetrotrypus* Sauss.33. *Hetrotrypus buqueti* Sauss.

One ♂, Sipora (H.H.K.), and 2 ♀ (C.B.K. and N.S.)

I consider these specimens as *H. buqueti* although the shape of the male genitalia (fig. 13) is somewhat different from that of the specimens from Java, typical locality of the species.

34. *Hetrotrypus karnyi* n. sp.

Types: 1 ♂, 1 ♀, Siberut, September 1924 (H.H.K.).

Paratypes: 5 ♂, 1 ♀, Siberut (H.H.K.), 1 ♀, Siberut (C.B.K. and N.S.), 2 ♂, Sipora (C.B.K. and N.S.).

♂. Rather short and wide; pale testaceous. Head testaceous, pubescent; frontal rostrum as wide as first antennal joint, with parallel margins, slightly convex above. Ocelli very small. Face and palpi yellow; 4th joint of the maxillary palpi a little shorter than the 3rd, 5th long, feebly enlarged at apex. Antennae slender, yellow at base, brownish with a few yellow rings distad.

Pronotum slightly narrowing in front, with anterior and posterior margins straight; disk convex, very pubescent, yellowish with a brown band along the posterior margin; lateral lobes concolorous with inferior margin slightly ascending backwards. Abdomen yellowish; sub-genital plate rather short; genitalia forming a small, notched piece (fig. 14). Cerci long.

Legs yellowish; femora with a light brown ring before the apex, tibiae feebly ringed with brown. Anterior tibiae darkened above, weakly swollen at base, perforated either side; metatarsus shorter than the 3rd joint. Posterior femora rather strongly dilated, pubescent, yellowish with three light brown bands above; tibia with four rather long spines on each margin, besides denticulated as follows: external margin 6.5.4.1; internal margin 4.0.0.0; supero-internal spur equalling the metatarsus which is armed with a single row of 5 denticles.

Elytra wide, testaceous; mirror divided into three nearly equal parts; diagonal vein short and furcate towards the anterior third; 7 oblique veins 4 of which long, slightly diverging; chords angulate; apical field short with four sectors; lateral field with mediastinal vein bearing very numerous, almost perpendicular branches. Wings not visible beyond the elytra.

♀. General shape and colour of the male. Pronotum not narrowing in front with posterior margin slightly sinuate. Elytra rather short, a little widening towards the middle, then rather strongly narrowing to the apex; surface somewhat pubescent; dorsal field with three a little oblique, parallel, rather close free veins and 3 branches of the discoidal which are much more apart and more oblique; transverse veinlets scarce and irregular; lateral

field with mediastinal vein straight, bearing 12 parallel branches. Wings as in the male.

Ovipositor rather long and slender, with apical valves very small, ridged, divided towards the basal third by a deep, oblique furrow.

Length of body 13.5 mm.; length with wings 16 mm.; post. fem. 12.5 mm.; ovipositor 11.5 mm.

This species is very close to *H. testaceous* Chop., the nervation of the male elytra being almost exactly the same in both species; but *H. karnyi* is shorter and wider with wings no longer than the elytra. In its general shape it looks much like *H. modulator* Sauss., from the Philippine Islands.

Gen. *Itara* Walk.35. *Itara microcephala* Haan.

Three ♂, 4 ♀, Sipora (H.H.K.); 2 ♂, Siberut (H.H.K.); 1 ♂ Pulau Tello, Batu Islands (H.H.K.).

It seems evident that I made a mistake when figuring the genitalia of this species in *Ann. Soc. ent. Fr.*, (1925), p. 313. From the studies I have made since then of the genitalia of different species of *Itara* and *Heterotrypus*, I have become quite convinced that this figure is that of the genitalia of an *Heterotrypus*. Very probably, by an inconceivable mistake, my preparations have been mixed and the figure 37 corresponds to *Heterotrypus jacobsoni* whereas figure 46—47 should be referred to *Itara microcephala*. In the specimens from the Mentawi Islands, the genitalia (fig. 15) are nearly exactly similar to those of the specimens from Sumatra.

Gen. *Calypotrypus* Sauss.36. *Calypotrypus helvolus* Sauss.

One young example belonging probably to this species, Siberut (H.H.K.).

Gen. *Madasumma* Walk.37. *Madasumma grandipennis* n. sp.

Type: 1 ♂, Pulau Tello, Batu Islands, November 1924.

♂. Large, dark brown, rather pubescent. Head small, round occiput and forehead dull brown, pubescent; frontal rostrum narrow, furrowed above, with parallel margins; face yellowish brown. Palpi brown; 4th joint of maxillary palpi shorter than 3rd, 5th rather weakly enlarged at apex. Antennae rufous with first joint brown. Eyes rather small, rounded; ocelli very big, yellow, nearly contiguous and united by a yellow spot.

Pronotum very transverse, anterior margin straight, posterior rather strongly convex; disk feebly convex; dark brown, pubescent; lateral lobes concolorous with inferior margin slightly ascending forwards. Abdomen brownish; sub-genital plate rather short, rounded at apex. Cerci long, yellowish brown. Genitalia small, in the shape of a plain forceps (fig. 17).

Anterior and intermediate legs short, very dark brown; anterior tibiae thick, a little swollen at base, external tympanum almost square, internal elongate, partly covered by the superior margin of the swollen part of the tibia; metatarsi very short. Posterior femora rather long and feebly dilated, uniformly rufous brown; tibiae flattened above, armed with 7 rather small, rufous spines on each margin; metatarsi very short, armed with two spines above, besides the apical spurs.

Elytra large (fig. 18); apical field specially much lengthened; speculum very small, round, divided towards the middle; enveloping vein and chords very distant from the mirror; diagonal short; 6 oblique veins, 3 of which a little longer than the others; anal vein broken at right angle; apical field with 5 sectors and a wide reticulation. Wings a little longer than the elytra.

Length of body 26 mm.; length with wings 38 mm.; pronot. 5 mm.; ant. fem. 6.5 mm.; post. fem. 17 mm.; elytra 27 mm.

Allotype: 1 ♀, Sipora, October 1924 (C.B.K. and N.S.).

♀. Very large and stout. Head, pronotum and legs as in the male; ocelli smaller. Sub-genital plate rather large, deeply notched. Ovipositor rather long, strong, a little sinuate, the apical part curved downwards; apical valves long, narrow, furnished with strong tubercles beneath (fig. 19). Elytra wide, a little pubescent, presenting about 15 equally distant, weakly oblique veins; transverse veinlets numerous, forming a rather regular reticulation, the meshes of which are in the shape of long squares on the disk, but become polyhedral in the anterior part of the apical field where the venation is rather confused; mediastinal vein bearing 15 oblique, regular veins.

Length of body 32 mm.; length with wings 47 mm.; elytra 35 mm.; post. fem. 22 mm.; ovipositor 25 mm.

This species is one of the largest of the genus; the male is distinguishable for its short anterior legs and its very large elytra with small speculum; the female looks rather like *M. grandidieri* Sauss., from Madagascar, but it is stouter with internal tympanum of anterior tibiae split-like, ovipositor thicker and more regular reticulation of the elytra.

Two immature females were been collected on Siberut, September 1924 (H.H.K.).

38. *Madasumma karnyi* n. sp.

Types: 1 ♂, 1 ♀, Siberut, September 1924 (H.H.K.).

Paratypes: Same locality, 5 ♂, 1 ♀.

Also at Sipora, October 1924 (H.H.K.), 1 ♀, 2 immature ♂.

♂. Rather large and elongate, testaceous brown mottled with brown. Head small, rounded, pubescent; frontal rostrum a little narrower than the first antennal joint, with parallel margins. Palpi testaceous, the 4th joint of maxillary palpi shorter than the 3rd, 5th large, triangular. Antennae brown with a few yellowish rings. Ocelli big, nearly contiguous.

Pronotum scarcely narrowing in front, with anterior margin straight, mottled with brown, posterior margin sinuated; disk rounded, very pubescent; lateral lobes concolorous, slightly ascending forwards. Abdomen yellowish brown; sub-genital plate rather long, sub-acute at apex. Genitalia large, presenting a large, superior, bifid piece and two pairs of hooks directed downwards (fig. 20).

Legs rather long, testaceous brown, mottled with brown, very pubescent. Anterior tibiae scarcely dilated at base, perforated with two tympani the external a little larger than the internal one. Metatarsi short, pubescent, 3rd joint of the tarsi very slender. Posterior femora, long, narrow, presenting a row of small brown spots along the inferior margin and a few larger spots about the middle of the exterior face; tibiae bearing 5 spines on each margin.

Elytra (fig. 21) rather narrow, yellowish brown with a small yellow spot at the external angle of the mirror; mirror rather large, somewhat lengthened divided a little above the middle; diagonal vein rather short, straight; 6 oblique veins of which 2 long ones, sinuated, the others short, straight; 6 oblique veins of which 2 long ones, sinuated, the others short, coming from the angle of the anal vein; anal vein slightly sinuated before the angle; anal field large with somewhat projecting veins, not reticulated; apical field presenting 3 veins and a very wide reticulation. Wings perceptibly longer than the elytra.

♀. A little larger than the male; similar general shape and coloration. Elytra presenting a few yellow and blackish spots along the edge; dorsal field with 3 free veins uniting before the apex and 8 branches of the discoidal vein; these branches are very distant at their base, nearly broken towards the middle, and very close to one another in their apical part where they are longitudinal; reticulation irregular and close, forming large elongate cells, disposed on two rows in the basal part.

Ovipositor long, rather slender, with apical valves small, elongate, shagreened at their external face, armed with 4 inferior and 2 external teeth (fig. 16).

Length of body ♂ 23 mm., ♀ 25 mm.; length with wings ♂ 34 mm., ♀ 37.5 mm.; post. fem. ♂ 17 mm., ♀ 19.5 mm.; elytra ♂ 22 mm., ♀ 25 mm.; ovipositor 20 mm.

This species is rather close to *M. bakeri* Chop.; the male is remarkable by its apical field of elytra with a very wide reticulation, the female by the elytral veins which are kneed in the middle.

Gen. *Euscyrtus* Guer.

39. *Euscyrtus concinnus* (Haan.).

Seven ♂, 10 ♀, Siberut (H.H.K.), 1 ♂, 5 ♀, Sipora (H.H.K.), 1 ♀, Pulau Tello, Batu Islands, (C.B.K. and N.S.).

Gen. *Podoscirtus* Serv.

40. *Podoscirtus javanus* Sauss.

One ♂, Sipora (C.B.K. and N.S.).

Podoscirtus fasciatus (Haan.).

One ♂, 1 ♀, Siberut (H.H.K.), 1 ♂, 1 ♀; Sipora (H.H.K.).

41. *Podoscirtus lineiceps* n. sp.

Type: 1 ♀, Siberut (H.H.K.), 15 September, 1924.

Cotype: 1 ♀, same locality.

♀ (fig. 23). Size rather small, shape elongate; testaceous brown, rather pubescent. Head as wide as pronotum in front, feebly convex; forehead adorned with four longitudinal, narrow, brown bands, uniting forwards on the rostrum; frontal rostrum a little narrower than the first antennal joint, convex above, rounded at apex. Eyes big, rounded; ocelli very small, the anterior almost at apex of the rostrum. Face and cheeks wholly light yellow; a brown band behind each eye extending on the lateral lobes of pronotum. Palpi yellow; 4th joint a little shorter than 3rd, 5th elongate, weakly enlarged at apex. Antennae yellowish, 1st joint very large, mottled with brown.

Pronotum transverse, very pubescent; disk convex, testaceous, spotted with brown; lateral lobes with superior part brown, inferior yellow, inferior margin ascending backwards. Abdomen brownish. Ovipositor rather short, apical valves small, armed with 4 strong teeth externally (fig. 22).

Legs rather long, testaceous, pubescent. Anterior femora with a small brown ring before the apex; tibiae rather strongly dilated at base, in the middle and at apex, perforated with two oval drums. Middle femora mostly darkened above; tibiae with three brown rings. Posterior femora feebly dilated, very pubescent, testaceous with three brown spots above and on the internal face; tibiae yellowish with 6 brown spots above, 4 rather long, pubescent spines on each margin; external spurs very small, the middle one longer

than the other two; infero-internal spur short, middle and specially superior long; metatarsi long, denticulated on the external margin only; 3rd joint long and slender.

Elytra testaceous brown, rather narrow; dorsal field with 8 very oblique and distant veins, of which 3 are free and 5 from the discoidal; transverse veinlets regular and forming square areas; lateral field transparent with 2 veins and 6 branches of the medias-tinal. Wings a little longer than the elytra.

Length of body 11 mm.; length with wings 20 mm.; pronot. 2.5 mm.; elytra 14 mm.; ovipositor 8.5 mm.

Gen. *Aphonomorphus* Rehn.

42. *Aphonomorphus punctatus* (Haan.).

One ♀, Siberut (H.H.K.).

43. *Aphonomorphus gracilis* Chop.

One ♂, Siberut (C.B.K. and N.S.), 1 ♂, 2 ♀, Pulau Tello, Batu Islands, November 1924 (H.H.K.).

This species is rather widely distributed from the Philippine Islands to the Malaysian sub-region. It is also rather variable, chiefly as concerns the coloration. Among the examples above recorded, the female from the Mentawi Islands presents a brown spot on the anterior tibiae; and one of the females of the Batu Islands is large with lateral field of the elytra transparent and dorsal field greyish.

44. *Aphonomorphus pallipes* n. sp.

Type: 1 ♂, Siberut (H.H.K.), 30th September, 1924.

♂ (fig. 24). Medium size, elongate. Head yellowish with a few small brown spots on the occiput; forehead flat; frontal rostrum a little narrower than the first antennal joint, flat, truncated at apex; ocelli very small. Face and palpi yellow; 4th joint of the maxillary palpi shorter than the third, 5th securiform. Antennae yellowish with 1st joint brown.

Pronotum slightly narrowing in front; anterior margin straight, posterior one strongly sinuated, nearly angular in the middle; disk much rounded, pale yellow, with a brown triangular spot in the middle of the anterior part and a few small, brown, piliferous spots; disk with a rather abundant whitish pubescence and a few brown bristles, lateral lobes yellow with a small brown spot in the middle. Abdomen yellowish. Cerci yellow, ringed with brown. Sub-genital plate rather long, rounded at apex; supra-anal valve spotted with brown, truncated at apex. Genitalia small, bifid.

Legs short, pubescent. Anterior and median femora and tibiae rather strongly dilated at base and perforated at their internal face; metatarsi much shorter than the 3rd joint of the tarsi. Posterior

J. C. MOULTON

femora rather slender, yellowish with a few small brown points at their external face, a larger brown spot towards the middle and a brown ring before the apex; tibiae pubescent, yellow with a brown spot about the anterior third and another larger one past the middle; 6 yellow with brown extremity spines on each margin; external spurs very short; infero-internal spur also very short, the other two longer chiefly the median one which is equal to the last spine; metatarsi strong, very pubescent, brown, with 3—4 external denticles, 1 only at apex of the internal margin.

Elytra entirely of a dark grey, pubescent; dorsal field with 6 very regular veins, the 4th and 5th united at base, the 6th coming from the discoidal; transverse veinlets forming rather regular, elongate areolæ; lateral field with 6 veins equally distant, of which 2 short ones along the anterior margin and 3 branches of the mediastinal vein. Wings a little longer than the elytra, greyish.

Length of body 12 mm.; length with wings 19 mm.; pronot. 3 mm.; post. fem. 9 mm.; elytra 12.5 mm.

A pretty small species which is quite characteristic among the *Aphonomorphus* by its coloration.