

Lens & Riemsdijk, is a synonym of *C. sagittata* (Q. & G.) ; and that this Eudoxid is not, as Bigelow supposed, the monogastric state of *Abyla leuckartii*, Huxley.

REFERENCES.

- QUOY and GAIMARD. "Observations zoologiques . . . l'Astrolabe . . ." Ann. Sci. Nat. Paris, x. 1827, p. 16.
 LENS, A. D., and RIEMSDIJK, T. VAN. "Siphonophora." Siboga-Expedition, Monogr. ix. 1908.
 BIGELOW, H. B. "The Siphonophoræ." Repts. Sc. Res. . . Eastern Tropical Pacific . . . 'Albatross' . . . Mem. Mus. Comp. Zool., Harvard, xxxviii. 2, 1911, p. 224.
 MOSER, F. "Die Siphonophoren . . ." Deutsche Südpolar-Expedition, 1901-1903, xvii. Zool. ix. 1925, p. 310.

LVIII.—*The Hemiptera collected by Prof. J. W. Gregory's Expedition to Yunnan, with Synonymic Notes on Allied Species.* By W. E. CHINA, B.A.

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PROF. GREGORY'S collection, though small, is of considerable value, as it throws some light on the hemipterous fauna of a region which is comparatively unknown. It would be unwise to base any definite zoo-geographical conclusions on our far too fragmentary knowledge of the Hemiptera and their distribution, but in this case it is possible to obtain some conception of the various faunal units concerned. The bulk of the species taken are typical of Blanford's Transgangetic sub-region*, which includes the forest-area of the Himalayas, Assam, N. Burma, Siam, and Tonkin. There is, however, a considerable Palæarctic element corresponding to the fauna of Blanford's Tibetan sub-region, and probably derived, as Uvarov† has pointed out, from the ancient continent which Suess has called Angara. These forms, such as *Palomena prasina*, L., *Eurydema sexpunctata*, L., and *Gerris paludum*, F., are in Yunnan more or less confined to the higher altitudes, although they extend much lower down on the colder slopes. Still another fauna is represented, as evidenced by the occurrence of such species as *Homæocerus marginatus*, Uhl., *Sphærodema japonicum*, Vuill., and *Clovina multilineata*, Stål. This fauna is typical

* Blanford, Phil. Trans. Roy. Soc. Lond. B. vol. cxciv. pp. 335-436 (1901).

† Uvarov, Journ. Asiatic Soc. Bengal (in press).

of S. Japan, Formosa, and Canton, and has probably been derived from the ancient continent which Grabau has called Cathaysia. There is little evidence from the Hemiptera of the connection between S.W. Asia and tropical America, although the new genus *Tachengia* is more closely related to the American genus *Brochymena* than to the Oriental forms of the Halyaria.

The whole of Prof. Gregory's material was presented to the British Museum and has been incorporated in the National Collection.

Suborder HETEROPTERA.

Family Pentatomidæ.

Subfamily PENTATOMINÆ.

Tribe HALYARIA.

TACHENGIA, gen. nov.

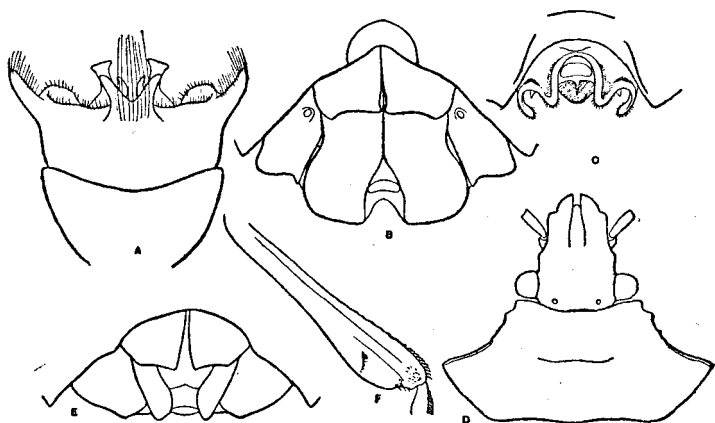
Head strongly rugosely punctate, narrowing slightly towards the apex, as long as pronotum in the middle, and about as long as width across the base including the eyes; sides with a small tooth just in front of the eyes and a larger rounded tooth towards the apex; juga not contiguous apically, much longer than the tylus which is depressed and narrowed apically and scarcely passes the anterior lateral teeth of the juga; eyes small, diameter only one-third width of head, very prominent, almost stalked, ocelli placed with their anterior margins on a level with the posterior margin of the eyes; antenniferous tubercles visible from above, first joint of antennæ short, scarcely reaching the apex of the juga, second nearly twice the length of the first, third subequal with the second, fourth a third longer than the second, fifth a little shorter than the fourth; rostrum moderately thin, basal joint extending slightly beyond the bucculæ to the middle of the eyes, second joint reaching the fore coxæ, third reaching the middle coxæ, and the fourth extending to the hind coxæ. *Pronotum* strongly rugosely punctate, twice as wide across the humeral angles as long in the middle, anterior margin slightly wider than head including eyes; sides strongly concave, slightly serrate anteriorly and smoothly carinate posteriorly; humeral angles dentiform, rather prominent, and somewhat elevated; base broadly emarginate; anterior half of disc more or less depressed. *Scutellum* rugosely punctate, the apical third narrowed with its sides more or less parallel; frena extending

to base of narrowed apical third. *Hemelytra* punctate, the non-reticulate membrane extending beyond the apex of the abdomen. Femora unarmed, tibiae simple, not dilated. *Abdomen* below with a flattened median longitudinal band, the basal median furrow indistinct. Mesosternum carinate, metasternal orifice auriculate as in *Dalpada*. Pygofer in the ♂ with a large central emargination and two smaller lateral ones (fig. 1, C).

Genotype, *Tachengia askra*, sp. n.

Closely allied to the American genus *Brochymena*, but differs in the much less dentate lateral margins of the pronotum and in the greater length of the juga.

Fig. 1.



A, *Urostylis agna*, sp. n., ♂, pygofer (ventral); B, *Eusthenes philoctetes*, sp. n., ♀, genital plates (ventral); C, *Tachengia askra*, gen. et sp. n., ♂, pygofer (ventral); D, head and pronotum of same; E, *Erthesinilia*, sp. n., ♀, genital plates (ventral); F, fore tibia of same.

1. *Tachengia askra*, sp. n. (Fig. 1, C, D.)

♂. *Head* black with a faint purplish lustre; basal joint of antennae ochraceous with a dorsal and a ventral black longitudinal stripe, remaining joints black, the basal third of the fifth joint ochraceous; rostrum ochraceous with the commissure and the apical joint entirely black; head below with minute depressed white hairs arising from the punctures. *Pronotum* and *scutellum* blackish flecked with ochraceous, the anterior lateral serrations of the pronotum ochraceous. *Sternum* black with a median band, the coxae

and trochanters ochraceous. *Hemelytra* dull ochraceous thickly covered with black punctures, the membrane hyaline, with the inner basal angle, the veins, and an apical fascia between each vein fuscous. *Wings* hyaline tinged with fuscous. *Abdomen* above bluish black, connexivum black with a median obsoletely ochraceous fascia on lateral margin of each segment, the posterior lateral angles of the segments moderately acutely prominent; abdomen below ochraceous, thickly, blackly punctured laterally, but in the middle smooth and tinged with red. *Legs* dull ochraceous, thickly punctured with black. Male pygofer very distinct (fig. 1, C).

Length (including membrane) 12.5 mm., width across humeral angles 6 mm.

1 ♂, Tacheng, 7300 feet, open valley, 1. viii. 1922.

2. *Dalpada jugatoria*, Leth.

Ann. Soc. Ent. Belge, Bull. 1891, p. cxlii.

1 ♀, Mekong R., near Nantao, 6400 feet, 2. vii. 1922.

Recorded from N. India and Burma.

This is a rather dark specimen, and, except for the yellow bases of the fourth and fifth joints, the antennæ are entirely black. The apex of the scutellum is fairly thickly punctate and the typical yellow colour is therefore somewhat obscured.

3. *Halys rugosus*, Dist.

Entomologist, liv. p. 5 (1921).

1 ♀, Wei-si, 7000 feet, 27. vi. 1922.

Described from Laos.

4. *Erthesina ilia*, sp. n. (Fig. 1, E, F.)

♀. *Head* black, coarsely punctate, a central longitudinal line, lateral margins, inner margins of eyes and two spots, one on each side of the base below the eyes, ochraceous; antennæ black, basal joint short not reaching the apex of the head, second twice as long as the first, third slightly shorter than second, and fourth once and a half the length of the third, fifth joint missing; rostrum reaching the middle of the third abdominal segment. *Pronotum* and *scutellum* black, very coarsely punctate with scattered small ochraceous callosities, the pronotum with a central line anteriorly and the lateral and anterior margins also ochraceous. *Corium* purplish brown, the costal area darker, with scattered ochraceous callosities except on the disc and a

single larger yellow spot on the outer margin of the disc; membrane fuscous, extending slightly beyond the apex of the abdomen. *Connexivum* black, with a rather broad yellow fascia on the middle of each segment, posterior lateral angles of segments moderately prominent; abdomen beneath ochraceous with coarse scattered black punctures on the lateral areas and the extreme basal and apical margins of the segments narrowly black. *Sternum* black variegated with ochraceous. *Legs* black, the ventral basal half of the anterior femora, the ventral basal two-thirds and a narrow dorsal stripe of the intermediate and posterior femora, a median ventral fascia on the intermediate and posterior tibiae, and the apical half of the basal joint of the posterior tarsi ochraceous; anterior tibiae feebly dilated.

Length (including membrane) 22 mm., width across pronotal angles 10.5 mm.

1 ♀, near Shih-ku, on the Yangtsekiang, 19. vi. 1922.

1 ♀, Tacheng, 7300 feet, 1. viii. 1922.

Closely allied to *E. fullo*, Thunb., and more or less identical in general colouring, the anterior tibiae, however, are entirely black and much less dilated than in that species. The dilation strongly resembles in shape that of *E. robertsi*, Dist., from N. India, and it is possible that the present species is synonymous with the latter, the type of which is undoubtedly a teneral specimen.

Tribe PENTATOMARIA.

5. *Palomena unicolor*ella, Kirk.

1837. *Pentatoma unicolor*, Westw., Hope, Cat. i. p. 41.

1900. *Palomena unicolor*, Dist., Proc. Zool. Soc. 1900, p. 811, pl. lii. f. 5.

1909. *Palomena unicolor*ella, Kirk, nom. nov., Catalogue Hem. Cimicidae, p. 52.

1921. *Epagathus chapana*, Dist., Entomologist, liv. p. 69 [n. syn.].

1 ♂ and 1 larva, Jugeh R., 9500 feet, 28. vii. 1922.

1 ♀, N. of Chi-tien, Yangtsekiang, 8000 feet, 2. viii. 1922.

Described from Bengal.

It is doubtful whether the differences between Distant's *P. spinosa* and this species are sufficient to separate them into two distinct species. The six specimens from Tonkin described by Distant under the name *Epagathus chapana* belong to this species.

6. *Palomena prasina*, L.

1761. *Cimex prasinus*, L., Faun. Suec. p. 249.

1892. *Palomena prasinus*, Saunders, Het. Brit. Is. p. 29, pl. iii. f. 1.

1 ♀, Shalu, 9300 feet, 25. vii. 1922.

This specimen is indistinguishable from British examples. Outside the Western Palearctic region this species has been recorded from Altai-Bezirk and Krasnoyarsk in Siberia and also from Amurland.

7. *Eurydema lituriferum*, Walk.

1867. *Strachia lituriferum*, Walk., Cat. Het. ii. p. 326.

1889. *Eurydema vicarium*, Horv., Termez. Fuztek. xii. p. 32.

2 ♂♂, 1 ♀, Wei-si River, 6200–7700 feet, 26. vi. 1922.

Recorded from N. India (Kashmir, Sikkim, and Dehra Dun) and Indo-China (Haut Mekong).

7a. *Eurydema lituriferum*, var. *supplens*, Horv.

Eurydema vicarium, var. *supplens*, Horv., loc. cit.

3 ♂♂, 1 ♀, Wei-si River, 6200–7700 feet, 26. vi. 1922.

Described from Kashmir.

7b. *Eurydema lituriferum*, var. *yunnanensis*, nov.

The red colouring present in the typical form is replaced by yellow tinged with orange in places. The black markings above exhibit a more greenish lustre, while those below are rather more pronounced.

Numerous specimens, Wei-si River, 6200–7700 feet, 26. vi. 1922. "Sitting on low herbs."

Also recorded from Sikkim, Mungphu, Dehra Dun, and Haut Mekong.

It is possible that this variety is merely a teneral form and that these specimens had not acquired the mature colouring.

8. *Eurydema pulchrum*, Westw.

1837. *Pentatoma pulchra*, Westw., Hope Cat. i. p. 34.

1862. *Eurydema sumatrana*, Ellenr., Nat. Tijdschr. Nederl. Ind. xxiv. p. 152, f. 20.

1867. *Strachia designata*, Walk., Cat. Het. ii. p. 327.

2 ♂♂, Wei-si River, 6200–7700 feet, 26. vi. 1922.

1 ♂, near Chi-tien, 7000 feet, 3. viii. 1922.

1 ♀, Olosha, W. of Tali Lake, 7100 feet, 13. viii. 1922.

Widely distributed over the Indian and Oriental Regions and extending to Japan and Queensland.

9. *Eurydema sexpunctatum*, L.

1764. *Cimex serripunctatus*, L., Mus. Lud. Ulr. p. 175.

1846. *Eurydema gebleri*, Kol., Melet. Ent. fasc. iv. sp. 148, t. 15. f. 30.

1 ♂, 1 ♀, Wei-si River, 6200–7700 feet, 26. vi. 1922.

Recorded from Caucasus, Turkestan, Siberia, and Thibet.

10. *Hoplistodera virescens*, Dall.

List Hemiptera, i. p. 217 (1851).

1 ♀, Yunnan (no definite locality).

Recorded from Sikkim, Burma, and West Yunnan.

11. *Hoplistodera scutello-maculatus*, Dist.

Entomologist, liv. p. 41 (1921).

1 ♂, near Mekong River, 28. vi. 1922.

Recorded from Luang Prabang, Haut Mekong, and Laos.

12. *Piezodorus rubrofasciatus*, F.1787. *Cimex rubrofasciatus*, F., Mant. Ins. ii. p. 293.1868. *Piezodorus rubrofasciatus*, Stål. K. Svensk. Vet.-Ak. Handl. vii. no. 11, p. 32.

1 ♀, Mekong River, near Sha-wa-tsun, 6200 feet, 29. vi. 1922.

Widely distributed, extending from E. Africa over the whole of the Indian, Oriental, and Australian Regions to Japan and Fiji.

13. *Lelia octopunctatus*, Dall.1849. *Raphigaster (Prionochilus) octopunctatus*, Dall., Trans. Ent. Soc. Lond. 1849, p. 192, pl. xix. f. 5.1902. *Lelia octopunctatus*, Dist., F. B. Ind., Rhyn. p. 207, f. 129.

1 ♀, N. of Wei-si, 7000 feet, 26. vi. 1922.

Recorded from Assam.

Subfamily ASOPINÆ.

14. *Parastrachia nagaensis*, Dist.*Parastrachia nagaensis*, Dist., Faun. Brit. Ind. iv. p. 443, f. 266 (1908).

2 larvæ, Tacheng, 7300 feet, open valley, 1. viii. 1922.

Described from the Naga Hills, Assam.

Subfamily TESSARATOMINÆ.

15. *Eusthenes philoctetes*, sp. n. (Fig. 1, B.)

♂. Rich purplish brown above, the head, anterior margin and disc of pronotum, frena, and corium apically, bright green. Membrane bronze-brown, apex of scutellum pale castaneous. Sternum castaneous tinged with shining metallic green; abdomen below bright shining metallic green with the disc golden, and with a narrow longitudinal brown line down the centre. Connexivum green with the bases of the segments very narrowly castaneous and the

extreme margins piceous. *Abdomen* above very bright shining metallic green tinged with brassy yellow, each segment with a bluish fascia invading it laterally from the connexivum. *Wings* fuscous. *Legs* castaneous, the middle and hind femora somewhat piceous. *Antennæ* dark piceous shading to black on the apical joints, the basal sixth and the extreme apex of the fourth joint orange-yellow; length of joints 1.2, 4.3, 3.8, and 5.3 mm. *Rostrum* extending beyond the procoxæ to the base of the mesosternum, piceous with the two apical joints black; third joint more or less swollen; length of joints 1.3, 2.2, 0.8, and 0.8 mm. *Pronotum* obscurely transversely striate, slightly wider across basal angles than the base of hemelytra. *Scutellum* rather more distinctly transversely striate. Mesosternum in the middle with a narrow orange-yellow roughened band scarcely elevated anteriorly, but distinctly elevated posteriorly and produced backwards between the middle coxæ and below the anterior process of the metasternum. Metasternum strongly elevated in the middle, forming a strongly, laterally compressed, anterior process extending over the apex of the mesosternal process. Second abdominal segment not at all elevated in the middle, lateral angles of segments only slightly prominent. Anterior femur with a small but distinct spine on the anterior apical margin and a very minute almost invisible tooth on the posterior apical margin; intermediate femur with two equally long spines one on each side of the apex; posterior femur with the basal spine very short (about 2 mm.), also with two parallel rows of small tubercles extending along the femur to the two apical spines; the tubercles nearest the basal spine sometimes spine-like and nearly as long as the basal spine itself.

Total length (including membrane) 27 to 31 mm.

♀. Similar to ♂, but the hind femora are slender and unarmed except for the two apical spines.

4 ♂ ♂, 8 ♀ ♀, Mekong River, near Sha-wa-tsun, 6200 feet, 29. vi. 1922.

1 ♂, N. of Yei-chih, 6400 feet, 1. vii. 1922.

Allied to *E. sævus*, Stål, but readily distinguished by the very short basal spine of the hind femora and the slightly less prominent lateral basal angles of the pronotum.

16. *Eusthenes cupreus*, Westw. ?

Hope Catalogue, Hemp. 1837, p. 27.

4 ♂ ♂, 3 ♀ ♀, Mekong River, near Sha-wa-tsun, 6200 feet, 29. vi. 1922.

1 ♂, Tacheng, 7300 feet, 1. vii. 1922.

These specimens vary considerably in the shape of the metasternal elevation and in the shape of the lateral angles of the sixth ventral segment. I have, however, been unable to separate them into distinct species on these characters, and have therefore referred them to *E. cupreus*, Westw., with which species they are very closely allied, if not synonymous. *E. cupreus* is recorded from India, Ceylon, and Malay Peninsula.

Family Urostylidæ.

17. *Urostylis agna*, sp. n. (Fig. 1, A.)

♂. *Head* impunctate, ochraceous, tinged with red inside the eyes; eyes ferruginous, distance between ocelli little more than one-third the distance from the eyes; basal joint of antennæ ferruginous, moderately incrassate, a little longer than the pronotum in the middle and covered with short anteriorly directed dark hairs; remaining joints thinner and covered with shorter hairs; second joint paler than first and subequal to it in length; third joint black with its extreme base pale, two-fifths the length of the second, its articulation with the second joint obscure; fourth joint black with the basal half yellow, subequal to second; fifth joint a little shorter than the fourth, but similarly coloured; rostrum extending to middle coxæ, yellowish with the apex black. *Pronotum* ochraceous, with the basal half transversely wrinkled and sparsely covered with black punctures; lateral margins straight, moderately reflexed, and very obscurely serrate. *Scutellum* and *hemelytra* unicolorous with the pronotum, and sparsely covered with black punctures; scutellum transversely wrinkled, and apex and interior disc of corium tinged with fuscous; membrane yellowish hyaline tinged with fuscous with only four distinct veins, two of which are medianly furcate and another furcate towards the apex. *Sternum* and *abdomen* below greenish yellow, a line behind the eye, the tip of the auriculate lobe of the metasternal orifice and the spiracles black. *Legs* greenish yellow with the tarsi fuscous. *Pygofer* below in the middle of the posterior margin with two short V-shaped divergent styles curving upwards and inwards and with a tuft of hair on the outside towards their common base; on each of the lateral margins a short spine-like process curving backwards and upwards, the interior margin of this process and the apical margin of the pygofer fringed with brown hairs; interior appendages short and projecting.

Total length 9.5 mm., width across pronotal angles 4.1 mm.

1 ♂, S.E. of Atuntze, 12,000 feet, 20. vii. 1922.

This species agrees in some respects with Kirkaldy's meagre description of his new genus and species, *Tessaromerus quadriarticulatus*, from Yunnan*. It disagrees, however, in the colouring and relative length of the joints of the antennæ. Kirkaldy states that his species possesses only four antennal joints. In *U. agna* this is superficially so, but the articulation of the second and third joints can readily be distinguished on closer examination.

Family Coreidæ.

Subfamily COREINÆ.

Tribe MICTARIA.

18. *Ochrochira nigrorufa*, Walk.

1871. *Physomerus nigrorufa*, Walk., Cat. Het. iv. p. 60.

1893. *Ochrochira nigrorufa*, Dist., Ann. & Mag. Nat. Hist. (6) xii. p. 121.

2 ♂♂, Mekong River, near Sha-wa-tsun, 6400 feet, 29. vi. 1922.

1 ♀, N. of Chi-tien, Yangtsekiang, 7000-8000 feet, 2. viii. 1922.

1 ♀, N. of Yei-chih, 6400 feet, 1. vii. 1922.

Recorded from Assam and Burma.

Kiritshenko † has erected a new genus, *Molipteryx*, to hold two species previously placed in *Ochrochira*, Stål. In differentiating his genus from *Ochrochira* he relies on the following characters: the outward and forward production of the lateral pronotal angles, the distinctly tuberculate condition of the inner surface of the hind femora, and the absence of tubercles on the third ventral segment in the male. Stål, in his description of *albiditarsis*, Westw., the genotype of *Ochrochira*, says:—"Segmento secundo ventris truncato, posterius tuberculis duobus *obtusissimus* valde distantibus, *parvis* armato." In fact, the second apparent ventrite is practically unarmed, and in all the other evidently congeneric species these abdominal "tubercles" are not visible at all. The tuberculation of the inner surface of the hind femora used by Distant ‡ in his generic synopsis is a very unsatisfactory generic character, and various species show intermediate forms between the granular and the tuberculate condition—indeed, in both *O. albiditarsis*, Westw.,

* Canadian Ent. xl. p. 452 (1908).

† Faune de la Russie, Hémiptères, vi. livr. 2, p. 32 (1916).

‡ Fauna Brit. Ind., Rhyn. i. p. 333 (1902).

and *O. biplagiata*, Walk., the condition is actually tuberculate, though not so pronounced as in *Molipteryx*. With regard to the shape of the lateral angles of the pronotum, if *O. lunata*, Dist., and *O. fuliginosa*, Uhler, are separated from the genus on this character, then a new genus must be erected for *O. nigrorufa*, Walk., in which the lateral angles of the pronotum are no more produced than are those of *Mictis*, Leach.

19. *Ochrochira camelina*, Kirits.

Mictis camelina, Kiritschenko, Faune de la Russie, Hémipt. vi. livr. 2, p. 53 (1916).

1 ♂, 1 ♀, N. of Wei-si, 7700 feet, 26. vi. 1922.

Described from a single female, Sz-tschwan Province, China.

♂. Similar in general colouring to the ♀, but smaller, with the hind tibiae moderately dilated and inwardly dentate towards the base, the abdomen below unarmed and the inner surface of the hind femora obscurely tuberculate. Kiritschenko, knowing only the female, referred this species to the genus *Mictis*. The male specimen from Wei-si shows that the species belongs to *Ochrochira*, Stål, and is closely allied to *O. nigrorufa*, Walk., in which the lateral pronotal angles are as in *Mictis*, Leach. Kiritschenko also erroneously states that the abdomen in *Mictis serina*, Dall., is unarmed, and in this he is obviously following Stål (Enum. Hemipt. iii. p. 46), who included this species in his series *d*. It is impossible to decide to which species Stål's ventrally unarmed male actually belongs without reference to the type-specimens.

20. *Anoplocnemis binotata*, Dist.

Faun. Brit. Ind. vii. p. 153 (1918).

1 ♀, near Pu-piao, 23. v. 1922.

Described from North Assam.

Tribe DALADERARIA.

21. *Dalader planiventris*, Westw.

1842. *Acanonicus planiventris*, Westw., Hope, Cat. ii. p. 8.

1843. *Dalader rotundicosta*, Am. & Serv., Hém. p. 188.

1 ♂, Mekong River, near Sha-wa-tsun, 6200 feet, 29. vi. 1922.

Widely distributed over India, Burma, and Malaya.

Tribe COREARIA.

22. *Mesocerus potanini*, Jak.1890. *Syromastes potanini*, Jak., Horæ Soc. Ent. Ross. xxiv. p. 551.1916. *Mesocerus potanini*, Kirits., Faune de la Russie, Hémipt. vi. livr. 2, p. 218.

1 ♂, Kari, 9800 feet, 27. vii. 1922.

Recorded from China (Pekin, Kang-su Prov., Sz-tschwan Prov.) and Thibet.

Tribe HOMŒOCERARIA.

23. *Homæocerus* (*Anacanthocoris*) *marginatus*, Uhler?*Homæocerus marginatus*, Uhler, Proc. U.S. Nat. Mus. xix. p. 260 (1897).

1 ♂, near Mekong River, 28. vi. 1922.

Recorded from Japan.

This specimen is in a poor state of preservation and is probably somewhat teneral. It agrees, however, fairly well with Uhler's description. It is greenish in colour and resembles *H. stricornis*, Scott, but the first antennal joint lacks the black side-stripe.

Subfamily ALYDINÆ.

Tribe ALYDARIA.

24. *Riptortus pedestris*, F.1775. *Gerris pedestris*, F., Syst. Ent. p. 727.1788. *Cimex pedes*, Gmel., Syst. Nat. i. iv. p. 2191.1868. *Riptortus pedestris*, Stål, Hem. Fabr. i. p. 64.

1 ♂, Se-kon, Jugeh River, 7300 feet, 30. viii. 1922.

Recorded from India, Burma, Malay Peninsula, and Cochin China.

25. *Babaranus ornatulus*, Dist.

Fauna Brit. Ind. iv. p. 482 (1908).

1 larva, near Ho-ching, 7700 feet, 10. viii. 1922.

Recorded from Assam, Tenasserim, and Sumatra.

Family Lygæidæ.

Subfamily LYGÆINÆ.

Tribe ORSILLARIA.

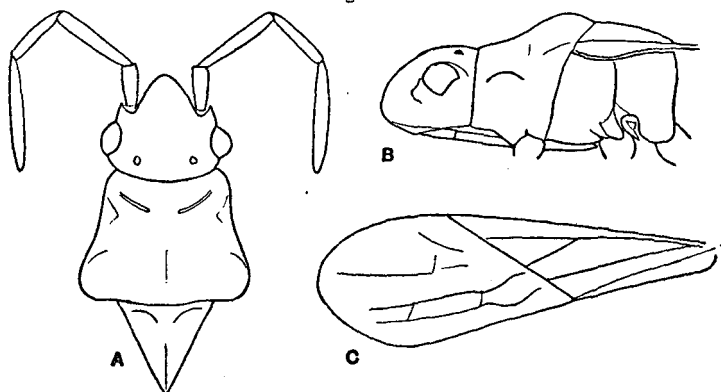
EMPHANISIS, gen. nov.

Head triangular, slightly less than three-quarters as long as wide across the eyes, moderately convex above,

slightly exserted, the eyes small and well separated from the anterior margin of the pronotum, ocelli placed on the anterior slopes of rounded swellings, about twice as far from one another as from the eyes, juga distinctly shorter than the tylus, antenniferous tubercles remote from the bucculæ, prominently rounded at the sides and very distinctly visible from above; antennæ robust, the basal joint extending slightly beyond the apex of the head, the second slightly more than twice as long as the first, the third about four-fifths the length of the second, the fourth fusiform one-fifth longer than the second; bucculæ extending to the level of the posterior margin of the eyes, moderately elevated anteriorly, rostrum four-jointed extending to the intermediate coxæ, the second joint longest, first and fourth subequal, third shortest. *Pronotum* somewhat gibbous, medially obscurely carinate, rather more than two-thirds as long as broad across the humeral angles, anterior margin somewhat wider than half the basal width, lateral margins concavely sinuate in the middle, not at all carinate, the posterior lobe strongly reticulately rugose, anterior lobe much more smooth with the cicatricial area on each side swollen, cicatrices shining linear arcuate, the convex side facing posteriorly and outwards. *Scutellum* triangular, rather narrower at the base than the length of lateral margin, medially rugosely carinate, the base slightly transversely elevated. Metasternal orifice auriculate, rounded apically, surrounded by a distinct evaporative area which extends on to the middle acetabulum, covering the whole of it below the acetabular suture. Mesosternum sulcate in the middle, shallowly and narrowly so anteriorly but broadly and more deeply posteriorly, anteriorly angularly produced between the fore coxæ, posteriorly angular with the margins somewhat reflexed. Metasternum rather elevated and angular posteriorly between the hind coxæ, posterior lateral margins not at all laminate as in *Nysius*. *Hemelytra* extending a little beyond the apex of the abdomen (♂), the corium and clavus rather wrinkled but not punctate, apical margin of the corium straight about equal in length to claval suture, claval commissure very short, costal margins straight; membrane semi-opaque densely rugosely wrinkled, a single elongated basal cell at the inner basal angle emitting two nervures from its apex which are connected posteriorly by a small transverse vein, three other nervures on the outer part of the membrane not extending to the apical margin of the corium. *Wings* hyaline, well developed, the basal cell with the hamus arising from the "vena sustensa" and not from the "vena connectente." *Abdomen* with the connexivum broad and almost vertically reflexed, ventrally somewhat

compressed laterally and tectiform towards the base, which is medially produced anteriorly in the form of a ridge between the hind coxæ; sutures of ventrites more or less straight, reaching the lateral margin of the connexivum; spiracles placed on the dorsal side of the connexivum and visible on the second, third, fourth, fifth, and sixth apparent tergites; fourth and fifth apparent ventrites with a pair of glandular spots laterally, sixth apparent ventrite with only one glandular spot; last dorsal segment in ♂ slightly rounded, pygofer ventrally foveolate towards posterior margin. Femora only moderately incrassate, unarmed, middle and hind femora slightly less incrassate than anterior ones; tibiæ subequal to their respective femora, second tarsal joint very short, the first long and in the hind tarsi half as long again as the third joint, tarsal claws large and strongly recurved.

Fig. 2.



A, *Emphanisis cuprea*, gen. et sp. n., head, pronotum, and scutellum; B, lateral view of head and thorax; C, hemelytron of same.

Genotype, *Emphanisis cuprea*, sp. n.

This genus has the general facies of the Heterogastrinae, but is actually allied to *Nysius*, Dall. It differs by the slightly exserted head, relatively smaller eyes, the more convex vertex, the more prominent antenniferous tubercles, the shorter and more robust antennæ, the more gibbous pronotum, the un-laminate posterior margin of the metasternum, the straight costal margins and apical margins of the corium, etc.

26. *Emphanisis cuprea*, sp. n. (Fig. 2, A-C.)

Dark fuscous covered above with a coarse golden-brown

tomentose pubescence, which gives a general bronzy coloration, and below with a whitish tomentose pubescence. Membrane shining bronzy brown, wings whitish hyaline. Antennæ almost black with the extreme apex of the second and third joints ochraceous, covered with pale depressed hairs; length of joints 0.33, 0.73, 0.61, and 1.0 mm. Underside of head on each side, various areas on the pro-, meso-, and metasterna, including the posterior margins of the pro- and metasterna, abdomen ventrally (except a median longitudinal vitta), more or less obscurely fulvous; metasternal orifice and evaporative area, acetabula, a broad median annulation on all the tibiæ and the middle tarsal joints, flavous. Tibiæ, particularly the hind pair, covered with long ochraceous hairs.

Total length 5.5 mm.

1 ♂, Feng-ming-kai, S. of Likiang, 7700 feet, 11. viii. 1922.

Subfamily *Geocorinæ*.

27. *Geocoris jucundus*, Fieb.

1861. *Ophthalmicus jucundus*, Fieb., Wien. ent. Mon. v. p. 270.

1874. *Geocoris jucundus*, Stål, Enum. Hemipt. iv. p. 137.

3 ♀ ♀, Feng-ming-kai, S. of Likiang, 7700 feet, 11. viii. 1922.

Widely distributed over India and Burma.

Subfamily *Aphaninæ*.

Tribe *APHANARIA*.

28. *Pæantius festivus*, Dist.

Ann. & Mag. Nat. Hist. (7) viii. p. 506 (1901).

1 ♀, N. of Wei-si, 26. vi. 1922.

Recorded from Ceylon and Calcutta.

Family *Pyrrhocoridae*.

29. *Euscopus rufipes*, Stål.

1870. *Euscopus rufipes*, Stål, Enum. Hemipt. i. p. 106.

1872. *Pyrrhocoris vittiventris*, Walk., Cat. Het. v. p. 171.

1902. *Æschines pyrrhocoroides*, Kirk., Wien. ent. Zeit. xxi. p. 167, t. iii. fig. 7.

1 ♂ and 1 ♀, "taken in coitu" near Chi-tien, 7000 feet, 3. viii.

Recorded from Java, Bali Is., Tonkin, Burma, and N. India.

Family Reduviidæ.

Subfamily REDUVIINÆ.

30. *Reduvius gregoryi*, sp. n.

♂. *Head* black, covered with moderately long pale silky hairs, anteriorly more or less porrect and only slightly deflexed, frons about three-quarters the width of an eye, gula between the eyes about as wide as the middle of the second joint of the rostrum; rostrum black covered with pale hairs, the bucculæ, extreme apices of first and second joints and the third joint, fulvous, the second joint about one-and-a-half times as long as the first; antennæ placed close to the apex of the inner side of each eye, basal joint fuscous, slightly incrassate, covered with rather long erect pale hairs, about as long as from the apex of the head to the ocelli, remaining joints pale flavous covered with short and long pale hairs, the second about once and two-thirds longer than the first with its apex fuscous, the third slightly shorter than the second with its base fuscous (fourth joint missing). *Pronotum* covered with long shaggy hairs, anterior lobe black, about half the length of the posterior lobe, the median sulcus very distinct, posterior lobe pale flavous obsoletely finely punctate, median sulcus not reaching the posterior margin, apical carinæ almost obsolete, humeral angles rounded, slightly projecting beyond the costal margins of hemelytra. Meso- and metasterna black, transversely rugose and sparsely covered with long pale hairs, acetabulæ and posterior lateral angle of mesosternum fulvous. *Scutellum* black, pilose, apex slightly cylindrically produced, disc concave, arcuately rugose, distinctly foveate before the apex. *Hemelytra* fuscous, sparsely covered with rather long depressed hairs and with the costal margins fringed with moderately short hairs, the base of the clavus, the base of the corium, and the basal third of the costal margin sordid yellowish white; veins pale except the base of the outer membranal vein and the outer veins of the corium towards the base of the membrane, which are fuscous; membrane extending beyond the apex of the abdomen by more than one-third its length, apical third and extreme base of the exterior half whitish. *Abdomen* below shining castaneous with the apex of the pygofer and the connexivum fulvous, sparsely covered with long pale depressed hairs, base carinate in the middle; above fulvous, the connexivum concolorous and fringed with moderately long hairs. *Legs* pale fulvous, longly pilose, a rather broad subapical annulation on all the

femora, and the apex and sub-base of all the tibiae fuscous; coxae and trochanters dark castaneous, tibiae very densely and longly pilose, spongy fossa occupying apical third of anterior tibiae.

Length (excluding membrane) 15.2 mm.

Total length 19 mm.

1 ♂, between Gadsze and Beta, 7000 feet, 21. vi. 1922.

BRACHYTONUS, gen. nov.

Head not quite twice as long as width including eyes, pre-ocular lobe more or less porrect, longer than post-ocular lobe, which is convexly swollen with the ocelli large; rostrum with the second joint nearly twice as long as the first; antennae with the basal joint (♂) very short, only about as long as the posterior lobe of the head is wide and scarcely reaching the apex of the head, second joint more than six times as long as the first, rather robust, gradually tapering to the apex. *Pronotum* more or less as in *Khafra*, Dist., but the anterior lobe small, about three-fifths the length of the posterior lobe in the middle, feebly prominent, the sculpturing almost obsolete, but with a distinct median sulcus posteriorly; posterior lobe strongly transversely rugose, median sulcus very shallow, practically absent, the posterior margin distinctly emarginate above the scutellum, the humeral angles prominent and acutely angular but not spinous, directed slightly backwards and upwards. *Prosternum* between the front coxae (apophysis) sulcate, not at all recurved at its apex, anteriorly somewhat conically prominent on each side of the sulcus. *Metasternum* medially carinate, the hind coxae widely separated. *Scutellum* small, transverse, distinctly concave above, the lateral margins towards the base, not at all tuberculate, the apex produced into an erect spine slightly posteriorly curved at its apex. *Membrane* of hemelytra extending well beyond the apex of the abdomen (♂), its interior basal cell wider than the exterior one. *Abdomen* below strongly carinate along the middle, the connexivum broad, strongly reflexed. *Legs* moderately long, feebly incrassate and unarmed, the femora much longer than in *Acanthaspis*; anterior tibiae with the spongy fossa narrow and extending nearly half the length of the tibia; second joint of the posterior tarsi twice as long as the first, but distinctly shorter than the third.

Genotype, *Brachytonus bicolor*, sp. n.

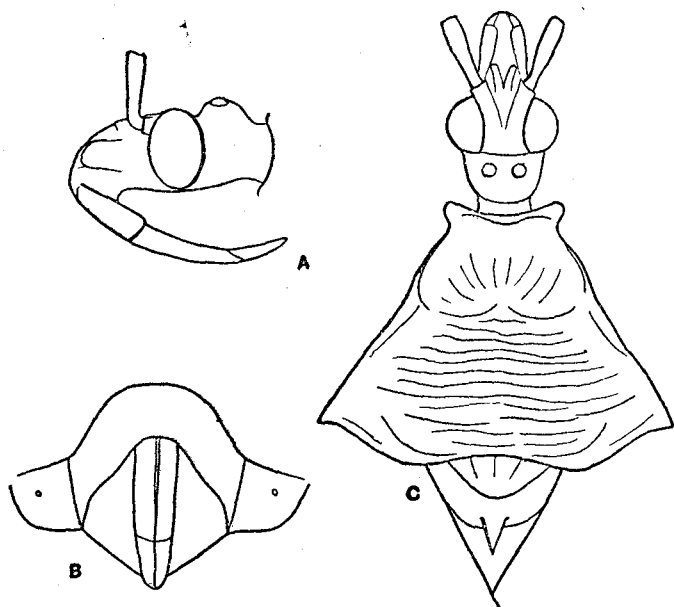
This genus is rather difficult to place exactly. Although
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it resembles in general facies the African genera *Macrospongius*, Horv., *Khafra*, Dist., and *Mankuninga*, Dist., it differs in some respects from them all. The absence of lateral tubercles at the base of the scutellum, the very short basal joint of the antennæ, the short basal joint of the rostrum, and the feebly prominent anterior lobe of the pronotum, etc., will readily distinguish it.

31. *Brachytonus bicolor*, sp. n. (Fig. 3, A, C.)

♂. Head moderately pilose especially on the sides of the

Fig. 3.



A, *Brachytonus bicolor*, gen. et sp. n., lateral view of head; C, head pronotum, and scutellum of same; B, *Nabis dis*, sp. n., ventral view of ♀ genital segments.

posterior lobe, black with the apex in front of antenniferous tubercles, a stripe down the throat, and an obscure spot on each side of the posterior lobe adjoining each ocellus, deep orange-yellow; between the antennæ with two elongated anteriorly divergent tubercles, anterior lobe at the base medially sulcate; rostrum orange-yellow with the apical joint fuscous; antennæ black, the second joint densely

covered with short semi-depressed bristle-like hairs. *Pro-notum* with the anterior lobe black, posterior lobe orange-yellow with two short stripes on the anterior two-thirds of each lateral margin and a large triangular spot on the disc of the posterior lobe (overlapping the anterior margin, but not reaching the posterior margin) black. *Prosternum* black with the basal halves of the propleura orange-yellow. *Meso-* and *metasterna* black. *Scutellum* covered with long fine hairs, black with the apical spine testaceous. *Hemelytra* orange-yellow with a broad transverse band a little below the base, the apical three-quarters of the clavus, and an obscurely defined spot towards the apex of the corium black; membrane fuscous with its costal margin pale fulvous. *Connexivum* orange-yellow with the base and apex of each segment black; abdomen below fulvous with the basal ventrite (except a lateral spot), the basal margin of each ventrite, an obscure lateral spot on each side of each of the second to fifth ventrites, and the pygofer (except disc and apex) black or fuscous. *Legs* orange-yellow with the coxæ, the apices of the femora laterally, and the extreme base of the tibiæ black to fuscous.

Total length (including membrane) 21.5 mm.

1 ♂, Yunnan (no particular locality), 11. vii. 1922.

Subfamily *Ectrichodiinæ*.

32. *Scadra militaris*, Dist.

1909. Ann. Soc. Ent. Belg. liii. p. 366.

1910. Faun. Brit. Ind., Rhyn. v. p. 197, f. 112.

1 ♀, near Chien-chuan-chou, 7700 feet, 9. vi. 1922.

Described from the Naga Hills, Assam.

Family Nabidæ.

Subfamily *Nabinæ*.

33. *Nabis (Aptus) dis*, sp. n. (Fig. 3, B.)

Brachypterous ♀. *Head* once and a third longer than its width across the eyes, vertex once and a half the width of an eye; black with various symmetrical patches of golden-brown depressed hairs, a spot between each ocellus and eye, an obscure median vitta in front of ocelli, the tylus laterally, apices of juga, margins of bucculæ, and the labrum fulvous; rostrum extending to the base of the hind coxæ, first joint short black, second long (slightly shorter than the third) fulvous, its base and two or three annulations fuscous,

third castaneous with an obscure fulvous annulation before the base, fourth not quite half as long as the second, castaneous; antennæ black, rather sparsely covered with moderately long bristly hairs which are shorter and more depressed on the apical two joints, first joint as long as from the ocelli to the apex of the head, with the extreme apex and a broad vitta below visible from above in the form of two obscure annulations, fulvous, second joint a little less than twice as long as the first, extreme base and apex and five annulations fulvous, third joint rather less than once and a half the length of the first, fourth joint subequal to the first. *Pronotum* about once and a quarter wider across the humeral angles than long in the middle, anterior lobe black covered with regular patches of golden rather tomentose pubescence with a large square-shaped spot on the anterior margin and two small slightly elevated spots on the posterior margin fulvous, and a longitudinal stripe on the disc velvety black; posterior lobe fulvous, regularly and more or less finely mottled with fuscous and very sparsely covered with short golden depressed hairs. *Prosternum* black with the posterior margin between the front coxæ and some markings on the collar flavous, the posterior halves of the propleura concolorous with the posterior lobe of the pronotum, anterior halves separated from anterior lobe of pronotum by a dark fulvous elongated raised area. *Meso- and metasterna* black with the acetabula fulvous. *Scutellum* velvety black with a dark fulvous vitta on each side towards the apex. *Hemelytra* extending to the middle of the fourth dorsal ventrite, covered with short semi-erect dark hairs and including the membrane fulvous, regularly mottled and shaded with fuscous; extreme apex of corium white; wings smoky with basal half of the costal margin yellow. *Abdomen* above shining black, laterally covered with a depressed pubescence, a spot at the base of the lateral margin of each ventrite bright fulvous; below castaneous, shading to black laterally, the connexival spots at the bases of the ventrites and various spots and markings fulvous. *Coxæ* shining castaneous with patches of pale hairs, trochanters and femora castaneous mottled and banded with fulvous and black; tibiæ fulvous with the base and apex widely and numerous narrow annulations (three to four on the fore and hind tibiæ and ten to eleven on the hind tibiæ) black; tarsi castaneous, the basal half of the third joint fulvous, apical joint of posterior tarsi slightly longer than the basal two together; anterior and middle tibiæ with a row of fine spine-like teeth along the underside.

Total length 10.1 mm., width across humeral angles 2.7 mm., width across abdomen at widest part 4.1 mm.

1 ♀, Jugeh River, 7000-9500 feet, 23. vii. 1922.

This is possibly the brachypterous ♀ of *N. mussooriensis*, Dist., or of *N. assamensis*, Paiva, which is closely allied to it. Both these species were described from single macropterous males. It is extremely likely that these two species are synonymous, although they differ slightly in details of colouring. Paiva states, however, that the basal antennal joint is longer than the head. In *mussooriensis*, Dist., it is only as long as from the ocelli to the apex of the head. Paiva's measurements may possibly be inaccurate, although his figure bears out the text. More material must be studied before the status of these three species can be definitely decided.

Family Miridæ.

Subfamily CAPSINÆ.

Tribe CAPSINI.

34. *Creontiades pallidifer*, Walk.

1873. *Capsus stramineus*, Walker, Cat. Hem. Het. vi. p. 120 (278); [name preoccupied, *tom. cit.* p. 96 (160)]. *Capsus pallidifer*, Walker, *tom. cit.* p. 199 [new name].

1904. *Megacœlum stramineum*, Distant, Faun. Brit. Ind., Rhyn. ii. p. 428.

1915. *Creontiades stramineus*, Poppius, Ann. Mus. Nat. Hung. xiii. p. 18.

One teneral ♀ in very bad state of preservation, but probably belonging to this species. Kari, 9800 feet, 27. vii. 1922.

Widely distributed over British India and also recorded from Java, Philippines, New Hebrides, Fiji, etc.

35. *Lygus* * *pulchellus*, Reuter.

Ann. Mus. Zool. St. Petersburg, x. 1905, p. 33 (1907).

1 ♂, Tacheng, l. viii. 1922; 1 ♀, Wei-si River, 27. vi. 1922.

Described from Szetschwan Province, China.

It is probable that *L. costatus*, Dist., from Nepal, is merely

* I take this opportunity to re-name my species *Lygus solani* described from Java (Bull. Ent. Research, xiii. p. 447, April 1923), and preoccupied by the *solani* (= *L. pabulinus*, L.) of the American author Curtis, Farm Ins. p. 434, 1860. I propose for it the new name *L. vandergooti*, nom. nov.

a form of this variable species. *L. kosempoënsis*, Popp., is also closely allied to *L. pulchellus*, Reut.

Subfamily DERÆOCORINÆ.

36. *Deræocoris horváthi*, Poppius (?).

Ann. Mus. Nat. Hungarici, xiii. p. 78 (1915).

1 ♀, Yangtze-kiang, N. of Chi-tien, 7000–8000 feet, 3. viii. 1922.

I have referred this specimen with some hesitation to Poppius's species described from a single ♂ from Tonkin. In the British Museum Collection there is also another ♀ from Tenasserim, Thagata (*Fea*), labelled by Distant "*lutulentus* var."

Family Gerridæ.

37. *Gerris (Aquarius) paludum*, F.

Gerris paludum, F., Ent. Syst. iv. p. 188 (1794).

2 ♀ ♀ (brachypterous), Gadsze on the Yangtze-kiang, 6600 feet, 20. vi. 1922.

Extends from Middle and North Europe across Asia to Amurland.

38. *Gerris (Limnotrechus) gracilicornis*, Horv.

1879. *Limnotrechus gracilicornis*, Horv., Ann. Soc. Ent. Belg. xxii. p. cix.

1903. *Gerris selma*, Kirk., Entomologist, xxxvi. p. 181.

1910. *Gerris lepcha*, Dist., Ann. & Mag. Nat. Hist. (8) v. p. 140 [n. syn.].

2 ♂ ♂ and 1 brachypterous ♀, Wei-si River, north of Wei-si, 6200–7700 feet, 26. vi. 1922.

Recorded from Japan, China, Sikkim, Kurseong, and Assam.

Rather variable in size and colouring. Specimens from Japan and Kurseong measure, ♀ 15 mm., ♂ 12½ mm., while those from Sikkim and Yunnan, ♀ 13 mm., ♂ 11¼ mm.

G. lepcha, Dist., is nothing but a very greasy specimen of *G. gracilicornis*, Horv. The specimens from Yunnan agree with Kirkaldy's description of *G. selma* in having the abdominal sternites depressed on each side of the carina.

Family Belostomidæ.

39. *Sphærodema japonicum*, Vuill.

1864. *Appasus japonicus*, Vuillefroy, Ann. Soc. Ent. France, p. 141, t. i. fig. 5.

1874. *Appasus lewisi*, Scott, Ann. & Mag. Nat. Hist. (4) xiv. p. 450.

1915. *Sphærodema japonicum*, Matsumura, Ent. Mag. (Japan), i. pt. iii. p. 106.

1 ♂ and 1 larva, near Yei-chih, 6400 feet, 30. vi. 1922.

Recorded from Japan.

Except for the darker colouring indistinguishable from Japanese specimens.

Suborder HOMOPTERA.

Family Cicadidæ.

Subfamily *TIBICINÆ*.

40. *Melampsalta soulii*, Distant.

Quintilia soulii, Dist., Ann. & Mag. Nat. Hist. (7) xvi. p. 561 (1905).

1 ♂, 1 ♀, Mekong River, north of Yei-chih, 6400 feet, 1. vii. 1922.

Described from Tze-ku, Yunnan.

This species closely resembles *M. montana*, Scop., the only Cicada occurring in England. *Quintilia mogannia*, Dist., another Chinese species, is undoubtedly congeneric with *M. soulii*, Dist., and should also be removed from the South African genus *Quintilia*.

Subfamily *GEANINÆ*.

41. *Cicadatra gregoryi*, sp. n. (Fig. 5, E, F.)

♂. Black, with the ventral surface of the abdomen and some obscure lateral markings on the abdominal tergites more or less castaneous; the eyes, a spot at the dorsal apex of frons, anterior lateral margins of vertex above antennæ, basal joint of rostrum, anterior and posterior margins and a median longitudinal stripe of the pronotum, pro-pleuræ, coxæ and trochanters interiorly and ventrally, posterior margin of mesosternum, apical and exterior areas of opercula, first ventrite between the opercula, disc and posterior margin of cruciform elevation of mesonotum, apical third of tympanal coverings, the posterior margin of the second, third, fourth, and fifth ventrites, and almost the whole of the sixth ventrite, ochraceous. Apices of femora, bases of tibiæ, an area at the base of the ventral surface of the fore and hind femora, the whole ventral surface of the hind femora, and the middle and hind tibiæ, and an obscure dorsal stripe along all the femora ochraceous. Fifth and sixth abdominal tergites each provided laterally with a small patch of silvery-white pubescence. Opercula scarcely reaching the first ventrite. Tegmina hyaline, veins fuscous with the upper surface ochraceous; the apex of the first apical area, a zigzag line formed by the bases of the first five apical cells, and the apex of the

brachial nervure (claval suture) fuscous; the corial fold fuscous, strongly marked as in *Quintilia subvitta*, Walk., with the interruption of the median sector very pronounced, bases of tegmina not at all orange-red as in *Q. pomponia*, Dist., basal cell somewhat infusate. Wings hyaline, veins luteous except round the apical margin, where they are fuscous; the base of the first apical area, a zigzag fascia at the base of the second, third, and fourth apical areas, and the anal fold broadly at the apex, fuscous; base of anal lobe opaque white, margined with fuscous.

Total length 19.9 mm., breadth across base of pronotum 8 mm., length of tegmen 21.5 mm., greatest breadth of tegmen 8 mm.

1 ♂, Yunnan (no special locality), 11. vii. 1922.

This species closely resembles *Quintilia pomponia*, Dist., described from N. India, of which only female specimens are known, and it is quite possible that it may prove to be the male of that species. It differs, however, in the absence of the orange-red tint at the base of the tegmina and wings, and the ochraceous markings over the lateral pronotal sutures; the anterior and posterior margins of the pronotum are also more widely luteous.

Quintilia pomponia was placed by Distant in the Tibicinæ because of its similarity to *Q. subvitta*, Walk., from N. India, in which the tympanal coverings are absent in the male. But in spite of the absence of tympanal coverings, *Q. subvitta*, Walk., is closely allied to *Cicadatra* and is not a *Quintilia* at all. This is borne out by the shape of the eighth abdominal tergite, which is similar to that of *Cicadatra*. I therefore propose that a new genus,

LYCURGUS, gen. nov.,

be erected for *Quintilia subvitta**, Walk., differing from *Cicadatra* in the absence of tympanal coverings in the male. Whether *Q. pomponia*, Dist., will belong to this genus or to *Cicadatra* will not be known until male specimens are found.

42. *Cicadatra shaluensis*, sp. n. (Fig. 5, C, D.)

Similar in colouring to *C. gregoryi*, but larger and more robust. Tegmina broader with fuscous markings much broader and more distinct; the zigzag line at base of apical

* 1850. *Cicada subvitta*, Walk. List. Hom. i. p. 222.

1862. *Tibicen subvitta*, Stål, Öfv. Vet.-Ak. Förh. 1862, p. 485.

1906. *Quintilia subvitta*, Dist. Faun. Brit. Ind., Rhyn. iii. p. 169, fig. 76.

cells extending from *r* 1 to the cubital nervure; the apices of nervures *r* 2, *r* 3, *m* 1, *m* 2, *m* 3, *m* 4, and *cu* strongly infuscate. *Wings* with the zigzag infuscation broad and distinct, extending from the costal margin to the base of the fifth apical area. *Frons* with horizontal ochraceous striations; opercula entirely black, extending a little beyond the first ventrite on to the second. *Abdomen* below entirely black, legs similar in coloration to those of *C. gregoryi*, but with the markings a bright shining yellow.

Total length 21 mm., breadth across base of pronotum 9 mm., length of tegmen 25.2 mm., greatest breadth of tegmen 10.3 mm.

1 ♂, Shalu, 9300 feet, 25. vii. 1922.

Closely allied to *C. gregoryi*, but readily distinguished by its greater size, the more extensive infuscation of the tegmina and wings, the black opercula and underside of abdomen, and the comparatively broader tegmina.

43. *Terpnosia clio*, Walk.

1850. *Dundubia clio*, Walk., List Homopt. i. p. 73.

1892. *Terpnosia clio*, Dist., part., Mon. Orient. Cicad. p. 141.

1906. *Terpnosia ransonneti*, Dist., part., Faun. Brit. Ind., Rhynch. iii. p. 128.

1 ♂, West of Yangtsen, 8000 feet, 8. vi. 1922.

Recorded from Western Himalayas, Mussoorie (*Mackinnon*).

Distant has created considerable confusion with regard to this and other allied species of the genus *Terpnosia*. In his 'Monograph of Oriental Cicadidae' he figures a specimen which is certainly not conspecific with Walker's type of *T. clio*, and is probably referable to *T. andersoni*, Dist., which he also figures on the same plate. His records of *T. clio*, Walk., from Sikhim, Burma, and Tenasserim all appertain to *T. andersoni*, Dist. His specimens of *T. ransonneti*, Dist., recorded from Mussooree, actually belong to *T. clio*, Walk. He has also confused specimens of *T. andersoni*, Dist., from N. India with *T. abdulla*, Dist.*. It thus appears that *T. ransonneti*, Dist., is confined to Ceylon, *T. clio*, Walk., is confined to N. India and Yunnan, while *T. andersoni*, Dist., is widely distributed, extending along the Himalayas into

* As stated by Moulton in his 'Cicadas of Malaysia,' I can find no differences in the genitalia of *T. abdulla*, Dist., and *T. andersoni*, Dist., and these species are probably local forms of the same species, but more material, especially from the type-locality of *T. abdulla*, must be examined before a definite statement can be made.

Yunnan, Burma, and down to Tenasserim. It is probable that the Malayan *T. abdulla*, Dist., is only a geographical race of *T. andersoni*, Dist.

Subfamily *CICADINÆ*.

Division *TOSENARIA*.

HYALESSA, gen. nov.

Head somewhat depressed as in *Graptopsaltria*, rather shorter than breadth between the eyes, breadth including eyes distinctly less than base of mesonotum and only two-thirds the breadth of the pronotum at the humeral angles; rostrum extending to the base of the second ventrite. *Pronotum* at the humeral angles about once and a third as broad as across the anterior angles; lateral margins feebly sinuate, strongly convergent anteriorly; posterior lobe distinctly but finely transversely rugose. Mesonotum once and a half the length of the pronotum. *Abdomen* (♀) slightly longer than the pronotum and mesonotum together. Tegmina and wings hyaline, tegmen three and one-fifth times longer than wide; corial fold forming a well-defined nervure, almost completely crossing the tegmen and only interrupted in the middle of the third ulnar area; fifth apical area scarcely shorter than the fourth—that is, the third postdiscal nervule arises very close to the branching of *m*1 and *m*2. Eighth abdominal tergite (♀) ending as in *Graptopsaltria* in a short sharp spine-like tooth.

Genotype, *Hyalessa ronshana*, sp. n.

It is with some hesitation that I describe a new genus from a single female specimen, the male characters being of such importance in the present system of classification. In this case, however, the extraordinary development of the corial fold, combined with the hyaline tegmina and wings, seems to me to make this genus a distinctive one. Its position is somewhat doubtful, but I have referred it to the *Tosenaria*, since it resembles *Graptopsaltria* and *Ayuthia* in the shape of the head and pronotum and in the well-defined corial fold. From these genera, however, it is readily distinguished by the entirely hyaline tegmina and wings, the former being distinctly narrower and more lanceolate than in *Graptopsaltria*.

44. *Hyalessa ronshana*, sp. n. (Fig. 4, D, E.)

♀. Black; frontal striæ, a longitudinal fascia at apex of frons, lateral margins of vertex above antennæ (narrowly),

a spot at the base of frons, the impressed areas between the ocellular area and the lateral margins of the vertex, a spot on each side of the base of the vertex between the ocelli and the eyes, rostrum (except apex), two traces of a median longitudinal stripe on the pronotum, one anteriorly, the other posteriorly, six small irregular spots—three on each side of the median line of the mesonotum, four close to the base, the other two more on the disc,—the posterior lateral margins of the mesonotum, the depressed area on each side of the cruciform elevation, the pro- and meso-sterna, various mottlings on the venter, the ventral margins of the pygofer, various markings on femora, and the basal part of the middle and hind tibiæ, all ochraceous.

Sternum and genæ covered with a dense white downy pubescence; second abdominal tergite with a long patch of dull whitish pubescence on each side at its base. Tegmina and wings hyaline with the veins more or less dark ochraceous towards the bases but blackish towards the apices; subcostal nervure castaneous; corial fold just below the costal margin luteous; basal membranes opaque greyish white.

Total length 33.5 mm., breadth across humeral angles 15 mm.

Length of tegmen 47.3 mm., greatest breadth of tegmen 15.5 mm.

1 ♀, near Ronsha, 7200 feet, 3. vii. 1922.

Division DUNDUBIARIA.

45. *Pomponia thalia*, Walker.

1850. *Dundubia thalia*, Walk., List Homopt. i. p. 72.

1866. *Pomponia thalia*, Stål, Berl. ent. Zeitschr. x. p. 171.

1 ♂, Gad-ssu, on the Yangtze-kiang, 6600 feet, 20. vi. 1922.

1 ♂, north of Wei-si, 6000–7700 feet, 27. vi. 1922.

1 damaged specimen, Mekong River, Sha-wa-tsun, 6200 feet, 29. vi. 1922.

Recorded from North India and Thibet.

The genus *Pomponia* includes a rather heterogeneous collection of species. *P. thalia*, Walk., is one of those in which the lateral pronotal tooth is absent. This character is evidently of no generic importance, as it occurs sporadically in different groups of species, and there is a gradual transition from strongly toothed forms like *P. imperatoria*, Westw., to those in which the teeth are absent. It is thus

impossible to separate species like *P. thalia* from the genus *Puranoides*, Moul., on this character as Moulton has done*.

46. *Pomponia scitula*, Dist.

1888. *Pomponia scitula*, Dist., Ann. Mus. Civ. Gen. (2a) vi. p. 456.

1906. *Aola scitula*, Dist., Faun. Brit. Ind., Rhynch. iii. p. 116.

1 ♂, Feilung, 4500 feet, 29. v. 1922.

Recorded from Burma, Assam, and Cambodia.

This species is undoubtedly allied to *Pomponia thalia*, Walk., and *P. siamensis*, Dist., and Distant wrongly removed it from the genus *Pomponia*. In *Aola*, Dist., the tympanal coverings are abnormally developed as in *Dokuma*, Dist., and *Oncotympana*, Stål.

Superfamily FULGOROIDEA.

Family Flatidæ.

Tribe CERYNIINI.

47. *Cerynia parnassioides*, sp. n. (Fig. 4, C.)

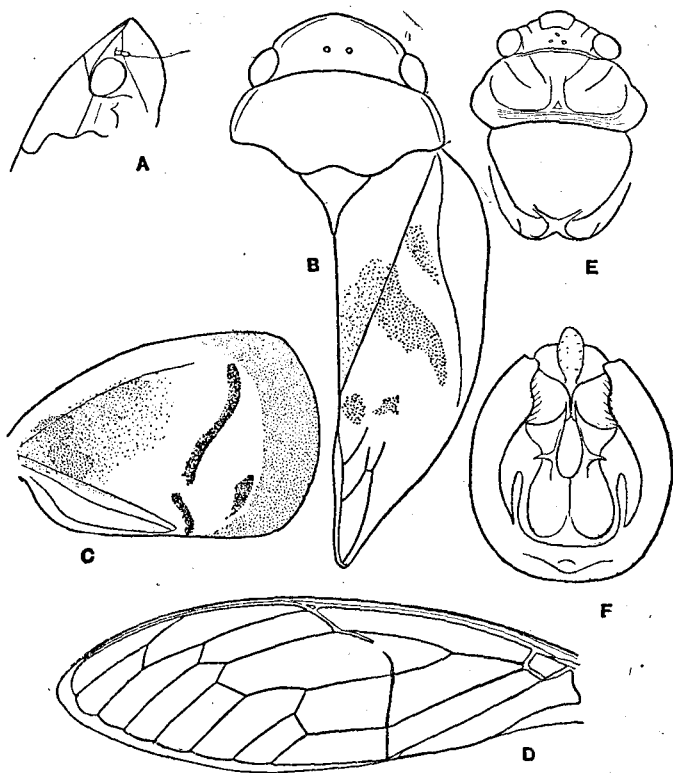
♀. *Head* greenish white, rostrum, clypeus, antenniferous tubercles, and eyes fuscous; antennæ black, the apex and the groove on the underside of the second joint mottled with bluish green. *Pronotum* and mesonotum greenish white; the former with the sides anterior to the shoulder-keels, and the posterior margin in the middle, pale fuscous; the latter with two fasciæ on the disc, interrupted towards the anterior margin and a lateral fascia on each side interrupted in the middle, fuscous. *Prosternum* fuscous; meso- and meta-sterna and pleura greenish white with fuscous tinge. *Abdomen* fuscous with the posterior halves of the sclerites whitish green and the genital wax-plate (♀) orange-yellow. *Tegmen* white, the extreme base, the costal margin, and clavus tinged with pale bluish green; apical margin with very broad pale fuscous border, three stripes (two short and one long and oblique) placed as in *Cerynia maria*, White†, but much broader and more distinct, dark fuscous;

* It is probable, however, that *Puranoides*, Moul., will stand, as the pygofer in the ♂ is of a different type from that in *Pomponia*, Stål. I take this opportunity to remove *Purana tigroides*, Walk., to the genus *Tanna*, Dist. Judging by the single almost obsolete pair of tubercles on the second ventrite, this species seems to be a connecting-link between *Tanna*, Dist., and *Puranoides*, Moul. *Leptosemia*, Mats., is unknown to me.

† See Melichar's Monogr. Flatidæ, Ann. Nat. Hist. Hofmus. Wien, xvi. pl. ii. fig. 13 (1902).

towards the base with a rather large irregular vermilion-red spot, formed by the partial fusion of two round spots, and extending from the claval suture to the costal membrane, the corium external to this red spot tinted with very pale brown. Coxæ and trochanters pale bluish green, femora

Fig. 4.



A, *Yunnana vera*, gen. et sp. n., lateral view of head and pronotum; B, dorsal view of same; C, *Cerynia parnassioides*, sp. n., tegmen showing colour-pattern; D, *Hyalessa ronshana*, gen. et sp. n., tegmen; E, head and thorax of same; F, *Nilaparvata muii*, sp. n., ♂, pygofer (end view).

fuscous tinged with green below and at the base, tibiae and tarsi dark fuscous.

Length of body 11 mm., expanse of tegmina 33 mm., breadth of tegmen 10 mm.

2 ♀ ♀, Gadsze on the Yangtze-kiang, 6600 feet, 20. vi. 1922.

This is a very distinctive-looking species and bears a rather superficial resemblance to a small butterfly of the genus *Parnassius*. It is allied to *C. maria*, White, and exhibits the same type of colour-marking, but is readily distinguished by the broad brown apical border to the tegmina and the much thicker dark brown stripes on the corium.

48. *Phromnia melichari*, China, nom. nov.

1901. *Flata inornata*, Melichar, nec Walk., Ann. Hofmus. Wien, xvi. p. 213.

1923. *Phromnia inornata*, Mel., nec Walk., Wyts. Gen. Ins. fasc. clxxxii. p. 16.

Except for its rather smaller size, this species agrees perfectly with Melichar's description of *P. inornata*, Walk., which he distinguishes from *P. intacta*, Walk., by the entirely black antennæ and fore and middle tibiæ. In the type-specimen of *P. inornata*, however, the antennæ and tibiæ are of the same colour as in *P. intacta*. As stated by Distant in the 'Fauna of British India,' vol. iii., *P. inornata*, Walk., can be distinguished from *P. intacta*, Walk., by the per-current median carina of the pronotum. The present specimens have been somewhat crushed in transit, and consequently the structure of the pronotum is difficult to make out accurately, but it is apparently similar to that in *P. intacta*, Walk.

Total length (including tegmina) 22 mm.; expanse of tegmina 40 mm.

Several examples mostly in poor condition. Also numerous larvæ probably of this species. Mekong River near Sha-wa-tsun, 6200 feet, 29.vi.1922; Lower Wei-si Road, 28.vi.1922, and (larvæ) Yung-lung-Chow, 5300 feet, 30.v.1922.

It is difficult to decide without seeing his collection which of the localities recorded by Melichar actually refer to *P. melichari*, as there has evidently been some confusion of species. In the British Museum collection, for example, of the specimens placed under *P. inornata*, Walk., by Distant, only one besides the type can be definitely referred to that species and that is labelled "Ind." There are specimens of *P. intacta*, however, from Sylhet, Siam, and Cambodia. Those recorded by Distant from N. Borneo belong to a distinct species allied to *P. melichari*, but distinguishable amongst other things by the longer second antennal joint. I am inclined to agree with Kirkaldy* that *P. deltotensis*,

* Journ. Bomb. Nat. Hist. Soc. xiv. p. 53 (1902).

Kirby, is probably only a teneral form of *P. marginella*, Oliv. Considerably more mature material of these species is needed before the synonymy can be satisfactorily cleared up, and a study of the genitalia is essential.

Family Eurybrachydidae.

49. *Nesis seresis*, sp. n.

♂. Vertex and upper half of genæ olive-green, the former with two reniform fuscous spots at base; frons sage-green, the anterior edge adjoining vertex infusate; clypeus ferruginous, rostrum fuscous, lower halves of genæ pale bluish green; eyes olivaceous, minutely speckled with dark brown; antennæ fuscous. *Pronotum* olivaceous, irregularly tinted with ferruginous brown and (especially in the middle of the posterior margin and on the shoulders) bright red; propleura and tegulæ red. Scutellum olivaceous ferruginously tinted on the disc; meso- and metasterna pale ochraceous shaded with fuscous; meso- and metanota fuscous. *Abdomen* above (except the sixth apparent tegite, which is pale yellow), the pygofer, and genitalia blackish brown; abdomen below and dorsal margins bright chrome-yellow; genital hooks ferruginous. Front and middle legs red, the fore tibiæ infusate towards the apex, and the tarsi black; hind legs fuscous, the femora below towards the bases and the first tarsal joints olivaceous. Tegmen fuscous with all the veins and reticulate nervules pale olivaceous; the anal half of the clavus, together with various mottlings on the clavus and base of corium, and an oblique transverse fascia extending from the costal margin to the middle of the corium, sordid white; the veins and nervules over the oblique fascia pale bluish green. *Wings* white, the apices infusate and provided with several small brown spots. Hind tibiæ armed with five spines increasing in size from a small basal one.

Length (excl. tegm.) 7 mm., expanse of tegmina 20 mm.

1 ♂, Chung-tang, 27. v. 1922.

A very distinct small species, easily distinguished at a glance from the other species of the genus by the brown-spotted wing-tips.

Family Delphacidae.

It is scarcely advisable to describe a new genus in this family from a single specimen, so that I have referred the following species to the genus *Nilaparvata*, Dist., on the strength of the presence of two spines on the basal joint of

the posterior tarsus, in spite of the fact that it differs in various characters from the type of that genus, *N. sordescens*, Motsch. (*greeni*, Dist.).

50. *Nilaparvata* (?) *mui*ri, sp. n. (Fig. 4, F.)

♂ macropterous, length 2.0 mm., tegmen 2.9 mm.

Head and pronotum brown, the carinae and the basal margin of the pronotum (widely in middle) sordid white; eyes dark brown, antennae brown. Mesonotum dark brown with the carinae and the apex (indistinctly), sordid white. *Abdomen* blackish brown, yellowish at base, and with the connexivum alternately pale yellowish and black. Tegmen hyaline, the margin all round, the membranal veins apically, the oblique sections of *M* and *Cu* and the *Cu* cross-vein, and the area between the apex of the claval vein and the claval commissure fuscous; all veins provided with small brown setiferous granules. *Wings* hyaline, veins apically fuscous.

Carinae of head and pronotum as in *Liburnia* (*Delphacodes*). Vertex slightly wider than long and slightly narrower anteriorly than posteriorly. Width of vertex at base 15*, breadth anteriorly 13, length in middle 11; eyes comparatively narrow and oblique; breadth across head including eyes 38, length of one eye 20. *Pronotum* with the posterior margin rather deeply angularly emarginate (135°), greatest width 43, length in middle 10. Mesonotum flat on the disc with the carinae becoming obsolete posteriorly. Tegmen rounded at apex, venation as in *Nilaparvata* but with *Cu* 2 unbranched from *Cu* 1, the two forming a single vein, so that there are only six apical cells excluding the stigmal cell. Tibial spur broader than in typical *Nilaparvata*, posterior basi-tarsus with two small spines equally distant from one another, as are the two outer spines in *N. sordescens*, Motsch. Pygofer and genitalia figured (fig. 4, F).

1 ♂, Chungso, 7200 feet, 9.viii.1922.

Family Membracidæ.

Subfamily CENTROTINÆ.

51. *Telingana* *scutellata*, sp. n.

♀. *Head* shining black, punctate, with a fine scattered golden pubescence, width including eyes 2.5 mm., length from base of vertex to apex of clypeus 1.45 mm.; antennae black, ocelli about equally as far from one another as from the eyes. *Pronotum* shining black, strongly rugosely punctate,

* This and succeeding measurements are in divisions of the micro-eter eye-piece, which at this magnification equal 64 to 1 mm.

medianly lævigately carinate, covered with fine golden pubescence anteriorly and with longer hairs posteriorly; metopidium vertical, lateral processes triangular in section, directed upwards and outwards with the apical third curved backwards, sharply pointed, edges carinate, rather broad and flattened dorso-ventrally, so that the two edges facing posteriorly are much closer to one another than to the anterior edge, which is very acute; posterior process arising well behind the lateral processes, the basal fourth directed upwards and backwards, the remainder directed backwards and gradually downwards, slender tapering gradually to the apex, four edged, the surfaces concave, extending scarcely to the apex of the abdomen and the base of the fifth apical cell of tegmen.

Scutellum shining black, triangular, short, not much longer than wide at base, apex acuminate, not at all bifid as in many species described in this genus, punctate, medianly lævigately carinate. *Abdomen* dull black, except the posterior margins of the segments which are sordid white and the genital segment which is shining black. *Tegmina* long, extending by more than one-third their length beyond the apex of abdomen, hyaline with a yellowish smoky tint, five apical and two discoidal cells, veins black, except the costal which is ferruginous and part of the apical marginal vein which is pale ochraceous; a fuscous streak extends over the second apical cell and the apex of the first discoidal cell. *Wings* hyaline with the tips smoky, veins black, four apical cells. *Sternum* and base of *scutellum* with white sericeous tufts.

Length to tips of tegmina 9.5 mm., width across tips of supra-humeral horns 5.5 mm.

1 ♀, S.E. of Atuntze, 12,000 feet, 20. vii. 1922.

Agrees with *curvispina*, Stål, *decipiens*, Kirb., *flavipes*, Kirb., *imitator*, Kirb., and *ornanda*, Dist., in having the apex of scutellum non-bifurcate, but the scutellum is much shorter than in those species and resembles more that in *T. consobrina*, Dist. Readily distinguished from other species by the long tegmina, extending one-third their length beyond the apex of the posterior pronotal process.

Family Cercopidæ.

Subfamily APHROPHORINÆ.

52. *Clovio multilineata*, Stål.

1866. *Ptyelus multilineata*, Stål, Öfv. Vet.-Ak. Förh. 1865, p. 154.

1866. *Clovio multilineata*, Stål, Hem. Africana, iv. pp. 75 (footnote) & 76.

Ann. & Mag. N. Hist. Ser. 9. Vol. xvi. 32

1902. *Clovia multilineata*, Mel. Ann. Mus. Zool. St. Petersburg, vii. p. 117.

2 ♀ ♀, Fen-ming-kai, S. of Likiang, 7700 feet, 11. viii. 1922.

Recorded from N. China (*Stål*); W. China; Sze-chuan, Taschuiwan-Luigupin (*Melichar*); Formosa (*Matsumura*).

This species superficially resembles *C. conifer*, Walk., but the vertex is longer.

YUNNANA, gen. nov.

Head, including eyes, narrower than pronotum at humeral angles; vertex about half as long as wide at base between the eyes and rather more than half as long as the pronotum in the middle; anterior margin obtusely angular, distinctly reflexed, disc concave in the middle, broadly and rather obsoletely carinate; eyes moderately small and rounded as in *Neænus*, Fowl., ocelli placed close together in a line with the anterior margin of the eyes, twice and a half as far from the eyes as from one another; frons inflated and strongly convex, very obscurely furrowed down the middle, the furrow more distinct and almost foveolate anteriorly, sides obscurely transversely striate; rostrum extending to middle of posterior coxæ. *Pronotum* feebly convex on disc, twice as wide as long, the anterior lateral margins laminate and reflexed, in outline convexly curved, posterior lateral margins concavely sinuate, posterior margin obtusely angularly emarginate, disc with a few scattered fine punctations, medianly narrowly carinate, the carina almost obsolete posteriorly. *Scutellum* small, triangular, about half as long as pronotum in the middle. *Tegmen* sub-hyaline, distinctly but sparsely punctate, feebly convex, the costal margin towards the base flattened and widely explanate. *Wings* rudimentary. *Hind tibiæ* with two spines.

Genotype, *Yunnana vera*, sp. n.

This very distinct genus bears a superficial resemblance to a *Lepyronia*, but is readily distinguished by the smaller rounder eyes, the reflexed anterior margin of the vertex, the rudimentary wings, and the much more flat and less tectiform tegmina.

53. *Yunnana vera*, sp. n. (Fig. 4, A, B.)

Shining, yellowish grey, shaded with brown, apical half of frons and genæ, clypeus, loræ, sternum, basal half of pronotum, scutellum, and abdomen dark brown. *Tegmina* narrowed apically, apical half sub-lanceolate; sub-hyaline

more or less regularly, but not densely punctate, the punctures brown; an oblique sordid white fascia commencing at the middle of the claval suture extends across the corium towards the middle of the costal area, and is bordered posteriorly by a brown suffused area, a spot adjoining this whitish stripe anteriorly at the claval suture, two spots side by side on corium near apex of clavus and the apical veins brown. Genital plates (anterior gonapophyses) rather suddenly narrowed apically, the hook-shaped apices directed outwards.

Length (including tegmina) 5 mm., width of pronotum 2 mm.

1 ♂, valley west of Tsa-si-la, 5. vii. 1922.

Subfamily CERCOPINÆ.

54. *Paphnutius ostentus*, Dist.

Faun. Brit. Ind., Rhyn. vi. p. 200 (1916).

1 ♀, near Pehalo, 9000 feet, 6. vii. 1922.

Recorded from N. India, Darjeeling.

The bases of tegmina in this species are sometimes red, but not so much so as in a rather larger and undescribed species from Tonkin.

Family Jassidæ (*Cicadellidæ*).

Subfamily CICADELLINÆ.

Tribe CICADELLINI.

55. *Cicadella* (*Tettigoniella*) sp. (*ferruginea*, F., group).

A heterogeneous collection of species are included under *C. ferruginea*, F., and this group is badly in need of revision. Several species have been described by Walker, but these have been wrongly synonymised by Distant under *ferruginea*, F. The type of the Fabrician species (♀) is in the British Museum (Banks Collection), the structure of the last ventrite is very characteristic, and actually none of Walker's species is synonymous. I therefore reserve the Yunnan species until the much-needed revision of this group can be undertaken. A single female was taken by Prof. Gregory near the Mekong R., 28. vi. 1922.

Tribe ERRHOMENELLINI.

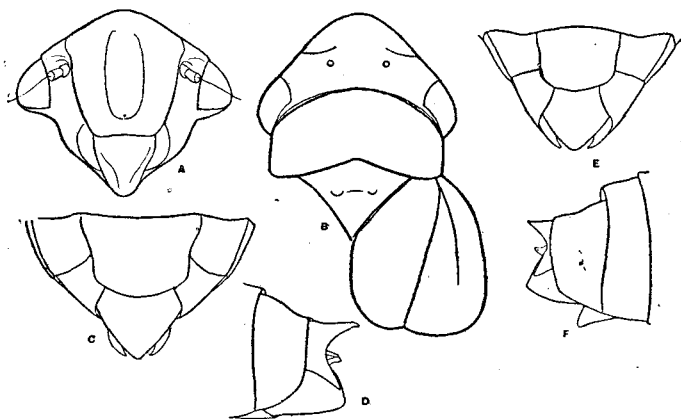
ONIROXIS, gen. nov.

Similar in general appearance to *Anoterostemma*, P. Löw. *Head* rather more acutely angularly produced, the posterior

margin more deeply emarginate; ocelli more distinct, placed much further on the disc and away from the frontal suture, about the same distance from one another as from the eyes; frons longer and narrower but much more inflated, the middle of the disc slightly longitudinally flattened; genæ and loræ narrower, clypeus much longer and more convex, strongly narrowed apically, the whole head in facial view longer and narrower. *Pronotum* longer, more distinctly angularly emarginate posteriorly. *Scutellum* longer and much less transverse. Tegmina brachypterous, reaching to the second abdominal tergite, the claval suture distinct, the corium longer than the clavus, their apices separately rounded and not uniformly truncate as in *Anoterostemma*. Wings rudimentary.

Genotype, *Oniroxis kariana*, sp. n.

Fig. 5.



A, *Oniroxis kariana*, gen. et sp. n., front view of head; B, dorsal view of same showing tegmen; C, *Cicadatra shaluensis*, sp. n., ♂, genital segments (ventral); D, same, lateral view; E, *Cicadatra gregoryi*, sp. n., ♂, genital segments (ventral); F, same, lateral view.

56. *Oniroxis kariana*, sp. n. (Fig. 5, A, B.)

♀. Castaneous variegated with pale and dark yellow. Frons, clypeus, genæ, and loræ pale testaceous, the frons laterally transversely striate with dark brown; vertex castaneous, posterior margin with two black spots below the ocelli, surrounded with very pale yellow. *Pronotum* castaneous, anteriorly irregularly pale yellow, the cicatrices

brown; posterior margin on either side of central emargination bright orange-yellow. *Scutellum* pale whitish yellow, with two dark cicatricial impressions on disc towards the base. *Tegmina* with the clavus and inner half of corium castaneous, the outer costal half pale yellow, except towards the base, and with the sector orange-yellow. *Abdomen* pale yellow with the apical halves of the tergites pale testaceous, a double row of spots down the middle and two fasciæ down each side of the dorsum dark brown.

Total length 4.3 mm., width of pronotum 1.2 mm.

1 ♀, Kari, 9800 feet, 27. vii. 1922.

Subfamily *BYTHOSCOPIINÆ*.

57. *Bythoscopus viridulus*, Mel.

Macropsis viridula, Mel., Ann. Mus. Zool. St. Pet. 1902, p. 120.

1 ♂, between Gadsze and Beta, 7000 feet, 21. vi. 1922.

1 ♀, Feng-ming-kai, S. of Li-kiang, 7700 feet, 11. viii. 1922.

Recorded from W. China (prov. Sze-tshwan).

58. *Oncopsis* sp.

I hesitate to describe a new species from the single badly preserved ♀ taken W. of Tzeku, 4. vii. 1922, but it is closely allied to the West Chinese species *O. fusca*, Mel.

Subfamily *TYPHLOCYBINÆ*.

Several species belonging to this group are represented in the collection by teneral and poorly preserved specimens, which are not worth describing.

LIX.—The Genus *Aulina*.

By STANLEY SMITH, M.A., D.Sc., F.G.S.

[Plate XXIV.]

I FOUNDED the genus *Aulina* in 1916* upon a single species—*A. rotiformis*, S. Smith †, a compound coral of astræiform growth habit. At the time, this species had only been found at the very top of the Lower Carboniferous around

* Abstr. Proc. Geol. Soc. no. 995 (1916), p. 2.

† *Loc. cit.*