

## XXIII RHYNCHOTA FROM THE GARO HILLS, ASSAM

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(Plates XXXIV-XXXVI).

[In this paper Mr. Paiva gives an account of a collection of Rhynchota (excluding the smaller Homoptera) made in the Garo Hills between June and October, 1917, by Mrs. Kemp and myself. The specimens were for the most part obtained in two localities: at Tura, the headquarters of the Garo Hills district, at an altitude of 1,200 to 1,500 ft., and on the summit of the ridge immediately above Tura at altitudes varying from 3,500 to 4,000 ft. Although these two localities are less than five miles distant from each other there are marked differences in the fauna. The differences are no doubt due mainly to the change in altitude, but may to some extent owe their origin to the different nature of the country in the two localities. In the neighbourhood of Tura the Garos have made extensive clearings for cultivation and the country consists of open land and low scrub interspersed by patches of ancient forest. On the range above Tura no cultivation has ever been attempted and the hills are entirely covered with high tree-jungle, often almost impenetrable in its density. As might be expected, it is from the latter region that the more interesting forms were obtained. Mr. Paiva has found in the collection a considerable number of forms hitherto known only from the Eastern Himalayas and has described as new two genera and eighteen species. Among the latter is a very curious cavernicolous Reduviid recently obtained by Mr. R. Friel, I.C.S., in the Siju Cave on the borders of the Garo Hills and Mymensingh districts.—*S. W Kemp.*]

### Family PENTATOMIDAE.

#### *Cantao ocellatus* (Thunb.).

Five specimens from above Tura, 15.vii-31.viii.1917; three specimens from Tura, 1,400 ft., x.1917.

Those collected in July and August are dark reddish ochraceous, while those collected in October are pale yellowish ochraceous in colour.

Found all over India.

**Poecilocoris hardwickii** (West.).

Two specimens from above Tura.  
Common in the Hills of Assam.

**Chrysocoris grandis** (Thunb.) var. **baro** (Fab.).

One specimen from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917;  
two specimens from above Tura.  
Recorded from Skkim, Assam, Burma, extending to Java.

**Chrysocoris stollii** (Wolff).

One specimen from Tura, 1,400 ft., x.1917.  
Universally distributed.

**Chrysocoris pulchellus** (Dall.).

One specimen from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917.  
This evidently rare species was originally described from Sylhet, Assam. A larger, but similarly marked, form comes from Ceylon. Hitherto the only specimen in the collection of the Zoological Survey of India was one from Trincomalee, Ceylon, collected, probably by Mr. E. E. Green, in November, 1906.

**Chrysocoris garoensis**, sp. nov.

Described from two specimens, one from Tura, 1,400 ft., x.1917 and one from above Tura.

Closely resembling *C. ornatus* (Dall.) from which it differs in the number and position of the spots on the scutellum and in the colour of the abdomen.

Head dark purplish with the apices of the lateral lobes bluish-green and in one specimen slightly purplish-red; antennae and rostrum black; pronotum purplish-red with the anterior margin shining green in the centre, eight bluish-black spots arranged three near anterior margin, three largest on disk of posterior area, and one at each posterior lateral angle; scutellum purplish-red with a spot at the centre of basal margin, one large, central, almost rounded spot on disk and six spots arranged in pairs, bluish-black, a distinct callosity at base of scutellum; pronotum with a fine, short, central, longitudinal carina on disk, extending from the centre of the middle anterior spot to about the middle of the central posterior spot; scutellum with a distinct, central, longitudinal carina extending through the centre of the large discal spot, this carina is connected with the basal spot of the scutellum by a fine bluish-black line; underside of head purplish, appearing bright green in certain lights; sternum bluish-black; abdomen beneath pale ochraceous with a small basal and a large apical spot black, stigmal spots rounded, bluish, lateral margins bright orange; legs purplish.

Length 15 millim., breadth between pronotal angles 8.9 millim.

*Type* No. 8368/HI in the collection of the Zoological Survey of India.

***Lamprocoris lateralis* (Guer.).**

Three specimens from above Tura.

Not uncommon in the hills of Assam and Burma.

***Lamprocoris roylii* (West.).**

Five specimens from above Tura.

Recorded from Nepal, E. Himalayas and hills of Assam.

***Hotea curculionoides* (Herr.-Sch.).**

One specimen from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917.  
India, Burma and Ceylon.

***Aspidestrophus morio*, Stål.**

One specimen from above Tura.

The genus *Aspidestrophus* was not hitherto represented in the collection of the Zoological Survey of India and was recorded only from the Naga Hills, Assam and Java.

***Cydnus varians*, Fab.**

One specimen from above Tura.

A fairly common species.

***Macroscytus subaeneus* (Dall.).**

One specimen from Tura, 1,400 ft., x.1917.

Found all over India and Burma.

***Dalpada oculata* (Fabr.).**

One specimen from Tura, 1,400 ft., x.1917 and two from above Tura.

Common in Assam.

***Dalpada jugatoria*, Leth.**

One specimen from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917.

Recorded from Sikkim, Assam and Burma.

***Dalpada varia*, Dall.**

One specimen from above Tura.

Found in Bhutan and Assam.

**Nevisanus nagaensis, Dist.**

Four specimens from above Tura, "common on tree-trunks. S. W. K."

This species was not previously represented in the collection of the Zoological Survey of India and was known only from the Naga Hills.

**Ochrophara montana, Dist.**

Two specimens from above Tura.

The only other specimens in the collection of the Zoological Survey of India are those from Chanda, Central Provinces, about which there is an interesting note on the damage they do to bamboo seed crops, in Vol. I, p. 147 of the "Fauna of British India, Rhynchota."

Recorded also from the Naga Hills and Burma.

**Cappaea taprobanensis (Dall.).**

Three specimens from above Tura.

Recorded from Sikkim, N. Khasi Hills, Assam, S. India and Ceylon.

**Tolumnia latipes (Dall.).**

One specimen from Tura, 1,200-1,500 ft., x.1917.

Found in Sikkim, Hills of Assam, Trivandrum and Burma.

**Aeschrocoris obscurus (Dall.).**

Seven specimens from above Tura.

As widely distributed as the preceding species.

**Eusarcocoris montivagus, Dist.**

Five specimens from above Tura, 15.vii-31.viii and ix.1917.

Same distribution as the two preceding species.

**Carbula crassiventris (Dall.).**

Three specimens from above Tura.

This species was not previously represented in the collection of the Zoological Survey of India.

Bhutan, Naga Hills, Assam and Burma.

**Hoplistodera virescens, Dall.**

One specimen from above Tura.

Recorded from Sikkim, Naga Hills and Burma.

**Antestia pulchra (Dall.).**

Five specimens from above Tura, 15.vii-31.viii and ix.1917.

Found in Sikkim and Burma.

**Exithemus similis**, sp. nov.

One specimen from above Tura, ix.1917.

Resembling *E. assamensis* but differing from it in the absence of the linear, levigate fascia on the anterior area of the pronotum and head; the scutellum is not paler in hue on its central disk, but is concolourous and evenly punctured throughout and has two small, almost contiguous, black spots near the centre of disk; the abdomen is pale yellowish ochraceous and the black fascia on the lateral area is less distinct, and extends to the apex of the fifth abdominal segment, a large, longitudinal, black fascia occupies the centre of the remaining apical segments; there is no large, black spot on the femora beneath a little before the apex, the apices of the tibiae and tarsi are brownish ochraceous; the antennae are pale ochraceous with the apices of the second and third joints narrowly, and the apical halves of the fourth and fifth joints brownish-black.

Length 12 millim.; breadth between pronotal angles 7.5 millim.

*Type* No. 8369/H1 in the collection of the Zoological Survey of India.

**Compastes bhutanicus** (Dall.).

Four specimens from above Tura.

Recorded from Bhutan, Sikkim, Assam and Burma.

**Priassus exemptus** (Walk.).

One specimen from above Tura.

Known from the Naga Hills and Tenasserim.

**Rhynchocoris humeralis** (Thunb.).

One specimen from Tura, 1,400 ft., x.1917 and one specimen from above Tura.

Recorded from Sikkim, Assam and Burma.

**Catacanthus incarnatus** (Dru.).

One specimen from Tura, 1,200-1,500ft., 15.vi-15.vii.1917.  
Almost universally distributed.

**Nezara viridula** (Linn.).

One specimen from above Tura.

Common all over India, Burma and Ceylon.

**Menida varipennis** (West.).

Three specimens from above Tura, 15.vii-31.viii and ix.1917; occurring in Sikkim, Khasi Hills and Tenasserim.

***Menida histrio* (Fabr.).**

One specimen from above Tura.

At present recorded only from Calcutta, Bangalore and Burma.

***Cecyrina platyrhinoides*, Walk.**

Three specimens from above Tura.

In these specimens the dark brown ochraceous colour given by Walker in his description of the species is replaced by shining black, the pale ochraceous and pale luteous markings on the various parts of the body are present but are less distinct; in one specimen, probably a male, the femora of all the legs and the intermediate and posterior tibiae are medially banded with red; the second and third joints of the rostrum are also red.

This species is apparently confined to Assam. It was not previously represented in the collection of the Zoological Survey of India.

***Cazira verrucosa* (Westw.).**

Two specimens from above Tura, ix.17, and one from Tura, 1,400 ft., x.1917.

•Found all over India and Burma.

***Picromerus obtusus*, Walk.**

Four specimens from above Tura.

Recorded from Sikkim, Naga Hills, Assam and Burma.

***Eusthenes rubefactus*, Dist.**

Two males and two females from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917; also one specimen from above Tura.

The latter is dark brown above and pale ochraceous on the underside and legs. It is partly deformed, the lateral margins of the pronotum being asymmetrical. This is evidently an immature male.

A common Assamese species.

***Pycanum ochraceum*, Dist.**

Two specimens from above Tura.

Recorded from Sikkim, Assam and Burma.

***Dalcantha dilatata*, Amy. and Serv.**

Three specimens from above Tura.

Probably only known from Assam.

***Cyclopelta siccifolia* (Westw.).**

One specimen from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917.

Found all over India, Burma and Ceylon.

**Aspongopus chinensis**, Dall.

Three specimens from above Tura.  
Common in Sikkim and Assam.

**Megymenum parallelum**, Voll.

One specimen from above Tura.  
Recorded from Sikkim, Assam and the Andamans.

**Eumenotes obscura**, West.

One specimen from above Tura.  
Previously recorded from Sikkim and Burma.

**Gonopsis coccinea** (Walk.).

One specimen from above Tura, ix.1917.  
Recorded from Sikkim, Assam and Burma.

**Sastragala heterospila** (Walk.).

One specimen from above Tura, ix.1917.  
This species was not previously represented in the collection of the Zoological Survey of India.  
Recorded from the Western Himalayas and the Nilgiris.  
Apparently very widely distributed.

**Sastragala trilineata**, sp. nov.

Pl. xxxiv, fig. 1.

Described from a single specimen from above Tura.  
Head ochraceous with four longitudinal series of punctures, two discal and two marginal, two small, triangular, black spots on basal margin, antennae pale ochraceous with the fourth and fifth joints slightly fuscous; rostrum luteous, its apex black; pronotum ochraceous, coarsely but sparingly punctured, anterior area levigate a little behind the anterior margin, posterior lateral angles spinously produced, acute, the spines dark castaneous, between the posterior lateral angles a broad castaneous fascia occupies the basal portion of the pronotum, and on the middle of the fascia there are three pale ochraceous, longitudinal fasciae, giving the central area a paler appearance; sternum pale ochraceous; scutellum light brownish on the basal area, the apical half luteous with a pale fuscous transverse band just before the apex; extreme basal angles black, the basal area and the apical half sparingly but strongly punctured; corium luteous, irregularly punctured with a few dark castaneous punctures which are most dense on the disk and at the apical angle; connexivum ochraceous, marked with black at the segmental angles; the apex of

the sixth abdominal segment broadly black; underside of abdomen and the legs pale ochraceous, the latter with the apices of the femora, tibiae and tarsi pale fuscous.

Length 7 millim., breadth between pronotal angles 4.5 millim.

*Type* No. 8370/HI in the collection of the Zoological Survey of India.

***Elasmostethus nebulosum*, Dist.**

Two specimens from above Tura.

Hitherto known only from the Naga Hills.

***Elasmostethus truncatulum* (Wa'k.).**

Two specimens from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917, and two from above Tura.

This and the preceding species were not previously represented in the collection of the Zoological Survey of India.

Recorded from Darjiling and Sibsagar, Assam.

Family COREIDAE.

***Helcomeria spinosa* (Sign.).**

One mature and one immature specimen from above Tura, 2,500 and 3,900 ft., respectively, 15.vii–31.viii.1917.

Recorded from Sikkim and Assam.

***Elasmomia granulipes* (Westw.).**

One specimen from above Tura.

Recorded from Sikkim.

***Mictis tenebrosa* (Fabr.).**

Two specimens from above Tura.

Occurring in Sikkim, the Khasi Hills, Assam and Burma.

***Mictis gallina*, Dall.**

Two specimens from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917.

Recorded from Burma.

***Homoeocerus subjectus*, Walk.**

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917 and one specimen from above Tura.

Within our limits, known only from Assam.

***Homoeocerus simiolus*, Dist.**

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917.

Recorded from Sikkim, Assam and Burma.



**Homoeocerus concisus**, Walk., var. *a.*

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917.  
Recorded from Sikkim and Burma.

**Cloesmus antennatus**, Dist.

One specimen from above Tura, 3,500–3,900 ft., ix.1917.

This specimen agrees in every respect with Distant's description of the species, but it is much larger, being 16 millim. in length.

Hitherto known only from Sikkim.

**Colpura erebus**, Dist.

Three specimens from above Tura  
Recorded from Sikkim and the Naga Hills.

**Colpura funebris**, Dist.

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917.  
Recorded from Sikkim and Assam.

**Colpura sulcata**, sp. nov.

Pl. xxxvi, fig. 1.

Described from one specimen from above Tura.

Black with ochraceous and reddish ochraceous markings, and some very fine, short, golden hairs above and beneath; extreme base of first joint and the apical joint of the antennae (excluding base), the ocelli, tubercles behind eyes, two lateral spots on basal margin of head, anterior, lateral and posterior margins of pronotum, two irregularly shaped marks on disk and a short longitudinal line on posterior margin of pronotum, apex of scutellum and costal margin of corium, reddish ochraceous; annulations to femora and tibiae of all the legs, those on the posterior femora very broad, veins on the basal area of membrane, transverse linear fasciae at incisures of connexivum, the apex of the first joint and the bases of the second, third and fourth joints of the rostrum ochraceous; some black spots on the pale areas of the femora; a lateral series of segmental spots and four spots at base of abdomen beneath dull black, those on the fifth, sixth and seventh segments larger and more distinct; membrane with a few irregular greyish marks; corium brownish ochraceous with a large dull black spot near inner angle followed by a small, indistinct ochraceous spot; pronotum with its margins slightly reflexed, two short, oblique pits or depressions on centre of anterior area and a shallow longitudinal discal sulcation which extends to the basal area; rostrum very long, extending to the apical margin of the fourth abdominal segment, first joint passing base of head,

shorter than any of the remaining joints, which are subequal, a somewhat deep, longitudinal sulcation on disk of abdomen beneath extending to the apical margin of the sixth segment.

Length 16.5 millim., breadth between pronotal angles 5 millim.

*Type* No. 8371/HI in the collection of the Zoological Survey of India.

***Hygia touchei* (Dist.) var.**

Three specimens from above Tura.

These specimens differ from the typical form in being black instead of piceous brown; the legs are entirely black with no ochraceous markings.

Recorded from Sikkim.

***Dasynus relatus*, sp. nov.**

Described from three specimens from above Tura.

Brownish ochraceous, thickly and darkly punctate; corium purplish; membrane fuscous brown, its basal angle darker; antennae black, the apical joint ochraceous with the base narrowly black; legs and underside ochraceous; antennae with the first joint slightly incrassated towards apex, first and second joints equally long, longer than the third and fourth, which are subequal; head a little longer than breadth between eyes, with a few minute scattered black punctures, which are most dense in a central longitudinal groove situated between the ocelli; apex of head broad, pale ochraceous; rostrum ochraceous, its extreme apex black, extending to base of mesosternum; pronotum densely punctate, the lateral margins narrowly black, posterior pronotal angles prominent, obtusely angulate and slightly recurved, disk of pronotum with a pale, faint, central, longitudinal carina, posterior marginal area of pronotum with a somewhat deep, transverse sulcation; scutellum brownish ochraceous, its apex pale and impunctate, the anterior area deeply punctured, transversely rugulose; coriaceous portion of hemelytra blackly punctate, outer portion of corium purplish, remainder brownish ochraceous, costal margin of corium ochraceous; abdomen above reddish ochraceous, the lateral margins of the sixth and the greater part of the apical two segments dull black; connexivum ochraceous; a small black spot on the lateral areas of the meso- and metasterna and a similar spot near the middle of the lateral areas of the second, third, fourth and fifth abdominal segments below.

Length 17-21 millim., breadth between pronotal angles 6-8 millim.

*Type* No. 8372/HI in the collection of the Zoological Survey of India.

***Cletus punctulatus* (Westw.).**

One specimen from above Tura.

Recorded from Sikkim and the hills of Assam.

**Cletus bipunctatus** (West.).

One specimen from above Tura.

Common throughout India, Burma and Ceylon.

**Cletus punctiger** (Dall.).

One specimen from Tura, 1,200–1,500 ft., vii–viii.1917 and two from above Tura.

Recorded from Murree; Bengal and Burma.

**Cletomorpha raja**, Dist.

Two specimens from above Tura.

Recorded from Sikkim, Assam and Burma.

**Riptortus linearis** (Fab.).

Three specimens from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917. Distributed throughout India, Burma and Ceylon.

**Serinetha abdominalis** (Fab.).

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917.

Apparently a common Indian species.

## Family LYGAEIDAE.

**Graptostethus trisignatus**, Dist.

Two specimens from Tura, 1,400 ft., x.1917 and five from above Tura.

Recorded from the Assam Hills and Burma.

**Nysius ceylanicus** (Motsch.).

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917.

A very common and widely distributed species.

**Ninus turaensis**, sp. nov.

Described from a single carded specimen from above Tura.

Head dark, clothed with fine white pubescence; eyes very dark purplish-red; antennae ochraceous, the basal and apical joints darker in hue, first joint stout, shortest, second longest, third and fourth joints much shorter than second, subequal, fourth in-crassated; pronotum brownish, densely pubescent on anterior area, the brown colouration on the posterior area in the shape of the letter **M**; scutellum, clavus and base of corium clothed with white pubescence, a spot at the apex of clavus near the inner angle of corium, a small linear mark near outer margin of corium a

little beyond base and the apex dark castaneous, a small impunctate, hyaline depression near apical area of clavus and a larger similar depression on disk of corium near the inner angle; membrane hyaline; legs ochraceous, claws of tarsi black.

Length excluding membrane 2.5 millim.

*Type* No. 8375/HI in the collection of the Zoological Survey of India.

**Macropes excavatus**, Dist.

Four specimens from above Tura.

Known only from Shillong, Assam.

**Malcus scutellatus**, Dist.

Three specimens from above Tura.

Recorded from Assam, Sikkim and Ceylon.

**Nerthus kempi**, sp. nov.

Pl. xxxvi, fig. 2.

Described from one carded specimen from above Tura.

Shining black, elongate. Base of first joint of antennae, basal margin of pronotum, central longitudinal fascia on apical area of scutellum not extending to base, basal marginal area of first and third segments of connexivum, basal third of intermediate and posterior femora, and a more or less distinct central annulation to posterior tibiae, yellowish ochraceous; clavus brownish ochraceous, with the scutellar margin black, and two longitudinal series of black punctures on marginal areas; basal half of corium semi-hyaline, its veins, costal margin and the apical area broadly black; membrane shining, bronzy; head, pronotum, scutellum and sternum densely punctured, the pale areas on the pronotum and scutellum almost impunctate, a small, foveate depression at the centre of the basal margin of scutellum; femora slightly incrassate, antennae with the first joint very short, second joint longest, third longer than fourth.

Length 11 millim., breadth between pronotal angles 3 millim.

The colour of the corium, connexivum and legs distinguishes this species from *N. dudgeoni*, Dist.

*Type* No. 8376/HI in the collection of the Zoological Survey of India.

**Vertomannus capitatus**, Dist.

Four specimens from above Tura.

Recorded from Assam and Burma and represented in the collection of the Zoological Survey of India from the Darjiling district.

**Paromius exiguus** (Dist.).

One specimen from above Tura.

Apparently widely distributed.

***Pamera pallicornis* (Dall.).**

Two specimens from Tura, 1,200–1,500 ft., 15.vi–15.viii.1917.  
Recorded from Assam, Sikkim, Burma and Shillong.

***Pamera vincta*, Say.**

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.viii.1917.  
Universally distributed.

***Dieuches uniguttatus* (Thunb.).**

One specimen from Tura.  
A very common and widely distributed species.

Family PYRRHOCORIDAE.

***Lohita grandis* (Gray).**

Four specimens from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917,  
and two from above Tura.

A fairly common species, also found in the plains.

***Physopelta gutta* (Burm.).**

Four specimens from above Tura.

Common in the Darjiling district. Recorded from Assam,  
Burma and Ceylon.

***Ectatops gelanor*, Kirk. and Edw.**

One specimen from Tura, 1400 ft., x.1917.

This species was not previously represented in the collection  
of the Zoological Survey of India.

Recorded only from Karenee, Burma.

***Dindymus lanius*, Stål.**

Five specimens from above Tura.

Recorded from the Naga and Khasi Hills, Assam, and  
Burma.

***Dindymus rubiginosus* (Fabr.).**

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917.

A common species in Assam. Occurring also in Malabar and  
Burma.

***Pyrrhopeplus posthumus*, Horv.**

One specimen from above Tura,

Recorded from Sikkim, Assam and Burma.

## Family ARADIDAE.

*Mezira membranacea* (Fabr.).

Three specimens from above Tura.  
An abundant species.

*Neuroctenus affinis*, Dist.

Two specimens from above Tura.  
Not previously known to occur in Assam.

## Family HYDROMETRIDAE.

*Rhagovelia nigricans* (Burm.).

Two specimens in alcohol, one from Tura, 1,200-1,500 ft., vi-vii.17 and another from the Ganool R., Damalgiri, Garo Hills, viii.17.

Recorded from the Southern Palaeartic Region and the Mascarene Is.

*Microvelia lineatipes*, sp. nov.

Pl. xxxiv, fig. 2.

Described from four carded specimens from Damalgiri, Garo Hills, ix.1917.

Head and pronotum piceous; lateral margins of head and greater part of pronotum with silvery grey pubescence; a fine, central, longitudinal sulcation extending from near base of head to apex; antennae castaneous, second joint longest, remaining joints subequal; a short, pale reddish ochraceous fascia near anterior margin of pronotum medially interrupted with black, some long black hairs near anterior lateral pronotal margins, lateral angles prominent; hemelytra fuscous, a long streak sometimes broken near inner margin of clavus, another on basal area of corium, three spots inconstant in size placed transversely across the middle of membrane, a long streak, sometimes broken up into spots, near inner margin and a somewhat elongate spot at the middle of apical area of membrane greyish-white; legs ochraceous, apical half of claw joint of all the tarsi, apices of fore tibiae and a longitudinal streak on the anterior part of all the femora, inwardly black, femora and tibiae of the legs hairy; underside dull black, densely pubescent, a spot beneath lateral pronotal angles and the connexivum beneath dark reddish ochraceous.

Length 2.3 to 2.5 millim.

*Type* No. 8377/HI in the collection of the Zoological Survey of India.

*Microvelia atromaculata*, sp. nov.

Pl. xxxiv, fig. 3.

Described from five carded specimens from Damalgiri, Garo Hills, ix.1917.

Head and pronotum dull black; apex of head, anterior margin and posterior portion of lateral angles of pronotum, reddish ochraceous; lateral margins of head and anterior area of pronotum greyishly pubescent; antennae ochraceous, apices of first and second joints and the whole of the fourth joint fuscous, second joint shortest, fourth longest, first and third subequal in length, third joint very slender; pronotum with a transverse patch produced narrowly backwards but not reaching basal margin, situated immediately behind the ochraceous fascia on anterior margin and two almost contiguous spots at basal angle jet black; hemelytra pale brownish, a longitudinal streak on clavus connected with a small spot at basal angle of corium, a large spot on disk of corium, a large, furcate mark near base of membrane, a rounded spot near apical angle of corium, a series of linear spots on inner margin and a large subrectangular spot on apical area of membrane greyish white; legs pale ochraceous, apices of tibiae and tarsi infuscate; underside black, greyishly pubescent.

Length 1.75 millim

*Type* No. 8378/HI in the collection of the Zoological Survey of India.

***Perittopus maculatus*, sp. nov.**

Pl. xxxiv, fig. 4.

Described from six carded specimens from above Tura, Garo Hills, 3,500–3,900 ft., 15.vii–31.viii.1917. Also found in a well in dense jungle above Tura, 3,800 ft., 15.vii–31.viii.17.

*Macropterous form*—Bright reddish ochraceous, with a large patch on each antero-lateral margin of pronotum black; the entire insect covered with erect hairs, those on the disk of the pronotum very short; head globosely arched, almost perpendicularly deflected anteriorly, a short longitudinal sulcation between eyes; antennae shining black, inserted below the eyes on a level with the clypeus, first joint stout, curved outwards, longer than any of the remaining joints, second and fourth subequal, slightly longer than the third, first three joints with long black hairs on inner margins; pronotum about as long as broad, lateral margins strongly sinuate, lateral angles broadly prominent, basal angle subangulate, disk moderately raised, minutely punctured, anterior margin depressed behind head, the whole surface covered with hairs which are most conspicuous on the lateral areas; hemelytra reddish-brown, with the claval margins and the basal and apical margins of corium black, clothed with short greyish hairs; membrane dusky grey, body beneath bright ochraceous, an irregular lateral fascia extending from the metasternum to the sixth abdominal segment black; legs bronzy black, coxae, trochanters, anterior femora and the bases of the intermediate and posterior femora pale ochraceous.

*Apterous form*.—Similar in colour to the macropterous form; lateral and basal angles of pronotum rounded; a slight transverse impression between the anterior and posterior lobes of the pro-

notum; the black patch on the antero-lateral area more distinct and rounded; pronotum not so long as in the macropterous form; abdomen above black as far as the sixth visible segment, remaining segments bright reddish ochraceous, the entire surface very hairy.

Length 2 millim.

Type No. 8379/Hr in the collection of the Zoological Survey of India.

### **Gerris (Limnogonus) tristan, Kirk.**

A single specimen from a stream in dense jungle above Tura, 3,800 ft., 15.vii-31.viii.1917.

A very common and widely distributed species.

### **Chimarrhometra orientalis (Distant).**

1879. *Halobates? orientalis*, Distant, *Trans. Ent. Soc. Lond.*, p. 126.  
 1879. " " " *Id. (gen.?) Sec. Yark. Miss., Rhyn.*, p. 12,  
 ff. 11, 12.  
 1896. *Chimarrhometra orientalis*, Bianchi, *Annuaire Mus. St. Pétersb.*,  
 p. 71.  
 1904. " " " Distant, *Fauna Brit. Ind. Rhy.*, II,  
 p. 190.  
 1908. *Rheumatotrechus himalayanus*, Kirkaldy, *Canad. Ent.*, XL,  
 p. 452.  
 1910. *Gerris monticola*, Distant, *Ann. Mag. Nat. Hist.* (8) V, p. 141.  
 1910. " " *Id., Fauna Brit. Ind. Rhy.*, V (Appendix),  
 p. 142.  
 1910. *Rheumatotrechus himalayanus*, Kirk., Distant, *Fauna Brit. Ind. Rhy.*, V (Appendix), p. 151.

One winged and five apterous females from the same locality as the preceding species.

The generic position of this species is doubtful. It has evidently been described under various generic and specific names by different authors. Distant himself has described it under two different genera. He based his original description on the structural character of the basal joint of the anterior tarsi but there appears to be a misunderstanding on this point. The male genitalia form a very good character for distinguishing the genus. Distant's description of *Gerris monticola* was taken from a macropterous female, while that of *Halobates? orientalis* was taken from an apterous male. We have in the collection of the Zoological Survey of India the type of *Halobates? orientalis* as well as the co-types of *Gerris monticola*. There is no doubt that Kirkaldy's species is the same as *G. orientalis*. It is common in Himalayan streams.

### **Eotrechus kalidasa, Kirk.**

One apterous specimen from above Tura.

This species was not hitherto represented in the collection of the Zoological Survey of India. I have no doubt that the specimen is specifically identical with the winged form described from Karenee, Burma, by Distant.



**Ptilomera laticaudata** (Hardw.).

Four apterous specimens from Tura, 1,200-1,500 ft., 15.vi—15.vii.1917.

Genus **Metrocoropsis**, nov.

*Type* : *Metrocoropsis femorata*, Paiva.

*Distribution* : Assam, Garo Hills.

Head subquadrate, as long as broad at base; lateral margins strongly concavely sinuate at junction of eyes, apical and basal margins convex; antennae four-jointed, first joint longest, almost as long as the remaining three together, third joint shortest; eyes large, posteriorly extending over the lateral angles of the pronotum; pronotum much longer than broad; hemelytra passing abdominal apex; anterior legs very robust in male, anterior femora much incrassated with two distinct teeth situated on the underside, one a little beyond middle and the other near apex, anterior tibiae almost as long as anterior femora, much stouter than the tibiae of the other legs, anterior tarsi with the basal joint much smaller than the second joint; intermediate and posterior legs very long; in the female the anterior femora are simple.

Allied to *Metrocoris*, but differing in the presence of the teeth on the anterior femora.

**Metrocoropsis femorata**, sp. nov.

Pl. xxxiv, fig. 5.

Described from five specimens from a stream in dense jungle, above Tura, 3,800 ft., 15.vii—31.viii.1917.

Head, pronotum, underside and legs ochraceous; antennae (excluding base of the first joint), a large patch on head between eyes, anterior and lateral margins of pronotum (excluding anterior angles), a central longitudinal fascia to pronotum extending from anterior margin to a little before basal angle, a broad curved fascia on each side of the central one, in some cases united anteriorly a little before middle, but not reaching basal angle, a few linear marks on intermediate and posterior acetabula, four longitudinal fasciae on anterior femora, the uppermost widest, the anterior tibiae and tarsi and two small rounded spots at the bases of the intermediate and posterior femora black; intermediate and posterior legs fuscous brown.

Length including membrane 8.5 millim.

This species resembles *Metrocoris nigrofasciatus* very closely but is easily separated from it by the markings on the pronotum and the anterior femora, etc.

*Type* No. 8381/HI in the collection of the Zoological Survey of India.

## Family REDUVIIDAE.

**Myiophanes greeni**, Dist.

One specimen from Tura, 1,400 ft., x.1917.

Not previously represented in the collection of the Zoological Survey of India.

Recorded only from Ceylon.

**Bagauda cavernicola**, sp. nov.

Pl. xxxvi, fig. 3.

Six specimens in alcohol from the Siju Cave, Garo Hills, Assam, xi.1917 (*R. Friel*).

Castaneous brown; constricted area of pronotum extending to the anterior half of the posterior lobe, a large rounded spot on corium at base of membrane, bases of anterior coxae, apical halves of anterior femora, the anterior tibiae (excluding base and apex), prosternum, a spot on the disks of meso- and metasterna, intermediate and posterior coxae, apices of intermediate and posterior femora, bases of intermediate and posterior tibiae creamy white; abdomen beneath paler than above; membrane pale fuliginous; other structural characters as in *B. splendens*, Dist. Antennae mutilated in type specimen.

Length excluding membrane 16 millim.

*Type No.* 8547/H1 in the collection of the Zoological Survey of India.

**Apocaucus laneus**, Dist.

One specimen from above Tura.

Hitherto known only from Kurseong, Darjiling district, E. Himalayas.

**Canthesancus gulo**, Stål.

One specimen from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917 and two from above Tura.

Recorded from Sikkim, Assam and Burma.

**Valentia apetala** (de Vuill.).

Three specimens from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917  
Known only from Sylhet, Assam.

**Valentia compressipes**, Stål.

Two specimens from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917.  
Recorded from Burma.

**Psophis erythraea**, Stål.

One specimen from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917  
and two from above Tura.

Not previously represented in the collection of the Zoological Survey of India. Recorded from North India.

***Centrocnemis stáli*, Reut.**

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917 and three found on a dead tree above Tura, 3,000 ft. Recorded from Darjiling district, E. Himalayas and Assam.

***Epirodera impexa*, Dist.**

Two specimens from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917. Not previously represented in the collection of the Zoological Survey of India. Hitherto known only from Burma.

***Acanthaspis helluo*, Stål.**

Three specimens from above Tura. Apparently confined to Assam.

***Scadra fuscicrus*, Stål.**

Three specimens from above Tura. Recorded from Burma and Ceylon.

***Scadra castanea*, sp. nov.**

Pl. xxxv, fig. 1.

Described from two specimens from above Tura.

Head light brown, collar, pronotum, scutellum and legs castaneous; antennae black, longly pilose, the base of the first joint pale ochraceous; pronotum shining, glabrous, constricted a little before the middle, a deep, central longitudinal furrow extending from the anterior margin to a little beyond the middle of the posterior lobe, a longitudinal depression on each lateral area of the posterior lobe extending from the impression at the constriction to the posterior basal margin, with the exception of the central longitudinal furrow, the other furrows on the pronotum are transversely impressed; scutellum strongly depressed on disk, the apical spines curved inwards; hemelytra dull black, the basal angle of the corium and a small triangular patch on its apical margin ochraceous, sometimes tinged with red; connexivum dilated, obliquely reflexed, marked alternately with orange yellow and black; sternum black; abdomen beneath black, centrally carinate, a pale ochraceous line on the middle of the apical margins of the first three basal segments, and a greenish-yellow patch on the basal lateral angles of the second, third, fourth and fifth segments; legs with the coxae, trochanters, apices of the femora broadly, bases and apices of the tibiae and the tarsi ochraceous.

Length 13.5 millim.

*Type* No. 8382/HI in the collection of the Zoological Survey of India.

Genus **Paralibavius**, nov.

*Type*: *P. singularis*, Paiva.

*Distribution*: Assam, Garo Hills,

Head deflected in front of eyes, its apex acuminate, central lobe tuberculous, eyes large, postocular area tumid, distinctly narrowed behind, forming a short cylindrical collar; antennae 7-jointed, inserted nearer the eyes than the apex, first joint long, passing apex of head, about as long as head, its apex incrassated, second joint longer than first, the remainder smaller and slender; pronotum slightly, transversely constricted before middle, centrally, longitudinally impressed, the impression not reaching the basal margin, anterior lobe tumid, faintly sculptured on disk, minutely tuberculous on lateral areas, posterior lobe with a shallow impression on each lateral area, where it is transversely striate; scutellum with three spinous angulations, the outer ones curved inwards, the central about two-thirds as long as the outer, disk with a large depression; hemelytra about reaching apex of abdomen; abdomen a little broader than hemelytra; a strong, acute spine at the posterior angle of each segment of the connexivum; femora slightly incrassated towards apex, two rows of minute, tuberculous spines on the underside of the femora and tibiae of all the legs, anterior tibia with a short spongy furrow at apex.

Readily distinguished from the other genera of the Ectrichodiinae by the spinous projections of the connexivum.

**Paralibavius singularis**, sp. nov.

Pl. xxxv, fig. 2.

Described from a perfect specimen from above Tura.

Head, anterior lobe and lateral margins of posterior lobe of pronotum, base and lateral margin of corium and connexivum pale reddish ochraceous; antennae black, extreme base of first joint ochraceous; disk of posterior lobe of pronotum, scutellum and legs castaneous; membrane dull black;

Length 8 millim.

*Type* No. 8384/HI in the collection of the Zoological Survey of India.

**Ectrychotes relatus**, sp. nov.

Pl. xxxv, fig. 3.

Three specimens from Tura, 1,200–1,500 ft. 15.vi–15.vii.1917 and three from above Tura.

Head, lateral margins of posterior pronotal lobe, scutellum, bases of clavus and corium, connexivum and legs reddish testa-

ceous; antennae longly pilose, black, first joint brown, its extreme base pale ochraceous; pronotum, excluding the posterior lateral margins, and base of scutellum cupreous; hemelytra black, a very deep black patch on clavus and disk of corium, the lateral margins and the apical area of corium reddish-black; connexivum marked with black on the third, fourth, fifth and sixth segments; sternum blackish; abdomen beneath reddish ochraceous, with the segmental sutures and large, lateral patches on each segment united to form a broad band, black; apices of the anterior and intermediate tibiae black; anterior and intermediate femora very faintly, and the posterior femora very distinctly, annulated with black at about middle; a narrow black annulation near base of posterior tibiae.

Length 13 millim.

*Type* No. 8385/HI in the collection of the Zoological Survey of India.

Closely resembling *E. cupreus*.

#### **Vilius melanopterus**, Stål.

Two specimens from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917.  
Recorded from Assam and Burma.

#### **Harpactor marginellus** (Fabr.).

Two specimens from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917 and two from above Tura.

Recorded from Assam, Burma and Aden.

#### **Harpactor nigricollis** (Dall.).

Four specimens from above Tura.

Found in Bhutan, Sikkim and Burma.

#### **Sphedanolestes mendicus** (Stål) var.

One specimen from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917.  
Recorded from Assam and Burma.

#### **Sycanus ? dubius**, sp. nov.

Described from a single specimen from above Tura, 2,500 ft. viii.1917.

Head, antennae, anterior lobe of pronotum, scutellum, membrane, body beneath, legs, and large rounded spots on the dilated connexivum shining black; antennae with the fourth joint very dark brown, the first joint longest, about as long as the anterior tibiae; head a little longer than pronotum; rostrum with the second joint longest; anterior lobe of pronotum small, centrally impressed near base, posterior lobe luteous, smooth, the lateral angles nodulosely subprominent; scutellum without a raised

tubercle or spine; clavus and corium dull black, margins of the dilated connexivum broadly brownish ochraceous, anterior tibiae outwardly spined before apex, coxae and trochanters of the anterior legs and the coxae of the intermediate and posterior legs dull reddish.

Length 28.5 millim.

*Type* No. 8386/H1 in the collection of the Zoological Survey of India.

I am not sure of the generic position of this species. It appears to belong to *Sycanus*, but the posterior lobe of the pronotum is not rugosely punctate and the anterior tibiae are outwardly spined before the apex.

### **Villanovanus dichrous (Stål.).**

Two specimens from above Tura.

Known only from Assam.

### **Rihirbus trochantericus, Stål.**

One male and one female from Tura, 1,500 ft., viii.1917.

A very variable species with a wide distribution.

### **Panthous excellens, Stål.**

Six specimens from above Tura.

Recorded only from Assam.

### **Gorpis annulatus, sp. nov.**

Pl. xxxvi, fig. 4.

Described from a single carded specimen from above Tura.

Head, pronotum, scutellum, and legs pale luteous; some light brown linear marks on vertex of head; antennae ochraceous, the apex of the second joint black; disk of anterior lobe of pronotum variegated with brown, its anterior and lateral margins and two indistinct patches on the posterior lobe brown, the latter rugosely punctured; scutellum with a black spot at centre of basal margin; hemelytra fuscous brown, the lateral margins of the clavus, the costal margin of the corium, medially interrupted, and all the veins luteous, a transverse patch a little beyond middle and the apex of the corium blackish, apical half of membrane hyaline; legs with two large black patches on the outside of the anterior femora, two indistinct annulations to intermediate and posterior femora and a slight annulation to intermediate and posterior tibiae near base fuscous; membrane passing abdominal apex.

Length including membrane 10 millim.

*Type* No. 8387/H1 in the collection of the Zoological Survey of India.

***Nabis assamensis*, sp. nov.**

Pl. xxxiv, fig. 6.

Described from one carded specimen from above Tura.

Head fuscous brown, a black V-shaped mark on disk extending from anterior margin of eyes to base of head; antennae black, extreme bases and apices of first and second joints, two annulations to second joint, third joint (excluding base) and fourth joint (excluding apex) ochraceous; pronotum with a greyish sericeous patch on disk of anterior lobe, widening posteriorly and extending from anterior margin to the transverse impression, the lateral margins and an elongate spot on the central area of the anterior lobe just before the transverse impression black; posterior lobe brownish mottled with ochraceous; scutellum black; hemelytra fuscous brown, thickly mottled with ochraceous; a large patch at apex of corium, and a linear mark at base of inner margin of membrane creamy white, a small black spot on disk of corium, some small spots on apical margin of membrane ochraceous; connexivum black with transverse ochraceous spots; legs brownish, mottled and annulated with ochraceous, some small, round, black spots on the femora; anterior and intermediate tibiae with a distinct row of small spines on the underside; tarsi brownish annulated with ochraceous; underside black; first joint of antennae longer than head, second joint longest, third slightly shorter than second, fourth shortest.

Length 9.25 millim.

*Type* No. 8388/HI in the collection of the Zoological Survey of India.

Closely allied to *N. mussooriensis*, Dist.***Velocipeda aliena* (Dist.).**

Four specimens from above Tura.

Recorded only from Burma.

**Family CAPSIDAE.**

Owing to the war it has not been possible to consult descriptions of various new species. It is, therefore, not advisable to describe specimens which do not agree with any of the described forms in the Fauna volumes of Rhynchota. The remainder of this paper will therefore consist only of those species which have already been recorded by Distant.

***Onomaus pompeus*, Dist.**

Two specimens from above Tura.

Recorded from Assam and Burma.

**Lasiomiris albopilosus** (Leth.) var.

Two specimens from above Tura.  
Recorded from Burma and Ceylon.

**Helopeltis cinchonae**, Mann.

Three specimens from above Tura.  
Recorded from the Darjiling district and British Bhutan.

**Poeciloscytus longicornis** (Reut.).

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917.  
A widely distributed species.

## Family PELOGONIDAE.

**Pelogonus marginatus** (Latr.).

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917.  
Found nearly all over India, Burma and Ceylon.

**Mononyx indicus**, Atkins.

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917,  
and two specimens from above Tura.  
A common E. Himalayan species.

## Family CICADIDAE.

**Tosena melanoptera** (White).

Two specimens from above Tura.  
Common in the Himalayas and U. Burma.

**Cryptotympana corvus** (Walk.).

One specimen from above Tura, "common with *Tosena melanoptera*. S. W. K."  
Recorded from the E. Himalayas and the Nilgiris.

**Leptopsaltria samia** (Walk.).

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.1917,  
and three from above Tura.  
Recorded from N. India and Sikkim.

**Platylomia similis** (Dist.).

Two specimens from Tura, 1,400 ft., x.1917.  
Recorded only from Sikkim and Assam.



**Platylomia umbrata** (Dist.).

Two specimens from Tura, 1,400 ft., x.1917.  
Found in Sikkim, Assam and Burma,

**Pomponia fusca** (Oliv.).

Four specimens from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917 and six from above Tura. "This species differs in note from very closely allied form from Tura, 1,300 ft. Its call is a harsh monotonous drone, whereas the species at 1,300 ft., though it begins in similar style, after a short period changes to an ear-splitting screech, 3,900 ft., vii.1917. S. W. K."

Occurring in Assam and the Nilgiris.

## Family FULGORIDAE.

**Fulgora viridirostris** (Westw.).

Two specimens from Tura, 1,200-1,500 ft., 15.vi-15.vii.1917.  
Recorded from Assam, Jumna Valley and Burma.

**Fulgora spinolae** (Westw.).

Three specimens from above Tura. "Not uncommon at 3,000 ft. with *F. clavata*, often found on the same tree. S. W. K."

Recorded from Sikkim, Assam and Mysore.

**Fulgora clavata**, Westw.

Five specimens from above Tura. "Not uncommon at 3,000 ft. Several specimens sometimes found on single trees to which they return after disturbance. S. W. K."

Fairly common in Sikkim and Assam.

**Saiva gemmata** (Westw.).

One specimen from Tura, 1,400 ft., x.1917.

Distributed throughout the E. Himalayas, extending to Assam.

**Saiva cardinalis** (Butl.).

Four specimens from above Tura, 2,500 ft., 1-10.viii.17.  
"On mossy tree-trunks, very inconspicuous. Only seen at 2,500 ft. S. W. K."

Recorded from Nepal and the Darjiling district.

**Aphana pulchella** (Guer.).

Two specimens from Tura, 1,400 ft., x.17.

Recorded from Sikkim, Assam and the Andamans.

**Aphana variegata** (Guer.).

One specimen from above Tura, 2,500 ft., viii.17.

Very widely distributed, extending from the Darjiling district through Assam and Burma to Cochin China.

**Lycorma punicea** (Hope).

Two specimens from above Tura.

Apparently confined to Assam and China.

**Euphria submaculata** (Westw.).

One specimen from above Tura, ix.17.

Recorded only from the Darjiling district, E. Himalayas.

**Loxocephala aeruginosa** (Hope).

One specimen from above Tura.

Extending from Garhwal in the Kumaon Hills to the hills of Assam.

**Centromeria simulata**, Dist.

Two specimens from above Tura, ix.17.

Known only from Assam.

**Borysthenes suknanicus**, Dist.

Two specimens from Tura, 1,200–1,500 ft., vii–viii.17.

Recorded only from Sukna, 500 ft., E. Himalayas.

**Melandeva ocellata**, Dist.

One specimen from above Tura.

Recorded from the Khasi Hills in Assam and from Momeit, Burma.

**Pochazia guttifera**, Walk.

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.

Extending from the Darjiling district through Assam to Burma and Tenasserim.

**Euricania ocellus** (Walk.).

Six specimens from above Tura.

Recorded from Sikkim and Assam; also found in China and Japan.

## Family MEMBRACIDAE.

**Hypsauchenia hardwicki** (Kirby).

One specimen from above Tura.

A common East Himalayan species; recorded also from Nepal, Assam and Burma.

***Nilautama typica*, Dist.**

Four specimens from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
Recorded from "India" and Tenasserim.

***Centrotypus assamensis* (Fairm.).**

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
Found in Sikkim, Assam, Burma and Tenasserim.

***Darthula hardwicki* (Gray).**

Three specimens from above Tura. "On twigs, 3,900 ft. Each specimen found sitting on clutch of eggs. Tail raised to perpendicular position when irritated. S. W. K."

Recorded from Nepal, Sikkim, Assam and Burma.

## Family CERCOPIDAE.

***Callitettix versicolor* (Fab.).**

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
Extending from Kashmir to Sikkim and Assam as far as Burma.

***Eoscarta semirosea* (Walk.).**

One specimen from above Tura.  
Found in the E. Himalayas and Assam.

***Cosmoscarta egens* (Walk.).**

Twelve specimens from above Tura.  
Common in the Darjiling district and Assam. Also recorded from Karenee, Burma.

***Cosmoscarta dimidiata* (Dallas).**

Three specimens from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
Recorded from Sikkim, the Bhutan Duars and Assam.

***Cosmoscarta dorsimacula* (Walk.).**

One specimen from Tura, 1,400 ft., x.17.  
Widely distributed, extending from the Kangra Valley to Assam.

***Cosmoscarta septempunctata* (Walk.).**

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.17, and one from above Tura.

Not uncommon in the Darjiling district and Assam; also found in Burma.

**Cosmoscarta funeralis**, Butl.

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
Recorded from the Khasi Hills, Assam.

**Leptataspis fulviceps** (Dallas).

Two specimens from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
and three from above Tura.  
Recorded from Sikkim, Bhutan, Assam and Burma.

## Family JASSIDAE.

**Tituria planata** (Fab.).

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
Recorded from Calcutta, Nepal, Darjiling district and Tenasserim.

**Petaloccephala latifrons** (Walk.).

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
Widely distributed. Recorded from the Bombay Presidency,  
the Darjiling district and Assam.

**Ledra dorsalis** (Walk.).

One specimen from above Tura.  
Occurring in Sikkim and Assam.

**Tettigoniella ferruginea** (Fab.).

Two specimens from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
A very common and widely distributed species.

**Tettigoniella leopardina**, Dist.

One from Tura, at light, 1,200–1,500 ft., 15.vi–15.vii.17.  
Recorded from Upper Assam and Tenasserim.

**Tettigoniella inflammata**, Dist.

One from above Tura.  
Only known from Margherita, Assam.

**Tettigoniella sikhimensis**, Dist.

Two specimens from above Tura.  
Recorded from Sikkim.

**Hylca paradoxa**, Stål.

One specimen from Tura, 1,200–1,500 ft., 15.vi–15.vii.17.  
Recorded from the Darjiling district, Burma and Tenasserim.

**Vangama steneosaura**, Dist.

One specimen from Tura.

Recorded from Bhim Tal, Kumaon Hills, Dehra Dun and the Darjiling district.

**Krisna strigicollis** (Spin.).

Two specimens from above Tura.

A very widely distributed species.

