

# THE FAUNA OF BRITISH INDIA,

INCLUDING

## CEYLON AND BURMA.

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### **RHYNCHOTA.—Vol. II.** (HETEROPTERA)

BY

**W. L. DISTANT.**

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## PREFACE.

THE second volume of the Rhynchota, by Mr. W. L. Distant, is published in two Parts, of which the first, comprising pp. 1-242, appeared in December 1903, and the other is now issued. Several of the families included in the volume have hitherto received but little attention in India, and consequently the number of genera and species described for the first time is considerable.

The first volume of Rhynchota, containing the families Pentatomidæ, Coreidæ, and Berytidæ, was issued in June 1902. The present volume contains nearly all the remaining families of the Gymnocerata, and includes the Lygæidæ, Pyrrhocoridæ, Tingididæ, Phymatidæ, Aradidæ, Hebridæ, Hydrometridæ, Henicocephalidæ, Reduviidæ, Saldidæ, Cera-tocombidæ, Cimicidæ, and Capsidæ, leaving the Anthocoridæ and the Cryptocerata to be described in order to complete the account of the Indian Heteroptera. The Homoptera also remain to be dealt with.

A sketch of the structural details and a brief account of the scheme of classification, with a synopsis of the families of Heteroptera, were comprised in the Introduction to the first volume. All general remarks not contained in that Introduction are deferred by the Author until the Rhynchota are completed.

In other volumes of the 'Fauna of British India' now in

preparation or under consideration, it is proposed to include certain families of Beetles (Coleoptera), the Butterflies, and the Land-Mollusca. The families of Beetles to be first described are of economic importance on account of the injury they do to forests and agriculture.

W. T. BLANFORD.

April 1904.

## Family CAPSIDÆ.

This is an extremely large family, of which, apart from the Palæarctic and Nearctic species, and a considerable number of genera and species from Central America, our knowledge is still fragmentary.

The Capsidæ comprise insects with a more or less soft integument, but with most variable structural characters. The head is rarely provided with ocelli; the antennæ are four-jointed, the first joint usually the stoutest, and the third and fourth the most slender, but this is not an invariable rule; the rostrum is four-jointed, and one of the best and most distinctive characters is found in the presence of a cuneus, or more or less triangular semi-detached piece at the apex of the corium.

It has been generally supposed that the Capsidæ subsist exclusively on the juices of plants, trees, and fruits, but this is not a universal habit. Records have long existed as to the predatory habits of some species on other insects, and this information has been well garnered and published by Reuter (*Ent. Month. Mag.* 1903, p. 121). Another characteristic of the family is the wonderful simulation by many species of insects of other orders, especially of ants.

Of the Palæarctic Capsidæ we know most, and of those belonging to the European section our knowledge is the most complete, and this largely owing to the work of Reuter. The Nearctic representatives are also fairly well worked, and the present writer has described a large number of species from Central America. Of the Ethiopian Capsidæ very little is known; while, for the Oriental Region, the following pages contain by far the largest enumeration of genera and species. Some Australasian species have recently been described, but the Capsidæ of this great region are practically unrecorded.

One of the most considerable aids to the study of the whole family was afforded by the late E. T. Atkinson, who, in 1890 (*Journ. Asiat. Soc. Beng.* lviii, pt. 2, Suppl.), published a catalogue of the described species and genera to the year 1889. Considering that this work was prepared and published in Calcutta, it is somewhat remarkable how comparatively few are the omissions and errors which it contains, and it remains a witness to the loss which the study of Rhynchota sustained in the premature death of its compiler.

The classification of the family is largely dependent on the work and propositions of Reuter, who has made the Capsidæ a special study, and I have endeavoured to follow his arrangement as far as my own views will allow; but at present the classification of the family is more reflective of personal opinion, and contrived for the purposes of entomological arrangement, than exhibiting an

evolutionary or philosophical conception. The Capsidæ are a very difficult group to study, their affinities are of the most complicated description, and for the present we must be satisfied with a somewhat artificial or cabinet arrangement. Where I have diverged principally from the excellent work of Reuter, is in the taxonomical value ascribed to a structural character of the head. In my opinion a longitudinal incision or sulcation on the upper surface of this region is a primary distinction, and affords a character for the separation of a distinct subfamily. The remaining genera fall into two other subfamilies by the presence or absence of ocelli. This arrangement naturally exhibits in the first two subfamilies, *Mirinæ* and *Capsinæ*, some considerable superficial resemblance between certain genera belonging to the two groups, as, for example, the genera *Megacælum* (*Mirinæ*) and *Calocoris* (*Capsinæ*); but this is only what is more or less seen in any large divisions which have become necessary for the classification of other animals, though it constitutes the greatest divergence between the classification pursued here and elsewhere.

As regards the divisions in each subfamily no fixed rule exists, either in proposition or sequence. Those of Reuter are generally accepted, but at least their sequence is not followed by Uhler, and they are altogether unused by Saunders. Their value, however, cannot be overestimated as factors in generic discrimination, if their structural differences are not appraised at too high a value; they are but means to an end, and this at present is all we can expect.

It is necessary here to make a few remarks as to the priority of the names given to these divisions, a question which seems likely to reduce the whole arrangement to chaos. By some recent writers it is insisted that the name of a division must necessarily be founded on that of the earliest described genus which it contains, and this, if feasible, would doubtless constitute a good rule. But it is at once evident that such a procedure could result in no finality, and must obscure any reasonable classification by constant and useless changes. For instance, a writer forms a new division, and gives it a name founded on the earliest described genus which it is then known to contain. Another worker is subsequently able to include another and older genus in the group, and therefore a change of divisional name is, on this argument, necessitated, to be again and again repeated as other and earlier described genera may be found to fall into the divisional group. Kirkaldy, in his contribution to the 'Fauna Hawaiensis,' has shown by his almost universal change of nomenclature what this process may produce, and these remarks are intended as our vindication for not recognizing the same. A similar argument has been used to even alter the family name Capsidæ to Miridæ, because the genus *Miris* was earlier described than *Capsus*! In such a course what entomological name would stand? In Rhopalocera, Lycænidæ must become a deposed term, and in the Hymenoptera, as Col. Bingham informs me, the family

name Pompilidæ must disappear, as it is founded on *Pompilius* (1798) and contains a genus *Ceropales* (1796). These are only examples!

*Synopsis of Subfamilies.*

- A. Head longitudinally impressed or sulcated, or anteriorly excavated . . . . . *Mirinæ.*
- B. Head entire, neither sulcate nor excavated.
  - a. Head without, or practically without, ocelli . . . . . *Capsinæ.*
  - b. Head provided with distinct ocelli . . . . . *Isometopinæ.*

Subfamily I. MIRINÆ.

*Mirides*, *Amy. & Serv. Hém.* p. 277 (1843).

*Myridina*, *Berg, Hém. Argent.* p. 117 (1879).

*Capsinæ*, Div. *Miraria*, *Dist. Biol. Centr.-Amer., Rhynch.* i, p. 235 (1883).

*Miraria*, *Reut. Act. Soc. Sc. Fenn.* xiii, p. 565 (1884).

This subfamily is universally distributed, and, as in the Capsidæ generally, comprises insects of most diverse facies.

Division *HERDONIARIA*.

*Herdoniaria*, *Dist. A. M. N. H.* (7) xiii, p. 103 (1904).

*Pilophoraria* (part.), *Reuter, Act. Soc. Sc. Fenn.* xiii, p. 566 (1884).

Allied to the *Myrmecoraria*, *Reut.*

Cuneus always discernible; head prominent, sometimes very large, always with a distinct longitudinal impression between the eyes; pronotum transversely constricted, the anterior area or lobe somewhat broad and long, but never broader, and generally narrower, than the posterior area; second joint of the antennæ either very strongly or slightly apically incrassated; scutellum sometimes spined.

The Nearctic and Neotropical genus *Xenetus*, *Dist.*, I take as typical of this division, and I also include the genera *Herdonius*, *Stål*, *Zacanthus*, *Dist.*, *Zosippus*, *Dist.*, *Minytus*, *Dist.*, *Saturniornis*, *Kirk.*, *Erotocoris*, *Dougl. & Scott*, *Systellonotus*, *Fieb.*, and apparently *Chrysorrhænis*, *Kirk.*\*

*Synopsis of Genera.*

- A. Eyes well separated from anterior margin of pronotum.
  - a. Apex of second joint of antennæ incrassate; lateral margins of pronotum concavely sinuate; hemelytra about twice as long as head and pronotum together . . . . . ISABELLINA, p. 415.

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\* Some of these genera are claimed by Bergroth (*Wien. ent. Zeit.* xvii, p. 35, 1893) as belonging to Reuter's division *Pilophoraria*, to which they have a superficial resemblance, but are separable by the longitudinal sulcation to the head.

- b. Apex of second joint of antennæ not incrassate; lateral margins of pronotum nearly straight, not sinuate; hemelytra about three times as long as head and pronotum together ..... ONOMATUS, p. 416.
- B. Eyes touching or almost touching anterior margin of pronotum.
- a. Legs and antennæ of moderate size and length.
- a. Pronotum moderately constricted; scutellum longitudinally sulcate ..... [p. 417.  
CALLICRATIDES,
- b. Pronotum strongly constricted; scutellum foveate ..... HARPEDONA, p. 418.
- b. Legs and antennæ very long.
- a. First joint of antennæ as long as head and pronotum together; rostrum considerably passing posterior coxæ; pronotum coarsely punctate or subrugulose. MYSTILUS, p. 420.
- b. First joint of antennæ as long as head, pronotum, and scutellum together; rostrum reaching intermediate coxæ; pronotum moderately punctate ..... [p. 421.  
MECISTOSCELIS,
- c. Antennæ with the first joint strongly amplifiedly incrassate ..... CLAPMARIUS, p. 419.

Genus **ISABELLINA.**

Isabel, *Kirk. J. Bomb. N. H. Soc.* xiv, p. 58 (1902).

Type, *I. ravana*, Kirby.

*Distribution.* Ceylon.

Head triangular, subhorizontal, with a central narrow longitudinal impressed line or sulcation, eyes well separated from anterior margin of pronotum; rostrum reaching apex of posterior coxæ; antennæ moderately long and slender, second joint slightly more than twice as long as first and distinctly thickened at apical area, basal joint slightly thickened, eyes distinctly separated from anterior margin of pronotum; pronotum with the basal at least twice as broad as anterior margin, with a central longitudinal sulcation, and two transverse impressions, one immediately behind anterior margin, the other before middle, lateral margins concavely sinuate, posterior angles subspinously produced, disk transversely rugosely striate; scutellum moderately tumid; hemelytra subhyaline; legs of moderate length, posterior femora moderately incrassate; tibiæ finely setose.

Kirkaldy placed this genus in the *Capsaria*. He had, by the omission in his description, evidently overlooked the central longitudinal incision to the head.

1356. *Isabellina ravana*, Kirby (Capsus), *J. Linn. Soc., Zool.* xxiv, p. 106, pl. iv, f. 10 (1891); *Kirk. (Isabel) J. Bomb. N. H. Soc.* xiv, p. 58, pl. A, f. 9, pl. B, f. 7 (1902).

Very pale testaceous, more or less mottled and speckled with

reddish; head and pronotum with longitudinal reddish or brownish

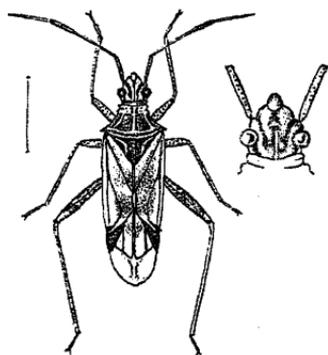


Fig. 263.—*Isabellina ravana*.

stripes; pronotum with the posterior lobe thickly transversely striate; scutellum brownish, with three pale longitudinal lines, one central, the others on lateral margins; hemelytra pale subhyaline, the clavus, subclavial area, and lateral margins ochraceous; cuneus and veins to membrane reddish; antennæ with the first and second joints ochraceous with fuscous speckles, second joint with apex reddish, remaining joints fuscous, third luteous at base; legs more or less speckled with dull reddish, especially on posterior femora.

Length 7 to 8 millim.

*Hab.* Ceylon; Pundaluoya (*Green*). Burma; Karennee.

#### Genus **ONOMAUS**, nov.

Type, *O. pompeus*, Dist.

*Distribution.* Assam, Burma.

Subelongate; head moderately large and tumid above, strongly perpendicularly deflected in front of antennæ, distinctly centrally sulcated, eyes well separated from anterior margin of the pronotum; antennæ a little shorter than the body, first joint a little longer than head and anterior area of pronotum together, second joint longest, slightly longer than third; rostrum reaching posterior coxæ, first joint about as long as head; pronotum subtriangular, narrowed anteriorly, with a very narrow anterior collar and somewhat obscurely constricted at about one-third from anterior margin, posterior margin upwardly curved at lateral angles, which are subprominent; scutellum tumid; hemelytra with the lateral margins a little sinuate; corium with cuneus about as long as abdomen; membrane with an elongate, basal, subquadrate cell; legs long, tibiæ longer than femora, posterior tibiæ half as long again as femora; cuneus longer than broad.

#### 1357. *Onomaus pompeus*, sp. n.

Head ochraceous, its apex, basal margin, central sulcation, and the antennæ piceous, basal half of third joint of antennæ luteous; pronotum dark chocolate-brown, the narrow anterior collar, anterior area, and a central longitudinal line to posterior area luteous, a central piceous spot on anterior luteous area; scutellum pale virescent, its basal and lateral margins, central line and apex piceous;

corium and cuneus pale luteous; clavus, a transverse fascia beyond middle, apical margin and apical area of cuneus chocolate-brown; membrane pale ochraceous, its apex broadly fuscous, the venation piceous; sternum piceous; abdomen beneath luteous, its lateral margins and transverse segmental fasciæ pale sanguineous; legs luteous, apices of anterior and intermediate femora, two very broad annulations to posterior femora, and bases of tibiæ pale sanguineous; apices of anterior and intermediate tibiæ, subbasal annulation to posterior tibiæ, and apices of tarsi piceous.

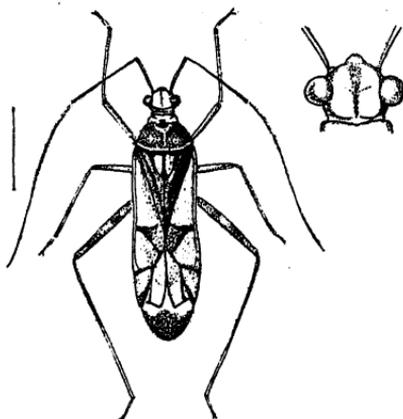


Fig. 264.—*Onomaeus pompeus*.

Length 10 millim.

*Hab.* Assam; Nāga Hills (*Doherty*). Burma (*Coll. Dist.*).

#### Genus **CALLICRATIDES**, nov.

Type, *C. rama*, Kirby.

*Distribution.* Ceylon.

Body oblong; head with eyes much broader than anterior margin of pronotum, disk between eyes with a flat shield-like process, which extends to the antenniferous tubercles, but does not quite reach base, distinctly longitudinally impressed or finely sulcate, apex porrectly deflected in front of this process; antennæ inserted in front of the eyes, basal joint incrassated, about as long as head, moderately curved outwardly, second joint longest, moderately thickened, about four times as long as the first; rostrum not quite reaching the posterior coxæ; pronotum about as long as broad, obsolete constricted at about one-third from apex, narrowed anteriorly, basal twice the width of anterior margin; scutellum moderately long, tumid, subdepressed and longitudinally sulcate; hemelytra hyaline; corium with cuneus just passing abdominal apex, cuneus longer than broad; membrane with a long basal cell; legs of moderate length, posterior femora longest and incrassate.

By the structure of the hemelytra resembling *Hyalopeplus*, Stål, but differing entirely from it by the structure of the head.

1358. *Callicratides rama*, Kirby (*Capsus*), *J. Linn. Soc., Zool.* xxiv, p. 106 (1891); *Kirk.* (*Hyalopeplus*) *J. Bomb. N. H. Soc.* xiv, p. 58, pl. A, f. 8, pl. B, f. 6 (1902).

Pale ochraceous; antennæ sometimes fuscous, sometimes with

first joint and basal half of second more or less ochraceous; pronotum with the anterior lobe finely mottled with reddish, basal margin and some linear spots at anterior margin black, a central longitudinal line black or reddish, the lateral margins

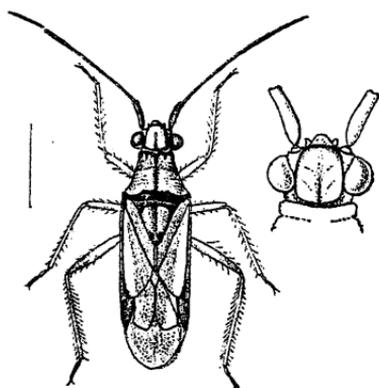


Fig. 265.—*Calliocrutides rama*.

also sometimes black; hemelytra hyaline, the lateral margins and cuneus reddish, the venation piceous; femora, especially posterior femora, finely spotted with fuscous-red, their bases unspotted.

Length 8 to  $9\frac{1}{2}$  millim.

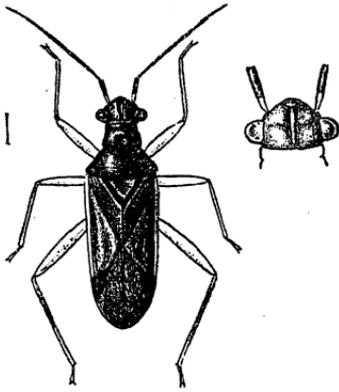
*Hab.* Ceylon; Peradeniya, Nawalapitiya (*Green*).

#### Genus **HARPEDONA**, nov.

Type, *H. marginata*, Dist.

*Distribution.* Ceylon.

Subelongate; head moderately robust and tumid, somewhat obscurely but broadly centrally longitudinally sulcate; antennæ with the first joint about as long or scarcely as long as head, second joint more than twice or nearly three times as long as first, its apex very slightly thickened; pronotum moderately long, with a distinct narrow anterior collar, and transversely constricted before middle, anterior lobe much narrower and shorter than posterior lobe, with a small distinct foveation at centre of its posterior margin, posterior lobe finely and obscurely punctate, its posterior lateral angles subprominent; scutellum somewhat small and foveate; hemelytra a little narrowed posteriorly, with the lateral margins straight and subparallel; cuneus broad; legs slender; rostrum passing the anterior coxæ (imperfectly seen owing to typical specimen being in a carded condition), first joint about as long as head, first and second joints subequal, third and fourth short.

1359. *Harpedona marginata*, sp. n.Fig. 266.—*Harpedona marginata*.

Black; base of first joint of antennæ, coxæ, trochanters, legs, rostrum, and lateral margins of corium stramineous; abdomen beneath ochraceous, the margins and apex piceous; pronotal collar and anterior lobe shining black, posterior lobe subopaque, finely and obscurely punctate, and shortly pilose; an apical line on upper surface of posterior femora, and the posterior tibiæ, excluding apices, pale fuscous.

*Var.* Corium excluding clavus pale fuscous-brown.

Length  $3\frac{1}{2}$  millim.

*Hab.* Ceylon; Peradeniya (Green).

The type with the corium wholly black is in the British Museum; a series of specimens since received from Mr. Green constitute the variety described above.

Punctures the foliage of *Dioscorea* sp., and causes considerable injury to this yam-plant (*E. E. Green*).

Genus **CLAPMARIUS**, nov.

Type, *C. turgidus*, Dist.

*Distribution.* Ceylon.

Body elongately subovate; head somewhat long and triangularly produced in front, distinctly centrally sulcated; eyes somewhat large, extending from near base of antennæ to anterior margin of pronotum; antennæ with the first joint about as long as pronotum, pilose, much ampliatly incrassate, profoundly attenuated at base, narrowed at apex, second joint slender, about half as long again as first; rostrum about reaching the posterior coxæ (as seen on carded specimen); pronotum rugulose, more than twice as broad at base as at apex, anteriorly constricted near anterior margin; mesonotum exposed; scutellum finely transversely striate; corium a little widened posteriorly,

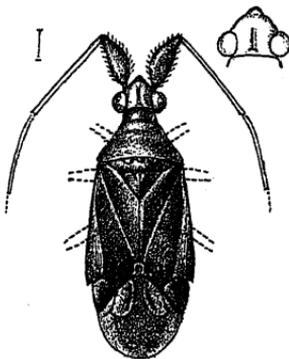


Fig. 267.  
*Clapmarus turgidus*.

its apical angle acute, and with an apparent foveation at apex of clavus which is broad and long; cuneus a little longer than broad, the fracture profound; legs mutilated in typical specimen.

1360. *Clapmarius turgidus*, sp. n.

Above very dark castaneous, lateral margins of corium (widened posteriorly) and the cuneus paler; antennæ very pale castaneous, the second joint and rostrum ochraceous; membrane fuliginous; pronotum rugulose; scutellum finely transversely striate; hemelytra obscurely pubescent; legs mutilated in typical specimen.

Length 4 millim.

*Hab.* Ceylon; Yatiyantota (*Green*).

Genus **MYSTILUS**, nov.

Type, *M. priamus*, Dist.

*Distribution.* Tenasserim.

Subelongate; head broad, deeply centrally, longitudinally sulcate,

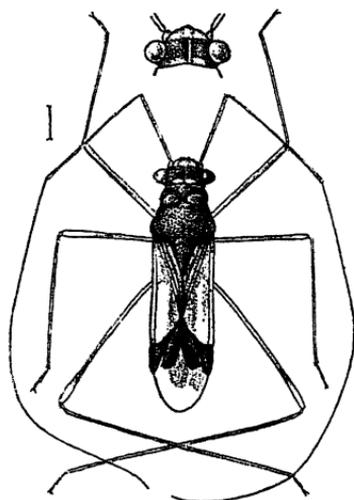


Fig. 268.—*Mystilus priamus*.

somewhat convexly produced in front of eyes, which touch the anterior margin of the pronotum, but project beyond it: antennæ very much longer than the body, with the first joint almost as long as the head and pronotum together, remaining joints very slender; rostrum considerably passing the posterior coxæ; pronotum subquadrate, a little narrowed anteriorly, very coarsely punctate or subrugulose, constricted at about one-third from anterior margin, where there are two rounded callosities; scutellum moderately tumid; hemelytra hyaline, lateral margins slightly sinuate; legs very long, posterior tibiæ very much longer than the femora; cuneus a little longer than broad.

1361. *Mystilus priamus*, sp. n.

Head, antennæ, pronotum, and scutellum black, opaque; hemelytra pale greyish hyaline; base and apex of clavus, apical margin of corium, cuneus, and basal cell to membrane dark fuscous-brown; rostrum and legs brownish-ochraceous, bases of femora and apices of tibiæ luteous; sternum piceous, abdomen beneath ochraceous, with its apical area and upper surface piceous; base of first joint of antennæ, apex of head, and two spots between the eyes ochraceous.

Length 4 millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

Genus **MECISTOSCELIS.**

*Mecistoscelis*, *Reut. Rev. d'Ent.* x, p. 131 (1891).

Type, *M. scirtetoides*, Reut.

*Distribution.* Java, Tenasserim.

Body elongate; head robust, conically produced and deflected before insertion of antennæ, the disk centrally longitudinally sulcate; antennæ much longer than body, basal joint about as long as head, pronotum and scutellum together, remaining joints very slender; second longer than first; rostrum reaching the intermediate coxæ; eyes prominent, almost touching the anterior margin of the pronotum, but projecting beyond it; pronotum subquadrate, longer than broad, a little narrowed anteriorly, punctate, with a narrow anterior collar, and two transverse callosities between it and a transverse constriction at about one-third from anterior margin; hemelytra narrow, their lateral margins slightly sinuate, cuneus longer than broad; legs long and slender, femora very slightly incrassate at apices, posterior tibiæ very long.

1362. *Mecistoscelis scirtetoides*, *Reut. Rev. d'Ent.* 1891, p. 132.

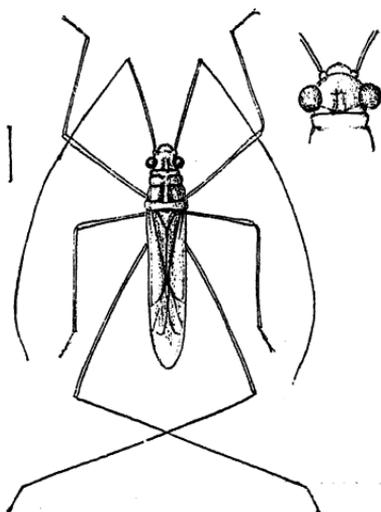


Fig. 269.—*Mecistoscelis scirtetoides*.

Length 6 to 7 millim.

*Hab.* Tenasserim; Myitta (*Doherty*).—Java (*fide Reuter*).

Head ochraceous; eyes, sometimes basal margin, and sometimes (as in specimen here figured) two discal lines piceous; pronotum virescent; transverse incisures, and two discal parallel lines, not reaching base, fuscous, in some specimens these darker markings are almost obsolete; scutellum virescent; hemelytra pale virescent semi-hyaline, the extreme base and whole of clavus dark fuscous; membrane very pale fuliginous and with a pearly virescent tinge, the veins darker; sternum infuscated; abdomen pale ochraceous or virescent; legs ochraceous, apices of tibiæ and tarsi fuscous; antennæ with the first and second joints more or less ochraceous; remaining joints fuscous.

*Species unknown to the writer.*

1363. *Systellonotus palpator*, Kirk. Tr. E. S. 1902, p. 247.

"Blackish-brown, shining; antennæ stramineous, more or less infuscate; legs pallid, more or less infuscate, basal two-thirds of posterior femora dark; elytra fuscous, cuneus and lateral margins darker; a small spot at junction of clavus, corium, and membrane, and two large corial spots (at base and apex, the latter extending a little on to the clavus) white; membrane pale fuscous, a white central transverse band; venter black.

"♂. Body sparsely and shortly pilose; head (with eyes) broader than long, short behind the eyes, the latter prominent; antennæ not incrassate, second joint four times as long as first, two-thirds longer than third."

Length  $3\frac{1}{2}$  millim.

Hab. Sind; Karachi (*vide Kirkaldy*).

Mr. Kirkaldy does not mention any sulcation to the head, a character of *Systellonotus*.

Division *MIRARIA*.

*Miraria*, Reut. Hem. Gymn. Eur. iii, p. 565 (1883); *Dist. Biol. Centr.-Am.*, Rhynch. i, p. 235 (1883).

In this division, as I recognize it, the head is always porrect and well developed in front of the antenniferous tubercles and distinctly longitudinally impressed or sulcate between the eyes; the pronotum is not distinctly transversely constricted, nor does it exhibit distinct anterior and posterior lobes; the basal joint of the antennæ is usually hirsute, but this is not an invariable character.

I now also include in this division the Neotropical genera *Jacchimus*, Dist., and *Peas*, Dist.

*Synopsis of Genera.*

- A. Head elongate, longer than broad.
  - a. Basal margin of pronotum concavely sinuate, exposing base of mesonotum . . . . . MEGALOCERÆA, p. 424.
  - b. Basal margin of pronotum truncate, base of mesonotum not exposed.
    - a. Rostrum either not passing or not reaching posterior coxæ.
      - a'. Pronotum and scutellum distinctly punctate . . . . . MIRIS, p. 423.
      - b'. Pronotum and scutellum impunctate . . . . . MATENESUS, p. 425.
    - b. Rostrum passing posterior coxæ . . . . . RHINOMIRIS, p. 426.
- B. Head transverse, about as long as broad.
  - a. Rostrum reaching or passing posterior coxæ . . . . . MEGACÆLUM, p. 427.
  - b. Rostrum not passing intermediate coxæ.
    - a. Pronotum distinctly punctate.
      - a'. Body elongate, not pilose above, lateral pronotal angles subprominent.
      - a''. First joint of antennæ about as

- long as head; pronotum about as long as half its width at base. TANCREDUS, p. 430.
- ♂<sup>2</sup>. First joint of antennæ considerably longer than head; pronotum longer than half its width at base ..... COMBALUS, p. 431.
- ♂'. Body broadly ovate, thickly pilose above; lateral pronotal angles not subprominent ..... DIOGNETUS, p. 431.
- ♂. Pronotum impunctate ..... ZANËSSA, p. 432.

Genus **MIRIS**.

*Miris*, *Fabr. Syst. Rhyn.* pp. ix & 253 (1803); *Burm. Handb.* ii, 1, p. 264 (1835); *Amy. & Serv. Hém.* p. 277 (1843); *Kirschb. Caps. v. Nassau* (1855); *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 8 (1875).  
*Miris*, *Hahn, Wanz. Ins.* ii, p. 73 (1834).  
*Lopomorphus*, *Dougl. & Scott, Brit. Hem.* p. 293 (1865).

Type, *M. lævigatus*, Linn., a Palæarctic and Nearctic species.

*Distribution*. Probably universal.

Elongate or subelongate; head with a distinct longitudinal impression, the eyes touching the anterior margin of the pronotum; antennæ with the basal joint robust, longly pilose or setose, about as long as the head or a little longer; rostrum extending to about the apex of the mesosternum; pronotum very strongly punctate, with the base truncate, and concealing the base of the mesonotum; scutellum also distinctly punctate; legs usually elongate, and posterior femora very seldom dentate.

1364. *Miris atkinsoni*, sp. n.

Very pale brownish-ochraceous; head and anterior area of pronotum pale brownish, posterior two-thirds of pronotal area fuscously punctate, the lateral margins and a narrow central longitudinal line pale ochraceous; scutellum fuscously punctate, the apex impunctate and pale ochraceous; corium and cuneus pale ochraceous, with some nearly obsolete reddish shadings, more distinctly visible at apex of clavus; membrane subviridescent, the venation ochraceous; antennæ with the first and base of second joint strongly pilose, first joint a little incrassate, about as long as pronotum, second joint more than twice as long as first; head

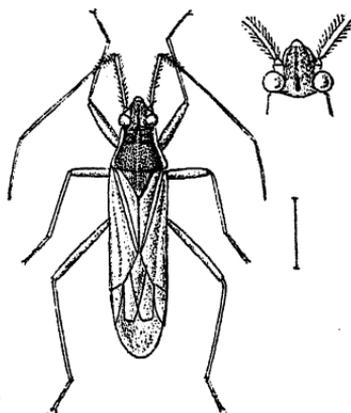


Fig. 270.—*Miris atkinsoni*.

anteriorly finely punctate, basal area impunctate, where the central sulcation is more profound.

Length 9 millim.

*Hab.* Nilgiri Hills; Utakamand (*Atkinson, Brit. Mus.*).

Genus **MEGALOCERÆA**.

Megaloceræa, *Wien. ent. Monats.* ii, p. 301 (1858); *id. Eur. Hem.* pp. 62 & 243 (1861); *Reut. Bih. Vet.-Akad. Handl.* iii, 1, p. 8 (1875).

Subg. Notostira, Megaloceræa, Trigonotylus, *Fieb. tom. cit.*

Type, *M. recticornis*, Geoffr., a Palæarctic species.

*Distribution.* Probably universally distributed.

Allied to the preceding genus (*Miris*), but differing in the sinuate basal margin of the pronotum, which is only obsoletely punctate, the non-punctate scutellum, and the exposed base of the mesonotum.

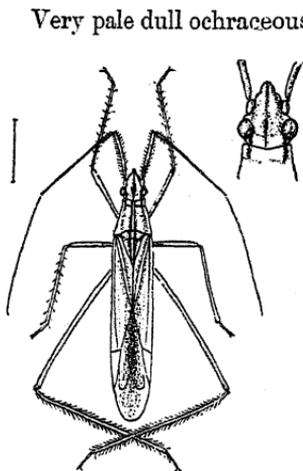
A. *Basal joint of antennæ strongly hirsute.*1365. **Megaloceræa graminea**, sp. n.

Fig. 271.

*Megaloceræa graminea.*

*Hab.* Ceylon; Pundaluoya (*Green*). Burma; Ruby Mines (*Doherty*).

Swept from grass (*E. E. Green*).

Length  $7\frac{1}{2}$  to 8 millim.

1366. **Megaloceræa antennata**, sp. n.

Dull pale ochraceous; antennæ with the first joint incrassate, thickly finely hirsute, and thickly speckled with sanguineous; apical areas of the femora obsoletely speckled with sanguineous; lateral margins and a central longitudinal line to pronotum pale ochraceous; legs pilose; head very distinctly pilose on posterior area; pronotum thickly and finely punctate, an impunctate callose spot on each side near anterior margin; scutellum transversely striate,

with a central longitudinal carination; tibiæ thickly and longly pilose.

Length 8 millim.

*Hab.* Sikhim; Kurseong (*Coll. Dist.*).

B. *Basal joint of antennæ not hirsute.*

1367. *Megaloceræa elongata*, sp. n.

Ochraceous; legs black; pronotum and scutellum with a central pale linear fascia; membrane pale ochraceous; the mesosternum and lateral areas of prosternum greyish ochraceous; rostrum just passing the posterior coxæ, its apex piceous; antennæ not hirsute, first joint incrassate, a little longer than head, second and third joints longest and subequal in length; head with a sharp central longitudinal incision between the eyes; anterior lobe of pronotum with some transverse testaceous markings, posterior lobe obsolete punctured; apices of the tarsi piceous.

Length 11 millim.

*Hab.* Ceylon; Pundaluoya (*Green*).

1368. *Megaloceræa dohertyi*, sp. n.

Head, pronotum, scutellum, body beneath and legs pale ochraceous; hemelytra stramineous; antennæ purplish-red; lateral margins of pronotum and a central longitudinal line extending throughout scutellum creamy-white; eyes piceous; first joint of antennæ a little incrassate, about as long as head, second and third joints long, about subequal in length; head with the lateral margins and a central longitudinal line narrowly purplish-red; pronotum with the lateral and anterior margins acutely reflexed, posterior margin concavely sinuate, a transverse incision on each side before anterior margin.

Length 4 millim.

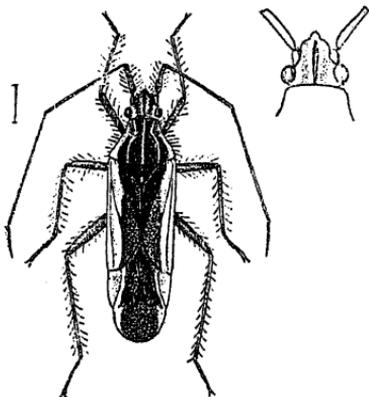
*Hab.* Tenasserim; Myitta (*Doherty*).

Genus **MATENESIUS**, nov.

Type, *M. marginatus*, Dist.

*Distribution.* Ceylon; Tenasserim.

Moderately elongate; head distinctly longitudinally incised between eyes, which almost touch the anterior margin of the pronotum; first joint of antennæ about as long as head or slightly longer, somewhat strongly thickened, hirsute, second long, slender, a little shorter than third; rostrum reaching the posterior coxæ; pronotum impunctate, its lateral margins a little carinately amplified, its base truncate, a little oblique near angles, transversely constricted towards middle; scutellum small, triangular, impunctate; hemelytra distinctly broader than abdomen; cuneus longer than broad; membrane with a single subovate cell; legs of moderate length, pilose; hemelytra much longer than body; membrane considerably passing abdominal apex.

1369. *Matenesius marginatus*, sp. n.Fig. 272.—*Matenesius marginatus*.

Chocolate - brown ; head ochraceous ; three longitudinal discal lines to pronotum, lateral margins to pronotum and hemelytra (the last broad), and narrow lateral margins to sternum and hemelytra beneath stramineous ; scutellum and clavus (excluding apex) black ; disk of membrane pale fuscous ; body beneath and legs ochraceous ; legs longly pilose.

Length  $4\frac{1}{2}$  millim.

*Hab.* Ceylon ; Pundaluoya (Green). Burma ; Karennee (Fea). Tenasserim ; Myitta (Doherty).

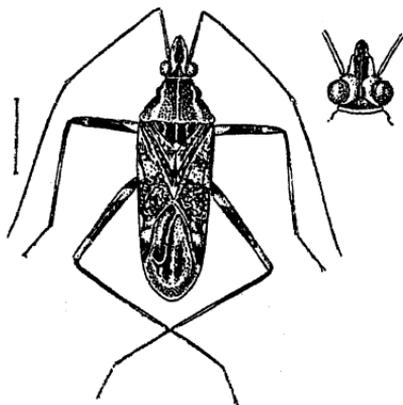
Genus **RHINOMIRIS**.

*Rhinomiris*, Kirk. *Tr. E. S.* 1902, p. 268.

Type, *R. vicarius*, Walk.

*Distribution.* Oriental Region.

Head subhorizontal, produced triangularly in front of eyes, which are large and almost touch the anterior margin of the pronotum, disk distinctly longitudinally sulcate between eyes ; antennæ long, nearly as long as body, first joint about as long as head and considerably passing its apex ; rostrum very long, passing posterior coxæ ; pronotum finely rugulose, almost medially constricted, the anterior area laterally rounded, moderately gibbous on disk, and with a central impressed line, posterior area laterally obliquely widened to posterior angles, the basal margin moderately sinuate ; scutellum somewhat tumid ; legs moderately long and slender.

Fig. 273.—*Rhinomiris vicarius*.1370. *Rhinomiris vicarius*,

Walk. (*Capsus*) *Cat.*

*Het.* vi, p. 121 (1873) ;

*Kirk. Tr. E. S.* 1902,

p. 269.

*Capsus canescens*, Walk.

*Cat. Het.* vi, p. 121

(1873).

Head and pronotum ochraceous ; head with a central anterior fascia and the eyes piceous ; pronotum with four broad longitudinal fasciæ, two central and one at each lateral margin, piceous ; scutellum ochraceous,

with the basal angles and two central fasciæ piceous; corium purplish-brown, thickly covered with small bright ochraceous spots, a larger spot at apex of clavus and the inner margin unspotted, a dark purplish spot on apical margin near inner angle, cuneus shining piceous; membrane greyish-brown, the veins ochraceous, their margins, apical margin, and some discal oblique streaks purplish-brown; body beneath ochraceous with piceous shadings; legs purplish-brown, femora and tibiæ annulated with luteous; antennæ brownish-ochraceous, apices of the joints infuscated.

Length  $7\frac{1}{2}$  to  $9\frac{1}{2}$  millim.

*Hab.* Assam; Margherita (*Doherty*). Burma; Karennee (*Fea*).—Siam and Malacca (*Brit. Mus.*).

### Genus MEGACCELUM.

Megacelum, *Fieb. Wien. ent. Monats.* ii, p. 305 (1858); *Stål, Hem. Afr.* iii, p. 18 (1865); *Reut. Act. Soc. Sc. Fenn.* xxiii, no. 2, p. 230 (1897).

Creontiades, *Dist. Biol. Centr.-Amer., Rhynch.* i, p. 237 (1883).

Pantiliodes, *Noualh. Ann. Soc. Ent. Fr.* 1893, p. 15.

Umslopogas, *Kirk. Tr. E. S.* 1902, p. 254.

Kangra, *Kirk. Tr. E. S.* 1902, p. 257.

Type, *M. infusum*, Herr.-Sch., a Palæartic species.

*Distribution.* Palæartic, Nearctic, Neotropical, Ethiopian, Oriental, and Australasian Regions.

Body elongate; head moderately and obliquely deflected before eyes, and with a distinct narrow central longitudinal sulcation; eyes somewhat prominent and contiguous to the anterior margin of the pronotum; antennæ about as long as the body, basal joint stoutest, as long as the head or longer, and sparingly but prominently hirsute, second joint about twice the length of the first, somewhat slender, slightly curved, and a very little incrassated at apex, third joint a little shorter than second, fourth about half the length of third or less; pronotum subtriangular, with a distinct narrow anterior collar, the anterior margin about half the width of posterior; scutellum large, its disk somewhat longitudinally raised and the lateral margins ob-

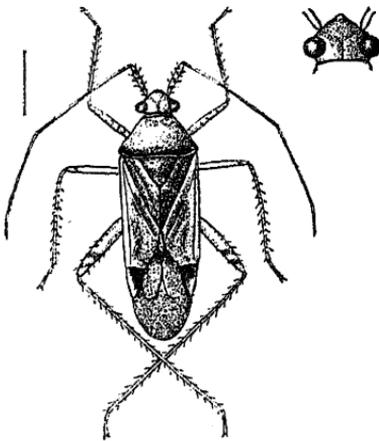


Fig. 274.—*Megacelum antennatum*.

liquely rounded; corium with the lateral margins subparallel; legs long, sparingly hirsute, the tibiæ with long and prominent setæ; posterior tarsi with the joints variable in length; rostrum reaching or passing the posterior coxæ.

a. *First joint of posterior tarsi shorter than second or third joint.*

1371. *Megacelum antennatum*, Kirby (Capsus), *Linn. Soc., Zool.* xxiv, p. 107 (1894).

Head and pronotum pale testaceous, very finely punctured; pronotum usually more or less shaded with purplish-brown; antennæ ochraceous, apices of the joints and a central annulation to the second joint fuscous-black; scutellum and corium purplish-brown, apex of scutellum and lateral margins of corium pale ochraceous; cuneus purplish, its apex ochraceous; membrane pale fuliginous; legs luteous, apices of femora more or less testaceous; head with a distinct central longitudinal sulcation; tibiæ longly setose.

Length 7 to 8 millim.

*Hab.* Nilgiri Hills (*Hampson*). Ceylon (*Lewis*); Pundaluoya (*Green*).

1372. *Megacelum relatum*, sp. n.

Dark chocolate-brown; corium with the base of lateral margin and two submarginal lateral streaks on apical area obscure ochraceous; cuneus castaneous, its extreme apex piceous; coxæ, bases of femora and mottlings to tibiæ obscure stramineous; antennæ obscure stramineous, basal joint speckled with fuscous, apical joint infuscated.

*Var.* Whole lateral margin to corium somewhat broadly obscure ochraceous.

Length  $5\frac{1}{2}$  millim.

*Hab.* Ceylon; Kandy (*Green*).

Allied to *M. antennatum*, but smaller; almost uniformly dark chocolate-brown above, colour of antennæ different, &c.

1373. *Megacelum stramineum*, Walk. (Capsus) *Cat. Het.* vi, p. 120 (1873).

Kangra dudgeoni, *Kirk. Tr. E. S.* 1902, p. 257.

Pale ochraceous, corium with a slight virescent tinge; eyes and apex of scutellum piceous; apical areas of posterior femora testaceous; membrane pale hyaline; head with a distinct central longitudinal sulcation; antennæ with the first and second joints luteous, remainder fuscous; head, pronotum and scutellum very finely ochraceously pilose; tibiæ longly setose.

Length 7 to 8 millim.

*Hab.* North Bengal (*Campbell, Brit. Mus.*). Kangra Valley (*Dudgeon*). Ceylon; Pundaluoya (*Green*).

In his description of this species, Kirkaldy writes: "A number of oblique striæ on each side of vertex in front of the eyes, interior margin of clavus, apical margin of corium, membranal nervures, sanguineous." This probably relates to a very fresh specimen of the species.

Swept from grass (*E. E. Green*).

- b. *First joint of posterior tarsi longer than second and about equal in length to third joint.*

1374. *Megacelum rubricatum*, sp. n.

Head, antennæ and pronotum ochraceous; a central line to apex of head, eyes and lateral areas of pronotum dark fuscous or black; apical transverse striæ and basal margin to head and minute discal spots to pronotum sanguineous; scutellum and corium dull sanguineous, lateral area of the last, including cuneus, stramineous; membrane slate-grey, subhyaline; body beneath and legs very pale ochraceous; basal joint of antennæ and lateral margins of sternum and abdomen sanguineous; first joint of antennæ scarcely longer than head, second more than twice as long as first; body finely pilose; posterior tibiæ setose.

Length  $5\frac{1}{2}$  millim.

*Hab.* Ceylon; Peradeniya and Pundaluoya (*Green*).  
Swept from grass (*E. E. Green*).

- c. *Posterior tarsi mutilated in specimens examined.*

1375. *Megacelum forsythi*, *Dist.* (*Calocoris*) *Tr. E. S.* 1879, p. 125;  
*id.* (*Calocoris*) *Sec. Yark. Miss., Rhynch.* p. 10, f. 8 (1878);  
*Horv.* (*Calocoris*) *Termész. Füzetek*, xii, p. 38 (1889).

Brownish testaceous; antennæ with the first joint not quite so long as head and pronotum, second slightly and gradually thickened towards apex, third pale luteous at base, fourth mutilated in specimen described; head with a deep central longitudinal incision between the eyes; pronotum rugulose, faintly anteriorly and more distinctly so towards posterior margin; hemelytra slightly pilose, somewhat paler towards costal margin, and with the extreme outer margin somewhat obscurely piceous; membrane pale fuscous, somewhat clouded; scutellum obscurely and transversely strigose; body beneath castaneous; anterior legs ochraceous, tibiæ with a longitudinal series of small brownish spots. Intermediate and posterior legs mutilated in specimen described.

Length 7 millim.

*Hab.* Kashmir (*vide Horvath*). Punjab; Murree (*Stoliczka*).

1376. *Megacelum hampsoni*, sp. n.

Obscure sanguineous; pronotum, scutellum, lateral margins of corium, tibiæ and tarsi pale luteous; membrane dark fuliginous with a pale basal spot; apex of head, lateral areas of sternum, and apex of abdomen fuscous.

A single specimen of this distinct species in mutilated condition; the above characters will distinguish it, and more minute description must await the arrival of specimens in better condition.

Length 6 millim.

*Hab.* Nilgiri Hills (*Hampson*).

1377. *Megacelum picturatum*, sp. n.

Head and pronotum ochraceous; eyes, lateral and subanterior and subbasal margins to pronotum black, anterior and basal margins to pronotum luteous, a subquadrate fuscous spot on each side of pronotal anterior area; scutellum luteous, its apex red; corium pale greyish-ochraceous, clavus and an irregular central transverse fascia fuscous, cuneus reddish; membrane pale fuliginous; legs luteous, apical halves of femora and the tarsi testaceous, apices of tarsi piceous; first joint of antennæ testaceous, second joint luteous with its apex testaceous (remaining joints mutilated in specimen described); head with a distinct narrow central longitudinal sulcation; pronotum obscurely punctate.

Length 7 millim.

*Hab.* Upper Burma; Goteik Gorge (*Bingham, Brit. Mus.*).

Genus **TANCREDUS**, nov.

Type, *T. sandaracatus*, Dist.

*Distribution.* Ceylon.

Subelongate; head with a distinct central longitudinal impression on its basal half, the eyes prominent and touching the anterior margin of the pronotum; antennæ with the first joint slightly thickened and about as long as the head, second joint about three times as long as the first, third about half as long as second; rostrum reaching the apices of the intermediate coxæ; pronotum punctate, broader than long, with a distinct but very narrow anterior collar, an obscure transverse constriction at about one-third from anterior margin, the lateral posterior angles distinctly prominent and subacute; scutellum subtriangular; corium with cuneus a little shorter than abdomen, clavus punctate and transversely striate; tibiæ setose.

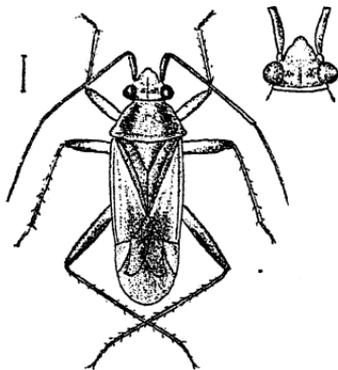


Fig. 275.—*Tancredus sandaracatus*.

1378. *Tancredus sandaracatus*, sp. n.

Pale stramineous; antennæ, inner margins of eyes, a broad oblique fascia on each lateral area of pronotum, clavus (excluding inner margin), apical area of corium, abdomen beneath, posterior femora (excluding base), apices of anterior and intermediate

femora, and apices of posterior tibiæ sanguineous; tarsi infuscated; membrane very pale fuliginous.

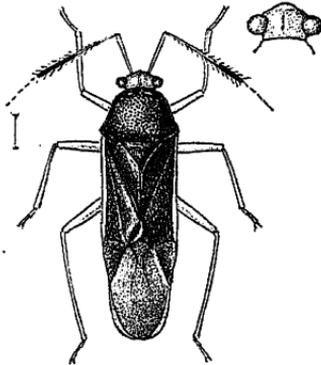
Length 4 millim.

*Hab.* Ceylon; Kalutara (*Green*).

Swept from grass (*F. E. Green*).

Genus **COMBALUS**, nov.Type, *C. novitius*, Dist.*Distribution.* Assam.

Body elongate; head short, broad, deflected anteriorly, with a distinct central longitudinal impression; eyes somewhat small, contiguous to the anterior margin of the pronotum; antennæ with the first joint long, a little shorter than the pronotum, second about twice as long as first and strongly setose (remaining joints mutilated in specimen described); rostrum passing the anterior coxæ; pronotum longer than half the width at base, coarsely punctate, with a very narrow anterior collar, behind which are two transverse callosities, lateral margins slightly sinuate; scutellum transversely foveate at base, glabrous, apex acute; corium smooth, shining, with a distinct impunctate margin, margins subparallel; a distinct foveation beyond apex of clavus, cuneus longer than broad, fracture indistinct; legs moderately short, femora not prominently incrassate.

1379. *Combalus novitius*, sp. n.Fig. 276.--*Combalus novitius*.

Black, shining; head, antennæ, rostrum, coxæ, legs, lateral margins of corium, and apparently (as seen in carded specimen) disk of abdomen beneath ochraceous; apex of second joint of antennæ broadly black; head glabrous; pronotum coarsely punctate and subrugulose; scutellum very faintly transversely striate; corium pilose and very obsoletely punctate; cuneus castaneous; membrane shining fuliginous-brown.

Length  $4\frac{1}{2}$  millim.*Hab.* Assam; Margherita.Genus **DIOGNETUS**, nov.Type, *D. intonsus*, Dist.*Distribution.* Ceylon.

Somewhat broadly ovate, thickly pilose; head moderately deflected, with a deep, broad, longitudinal incision between eyes, which are broadly transverse, inwardly touching the anterior margin of the pronotum, but extending far beyond it; antennæ moderately slender, basal joint very slightly thickened, about as long as head, second joint a little more than twice as long as first, rostrum reaching the intermediate coxæ; pronotum punctate, the basal margin about three times the width of anterior margin,

deflected anteriorly, the posterior margin a little sinuate; scutellum somewhat large, subtriangular; hemelytra a little outwardly convex, lateral margins slightly laminate; cuneus a little longer than broad; membrane considerably passing abdominal apex; legs of moderate length, tibiæ strongly setose.

1380. *Diognetus intonsus*, sp. n.

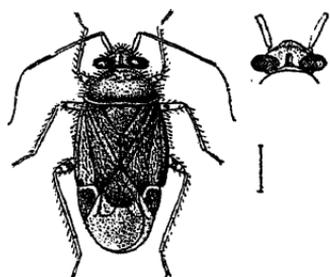


Fig. 277.—*Diognetus intonsus*.

Length  $5\frac{1}{2}$  millim.

*Hab.* Ceylon; Maskeliya (*Green*).

Chocolate-brown, ochraceously pilose; extreme basal margin of pronotum and lateral marginal areas of corium ochraceous; eyes and a subbasal transverse fascia to pronotum black; cuneus bright castaneous, its basal margin flavescent; membrane pale fuliginous, its basal area and veins piceous; body beneath brownish-ochraceous; legs pale ochraceous, femora annulated with brown; antennæ dark ochraceous, third joint stramineous, apices of second and third joints and the whole of fourth piceous.

Genus **ZANESSA**.

*Zanessa*, *Kirk. Tr. E. S.* 1902, p. 269.

Type, *Z. rubrovariegata*, Kirk., an Australian species.

*Distribution.* Australasian and Oriental Regions.

Covered with short hairs, not pubescent; head centrally sulcate (not carinate as described by Kirkaldy), slightly transversely impressed at base; eyes globular, prominent, almost touching but passing in width the anterior margin of the pronotum; rostrum extending to intermediate coxæ; pronotum moderately constricted before middle, the lateral margins sinuated or nearly straight, base a little emarginate; scutellum subtriangular, slightly tumid; antennæ moderately robust, first joint about as long as head, stoutest, second rather more than twice as long as first; legs of moderate length, slender, very finely pilose.

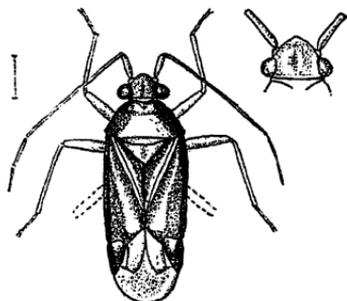


Fig. 278.—*Zanessa sanguinolenta*.

1381. *Zanessa sanguinolenta*, sp. n.

Ochraceous; basal joint of antennæ, eyes, lateral areas of pronotum, inner area of clavus, subclaval and lateral areas of corium,

cuneus (excluding base), and membranal veins sanguineous; body beneath and legs ochraceous; head distinctly longitudinally impressed or sulcate, transversely impressed, and also distinctly transversely carinate near base; pronotum and scutellum impunctate; membrane very pale fuliginous; scutellum with a faint longitudinal central darker line.

Length  $5\frac{1}{2}$  millim.

*Hab.* Utakamand (*Atkinson Coll., Brit. Mus.*).

### Division CYLAPARIA.

Valdasaria, *Dist. Biol. Centr.-Am., Rhynch.* i, p. 242 (1883).

Monalonionaria, *Reut. Ann. Soc. Ent. Fr.* lxi, p. 398 (1892).

Eucerocharia, *Kirk. J. Bomb. N. H. Soc.* 1902, p. 294.

Cylaparia, *Kirk. Wien. ent. Zeit.* xxii, p. 13 (1903); *Dist. A. M. N. H.* (7) xiii, p. 107 (1904).

The name of this division was founded on that of the Neotropical genus *Valdasus*, Stål, which has since been proved to be a synonym of the older genus *Cylapus*, Say. As the name *Valdasus* no longer exists as a generic cognomen, it is necessary to alter the divisional name as above.

This division includes a series of genera in which the head is truncated or deflected, not produced in front of eyes, and always, though frequently obscurely, sulcated, and sometimes more correctly to be described as excavated; the antennæ are inserted well in front, but on a level with the inner margin of the eyes. The species thus comprised are of a more robust character than those of the *Miraria*, and their coloration is bright and handsome, thus resembling those of the following division.

### *Synopsis of Genera.*

- |  |                     |
|--|---------------------|
| A. Eyes broad, transverse, somewhat contiguous on disk of head .....                                     | PHARYLLUS, p. 434.  |
| B. Eyes of ordinary size and placed wide apart.  |                     |
| a. Pronotum with a single anterior transverse constriction.  |                     |
| a. First joint of antennæ longer than head, but shorter than pronotum .....                              | ARGENTIS, p. 434.   |
| b. First joint of antennæ as long as head and pronotum together .....                                    | HELOPELTIS, p. 439. |
| b. Pronotum with two anterior transverse constrictions.  |                     |
| a. Head transverse, short; eyes near to, but well separated from, anterior margin of pronotum.           |                     |
| a'. First joint of antennæ globosely incrassate at base, second joint about twice as long as first ..... | GUISARDUS, p. 436.  |
| b'. First joint of antennæ not incrassate at base, second joint about half as long again as first .....  | PRODRONUS, p. 436.  |

- b.* Head long, transverse anteriorly, narrowly elongated posteriorly; eyes remote from anterior margin of pronotum and inserted near bases of antennæ.
- a'.* Pronotum coarsely punctate; corium opaque . . . . . ANGERIANUS, p. 437.
- b'.* Pronotum not or remotely punctate; corium hyaline . . . . . FELISACUS, p. 438.

Genus **PHARYLLUS**, nov.

Type, *P. pistacinus*, Motsch.

*Distribution.* Ceylon.

Subelongate; head broad with a central longitudinal impression, deflected in front of eyes, which are very large and transverse and well separated from anterior margin of pronotum; antennæ with the first joint longer than head, second rather more than twice the length of first; rostrum mutilated in specimen examined; pronotum with a very narrow anterior collar, transversely impressed before middle and enclosing two transverse nodulosities, lateral margins almost obliquely straight, basal margin truncate, slightly recurved at lateral angles; scutellum a little tumid, its apex subacute; corium opaque, cuneus longer than broad with an acute fracture; posterior tibiæ long, setose.

1382. *Pharyllus pistacinus*, Motsch. (Leptomerochoris?) *Bull. Soc. Nat. Mosc.* xxxvi (2) p. 85 (1863).

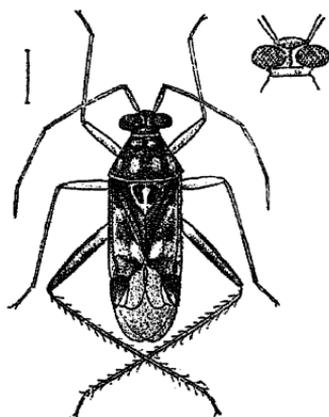


Fig. 279. — *Pharyllus pistacinus*.

Dark purplish-brown; extreme basal margin and two (sometimes four) discal spots to pronotum, lateral margins, apex, and a central line to scutellum, a spot before middle and two transverse fasciate spots before apex of corium, coxæ, trochanters, anterior and intermediate legs, bases of posterior femora, tarsi and base of abdomen beneath ochraceous; membrane fuliginous; anterior and intermediate tibiæ finely setose, posterior tibiæ longly setose.

Length  $6\frac{1}{2}$  millim.

*Hab.* Ceylon; Colombo (Green).

Genus **ARGENIS**.

*Argenis*, *Dist. A. M. N. H.* (7) xiii, p. 107 (1904).

Type, *A. incisuratus*, Walk.

*Distribution.* Ceylon.

Head broad, not horizontally produced in front of eyes, which

touch the anterior margin of the pronotum, but exceed it in width, distinctly longitudinally centrally impressed or very finely sulcate; antennæ with the first joint longer than head but shorter than pronotum, second joint almost twice as long as first, third joint about one-third shorter than second; eyes large, globose; pronotum coarsely punctate, transversely constricted before middle, posterior lobe tumid, centrally very obscurely carinate, posterior angles subprominent and a little tuberculous; scutellum triangular, the apex somewhat acute; corium long, cuneus passing apex of abdomen; membrane somewhat small; body beneath obscurely seen owing to typical specimen being in a carded condition; legs of moderate length; posterior femora scarcely thickened.

1383. *Argenis incisuratus*, Walk. (Capsus) *Cat. Het.* vi, p. 121 (1873); *Dist. A. M. N. H.* (7) xiii, p. 107 (1904).

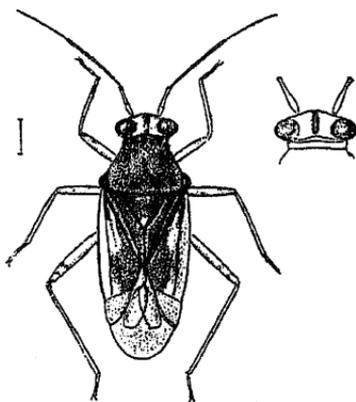


Fig. 280.—*Argenis incisuratus*.

Head ochraceous, the central impression and eyes fuscous; pronotum brownish-ochraceous, the obscure central longitudinal carina and two broad oblique discal fasciæ piceous, posterior lateral angles black; scutellum brownish-ochraceous, its apex luteous; corium luteous; clavus, a subclaval fascia extending to interior angle, a basal lateral spot, a small elongate discal spot a little beyond middle, and apical margin of cuneus piceous-brown; membrane pale brownish, subhyaline; antennæ with first joint luteous, remainder fuscous; legs and body beneath imperfectly seen owing

to the carded condition of the typical specimen.

Length 4 millim.

*Hab.* Ceylon (*Thwaites & Green*).

1384. *Argenis alboviridescens*, sp. n.

Head, antennæ, pronotum, and scutellum black; base of first joint of antennæ, anterior pronotal collar, posterior lateral angles of pronotum, and the corium creamy-white, the last with a very slight virescent tinge; membrane pale hyaline; body beneath piceous-brown, legs pale luteous; body elongate; head strongly centrally sulcated, obscurely punctate, and with two subobsolete discal pale spots; posterior lobe of pronotum somewhat coarsely granulate, with two distinct nodosities on anterior area, the posterior lateral angles subnodulose; margins of clavus and sub-lateral margins of corium linearly finely punctate.

*Var.* Antennæ fuscous-brown, apices of first and second joints piceous; posterior area of pronotum brownish-ochraceous, not black.

Length  $4\frac{1}{2}$  to 5 millim.

*Hab.* Ceylon (*Green, Brit. Mus.*).

### Genus **GUISARDUS**, nov.

Type, *G. pellucidus*, Dist.

*Distribution.* Tenasserim.

Subelongate; head broad, perpendicularly deflected in front of eyes, centrally medially depressed and shortly finely longitudinally sulcate; eyes large, prominent, well separated from anterior margin of pronotum; antennæ with the first joint longer than head and distinctly globosely incrassated at its base, second joint about twice as long as first; rostrum reaching the intermediate coxæ; pronotum longer than broad, doubly constricted on anterior area, with two central discal curved carinæ, the lateral posterior angles nodulose, the basal margin concavely sinuate; scutellum a little tumid, centrally linearly impressed; hemelytra subhyaline, cuneus longer than broad.

#### 1385. *Guisardus pellucidus*, sp. n.

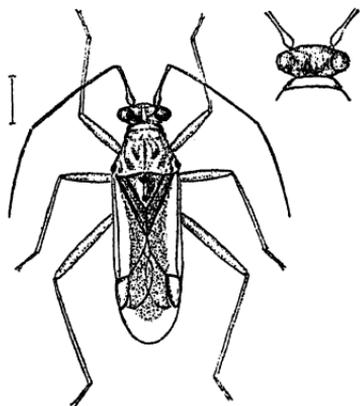


Fig. 281.—*Guisardus pellucidus*.

Head, pronotum, scutellum, body beneath and legs very pale ochraceous; antennæ (excluding basal joint), eyes, lateral margins and posterior lateral angles of pronotum, and a central basal spot and apex to scutellum black; apical margin of corium, margins of cuneus, and veins to membrane piceous; posterior area of pronotum tumid, transversely rugulose striate and centrally longitudinally incised on disk; clavus moderately infuscated.

Length 6 millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

### Genus **PRODROMUS**, nov.

Type, *P. subflavus*, Dist.

*Distribution.* Ceylon and Tenasserim.

Elongately subovate; head broad, medially depressed and centrally longitudinally impressed, eyes prominent and well separated from anterior margin of pronotum; antennæ with the first joint a little longer than head, second about half as long again as first; rostrum passing the intermediate coxæ; pronotum with a narrow anterior

collar, transversely constricted before middle and enclosing two transverse callosities, posterior area tumid, coarsely punctate, the basal margin concavely sinuate, the lateral posterior angles subnodulose; scutellum subtriangular, a little tumid; hemelytra moderately concavely amplified, cuneus longer than broad, the fracture distinct; legs of moderate length.

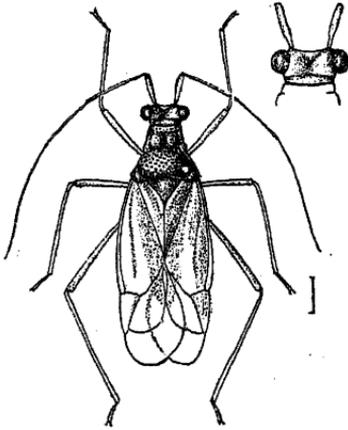


Fig. 282.—*Prodromus subflavus*.

1386. *Prodromus subflavus*, sp. n.

Head, pronotum, scutellum, clavus, and body beneath pale ochraceous; corium, legs, and antennæ pale stramineous; apex of second joint of antennæ piceous; membrane pale hyaline; pronotum, excluding the nodulosity and anterior collar, coarsely punctate; scutellum and clavus punctate.

Length  $4\frac{1}{2}$  millim.

*Hab.* Ceylon; Peradeniya (Green).

1387. *Prodromus clypeatus*, sp. n.

Stramineous; apex of second joint of antennæ piceous; eyes and scutellum, excluding basal margin, black, inner margin of clavus ochraceous; corium finely and obscurely pilose.

Allied to *P. subflavus*, but differing by the black and shining scutellum, and otherwise by the uniform pale stramineous coloration.

Length 5 millim.

*Hab.* Tenasserim; Myitta (Doherty).

1388. *Prodromus subviridis*, sp. n.

Very pale greyish-green; a black spot on abdomen above near apex of scutellum, imperfectly seen through the pale hemelytra; apex of second joint of antennæ brown; eyes piceous; body above finely and obscurely greyishly pilose.

Length 4 millim.

*Hab.* Tenasserim; Myitta (Doherty).

Genus **ANGERIANUS**, nov.

Type, *A. fractus*, Dist.

*Distribution.* Tenasserim.

Subovately elongated; head very broad between eyes, anteriorly perpendicularly deflected, medially longitudinally impressed,

transversely impressed behind eyes and narrowed to base; eyes somewhat small and very longly removed from anterior margin of pronotum; antennæ with the basal joint a little longer than head; rostrum robust, the apical joint slender; pronotum coarsely punctate, with a very narrow anterior collar and two anterior transverse constrictions which give the appearance of two very short lobes together shorter than the posterior lobe, which is moderately tumid, the posterior lateral angles subprominent, the basal margin subtruncate; scutellum small, tumid, transversely foveate at base; hemelytra with the lateral margin of corium a little convex, the cuneus longer than broad, its fracture very profound; legs of moderate length.

1389. *Angerianus fractus*, sp. n.

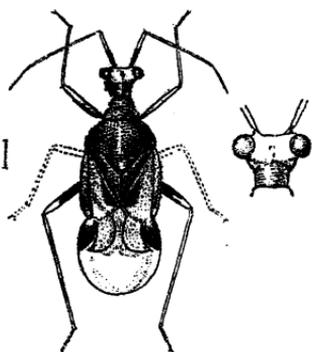


Fig. 283.—*Angerianus fractus*.

Piceous; antennæ, head between eyes, a central longitudinal fascia to posterior pronotal lobe, a central spot to scutellum, corium (excluding clavus), apical joint of rostrum, coxæ, trochanters, and legs pale ochraceous; base of first joint of antennæ, a subclaval and posterior lateral spot to corium, cuneus (excluding base), and central area of femora, piceous; membrane pale hyaline, the venation piceous; pronotum coarsely punctate; clavus and basal area of corium more finely punctate.

Length  $3\frac{1}{3}$  millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

1390. *Angerianus maurus*, sp. n.

Black; antennæ, excluding basal two-thirds of first joint, head between eyes, basal lateral margin of corium, and legs pale ochraceous; femora (excluding base) and bases of tibiæ black; base of cuneus narrowly pale ochraceous; membrane pale hyaline, the venation piceous; pronotum coarsely punctate, corium shining black.

Length 3 millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

Genus **FELISACUS**, n. nom.

*Liocoris*, *Motsch. Bull. Soc. Nat. Mosc.* xxxvi (3) p. 86 (1863); *nec Liocoris*, *Fieb.* (1859).

Type, *F. glabratus*, *Motsch.*

*Distribution.* Ceylon and Tenasserim.

Elongate; head long and broad, transversely constricted behind eyes, somewhat strongly and broadly sulcately excavate between eyes, which are moderately prominent and inserted at or near the

antennal tubercles, remote from base; rostrum reaching the posterior coxæ; antennæ with the first joint stoutest and about as long as the pronotum, second a little longer than the third; pronotum posteriorly convexly tumid, strongly constricted before middle, and with a very narrow anterior collar, posterior angles subnodulose; scutellum small, subtriangular; hemelytra hyaline; cuneus somewhat long and slender; membrane with a single basal cell; legs of moderate length and slender.

1391. *Felisacus magnificus*, sp. n.

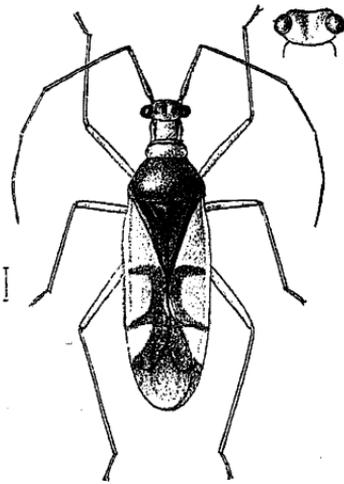


Fig. 284.—*Felisacus magnificus*.

Head, first joint of antennæ, anterior lobe and collar of pronotum pale sanguineous or reddish-ochraceous; corium pale hyaline; posterior lobe of pronotum, scutellum, clavus, two transverse fasciæ to corium inwardly connected, membrane, eyes, second and remaining joints of antennæ, and meso- and metasterna black or piceous; apical margin of membrane pale hyaline; head with two lateral dark sanguineous lines behind each eye, posterior tibiæ sometimes fuscous; posterior lobe of pronotum very finely and obsoletely punctate and with a transverse series of coarser punctures at the anterior constriction.

Length 4 millim.

*Hab.* Tenasserim; Myitta (Doherty).

1392. *Felisacus glabratus*, Motsch. (*Liocoris*) *Bull. Soc. Nat. Mosc.* xxxvi (2) p. 87, tab. ii, f. 20 (1863).

Dark ochraceous; hemelytra pale hyaline, the veins piceous; antennæ (excluding basal joint), eyes, and an oblique linear spot near apex of clavus black; coxæ and bases of femora very pale stramineous; inner margin of cuneus pale ochraceous; head, pronotum, and scutellum shining, glabrous; tarsi fuscous.

Length 4 millim.

*Hab.* Ceylon; Peradeniya, Diyatalawa (Green).

Genus **HELOPELTIS.**

*Helopeltis*, Signoret, *Ann. Soc. Ent. Fr.* (3) vi, p. 502 (1858).  
*Aspicelus*, Costa, *Ann. Mus. Zool. Nap.* ii, p. 147 (1865).

Type, *H. antonii*, Sign.

*Distribution.* Oriental and Ethiopian Regions.

Body elongate; head broad, deflected in front of eyes, discally

and centrally longitudinally incised or sulcated; antennæ inserted in front of but on a level with the inner margin of the eyes, with the first joint about as long as the head and pronotum together, its apex moderately incrassated; pronotum strongly constricted before the middle, posterior margin more than twice the width of anterior; scutellum with a long more or less erect horn or spine, its apex clavate; legs moderately long and slender, femora nodulose.

All the species known are destructive pests to plants, and some attacking tea are formidable enemies to plantations.

a. *Scutellar horn nearly straight and perpendicular.*

1393. *Helopeltis antonii*, *Sigm. Ann. Soc. Ent. Fr.* (3) vi, 1858, p. 502; *Waterh. Tr. Ent. Soc.* 1886, p. 458, pl. xi, f. 4; *Trimen, Nature*, xxx, p. 615 (1884).

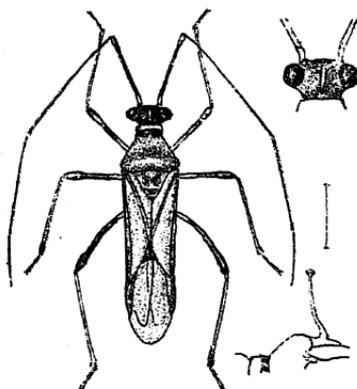


Fig. 285.—*Helopeltis antonii*.

♂. Head and pronotum black, anterior margin of pronotum narrowly obscurely ochraceous; rostrum obscure ochraceous, more or less suffused with fuscous, prominently so at apex; antennæ shining piceous, ochraceous at base; scutellum black, testaceous at apex; hemelytra pale olivaceous-fuscous; legs brown, speckled with ochraceous; bases of femora distinctly ochraceous; abdomen beneath luteous, with a basal spot and the apex black; scutellar horn nearly straight and perpendicular.

♀. Pronotum and most of the scutellum purplish-red, the transverse constriction to the first sometimes piceous.

Length 6 to 7½ millim.

*Hab.* Ceylon (*Green*). Tenasserim; Myitta (*Doherty*).

According to the late Dr. Trimen, this insect causes serious damage on cacao-plantations.

b. *Scutellar horn more or less distinctly curved backwards.*

1394. *Helopeltis theivora*, *Waterh. Tr. E. S.* 1886, p. 458, t. xi, f. 3; *Moore, ined.*

? *Helopeltis febriculosa*, *Berg. Ent. Month. Mag.* xxv, p. 271 (1889).

♂. Head and pronotum shining black, much resembling the same sex of the preceding species (*H. antonii*), but with the scutellar horn more curved backward at apex.

♀. Black, pronotum bright shining stramineous or ochraceous,

with a subapical transverse fascia and the basal area shining black; scutellum ochraceous, more or less suffused with black, the horn long, black, piceous at apex; antennæ dark brown, basal joint paler, yellowish at base; femora dark brown, mottled with ochraceous, and with a distinct pale annulation near base; tibiæ ochraceous, speckled with fuscous; head beneath with a lateral luteous fascia on each side, more obscurely seen above; abdomen pale creamy-ochraceous, the apical third black.

Length 6 to 7 millim.

*Hab.* Assam (*Brit. Mus.*). Kangra Valley (*Dudgeon*).

The late Mr. Peal, of Assam, writing on this insect (*Journ. Agri. Hort. Soc. Ind.* iv, p. 131, 1872), said:—"There can be no doubt that this insect will be the future tea-planter's great enemy, if it does not seriously cripple the industry." When this insect is badly prevalent, gardens otherwise quite capable of yielding 1000 maunds may have their crops reduced to 700 or 800. Mr. Atkinson was informed that these insects commence to tap the tea-plant in February, and go on till the end of August (*Ind. Mus. Notes*, i, p. 180). Mr. E. C. Cotes, on the authority of Mr. C. N. Harcourt, states that the species injures tea both in spring and also during September; it attacks chiefly the young tea shoots, also fuchsias, and a tree (*Schima wallichii*) known locally as *chilaruni*, which is botanically allied to the tea-plant (*ibid.* ii, p. 43). Mr. Dudgeon has observed and described the oviposition of *H. theivora*. Nine or ten eggs are generally found in the body of a mature female, as, owing to their large size in comparison with the insect itself, there would scarcely be room for more. It is possible that more eggs are formed as they are laid (*ibid.* iii (v) p. 35).

### 1395. *Helopeltis oryx*, sp. n.

♀. Shining, obscure sanguineous; head, antennæ, rostrum, anterior transverse constriction to pronotum, scutellar horn, apical third of abdomen, above and beneath, and legs black; base of first joint of antennæ, about basal half of rostrum, and bases of femora obscure sanguineous; corium and cuneus pale talc-like with an ochraceous tinge, the extreme margins piceous; membrane very pale fuliginous, the venation piceous; scutellar horn directed almost horizontally backward to the body, and extending over basal two-thirds of abdomen.

Length, ♀, 6½ millim.

*Hab.* Ceylon; Kandy (*Green*).

I have only seen a female specimen of this species, which has a very distinctive character in the length and direction of the scutellar horn.

*Genera and Species unknown to the writer, but apparently to be included in the Mirinæ.*

Genus **EBLIS**.

Eblis, *Kirk. Tr. E. S.* 1902, p. 256.

Type, *E. amasis*, Kirk.

*Distribution.* British India.

"Pronotum and elytra finely punctured; head strongly declivous; vertex obsoletely sulcate, clypeus scarcely elevated; head between eyes about equal to that of an eye, interior margin of the latter not sinuately emarginate, apically divergent; rostrum reaching beyond posterior coxæ; head and pronotum immarginate; antennæ longer than total length of body; membrane glabrous.

"Allied to *Capsus*, Fabr., but differs by the elongate slender antennæ and by the pronotum, narrower apically."

1396. **Eblis amasis**, *Kirk. Tr. E. S.* 1902, p. 256, pl. vi, f. 10 (side view of head only).

"Bronzy-black; head, pronotum, and scutellum (elytra sparsely) with silvery pubescence; anterior and intermediate tibiæ, all coxæ, apical half of posterior tibiæ, stink-gland orifices, third and fourth segments (joints) of antennæ pallid; first segment (joint) of antennæ about equal to length of pronotum, the former somewhat incrassate; second segment (joint)  $2\frac{2}{5}$  longer than first,  $\frac{1}{2}$  to  $\frac{1}{6}$  longer than third, and a little more than twice as long as fourth; base of pronotum twice as wide as collar; posterior femora somewhat incrassate; tibiæ about one-third longer than femora.

"Length (including elytra) 7 to 8 millim.

"*Hab.* Kangra Valley (4500 ft., Aug. 1899, *Dudgeon*.)"

The type is at present with the describer in the Sandwich Islands, and therefore not available for comparison.

Genus **CHILOCAPSUS**.

*Cheilocapsus*, *Kirk. Tr. E. S.* 1902, p. 259.

Type, *C. flavomarginatus*, Kirk.

*Distribution.* Burma.

"Vertex feebly marginate near the base; clypeus vertical, prominent, extending beyond vertex; eyes prominent, anterolaterally sinuately emarginate, oblique, together wider than vertex, remote from pronotum; rostrum extending to intermediate coxæ; pronotum with a well-marked collar, obsoletely callose behind the latter, lateral margins a little sinuately divergent posteriorly,  $2\frac{2}{3}$  wider at base than at apex, subrugose transversely, posterior margin subrotundately truncate; elytra subrugose-punctate, extending beyond apex of abdomen, the larger membranal area angular apically; cuneus very elongate.

"Somewhat remotely allied to *Hyalopeplus*, Stål, but at once separable by the opaque elytra and differently formed pronotum."

In the specific description we read "Head with a slight longitudinal sulcus," which locates the genus in the *Mirinæ*.

1397. *Chilocapsus flavomarginatus*, *Kirk. Tr. E. S.* 1902, p. 259, pl. vi, f. 9 (outline of head only).

"Clothed with short, black, bristly hair; head, pronotum, extreme base of scutellum, legs and ventral surface dull flavous; exocorium, cuneus (except black interbasal angle and extreme apex) bright flavous; antennæ sanguineous, apex of second segment (joint) blackish; eyes, lateral margins (narrowly) of pronotum, scutellum, elytra, membranal nervures, &c., black; membrane cinereo-hyaline; posterior femora with four small black spots; dorsum of abdomen sanguineous; head with a slight longitudinal sulcus; first segment (joint) of antennæ subincrassate, subequal to pronotum in length, a trifle longer than cuneus, second a little more than twice as long as the first; first segment (joint) of anterior tarsi longer than second and third together."

Length 11 millim.

*Hab.* Burma; Shan Yoma.

The type is at present in the Sandwich Islands, and therefore not available for comparison.

### Subfamily II. CAPSINÆ.

The Capsinæ may at once be distinguished from the *Mirinæ* by the non-sulcated head, and from the *Isometopinæ* by the absence, or practical absence, of ocelli. This is by far the largest section of the family, and contains the typical genera of Capsidæ.

I place three genera at the commencement of this subfamily which do not strictly appertain to any particular Division, and two of which have a considerable superficial resemblance to genera in the *Mirinæ*—*Disphinctus* to *Helopeltis*, and *Hyalopeplus* to *Calli-crattides*,—but the character of the non-sulcated head sufficiently distinguishes them. It is inadvisable to found a Division when represented by only a single genus, and each of the three here enumerated might be used for that purpose.

### Genus DISPHINCTUS.

*Disphinctus*, *Stål, Öfv. Vet.-Ak. Förh.* 1870, p. 668.

Type, *D. falleni*, Stål, from the Philippines.

*Distribution.* Oriental and Malayan Regions.

Body elongate; head small, with eyes considerably broader than the anterior margin of the pronotum, truncately deflected before, constricted behind eyes, which are large and prominent; rostrum extending beyond the anterior coxæ; antennæ long, slender, and (excluding basal joint) pilose, first joint incrassated, slender at base, second joint longest, three or four times the length

of first; pronotum anteriorly narrowed, nearly three times broader at base than at apex, prominently constricted a little before middle and again near anterior margin; scutellum unarmed, moderately convex, sometimes with a faint central sulcation; hemelytra parallel, longly passing abdominal apex; legs of moderate length, pilose, posterior femora slightly incrassated.

1398. *Disphinctus humeralis*, *Walk.* (Monalonia) *Cat. Het.* vi, p. 162 (1873); *Berg.* (*Disphinctus*) *Ent. Month. Mag.* xxv, p. 271 (1889).

Head, pronotum, sternum, rostrum, and legs ochraceous; antennæ, eyes, a large spot on each side of posterior lobe of pronotum, bases and apices of posterior femora, posterior tibiæ (excluding apices), meta- and sometimes mesosternum, two submedial transverse fasciæ to abdomen beneath, and apex of same black; abdomen beneath stramineous; base of first joint of antennæ luteous; scutellum very pale stramineous; hemelytra brownish-ochraceous, base, lateral margin, obscure transverse suffusion near inner angle and apex of cuneus fuscous; membrane pale fuscous, the veins darker.

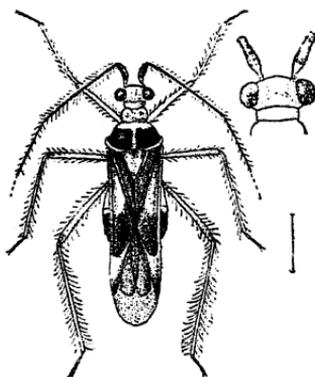


Fig. 286.—*Disphinctus humeralis*.

Length  $8\frac{1}{2}$  millim.

*Hab.* Sikhim (*Brit. Mus.*). Ceylon; Kandy, Peradeniya (*Green*). Tenasserim; Myitta (*Doherty*).—Malacca (*Brit. Mus.*); Siamese Malay States (*Annaldale & Robinson*).

Recorded as attacking cinchona at Mungphu in Sikhim (*Atkinson*).

1399. *Disphinctus politus*, *Walk.* (Monalonia) *Cat. Het.* vi, p. 163 (1873).

*Disphinctus formosus*, *Kirk.* *J. Bomb. N. H. Soc.* xiv, p. 295, pl. A (p. 46), f. 10, pl. C, f. 2 (1902); *Green, Entomologist*, 1901, p. 114, & p. 115, ff. 3 & 4 (eggs).

Dark shining ochraceous; antennæ (excluding basal joint), eyes, an irregularly-shaped spot at apex of corium before cuneus, and posterior tibiæ and tarsi, the first excluding base, black; abdomen beneath stramineous, a little infuscated at apex; body finely pilose; antennæ (excluding basal joint) and the legs longly pilose.

Var. *a.* Posterior tibiæ ochraceous, concolorous.

Length  $8\frac{1}{2}$  to 11 millim.

*Hab.* Assam; Margherita (*Brit. Mus.*); Kangra Valley (*Dudgeon*). Ceylon; Peradeniya, Kandy, Badulla (*Green*). Tenasserim; Myitta (*Doherty*).—Borneo, Sarawak (*Brit. Mus.*).

Mr. E. E. Green ('*Entomologist*,' 1901, p. 114) describes this

species as abundant in Ceylon on plants of *Cuphea jorullensis*. The young shoots are badly punctured and wilted, and the plants completely disfigured, the damage being done chiefly by the immature insects. Mr. Green also informs me that *D. politus* punctures leaves of *Solanum* sp., young leaves and shoots of *Peperonia* sp., young leaves of common guava (*Psidium guajava*), and young leaves of *Acalypha* sp.

1400. *Disphinctus dudgeoni*, *Kirk. J. Bomb. N. H. Soc.* xiv, p. 296 (1902).

Gen. ? sp. ?, *Dudg. Ind. Mus. Notes*, iii (v) p. 37 (1894).

♂. "Orange-red; abdomen broad and concave on the upper side, unmarked; head transverse, short; eyes black and prominent; rostrum paler orange, thickened for the basal third of its length, rather short, reaching just beyond the coxæ of the anterior legs when folded beneath; antennæ almost the same length as the whole body, first joint thickened, short, reddish, second long, third shorter than second, fourth short, all three black; pronotum and scutellum unmarked, orange-red, the former lengthened; legs pale, semihyaline yellow, barred with orange-red on the femora; the bases of the tibiæ also reddish; hemelytra with the corium orange-red, with a triangular black spot on the costa, membrane fuscous hyaline with a discal nervure orange."

♀. "Only differs from the male in being slightly paler in colour and in the underside of the abdomen having a curved corneous, black, shining ovipositor, as in *Helopeltis thewora*."

Length  $9\frac{1}{2}$  to 10 millim.

*Hab.* Sikhim and Bhutan, from 1500 to 5000 feet (*G. C. Dudgeon*).

Punctures leaves of plants of the genus *Maca* (*M. montana*, *M. ramentacea*, and *M. indica*), occurring in the Darjiling district.

I have not seen this species.

1401. *Disphinctus elegans*, sp. n.

♀. Head, pronotum, scutellum, cuneus, rostrum and sternum orange-red; corium reddish-brown; membrane pale shining fuscous; abdomen beneath stramineous; base, apex, and lateral margins (above and beneath) to abdomen, antennæ and eyes black; posterior legs stramineous, apical areas of femora, basal areas of tibiæ, and the tarsi black; anterior and intermediate legs mutilated in specimen described; corium thickly greyish pilose; legs and antennæ longly pilose.

Length, ♀,  $8\frac{1}{2}$  millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

1402. *Disphinctus mæsarum*, *Kirk. J. Bomb. N. H. Soc.* xiv, p. 295 (1902).

Head, antennæ, and pronotum black; central area of head between eyes, basal margin, collar, and sometimes anterior lobe

of pronotum, and scutellum ochraceous or stramineous; lateral margins of scutellum black; corium dull ochraceous or stramineous, basal and apical areas piceous; cuneus stramineous; membrane pale fuliginous; body beneath and legs ochraceous or stramineous, apices of posterior femora blackish; antennæ and legs longly pilose, extreme base of first joint of antennæ luteous.

Var. *a*. Sternum, apex of abdomen, bases and apices of posterior femora, posterior tibiæ and the tarsi black.

Length  $6\frac{1}{2}$  to  $8\frac{1}{2}$  millim.

*Hab.* Ceylon; Pundaluoya (*Green*). Tenasserim; Myitta (*Doherty*).

Punctures leaves of *Mesa indica* (*Green*).

### Genus **MALALASTA**, nov.

Type, *M. superba*, Dist.

*Distribution.* Tenasserim.

Body elongate; head subglobose, vertically deflected in front; eyes of moderate size, almost touching anterior margin of pronotum; antennæ inserted in front of anterior margins of eyes, first joint about as long as head and pronotum together, slightly thickened at apex, second joint about half as long again as first; rostrum reaching the intermediate coxæ; pronotum with an anterior collar, behind which are two transverse callosities centrally united, posterior area strongly punctate, with a faint central longitudinal ridge; scutellum rather large, subtriangular, its apex broad; hemelytra subhyaline; legs somewhat long and slender; cuneus long and slender.

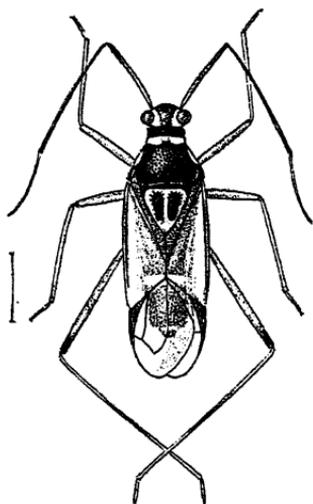


Fig. 287.—*Malalasta superba*.

#### 1403. *Malalasta superba*, sp. n.

Head, pronotum, and scutellum black; an elongate spot at inner margin of each eye, the transverse callosity and an elongate spot on the lateral margins of pronotum, margins, a central fascia and apex of scutellum, head beneath (excluding a central black fascia), acetabula, coxæ, legs, and abdomen beneath stramineous or very pale ochraceous; abdomen with black transverse spots on each side, anterior margin of penultimate segment and some apical spots black; apices of posterior femora, extreme bases and a central annulation to posterior tibiæ, the antennæ, and venation to hemelytra fuscous-brown; extreme base of first joint of antennæ and third joint (excluding apex) stramineous; pronotum

and scutellum, excluding pale markings, coarsely punctate; apex of scutellum broad and a little tumid.

Length 8 millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

### Genus HYALOPEPLUS.

*Hyalopeplus*, *Stål*, *Öfv. Vet.-Ak. Förh.* 1870, p. 670.

Type, *H. vitripennis*, *Stål*.

*Distribution.* Oriental and Australasian Regions.

Body oblong; head triangular, with eyes much broader than anterior margin of pronotum; eyes strongly prominent; antennæ inserted in front of eyes, basal joint moderately incrassated, subequal in length to head, second joint nearly four times as long as first; rostrum reaching the posterior coxæ; pronotum slightly shorter than broad, narrowed anteriorly, basal margin twice as broad as anterior margin, twice transversely impressed, near anterior margin forming a sort of collar, and again before middle, the last constriction being waved; scutellum tumid, the disk subdepressed, longitudinally sulcate; hemelytra parallel, smooth, hyaline, corium with cuneus reaching apex of abdomen; membrane with two cellular areas; legs of moderate length, posterior femora moderately incrassated.

1404. *Hyalopeplus vitripennis*, *Stål* (*Capsus*), *Freg. Eug. Resa, Ins.* p. 255 (1859); *id.* *Öfv. Vet.-Ak. Förh.* 1870, p. 671.  
*Capsus lineifer*, *Walk. Cat. Het.* vi, p. 122 (1873).  
*Hyalopeplus lineifer*, *Kirk. Tr. E. S.* 1902, p. 253.

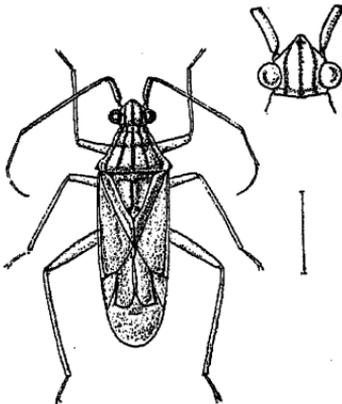


Fig. 288.—*Hyalopeplus vitripennis*.

Luteous; head with three, and pronotum with five longitudinal lines either red or black; scutellum with a central line similarly variable in colour; basal margin of pronotum black; antennæ luteous, sometimes (excluding basal joint) fuscous; hemelytra pale ochraceous hyaline, the venation piceous; apex of scutellum more or less castaneous.

Length 9 to 10 millim.

*Hab.* Assam; Margherita (*Doherty*). Ceylon (*Lewis*). Tenasserim; Myitta (*Doherty*).—Malacca (*Brit. Mus.*), Java, Philippines. North Queensland (*Dodd*).

1405. *Hyalopeplus spinosus*, sp. n.

Allied to *H. vitripennis*, *Stål*, but differing principally in the

pronotal angles, which are distinctly spinously produced, and with their apices a little directed backward; the fourth joint of antennæ is pale luteous with its apex piceous; the pronotum has a subbasal transverse black marginal line, but the longitudinal fasciæ are indistinct, only three in number, the central one continuous, indistinct and fuscous, the other two red, but not extending beyond the anterior area.

Length 9 millim.

*Hab.* Assam; Margherita (*Doherty*).

#### Division *PHYTCORARIA*.

*Phytcoraria*, *Reut. Bih. Vet.-Ak. Handl.* iii (1) p. 6 (1875); *id. Acta Soc. Faun. & Flora Fenn.* i, p. 35 (1875).

In this division the head is neither longitudinally sulcated nor impressed, the brachial vein to the hemelytra is distinct, the cuneus elongately triangular but the fracture not profoundly exhibited; the pronotum very obsoletely punctate, sometimes transversely rugose.

#### *Synopsis of Genera.*

- |  |                        |
|--|------------------------|
| A. Antennæ with the first joint thickened and shorter than pronotum; second joint incrassate at apex .....       | PARACALOCORIS, p. 449. |
| B. Antennæ with the first joint as long as pronotum or very little shorter; second joint not incrassate at apex. |                        |
| a. Body pubescent, first joint sparingly hirsute .....   | PHYTCORIS, p. 448.     |
| b. Body not pubescent, first joint not hirsute .....   | CALOCORIS, p. 451.     |

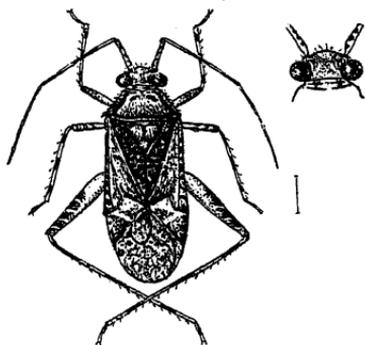
#### Genus *PHYTCORIS*.

*Phytcoris*, *Fallén* (part), *Hem. Suec.* p. 83 (1829); *Herr.-Sch. Wanz. Ins.* iii, p. 36 (1835); *Fieb. Eur. Hem.* pp. 65, 258 (1861); *Reut. Bih. Vet.-Akad. Handl.* iii (1) p. 10 (1875).

Type, *P. ustulatus*, *Herr.-Sch.*, a Palearctic species.

*Distribution.* Probably of universal distribution.

Body subelongate; first joint of the antennæ sparingly hirsute on its inner margin, and about as long as the pronotum; rostrum extending beyond the base of the abdomen; body opaque, somewhat densely pubescent; eyes large, prominent; pronotum trapezoidal, with a distinct anterior collar; scutellum tumid; hemelytra more or less parallel; membrane pale fuliginous, irrorated with paler coloration; legs elongate, the posterior pair longest, with the femora moderately thickened; tibiæ setose.

1406. *Phytocoris crinitus*, sp. n.Fig. 289.—*Phytocoris crinitus*.

Brownish-ochraceous, thickly tomentose; lateral and posterior margins of the pronotum, a central basal fascia to scutellum, clavus, corium, and cuneus fuscous; corium with central and apical paler suffusions; membrane pale fuliginous mottled with grey, the veins fuscous; body beneath fuscous, coxæ and legs pale greyish-brown, apical areas of the femora mottled with fuscous, tibiæ annulated with fuscous; antennæ brown, speckled and annulated with greyish, first joint as long as pronotum,

second about twice as long as first; rostrum considerably passing posterior coxæ.

Length  $4\frac{1}{2}$  millim.

*Hab.* Ceylon; Peradeniya (*Green*).

1407. *Phytocoris stoliczkanus*, *Dist. Tr. E. S.* 1879, p. 124; *id. Sec. Yark. Miss., Rhynch.* p. 10, f. 6 (1879).

Uniform pale ochraceous; head with a V-shaped mark consisting of small transverse striæ commencing from near base of antennæ, of which the first joint is almost as long as head and pronotum together; pronotum with two slightly raised transverse callosities extending across and occupying the anterior area; scutellum with the base somewhat raised and gibbous, a waved transverse cordate line near base, and a faint pale longitudinal median line near apex; hemelytra sparingly clothed with a few minute blackish hairs; membrane with bright prismatic reflections.

Length 6 millim.

*Hab.* Punjab; Murree (*Stoliczka*).

Genus **PARACALOCORIS**.

*Paracalocoris*, *Dist. Biol. Centr.-Am., Rhynch.* i, p. 263 (1883).

Type, *P. jurgiosus*, Stål, a Neotropical species.

*Distribution.* Neotropical, Ethiopian, and Oriental Regions.

Body above distinctly pilose; antennæ with the basal joint incrassated, shorter than the pronotum, thickly clothed with fine long hairs; second joint about twice as long as first, its apex distinctly incrassate, third and fourth slender, and together subequal to or longer than the second, fourth generally a little longer than the third; pronotum distinctly subgibbous, the width at posterior angles being about three times that of anterior margin; rostrum reaching the intermediate coxæ. Pronotum usually with two discal subexcavated spots.

1408. *Paracalocoris burmanicus*, sp. n.

Fig. 290.

*Paracalocoris burmanicus*.

Head, pronotum, and scutellum ochraceous; head suffused with brownish on the lateral areas; pronotum with two central and two sublateral fuscous fasciæ united at base, and with two small transverse spots near anterior margin and two rounded discal spots black; scutellum with a broad fuscous fascia on each lateral area; corium fuscous, thickly ochraceously pubescent; cuneus castaneous, its apex and a spot near inner angle black; membrane pale fuliginous and subhyaline, the venation and some apical linear marks black; body beneath ochraceous; a central and lateral spots to mesosternum and a sublateral series of small spots to abdomen black; femora ochraceous, with their apices broadly black; tibiæ and tarsi black, the first with a central ochraceous annulation; antennæ piceous, extreme base of second joint and bases of third and fourth joints stramineous.

Length 6 millim.

*Hab.* Burma; Karennee (*Fea*).1409. *Paracalocoris erebus*, sp. n.

Black, opaque, finely ochraceously pubescent; head with a small black spot in front of eyes, which are greyish-white; pronotum with two transverse black spots on anterior area and two obscure spots on disk; cuneus castaneous, its base and apex black; membrane subhyaline, its venation and a linear subapical spot black, its apical margin fuliginous; body beneath brownish-ochraceous, sternum piceous; a lateral spot to mesosternum and a sublateral series of small spots to abdomen black; legs black, bases of femora and central annulation to tibiæ stramineous; antennæ piceous, base of third joint stramineous.

Length  $4\frac{1}{2}$  millim.*Hab.* Burma; near Rangoon.1410. *Paracalocoris lanarius*, sp. n.

Dull pale ochraceous, greyishly pilose; antennæ, eyes, two discal spots to pronotum, a small spot at each basal angle of scutellum, and small spots at base and apex of cuneus black; basal half of second joint of antennæ and third joint (excluding base) purplish-red, extreme base of second and base of third joint greyish-white; head and collar of pronotum uniformly greyishly pilose; pronotum greyishly pilose, with two central curved fuscous fasciæ; scutellum

with the disk glabrous; corium and clavus strongly greyish-pilose; membrane very pale fuliginous, with venation black; body beneath and legs pale ochraceous, the legs darkest; mesonotum (slightly, perhaps accidentally, exposed in typical specimen) exhibiting two large discal fuscous spots; abdomen beneath with a submarginal segmental series of linear fuscous spots.

Length 4 millim.

*Hab.* Ceylon; Peradeniya (*Green*).

### Genus CALOCORIS.

*Calocoris*, *Fieb. Wien. ent. Monatsb.* Bd. ii, p. 305 (1858); *id. Eur.*

*Hem.* pp. 65, 251 (1861); *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 11 (1875); *Saund. Hem. Het. Brit. Islds.* p. 238 (1892).

Subg. *Closterotomus*, *Fieb. Eur. Hem.* pp. 65, 261 (1861).

„ *Deræocoris*, *Dougl. & Scott, Brit. Hem.* p. 315 (1865).

Type, *C. lineolatus*, Goeze, a Palæarctic species.

*Distribution.* Probably nearly universally distributed, though not yet recorded from the Ethiopian Region.

Body elongate, head inserted to the eyes; rostrum extending beyond the intermediate but not passing the posterior coxæ; antennæ variable, with the basal joint shorter than the pronotum or about the same length; pronotum convexly deflected anteriorly, with a narrow raised collar; scutellum moderately tumid; hemelytra with the margins parallel or sometimes slightly rounded; tibiæ setose.

411. *Calocoris lineolatus*, Goeze (*Cimex*) *Ent. Beytr.* ii, p. 267 (1778); *Reut. Act. Soc. Sc. Fenn.* xv, p. 262 (1888), et syn.

*Lygæus chenopodii*, *Fall. Mon. Cim.* p. 74 (1808).

*Calocoris chenopodii*, *Dist. Sec. Yark. Miss., Rhynch.* p. 10 (1879);

*Saund. Hem. Het. Brit. Islds.* p. 243 (1892).

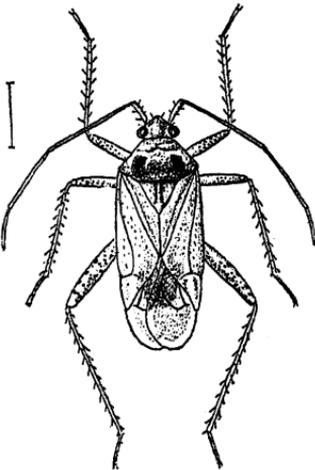


Fig. 291.—*Calocoris lineolatus*.

Pale greenish-ochraceous; pronotum with its posterior disk frequently infuscated and often with two black spots; scutellum with two central black lines; extreme lateral margins of the corium, and usually a discal fascia to corium, dark brown; legs speckled with black; cuneus stramineous; membrane pale fuliginous, with the veins piceous; antennæ robust, second, third and fourth joints about equally thick; pronotum much narrowed anteriorly; tibiæ somewhat longly setose.

Length  $8\frac{1}{2}$  to 9 millim.

*Hab.* Kashmir; Sind Valley (*Stoliczka*).—Widely distributed in the Palæarctic Region and recorded from Turkistan.

1412. *Calocoris dohertyi*. sp. n.

Pale ochraceous, apex of second joint of antennæ, eyes, basal margin of head, and a small spot near each posterior angle of pronotum black; membrane very pale fuliginous; first joint of antennæ subequal in length to pronotum, second almost twice as long as first; head moderately tumid between eyes; pronotum with some very obscure transverse striations; corium very finely and obscurely pilose; the membrane in some positions exhibits pearly greenish lustre; tibiæ rather longly setose.

Length 7 millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

1413. *Calocoris stoliczkanus*, *Dist. Tr. Ent. Soc.* 1879, p. 124; *id. Sec. Yark. Miss., Rhynch.* p. 10, f. 7 (1879).

Ochraceous clouded with brown, and sparingly palely flavescently pilose; antennæ brownish, second, third, and fourth joints with their apices piceous, first joint robust, shorter than pronotum, second somewhat suddenly thickened towards apex, third and fourth very slender, fourth not much more than half the length of third; cuneus somewhat paler in colour than corium, brownish and pilose at base and with a small piceous spot at apex; membrane pale fuscous clouded with brown; body beneath pale obscure ochraceous, finely palely pilose and with a somewhat obscure stigmatal series of small brown spots; legs mutilated in specimens described; pronotum faintly angulose; scutellum somewhat distinctly strigose.

Length 8 millim.

*Hab.* Punjab; Murree (*Stoliczka*).

1414. *Calocoris angustatus*, *Leth. Ind. Mus. Notes*, iii, no. 2, p. 90 (1893) fig.

Very elongate; dull flavescent; antennæ fulvous, first joint robust, as long as the head, second joint very long, slender, four times as long as first, third, fourth and fifth joints equal, slender, equal in length to the first joint; pronotum trapeziform, punctulate, posterior angles somewhat prominent, slightly obtusely acute, anterior angles obtuse, anteriorly with a distinct collar, the apical area for about one-third from anterior margin robustly callose; hemelytra flavescent, punctate, sparingly fulvous-pubescent; clavus and sutural portion of corium roseate, sometimes concolorous; legs concolorous, tibiæ armed externally with ten or eleven black spinules; apices of tarsi fuscous. (*Lethierry*.)

Length 6 to 7 millim.

*Hab.* Madras.

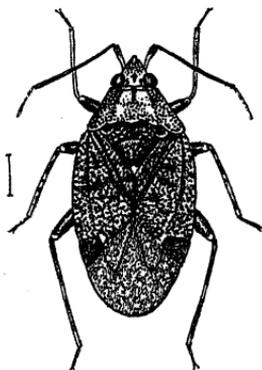
Stated to injure cholum (*Sorghum vulgare*) in the South Arcot District of the Madras Presidency.

Division — ?

Genus **MEVIUS**, nov.Type, *M. lewisi*, Dist.*Distribution.* Ceylon.

Somewhat broadly ovate, narrowed anteriorly and posteriorly; head somewhat long, narrowed anteriorly, not quite so long as width between eyes, which touch the anterior margin of the pronotum; antennæ with first joint moderately incrassate towards apex, shorter than head, second joint rather stout, about three times as long as first, third about as long as first; rostrum apparently reaching the posterior coxæ (type a carded specimen); pronotum tumid at base, deflected anteriorly, the lateral areas obliquely deflected, posterior margin in front of scutellum strongly concavely sinuate, and there slightly narrower than anterior margin, between posterior angles about twice as wide as anterior margin where there is a narrow anterior collar; scutellum small, tumid, basal margin strongly convex; clavus broader posteriorly than anteriorly; corium outwardly rounded, its marginal area moderately laminate; cuneus almost as broad as long; cuneal fracture indistinct; membrane with a single oblong cell; legs of moderate length, femora incrassate, tarsi with the last joint much the longest.

I cannot locate this genus in any division with which I am acquainted. It appertains to the *Phytocoraria* and *Capsaria*. I place it between the two divisions, and refrain from making a new one on a single genus.

1415. *Mevius lewisi*, sp. n.Fig. 292.—*Mevius lewisi*.

Length 5 millim.

*Hab.* Ceylon (*Lewis*).

Head and pronotum ochraceous, fuscously punctate; base of pronotum (its surface injured in type) and scutellum piceous speckled with ochraceous, the apex of the scutellum stramineous; corium piceous-brown speckled with flavous; cuneus dark castaneous, finely speckled with flavous, its apex and a spot at inner angle flavescent; membrane fuliginous, thickly covered with minute paler spots; antennæ and legs castaneous; base of first and the two apical joints of antennæ, apices of tibiæ, a central annulation to posterior tibiæ, mottlings to intermediate tibiæ, and the tarsi pale ochraceous.

Division *CAPSARIA*.

*Capsaria*, *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 6 (1875).

Reuter has subsequently amalgamated his previous division *Phytocaria* with the *Capsaria*, but I think unnecessarily. The *Capsaria* may always be distinguished by the more profound cuneal fracture as well as by more apparent though superficial characters.

This may be taken as the largest and most typical division of the Capsidæ, and its representatives are universally distributed.

*Synopsis of Genera.*

- A. Corium not or indistinctly punctate.
- a. Pronotum not or very indistinctly punctate.
- a. Eyes large; pronotum about half as long as broad; first joint of antennæ about as long as head. . . . . *LYGUS*, p. 454.
- b. Eyes small; pronotum more than half as long as broad; first joint of antennæ longer than head. . . . . *LUCITANUS*, p. 465.
- b. Pronotum coarsely punctate. . . . . *HERMOTINUS*, p. 462.
- B. Corium longly pilose.
- a. Antennæ slender; body elongately oval. . . . . *PŒCILOSCYTUS*, p. 458.
- b. Antennæ with apex of second joint incrassate and pilose; body broadly ovate. . . . . *GISMUNDA*, p. 463.
- C. Corium more or less strongly punctate.
- a. Pronotum remotely and obsoletely punctate. . . . . *LIOCORIS*, p. 463.
- b. Pronotum strongly punctate.
- a. Antennæ slender.
- a'. Head narrow, longer than broad at base. . . . . *CAMPTOBROCHIS*, p. 460.
- b'. Head very broad, as broad as long. . . . . *BOTHRIOMERIS*, p. 469.
- b. Antennæ with apex of second joint moderately incrassate; head somewhat narrow. . . . . *DERÆOCORIS*, p. 465.
- c. Antennæ with second joint incrassate from near middle; head broad. . . . *CAPSUS*, p. 468.

Genus *LYGUS*.

*Lygus*, *Hahn, Wanz. Ins.* i, p. 147 (1831); *Fieb. Eur. Hem.* pp. 68, 272 (1861); *Reut. Acta Soc. Fauna & Flora Fenn.* i, p. 61 (1875).  
*Lygocoris*, *Reut. Bih. Vet.-Akad. Handl.* iii, 1, p. 16 (1875).  
*Orthops*, *Fieb. Wien. ent. Monatsb.* ii, p. 311 (1858).

Type, *L. pabulinus*, Linn., a Palæarctic and Nearctic species.

*Distribution.* Probably universal.

Oblong, ovate, slightly pubescent; head with the vertex moderately elevated, eyes moderately exserted and placed close to

anterior margin of pronotum; antennæ with the second joint very slightly incrassate towards apex; pronotum anteriorly strongly convexly deflected, anterior disk with transverse elevated glabrous calli, basal margin convexly rounded; hemelytra longer than abdomen, cuneus broad at base; posterior tarsi with the second joint a little longer than the first.

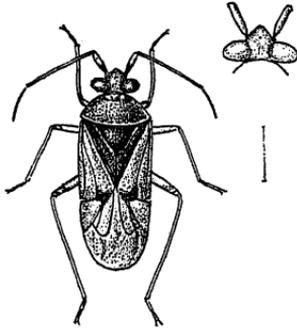


Fig. 293.—*Lygus sordidus*.

A. *Pronotum unicolorous*.

1416. *Lygus sordidus*, sp. n.

Dull yellowish-white; scutellum, clavus, and a spot on apex of corium and base of cuneus fuscous-brown; base of first joint and apical area of second joint of antennæ piceous; apical area of intermediate femora slightly, and apical area of posterior femora strongly suffused with reddish-castaneous; first joint of antennæ about as long as head, second about three times as long as first; pronotum obscurely punctate; hemelytra finely pubescent.

Length  $5\frac{1}{2}$  millim.

*Hab.* Utakamand (*Atkinson, Brit. Mus.*). Ceylon (*Green*).

1417. *Lygus albescens*, sp. n.

Uniform dull creamy-white, third joint of antennæ infuscated (remainder mutilated in specimen described); pronotum somewhat distinctly punctate; first joint of antennæ scarcely longer than head, second rather more than twice the length of first; pronotum with an anterior transverse impression a short distance from frontal margin, defining a tumid area with a central glabrous callosity; above finely pubescent.

Length 6 millim.

*Hab.* Utakamand (*Atkinson Coll., Brit. Mus.*).

1418. *Lygus decoloratus*, sp. n.

Very pale ochraceous, pronotum, scutellum, and lateral margins of corium paler with a slightly greenish tinge; membrane pale fuliginous mottled with some scattered fuscous markings; first joint of antennæ about as long as head, second about twice as long as first; hemelytra finely pubescent.

Length 5 millim.

*Hab.* Ceylon; Pundaluoya (*Green*).

The following note has been received from Mr. E. E. Green:—  
“This species has recently appeared as a pest of the tea-plant in Bogawantalawa (6000 ft.). It punctures the young shoots and

causes them to wither. It also attacks *Verbena* and *Tropæolum* plants in the bungalow gardens. My correspondent reports that a bed of *Tropæolum* was completely ruined by the insects. I have found the egg embedded in the young stems of *Verbena* plants and in succulent shoots of tea. The egg is cylindrical, rounded at posterior extremity; it is embedded in a slightly diagonal position, the truncate extremity being flush with the surface of the plant. Length 0.90 millim."

1419. *Lygus viridanus*, *Motsch.* (*Deræocoris*) *Bull. Soc. Nat. Mosc.* xxxvi (2) p. 83 (1863).

Pale greenish; head, antennæ, rostrum, body beneath and legs pale ochraceous; apex of second joint and the third and fourth joints of antennæ, eyes, and apices of tarsi black; membrane pale greenish-brown; tibiæ and tarsi less ochraceous and more virescent than the femora; pronotum finely punctate.

*Var.* All the ochraceous markings replaced by a much more greenish tinge, giving the insect a somewhat unicolorous appearance. Length 5 millim.

*Hab.* Ceylon (*Lewis & Green*).

I have received both the typical and varietal forms from Ceylon.

1420. *Lygus pubens*, sp. n.

Ochraceous; lateral marginal areas of the corium much paler in hue; clavus suffused with castaneous, two curved fuscous lines, united posteriorly, on posterior disk of corium; membrane very pale fuliginous, infuscated on apical area; antennæ piceous, second joint, excluding apex, ochraceous; pronotum very finely punctate.

*Var. a.* Scutellum, a broad transverse fascia at apex of corium, clavus, and a small spot at apex of cuneus piceous or black; first joint of antennæ ochraceous.

Length  $3\frac{1}{2}$  to 4 millim.

*Hab.* Ceylon; Pundaluoya (*Green*).

B. *Pronotum with two obscure dark spots.*

1421. *Lygus immitis*, sp. n.

Greenish-ochraceous, thickly finely pilose; eyes and a small spot at apex of cuneus black; pronotum with the disk more palely virescent, with two very obscure central linear pale fuscous spots near base; scutellum with two central pale fuscous linear lines, diverging posteriorly; clavus and corium irregularly mottled with pale fuscous; membrane fuliginous, with pale virescent suffusions; posterior femora with pale brownish apical annulations; apex of rostrum and apices of tarsus piceous.

Length  $4\frac{1}{2}$  to 5 millim.

*Hab.* Ceylon (*Lewis*); Pundaluoya (*Green*).

C. *Pronotum with two prominent black spots.*1422. *Lygus catullus*, sp. n.

Head and pronotum pale ochraceous; eyes, extreme apex of head, and two spots on anterior area of pronotum black; scutellum and corium dark shining fuscous; two small basal spots and apex to scutellum, and basal and apical marginal spots to corium pale ochraceous; cuneus pale ochraceous with an inner fuscous spot; membrane very pale fuliginous, base irrorated with pale flavescent and fuscous; body beneath and legs pale ochraceous; a lateral spot to meso- and metasterna, and some transverse fasciæ and the apex to abdomen dark fuscous; pronotum very obsoletely finely punctate; scutellum (excluding apex) finely transversely striate; corium with some scattered pale flavescent hairs; antennæ pale ochraceous, extreme apex of first, apical half of second, and the third joint (excluding base) fuscous.

Length 4 millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

D. *Pronotum with a central dark longitudinal fascia.*1423. *Lygus biseratensis*, *Dist. Fasciculi Malayenses*, *Zool.* vol. i, p. 269, pl. xvi, ff. 11, 11 a (1903).

Pale obscure ochraceous, finely sericeous; apices of first, second, and fourth joints of antennæ, eyes, a submarginal anterior line and a central longitudinal fascia to pronotum black; cuneus fuscous-brown; first and fourth, and second and third joints of antennæ subequal in length.

*Var. a.* Scutellum and corium pale purplish-brown, the lateral margins of the last pale ochraceous.

*Var. b.* Scutellum and corium dark castaneous, the lateral margins of the last narrowly pale ochraceous; femora moderately infuscated.

Length 7 millim.

*Hab.* Ceylon; Kandy (*Green*). Burma; Mandalay (*Fea*).—Siamese Malay States.

E. *Species unknown to the writer.*1424. *Lygus bengalicus*, *Reut. Ent. Tidskr.* v, p. 195 (1884).

Green, somewhat palely pubescent; head, antennæ, apices of femora, tibiæ, and tarsi more or less reddish-brown; apex of clypeus piceous; antennæ with about a third of basal joint and apex of second somewhat fuscous, frequently in the ♂ with the second joint totally fuscous; pronotum piceous, with a large anterior rounded greenish-livid spot in ♂, or sordidly greenish, with two submarginal broad stripes, sometimes broadly dilated posteriorly and before the basal margin confluent in ♀; hemelytra

with a fuscous spot at the interior apical angle of corium; membrane fuliginous, the cells immaculate or with their apices palely infuscated; a hyaline groove at apex of cuneus in ♂, or two semihyaline spots before the middle of the external margin in the ♀; apices of tarsi darkly fuscous; rostrum reaching posterior coxæ; hemelytra densely punctate.

Length  $3\frac{1}{2}$  to 4 millim.

*Hab.* Bengal (*vide Reuter*).

I have not seen this species.

1425. *Lygus obtusus*, *Reut. Ent. Tidskr.* v, p. 196 (1884).

Dark green, somewhat glabrous, slightly punctate; eyes fuscous; clypeus, a band on the pleura of the prothorax, an apical stricture and medial basal margin of pronotum, a medial band to scutellum, all the claval sutures (interiorly broad), an apical spot to corium, apical margin to cuneus (interrupted medially), a common arcuated fascia to the apices of the cells and two spots on the external edge of membrane, another a little behind apex of cuneus and another situate behind middle fuscous; legs dark green, unspotted, tibiæ darkly spinulose, last joint of tarsus apically dark fuscous; rostrum reaching the intermediate coxæ; hemelytra slightly punctate.

Length, ♀,  $3\frac{2}{3}$  millim.

*Hab.* Bengal (*vide Reuter*).

I have not seen this species.

Genus **PÆCILOSCYTUS.**

*Pæciloscytus*, *Fieb. Wien. ent. Monatsb.* ii, p. 311 (1859); *id. Eur. Hem.* pp. 68, 276 (1861); *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 19 (1885); *id. Acta Soc. Faun. & Flora Fenn.* i, p. 80 (1875).

Subg. *Charagochilus*, *Fieb. Wien. ent. Monatsb.* iii, p. 309 (1859).

„ *Systratiotus*, *Dougl. & Scott, Brit. Hem.* p. 443 (1865).

Type, *P. unifasciatus*, Fabr., a Palæarctic and Nearctic species.

*Distribution.* Probably universally distributed.

Body oval, opaque or subopaque, above flavescently pilose; head nearly vertical, inner margins of eyes marked with testaceous pubescence; eyes moderately exserted; antennæ moderately slender, first joint not longer than head, second twice as long as first; rostrum reaching or only slightly passing intermediate coxæ; pronotum trapeziform, anteriorly convexly deflected, posterior margin truncate, not covering basal margin of scutellum, the disk densely punctate; cuneus very strongly fractured, its apex ferruginous or flavous.

1426. *Pæciloscytus longicornis*, *Reut. (Charagochilus) Ent. Tidskr.* v, p. 196 (1884).

Black, hemelytra and anterior collar to pronotum greyishly

pilose; a flavescent spot

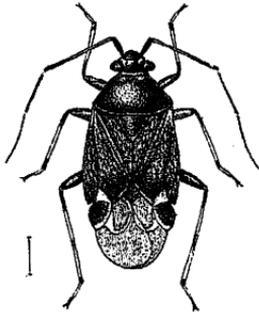


Fig. 294.

*Pæciloscytus longicornis*.

on apical margin of corium in front of cuneus, and the apex of cuneus also flavescent; antennæ long, first joint black, second about as long as posterior margin of pronotum, testaceous, with its apex black, third and fourth black, base of third flavescent; pronotum and scutellum rugulose; tibiæ pale ochraceous, their bases and apices and a central annulation to posterior pair black; membrane fuliginous, the basal cells a little darker with their margins flavescent.

Length  $3\frac{2}{3}$  to 5 millim.

*Hab.* Calcutta (*Brit. Mus.*). Ceylon (*Green*). Nicobar Islands; Teressa (*vide Reuter*).—Tonkin.

1427. *Pæciloscytus consanguineus*, sp. n.

Allied to *P. longicornis*, Reut., but differing in being less greyishly pilose above; basal margin of pronotum, apex of scutellum, a small spot at apex of clavus, and basal angle of corium (somewhat broadly) ochraceous; femora pale ochraceous, their apical halves broadly annulated with castaneous; pronotum a little more convex and more deflected anteriorly; scutellum more tumid and distinctly transversely striate.

Length  $3\frac{1}{2}$  millim.

*Hab.* Burma; Bhamo. Tenasserim; Myitta (*Doherty*).

1428. *Pæciloscytus pygmæus*, sp. n.

Black, hemelytra greyishly pilose; posterior margin of pronotum in front of base of corium, a small spot near base of lateral margin to corium, its inner margin beyond clavus (narrowly), and its apical margin before cuneus (broadly) ochraceous; apex of cuneus pale hyaline; membrane fuliginous, its basal cells piceous and margined with flavescent; antennæ piceous, basal half of second joint ochraceous; rostrum greyish-white, medially annulated with piceous, and reaching the posterior coxæ; legs piceous, femora broadly annulated near base with greyish-white, the apical halves of tibiæ, and tarsi excluding apices, greyish-white or very pale stramineous, apices of femora imperfectly annulated with brownish-ochraceous; pronotum, scutellum, and clavus very distinctly punctate.

Length  $2\frac{2}{3}$  to 3 millim.

*Hab.* Ceylon; Peradeniya (*Green*).

1429. *Pæciloscytus capitatus*, sp. n.

♀. Piceous, greyishly pilose; head, antennæ, rostrum, posterior margin of pronotum, posterior lateral margin (narrowly) and

interior apical margin of corium, basal and lateral margins and apex of cuneus ochraceous; coxæ and legs pale flavescent, posterior femora annulated with castaneous on apical areas, spinules to tibiæ piceous; third and fourth joints of antennæ, excluding extreme bases, fuscous; membrane fuliginous, margins of the basal cells flavescent; abdomen beneath with the disk piceous, and less longly greyishly pilose than the lateral areas, on which there is a submarginal series of small black spots; rostrum passing the posterior coxæ.

Length, ♀,  $5\frac{1}{2}$  millim.

*Hab.* Ceylon; Hambantota (*Green*).

### Genus CAMPTOBROCHIS.

*Camptobrochis*, *Fieb. Wien. ent. Monatsb.* ii, p. 304 (1859); *id. Eur. Hem.* p. 248 (1861); *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 20 (1875); *id. Acta Soc. Faun. & Flora Fenn.* i, p. 84 (1875).

*Camptobrochys*, *Fieb. Eur. Hem.* p. 64 (1861).

Type, *C. punctulatus*, Fall., a Palæarctic species.

*Distribution.* Nearctic, Palæarctic, and Oriental Regions.

Body oval, convex, shining, strongly punctate; head short, vertical; eyes large, exserted, touching anterior margin of pronotum; rostrum reaching or just passing the intermediate coxæ; antennæ with the basal joint not quite so long as head, second about twice as long as first or a little more than twice as long; pronotum convexly anteriorly deflected, strongly punctate, with a distinct transverse anterior callus, basal margin about twice as broad as anterior margin, truncate, oblique at lateral areas; corium with cuneus longer than abdomen; cuneal fracture profound; tibiæ spinulose.

A. *Corium, excluding lateral margins, almost uniformly punctate.*

1430. *Camptobrochis orientalis*, sp. n.

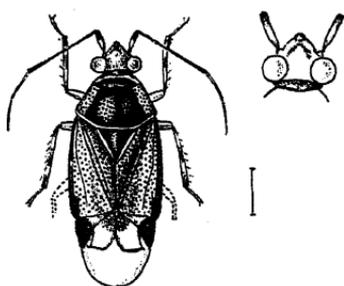


Fig. 295.—*Camptobrochis orientalis*.

Head pale ochraceous, its apex and basal margin black; pronotum black, its margins and lateral marginal areas ochraceous, the last brownly punctate; scutellum black, its lateral margins and apex ochraceous; corium and clavus black, the first with the whole discal area ochraceous; membrane very pale fuliginous and subhyaline; cuneus black, its inner angular area ochraceous; body beneath black, prosternum and legs ochraceous, legs annulated with fuscous;

antennæ piceous, bases of first, third, and fourth joints ochraceous; eyes greyish-white.

Length 5 millim.

*Hab.* Ceylon; Pundaluoya (*Atkinson, Brit. Mus.*).

1431. *Camptobrochis lutulentus*, sp. n.

Dark castaneous, shining; lateral margins of corium—widened posteriorly—and the legs pale ochraceous, the last somewhat obscurely annulated or suffused with fuscous; the pale lateral margins of corium traversed medially by a castaneous line; scutellum with an ochraceous spot near each basal angle; cuneus and membrane pale fuliginous, an inner streak and apex to the first, and cellular margins to the second, castaneous or fuscous-brown; eyes piceous; pronotum, clavus, and corium strongly punctate; basal joint and base of second joint of antennæ a little paler in hue; scutellum subglabrous; rostrum reaching the posterior coxæ.

*Var.* Much paler in hue; head, pronotum, and corium ochraceous, not castaneous, the corium with paler suffusions, or apparently exhibiting a subbasal and two discal paler elongate spots.

Length 4 millim.

*Hab.* Ceylon; Pundaluoya and Kandy (*Green*). Tenasserim; Thagata.

Allied to the Palæarctic species, *C. lutescens*, Schill. The variety is from Tenasserim.

1432. *Camptobrochis uniformis*, sp. n.

Head, antennæ, rostrum, pronotum and sternum pale ochraceous, the pronotum thickly, somewhat coarsely brownly punctate; eyes and apex of second joint of antennæ piceous, third and fourth antennal joints fuscous, base of third joint pale flavescent; scutellum pale castaneous, glabrous; corium brownish-ochraceous, thickly punctate, very finely pilose, the lateral margins pale ochraceous; cuneus pale fuscous, with an inner fuscous spot; membrane pale fuliginous; the veins darker, and the lateral and apical margins paler. Body and legs imperfectly seen owing to the typical specimen being in a carded condition.

Length 5 millim.

*Hab.* Burma; Katha.

B. *Disk of corium impunctate.*

1433. *Camptobrochis similis*, sp. n.

Pale ochraceous; eyes and apex of second joint of antennæ black, third and fourth antennal joints and apices of the tarsi fuscous; femora more or less mottled with darker ochraceous;

head glabrous; pronotum coarsely punctate, the anterior transverse callosity glabrous; scutellum glabrous; clavus thickly and coarsely punctate, corium with subclaval and sublateral punctures, the corium with a more or less distinct fuscous longitudinal streak; abdomen beneath with a central sublateral fuscous fascia; rostrum just passing the intermediate coxæ.

*Var.* Basal joint and base of second joint of antennæ fuscous.

Length 4 millim.

*Hab.* Ceylon (*Lewis*); Peradeniya (*Green*). Tenasserim; Myitta (*Doherty*).

### Genus **HERMOTINUS**, nov.

Type, *H. signatus*, Dist.

*Distribution.* Tenasserim.

Somewhat broadly ovate; pronotum strongly punctate; corium impunctate, moderately pilose; head somewhat broad, anteriorly deflected; eyes very large and transverse, touching but projecting beyond the anterior margin of the pronotum; antennæ slender, first joint longer than head, second nearly three times the length of first; rostrum reaching the intermediate coxæ; pronotum with a narrow anterior collar, behind which are two transverse callosities, posterior margin more than twice the width of anterior margin, its lateral margins sinuate, the disk tumid; scutellum subtriangular, a little transversely foveate at base; hemelytra with the lateral margins somewhat amplified, the cuneus a little longer than broad, the fracture distinct but not profound; legs of moderate length, the femora moderately incrassate, the tibiæ setose.

#### 1434. *Hermotinus signatus*, sp. n.

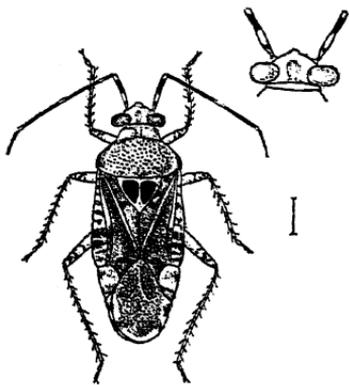


Fig. 296.—*Hermotinus signatus*.

annulated with fuscous; pronotum coarsely punctate, its

Head, pronotum, and scutellum very pale ochraceous; eyes, a central basal fascia to head and the punctures to the pronotum brown; antennæ brown, annulated with stramineous; scutellum with two large discal oblong black spots; corium dark fuscous-brown, some blackish spots and suffusions on clavus; the lateral areas and cuneus pale semi-hyaline, with transverse fuscous fasciate spots, cuneus with the apex and transverse discal spot pale fuscous; membrane very pale fuliginous, piceous at base, the margins paler; legs pale ochraceous,

lateral margins longly pilose; corium longly pilose at claval margin.

Length  $4\frac{1}{2}$  millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

Genus **GISMUNDA**, nov.

Type, *G. chelonia*, Dist.

*Distribution.* Sikhim.

Body broadly ovate; head strongly deflected in front of eyes, which about touch the anterior margin of the pronotum; antennæ with the first joint a little thickened, about as long as head, second about twice as long as first, its apical area distinctly incrassate and pilose, third and fourth joints together almost as long as second; rostrum about reaching the intermediate coxæ; pronotum short, transverse, very strongly deflected, coarsely punctate, lateral margins oblique, basal margin truncate, the lateral angles subprominent; scutellum triangular, moderately tumid, transversely striate; hemelytra flavescently pilose, their lateral margins convex, corium with cuneus shorter than abdomen, membrane passing abdominal apex; legs of moderate length, tibiæ setose.

1435. *Gismunda chelonia*, sp. n.

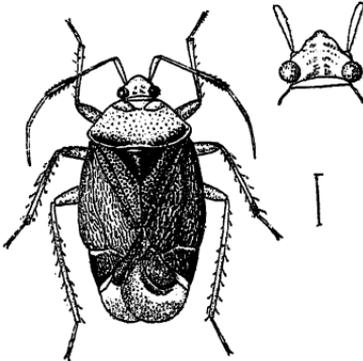


Fig. 297.—*Gismunda chelonia*.

*Hab.* Sikhim; Mungphu (*Atkinson Coll., Brit. Mus.*).

Head and pronotum ochraceous, eyes and basal margin of pronotum, interrupted at centre, piceous; scutellum black, corium castaneous, flavescently pilose; cuneus very dark castaneous, its anterior margin and apex flavescens; membrane fuliginous, margins of cell broadly ochraceous; antennæ ochraceous, apex of second joint broadly black; body beneath black; prosternum and legs ochraceous.

Length  $4\frac{1}{2}$  to  $5\frac{1}{2}$  millim.

Genus **LIOCORIS**.

*Liocoris*, *Fieb. Wien. ent. Monatsb.* ii, p. 309 (1858); *id. Eur. Hem.* pp. 67, 270 (1861); *Reut. Bih. Vet.-Akad. Handl.* iii, 1, p. 20 (1875); *id. Act. Soc. Sc. Fenn.* xxiii, no. 2, p. 45 (1898).

Type, *L. tripustulatus*, Fabr., a Palæarctic species.

*Distribution.* Palæarctic and Oriental Regions.

Body oval, convex above, glabrous, shining, pronotum remotely and obsoletely punctate; beneath very slightly pubescent; head

about as long as broad; eyes somewhat strongly exerted, almost touching anterior margin of pronotum; rostrum reaching the posterior coxæ; antennæ with the second joint shorter than the basal margin of the pronotum, third and fourth joints together longer than the second; pronotum with the posterior about twice as broad as anterior margin; corium more or less punctate.

1436. *Liocoris myittæ*, sp. n.

Ochraceous; apical half of second joint and the third and fourth joints of antennæ, two large rounded spots at anterior margin and two (obscure) at posterior margin of pronotum, two rounded spots at base of scutellum, clavus, a large angulated transverse spot at apex of corium, and a large spot at inner basal angle of cuneus black; membrane pale fuliginous mottled with ochraceous; femora reddish-ochraceous; tibiæ and tarsi pale fuscous; apices of femora obscurely annulated with fuscous; apices of tibiæ black; abdomen beneath with a sublateral series of small fuscous spots.

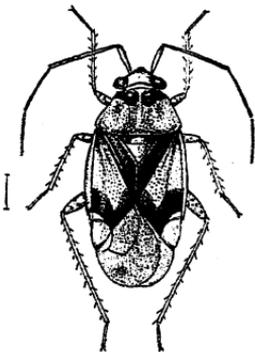


Fig. 298.—*Liocoris myittæ*.

Length 4 millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

1437. *Liocoris formosus*, sp. n.

Black; head (excluding eyes) and pronotum (excluding basal margin) ochraceous; a large apical spot to scutellum, an elongate spot at base, and a transverse spot at apex of corium, and apex of cuneus flavescens; membrane fuliginous mottled with pale fuscous; antennæ piceous, basal third of second joint, basal half of third joint, and extreme base of fourth joint ochraceous; body beneath and legs black; head beneath and lateral areas of prosternum reddish-castaneous; rostrum, anterior coxæ, anterior femora (excluding apices), a broad central annulation to anterior tibiæ, and numerous annulations to intermediate and posterior tibiæ flavescens; above shining, corium very obscurely and sparingly punctate.

Length  $3\frac{1}{2}$  millim.

*Hab.* Tenasserim; Myitta (*Doherty*).

1438. *Liocoris partitus*, *Walk.* (*Capsus*) *Cat. Het.* vi, p. 119 (1873).

Very pale luteous; antennæ (excluding basal joint), eyes, clavus, extreme basal margin of scutellum, lateral and apical margins of corium, the first strongly widened towards apex, apex of cuneus, central lobe to deflected head, and disk of mesosternum black; disk of abdomen beneath, and a submarginal series of small spots,

piceous; membrane fuliginous, with two paler spots on the lateral margins; head and anterior margin of pronotum darker luteous; rostrum reaching the posterior coxæ, its apex black.

Length 6 millim.

*Hab.* "North Hindostan" (*Boyes, Brit. Mus.*).

### Genus LUCITANUS, nov.

Type, *L. punctatus*, Kirby.

*Distribution.* Ceylon.

Subovate; head somewhat long, moderately deflected before eyes, first joint of antennæ considerably longer than head and a little thickened, second joint much longer than first and thickened on apical area, third and fourth joints short, slender, third a little longer than fourth; rostrum about reaching the posterior coxæ; pronotum tumid, deflected and narrowed anteriorly, lateral margins a little rounded, basal margin slightly concave in front of scutellum and thence oblique to lateral angles; scutellum large, subtriangular, about as broad as long; clavus very long, extending almost to base of membrane; lateral margins of corium a little convex; cuneus much broader than long; legs of moderate length, posterior femora thickened; tibiæ setose.

1439. *Lucitanus punctatus*, Kirby (*Leptomerocoris*), *J. Linn. Soc., Zool.* xxiv, p. 108 (1891).

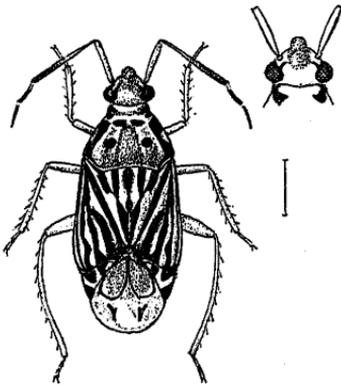


Fig. 290.—*Lucitanus punctatus*.

Pale ochraceous; head and pronotum shining; eyes, lateral margins (broken anteriorly), two anterior contiguous transverse discal spots and two rounded widely-separated central spots to pronotum, and longitudinal fasciæ to scutellum and corium, black: membrane very pale fuliginous, subhyaline, the venation and two posterior discal angulate lines black; antennæ with the apex of the second joint fuscous, third and fourth joints black, base of third stramineous.

Length 5 to 6½ millim.

*Hab.* Ceylon; Tangalla (*Green*).

### Genus DERÆOCORIS.

*Deræocoris*, *Kirschb. Jahrb. V. Nat. Herz. Nassau*, Heft x, p. 208 (1855); *Stål, Hem. Afr.* iii, p. 20 (1865); *Reut. Act. Soc. Sc. Fenn.* xxiii, no. 2, p. 18 (1898), et syn.  
*Macrocapus*, *Reut. Öfv. Finsk. Soc. Förh.* xxi, p. 55 (1879).

*Chilocrates*, *Horv. Termész. Füzetek*, xii, p. 39 (1889).  
*Shana, Kirk. Entomologist*, 1902, p. 315.

Type, *D. olivaceus*, Fabr., a Palæarctic species.

*Distribution*. Probably almost universally distributed.

Body oval, above shining, rarely pilose, excepting head moderately punctate; head with somewhat faint indications of a longitudinal impression which does not extend through the basal area, eyes touching anterior margin of pronotum; antennæ finely pilose, the last two joints together shorter than the second, apex of second joint moderately incrassate, first joint about as long as head; rostrum reaching the intermediate or posterior coxæ; pronotum with a narrow anterior collar, the basal nearly three times broader than the anterior margin, posteriorly strongly convex; scutellum moderately tumid; legs of ordinary length, posterior femora moderately incrassated, tibiæ setose.

The identity of *Shana*, Kirk., with *Chilocrates*, Horv., is evident from the description of each; I have seen the type of *Chilocrates*, and prefer to treat it as a section of *Deræocoris*.

1440. *Deræocoris patulus*, *Walk. (Capsus) Cat. Het.* vi, p. 120 (1873).  
*Chilocrates lenzii*, *Horv. Termész. Füzetek*, xii, p. 39 (1889).  
*Shana ravana, Kirk. Entomologist*, 1902, p. 316.

Black, shining, finely punctate; head, antennæ, rostrum, anterior area of pronotum, prosternum and legs ochraceous; apex of second joint of antennæ broadly black; bases of posterior femora black; rostrum reaching the posterior coxæ; extreme apex of head sometimes black.

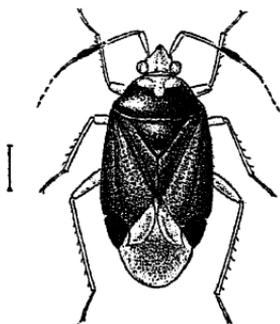


Fig. 300.  
*Deræocoris patulus*.

Var. *a*. Pronotum, excluding narrow basal area, ochraceous.

Var. *b*. Pronotum with an anterior black spot behind each eye, and with the basal black margin almost obliterated.

Var. *c*. Pronotum black, its collar and a central anterior linear spot ochraceous; femora black, tibiæ and tarsi ochraceous, bases and apices of tibiæ and apices of tarsi black.

Var. *d. lenzii*, Horv., *supra*. Resembling var. *c*, but disk of head black; legs black, a subapical annulation to anterior tibiæ, and first and second joints of the anterior tarsi, flavescent; posterior legs mutilated in type.

Length 4 to 5 millim.

*Hab.* Kashmir (*Budapest Mus.*). "North Hindostan" (*Boyes, Brit. Mus.*). Sikkim; Kurseong (*Calc. Mus.*), Mungphu (*Atkinson, Brit. Mus.*). Burma; Karennee (*Fea*).

Dr. Horváth has kindly forwarded to me the type of his *Chilo-*

*crates lenzii* for comparison. I have not seen the *Shana ravana*, Kirk., but from the description of both genus and species there can be little doubt as to its identity.

1441. *Deræocoris variabilis*, sp. n.

Uniform pale ochraceous; apical area of second joint of antennæ black; membrane pale fuliginous mottled with greyish; cuneus more or less piceous.

Above very finely punctate, rostrum reaching the posterior coxæ.

Var. *a*. Scutellum black; sometimes with a piceous spot near apex of corium.

Var. *b*. Resembling var. *a*, but with four black spots to pronotum—two on each side.

Var. *c*. Resembling var. *b*, but with a large irregular fasciate-like black spot on disk of corium.

Var. *d*. Resembling var. *c*, but pronotum without the four black spots, its basal margin being more or less broadly black.

Length  $4\frac{1}{2}$  to 5 millim.

*Hab.* Sikkim; Mungphu (*Atkinson, Brit. Mus.*), Kurseong (*Calc. Mus.*). Shillong (*Brit. Mus.*).

The five forms, as detailed above, are representative of the species; more or less intermediate links have also passed through my hands.

1442. *Deræocoris rufus*, sp. n.

Shining, reddish-ochraceous; head, second joint of antennæ and apices of tarsi black; third joint of antennæ stramineous, its apex piceous; membrane pale fuliginous; above, excluding head, finely punctate; rostrum imperfectly seen, owing to specimen described being in a carded condition.

Length  $5\frac{1}{2}$  millim.

*Hab.* Sikkim; Mungphu (*Atkinson, Brit. Mus.*).

1443. *Deræocoris ornandus*, sp. n.

Brilliant, shining; pronotum, scutellum, cuneus, body beneath and posterior legs black; corium and lateral areas of abdomen beneath sanguineous; head, antennæ, a broad subbasal and a narrow subapical annulation to posterior femora, and posterior tibiæ (excluding base) ochraceous; anterior and intermediate legs mutilated in specimen described; apical area of head and apical half of second joint of antennæ black; membrane fuliginous with greyish mottlings; above finely punctate; rostrum mutilated in specimen described.

Length 5 millim.

*Hab.* Sikkim; Mungphu (*Atkinson, Brit. Mus.*).

## Genus CAPSUS.

*Capsus*, *Fabr. Syst. Rhynch.* p. 241 (1803); *Reut. Act. Soc. Sc. Fenn.* xxiii, no. 2, p. 13 (1897), et syn.

*Rhopalotomus*, *Fieb. Wien. ent. Monatsb.* Bd. ii, p. 307 (1858).

Type, *C. ater*, Linn., from the Palæarctic and Nearctic Regions.

*Distribution.* Nearctic, Palæarctic, and Oriental Regions.

Oblong-ovate, robust, above rugosely punctate; scutellum rugose; head broad, with eyes broader than basal half of pronotum; rostrum incrassate, first joint strongly dilated; antennæ inserted near the internal apex of eyes, the last two joints together shorter than second joint, which is gradually apically incrassate; legs of moderate length, tibiæ setose.

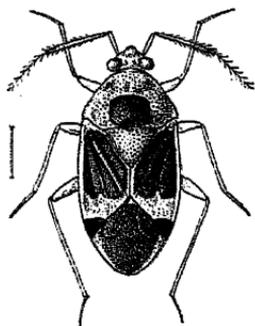
1444. *Capsus cræsus*, sp. n.

Fig. 301.—*Capsus cræsus*.

Pale sanguineous or reddish-ochraceous; second joint of antennæ (excluding base), eyes, a large somewhat rounded posterior discal spot to pronotum, corium (excluding basal angle, lateral margin and apical area), cuneus, and membrane black; tibiæ palely fuscous; pronotum coarsely punctate and laterally pilose, with an anterior levigate callosity; scutellum moderately tumid, punctured on basal area; corium finely punctate, its apical area somewhat longly pilose, its lateral margins a little reflexed; second joint of antennæ strongly pilose.

Length  $5\frac{1}{2}$  to 6 millim.

*Hab.* Burma; Palon (*Fea*).

1445. *Capsus remus*, sp. n.

Black or very dark chocolate-brown; extreme base of first joint of antennæ, an elongate apical spot to scutellum, an elongate discal spot near apex of corium, and the legs sanguineous; tibiæ sometimes palely fuscous or even black; pronotum coarsely punctate, with an anterior transverse callosity which is centrally sulcate; scutellum tumid, transversely foveate at base, obscurely wrinkled; corium more finely punctate than pronotum; membrane bronzy-brown; second joint of antennæ strongly pilose.

Length 5 to  $5\frac{1}{2}$  millim.

*Hab.* Burma; Karennee (*Fea*).

1446. *Capsus pegasus*, sp. n.

Black; basal joint of antennæ, a small discal spot near apex of corium, basal joint of rostrum, coxæ, legs, and disk of abdomen beneath ochraceous; rostrum (excluding basal joint) piceous; tibiæ palely fuscous; pronotum coarsely punctate, with an anterior callosity which is somewhat centrally sulcate; scutellum tumid, transversely foveate at base, obscurely transversely wrinkled; corium coarsely punctate; membrane fuliginous; second joint of antennæ strongly pilose.

Length 5 millim.

*Hab.* Ceylon (*Lewis*).

1447. *Capsus darsius*, sp. n.

Black; basal joint of antennæ, head beneath, legs, and some transverse fasciæ to abdomen beneath testaceous; second joint of antennæ longly pilose; pronotum strongly punctate, with an obscure anterior callosity which is strongly centrally sulcate; scutellum tumid, transversely foveate at base, punctate and obscurely transversely wrinkled; corium thickly punctate; membrane fuliginous.

Length 4½ millim.

*Hab.* Burma; Karennee (*Coll. Dist.*).

Genus **BOTHRIOMIRIS**.

*Bothriomiris*, *Kirk. Tr. Ent. Soc.* 1902, p. 270.

Type, *B. simulans*, *Walk.*

*Distribution.* Oriental Region.

Oblong, broad, remotely pilose; posterior area of pronotum, scutellum, corium, and sternum thickly strongly punctate; head broad, strongly deflected anteriorly, short as seen above, eyes large, touching the anterior margin of the pronotum but projecting beyond it; antennæ long, second joint longer than pronotum; pronotum without an anterior collar, not distinctly transversely impressed, the anterior area tumid, centrally sulcate, its posterior lateral margins oblique, the posterior area thickly strongly punctate, centrally carinate, the base truncate, oblique towards lateral angles; scutellum somewhat large and subtriangular; cuneus about as broad as long; interior cell of membrane posteriorly angulate; rostrum about reaching the posterior coxæ; femora short, moderately incrassate.

Kirkaldy states that this genus will probably form a new division. I place it here, provisionally, in the *Capsaria*.

1448. *Bothriomiris simulans*, *Walk.* (*Capsus*) *Cat. Het.* vi, p. 125 (1873).

*Bothriomiris marmoratus*, *Kirk. Tr. E. S.* 1902, p. 271.

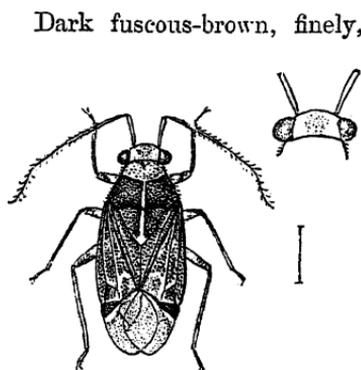


Fig. 302.—*Bothriomiris simulans*.

Length 6 to 7 millim.

*Hab.* Burma; Karennee (*Fea*).—Malay Peninsula; Perak, Singapore.

Dark fuscous-brown, finely, sparingly, palely pilose; a longitudinal fascia on inner side of each eye, anterior area of pronotum (more or less marked with fuscous), a central longitudinal fascia to posterior area of pronotum and scutellum, some waved reticulate marks at apex of corium, basal markings to membrane, basal annulations to femora and apical annulations to tibiæ stramineous; legs reddish-brown; posterior area of pronotum and the corium coarsely punctate; the scutellum finely transversely striate.

1449. *Bothriomiris testaceus*, sp. n.

Dark testaceous; a central fascia on apical half of scutellum and an elongate discal spot near apical margin of corium pale testaceous; membrane dark fuscous, the veins a little paler; head anteriorly and lateral margins of pronotum longly pilose; pronotum and corium coarsely punctate; scutellum transversely striate; legs more or less mutilated in the typical carded specimen described; third and fourth joints of antennæ slender and fuscous; scutellum distinctly transversely foveate at base.

Length 5 millim.

*Hab.* Burma; Karennee.

Division *TERATODELLARIA*.

*Teratodellaria*, *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 5 (1875).

*Fulvilaria*, *Uhler, Check-list Hem. Het. N. Amer.* p. 19 (1886); *Reut. Ann. Soc. Ent. Fr.* 1892, p. 391.

This division, as I understand and use it here, is primarily distinguished by the longly produced horizontal head.

Reuter, in his synopsis, places it before the *Miraria*, but according to the arrangement pursued here, and in agreement with the views of Uhler, I place it after the *Capsaria*.

Reuter has sank his name of the division in favour of that of the subsequent one proposed by Uhler, but I have already (*ante*, p. 413) explained my reasons for not following that course.

Genus **TYRAQUELLUS**, nov.Type, *T. albofasciatus*, Motsch.*Distribution.* Ceylon.

Elongate; head moderately long and somewhat triangular anteriorly; eyes inserted near anterior margin of pronotum; antennæ with the first joint incrassate and about as long as head, second about three times as long as first; rostrum reaching the posterior coxæ; pronotum nearly twice as broad at base as long, with a very narrow anterior collar, behind which it is distinctly constricted, gradually deflected from base, lateral margins concavely sinuate; mesonotum a little exposed; scutellum small, subtriangular; hemelytra with their margins nearly straight and subparallel; membrane longly passing abdominal apex; cuneus a little longer than broad; legs more or less mutilated in all the specimens examined.

1450. *Tyraquellus albofasciatus*, *Motsch.* (*Leptomerocoris*?) *Bull. Soc. Nat. Mosc.* xxxvi (2) p. 86 (1863).

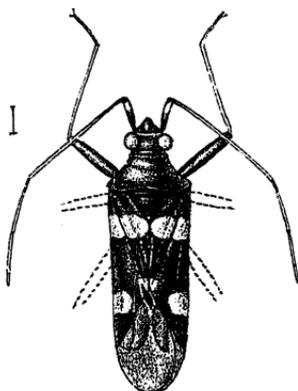


Fig. 303.

*Tyraquellus albofasciatus.*

Black or piceous; antennæ ochraceous, first joint black with an apical ochraceous annulation; eyes granulate, silvery-white; corium and clavus crossed by a transverse macular fascia near apex of scutellum, and corium with a large apical spot and a smaller one near apex of clavus, white; cuneus sometimes castaneous; membrane fuliginous; colour semi-opaque; pronotal posterior angles obtusely subprominent; anterior legs with the coxæ and femora piceous, the tibiæ and tarsi ochraceous, remaining legs mutilated in four specimens examined.

Length 3 millim.

*Hab.* Ceylon; Yatiyantota (*Green*).

1451. *Tyraquellus maculatus*, sp. n.

Piceous; corium with a lateral spot outside centre of clavus and a larger spot at apex white; membrane fuliginous; first and second joints of antennæ ochraceous, base of first joint piceous, remainder mutilated; rostrum ochraceous; femora piceous, tibiæ dark castaneous; eyes with silvery-white lustre.

Length  $3\frac{1}{2}$  millim.*Hab.* Ceylon; Yatiyantota (*Green*).Division *BRYOCORARIA*.

*Bryocoraria*, *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 6 (1875); *id. Ann. Soc. Ent. Fr.* 1892, p. 393.

*Eccritotarsaria*, Berg (*Reut.*), *Hem. Argent. Add.* p. 81 (1884).  
*Thaumastomiraria*, Kirk. *J. Bomb. N. H. Soc.* xiv, p. 56 (1902).

In this division the cubital vein to the hemelytra extends from the base to beyond the middle and is profoundly impressed; the last joint of the tarsi is incrassate; the membrane possesses one long areole or cell.

The *Bryocoraria* include some heterogeneous generic forms, and the two genera here enumerated appertain to the section divided by Berg as *Eccritotarsaria*, founded on the Neotropical genus *Eccritotarsus*.

#### Synopsis of Genera.

- A. Membranal cell not reaching apex; cuneus of moderate size ..... MERTILA, p. 472.  
 B. Membranal cell reaching apex; cuneus very long, almost reaching apex of membrane .... THAUMASTOMIRIS, [p. 473.]

#### Genus MERTILA.

*Mertila*, *Dist. A. M. N. H.* (7) xiii, p. 113 (1904).

Type, *M. malayensis*, Dist.

*Distribution.* Burma and Malaya.

Elongately oval; head rather long and depressed in front of insertion of antennæ, of which the first joint is shorter than head and attenuated at base, second joint much longer than first, it and the remaining joints pilose; rostrum not quite reaching the intermediate coxæ; pronotum sometimes as long as broad, with an anterior collar which has its anterior and posterior margins carinate, subimpressed or distinctly constricted before middle, the depression including two transverse callosities; scutellum small, subtriangular, callous, foveate at base; hemelytra much longer than abdomen; membranal cells long, triangular; legs moderately short and slender, apical joint of tarsi incrassate.

1452. *Mertila malayensis*, *Dist. A. M. N. H.* (7) xiii, p. 114 (1904).

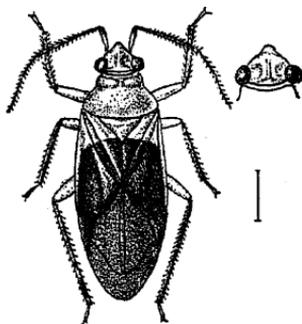


Fig. 304.—*Mertila malayensis*.

Orange-red; apex of first and the second joint of antennæ, legs, apex of rostrum, corium (excluding basal area), cuneus, membrane, extreme apices of femora, the tibiæ, tarsi, and sometimes abdomen beneath, indigo-black; head with a distinct central ridge, and a broad foveation on inner side of eyes; pronotum a little hollowed between the anterior callosities; upper surface very finely and obscurely pilose; tibiæ finely setose.

Length 5 to 6 millim.

*Hab.* Burma; Bhamo (*Fea*).—Singapore (*Brit. Mus.*).

Genus **THAUMASTOMIRIS.**

*Thaumastomiris*, Kirk. *J. Bomb. N. H. Soc.* xiv, p. 56 (1902).

Type, *T. sanguinalis*, Kirk.

Distribution. Ceylon.

Elongately ovate; head vertically depressed in front of eyes (transverse as seen from above), which are large, almost touching, but projecting beyond the anterior margin of the pronotum, broadly transversely sulcate near basal margin; antennæ with first joint longer than head, second a little longer than pronotum; rostrum almost reaching the posterior coxæ; pronotum with a narrow anterior collar, immediately behind which are two transverse callosities, lateral margins a little sinuate, anterior margin moderately concavely sinuate, posterior margin twice the breadth of anterior; scutellum transversely impressed near base and longitudinally sulcate on apical area\*; hemelytra considerably longer than abdomen; cuneus much longer than broad, curved round to near apex of membrane, which has a single long cell; legs of moderate length, femora a little thickened; apical joint of tarsi thickened.

1453. *Thaumastomiris sanguinalis*, Kirk. *J. Bomb. N. H. Soc.* xiv, p. 57, pl. A, f. 6, & pl. B, f. 4 (1902).

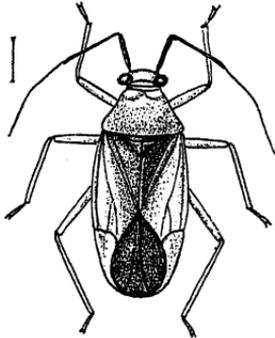


Fig. 305.

*Thaumastomiris sanguinalis*.

Sanguineous; antennæ and eyes dark fuscous; membrane pale fuscous, with the venation darker; pronotum very finely granulate, corium more finely granulate and very obscurely shortly pilose; tarsi fuscous.

Length 5 millim.

*Hab.* Ceylon; Peradeniya (*Green*).  
Frequents *Crinum asiaticum* (*E. E. Green*).

Kirkaldy writes: "The types ♂ & ♀ have been placed in the British Museum," but they are not to be found in that collection.

Division **CYLLOCORARIA.**

Cyllocoraria, *Reut.* (part.) *Bih. Vet.-Akad. Handl.* iii, 1, p. 6 (1875);  
*id. Act. Soc. Sc. Femm.* xiii, p. 567 (1884).

Heterotomaria, Kirk. *Faun. Hawaiiensis*, iii, pt. ii, p. 132 (1902).

Since Reuter founded this division in 1875 he has considerably subdivided it. One of these new divisions (*Dicypharia*)† I have

\* Kirkaldy, in his diagnosis of the genus, writes "scutellum not sulcate." He probably described an imperfect specimen.

† Renamed *Campyloneuraria* (Kirk. *Faun. Hawaiiensis*, iii, pt. ii, p. 138, 1902).

failed to adequately understand, at least sufficiently to give diagnostic characters, and it is, therefore, probably included here in the *Cyllocoraria*.

The body is usually elongate, the pronotum anteriorly more or less distinctly constricted, the femora seldom incrassated. The division possesses a somewhat common generic facies, though *Sthenaridea*, like the Palearctic genus *Heterocordylus*, has a foreign aspect, but Reuter himself has located the species in his *Cyllocoraria*, and we necessarily follow his lead.

#### *Synopsis of Genera.*

- |  |                       |
|--|-----------------------|
| A. Antennæ long, slender.  |                       |
| a. Body broad, ovate . . . . .   | STHENARIDEA, p. 474.  |
| b. Body more or less elongate.   |                       |
| a. Head globose; pronotum anteriorly<br>spined . . . . .   | NICOSTRATUS, p. 475.  |
| b. Head transverse; pronotum not spined.   |                       |
| a'. Eyes longly projecting beyond<br>anterior pronotal angles; corium<br>normal . . . . .                            | CYRTORRHINUS, p. 476. |
| b'. Eyes not longly projecting beyond<br>anterior pronotal angles; corium<br>with an apical cellular process . . . . | ZANCHIUS, p. 477.     |
| B. Antennæ short and thickened . . . . .   | GALLOBELICUS, p. 477. |

#### Genus **STHENARIDEA.**

*Sthenaridea*, Reut. *Ent. Tidskr.* v, p. 197 (1884).

Type, *S. pusilla*, Reut.

*Distribution.* Oriental Region.

Body ovate, shining; head one-third narrower than base of pronotum, in front of eyes regularly deflected, and on each side of them obliquely impressed; eyes large, minutely granulate, almost touching the anterior lateral angles of pronotum; rostrum almost reaching the apices of the posterior coxæ; antennæ longer than half the body including hemelytra, first joint not passing apex of clypeus, last two joints together much longer than the second joint; pronotum short, trapeziform, lateral margins nearly straight, anterior callosities barely discernible, without an apical stricture, and with no transverse sulcation; scutellum somewhat large, subtriangular; hemelytra longer than abdomen, cuneus shorter than broad, the fracture profound; membrane with two areolets or cells.

Dr. Reuter remarks that this genus is allied to *Heterocordylus*, Fieb., but in superficial appearance more closely to *Sthenarus*, Fieb., belonging to the division *Plagionatharia*. However, Reuter has placed it in his division *Cyllocoraria*, where we naturally leave it.

1454. *Sthenaridea pusilla*, Reut. Ent. Tidskr. v, p. 198 (1884).

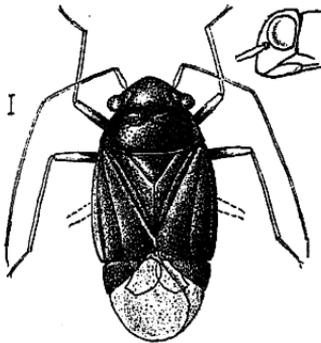


Fig. 306.—*Sthenaridea pusilla*.

Black, fuscous or reddish-black, shining, slightly griseous pubescent; second joint of antennæ excluding basal fourth, rostrum, apices of anterior and intermediate femora, the tibiæ and tarsi ochraceous; apex of last joint of antennæ fuscous; tibiæ finely spinulose; membrane fuliginous.

Var. Second and third joints of antennæ sometimes wholly ochraceous.

Length, ♀,  $2\frac{1}{2}$  millim.

Hab. Bengal (*Copenhagen Mus.*).

By the kindness of Dr. Meinert

I have been enabled to figure the type of this species.

Genus **NICOSTRATUS**, nov.

Type, *N. balteatus*, Dist.

Distribution. Ceylon.

Body elongate; head globose, almost circular; eyes moderately large but not exerted, adpressed to head; antennæ with the first joint shorter than head, second a little incrassated towards apex and almost as long as lateral margin of corium (excluding cuneus), third a little longer than fourth; rostrum passing the anterior coxæ; pronotum globosely tumid, deflected anteriorly, where it is strongly constricted, and behind a narrow anterior collar armed with two strong divergent spines, posterior margin slightly concavely sinuate; scutellum developed in a strong robust upright tuberculous spine; clavus distinctly raised and deflected on each side; corium with the lateral margins concavely sinuate, widened and tumid at apices; cuneus posteriorly deflected, a little longer than broad; membrane considerably passing the abdominal apex; legs moderately long and slender.

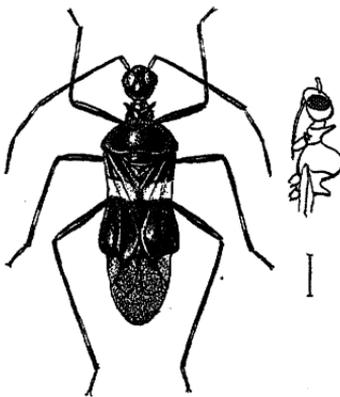


Fig. 307.—*Nicostratus balteatus*.

1455. *Nicostratus balteatus*, sp. n.

Black, shining; basal annulation to third joint of antennæ, a transverse fascia crossing corium and clavus behind scutellum, bases of intermediate and posterior femora, posterior acetabula, and a

subapical annulation to tibiæ white; tarsi (excluding apices) and basal joint of antennæ pale ochraceous; membrane very dark opaque, fuliginous; glabrous, shining, eyes opaque; posterior angles of pronotum subprominent and subacutely deflected.

Length  $4\frac{1}{2}$  millim.

*Hab.* Ceylon (*Lewis*).

### Genus **CYRTORRHINUS**.

*Cyrtorhinus*, *Fiéb. Wien. ent. Monatsb.* ii, p. 313 (1858).

*Cyrtorhinus*, *Reut. Act. Soc. Sc. Fenn.* xiii, p. 379 (1884); *Öfv.*

*Finsk. Soc. Förh.* xlv, p. 178 (1902).

*Tytthus*, *Fiéb. Wien. ent. Monatsb.* viii, p. 82 (1864).

*Sphyracephalus*, part., *Dougl. & Scott, Brit. Hem.* p. 349 (1865).

*Periscopus*, *Bredd. Deutsch. ent. Zeit.* 1896, p. 106.

*Breddiniessa*, *Körk. Wien. ent. Zeit.* xxii, p. 13 (1903).

Type, *C. caricis*, Fall., a Palæarctic species.

*Distribution.* Palæarctic and Oriental Regions.

Elongately ovate; head vertical, transverse, short; eyes large, contiguous to the anterior margin of the pronotum but longly projecting beyond it; rostrum reaching the intermediate coxæ; antennæ long, slender, first joint moderately thickened, second shorter than the last two joints together; pronotum trapeziform, basal rather more than twice the width of anterior margin, lateral margins strongly sinuate; legs moderately long, posterior tarsi with the second and third joints equally long.

1456. *Cyrtorhinus lividipennis*, *Reut. Ent. Tidskr.* v, p. 199 (1884).

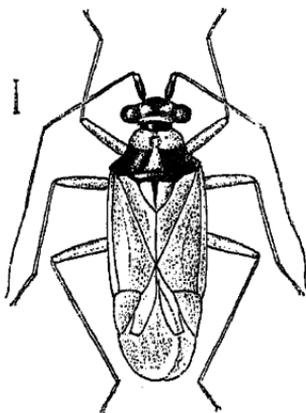


Fig. 308.  
*Cyrtorhinus lividipennis*.

Black; base of head confluent with a large spot on inner side of each eye, antenniferous tubercles and apex of first joint of antennæ, rostrum, anterior callosities and a broad central fascia to posterior area of pronotum, a large lateral spot on each side of scutellum, the hemelytra, body beneath and legs flavescent; a lateral sternal spot black.

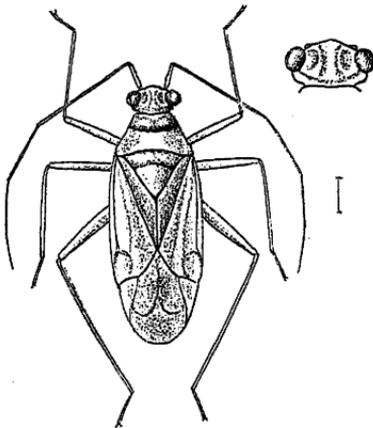
Length  $2\frac{3}{4}$  to  $3\frac{1}{2}$  millim.

*Hab.* Ceylon; Yatiyantota (*Green*).  
Burma; Rangoon (*Fea*). Great  
Nicobar (*Copenhagen Mus.*).

An apparently abundant species in Ceylon, where Mr. E. E. Green found it coming to light. By the courtesy of Prof. Meinert I have examined the type.

Genus **ZANCHIUS**, nov.Type, *Z. annulatus*, Dist.*Distribution.* Ceylon.

Elongately ovate; head broad, deeply channelled near inner margins of eyes, in front of which it is vertically deflected, eyes moderately exserted and situate nearer to the insertion of antennæ than base of head; rostrum reaching the posterior coxæ; antennæ long, basal joint about as long as head, second nearly four times longer than first, third and fourth almost subequal in length; pronotum somewhat strongly constricted before middle, lateral margins nearly straight, basal margin sinuate, mesonotum exposed; scutellum subtriangular; corium with a distinct cell-like process at apex; cuneus longer than broad; legs somewhat long and slender, posterior femora moderately thickened.

1457. *Zanchius annulatus*, sp. n.Fig. 309.—*Zanchius annulatus*.

Stramineous; eyes, two annulations to second joint of antennæ, the whole of third and fourth joints, and the apices of the tarsi fuscous; head deeply channelled near inner margins of eyes; anterior area of pronotum tumid; corium, cuneus and membrane a little paler than other parts of upper surface; lateral margins of corium a little reflexed; hemelytra very finely tomentose.

Length  $4\frac{1}{2}$  millim.*Hab.* Ceylon; Peradeniya (Green).Genus **GALLOBELICUS**, nov.Type, *G. crassicornis*, Dist.*Distribution.* Oriental Region.

Elongate; head robust, vertically deflected in front; eyes large, inserted about midway between base of head and insertion of antennæ; antennæ short, robust, first joint slightly shorter than head, second a little more than twice as long as first, third about as long as second; rostrum about reaching the intermediate coxæ; pronotum narrowed anteriorly, with a distinct anterior collar, transversely constricted before the middle, with a distinct central longitudinal sulcation; mesonotum exposed; scutellum subtriangular, a little tumid; hemelytra with the lateral margins straight, cuneus much

longer than broad; membrane considerably passing abdominal apex; legs of moderate length and slender.

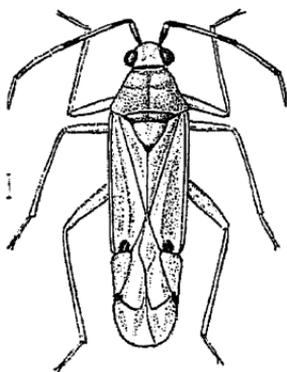


Fig. 310.  
*Gallobellicus crassicornis*.

1458. *Gallobellicus crassicornis*,  
sp. n.

Stramineous; eyes, basal joint of antennæ excluding apex, base and apex of second joint, apex of scutellum, a spot at apex of corium, a similar spot at apex of cuneus, and extreme bases of tibiæ black; third and fourth joints of antennæ fuscous; above finely tomentose; pronotum finely and obscurely punctate.

Length 3 millim.

*Hab.* Bor Ghát (*Dixon*). Tenasserim; Myitta (*Doherty*).

Division —?

Genus **ARMACHANUS**, nov.

Type, *A. monoceros*, Dist.

*Distribution.* Ceylon and North-west Australia.

Body elongate; head robust, long, not sulcate, the eyes nearer apex than base, with an apical spinous protuberance; antennæ

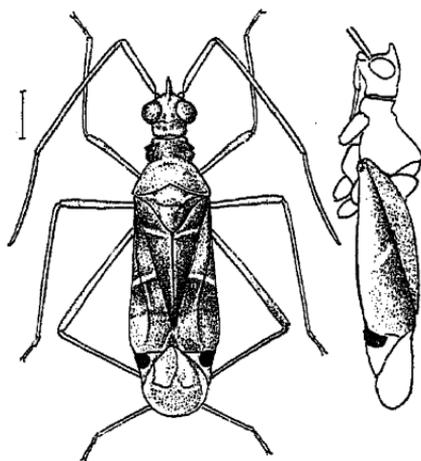


Fig. 311.—*Armachanus monoceros*.

robust, the first joint about as long as head from base to apex of frontal protuberance, second joint about twice as long as first; rostrum just passing the anterior coxæ; pronotum elongate, strongly constricted before middle, whence to apex its lateral margins are roughly dentate, the posterior area tumid, the base uncovered; scutellum carinately gibbous; hemelytra long, the clavus long, almost vertically raised inwardly; lateral margins of corium sinuate, a little widened and

tumidly raised posteriorly; cuneus almost as broad as long, the fracture acute; legs long and slender.

This genus clearly represents a distinct division, and I have recently described a second species from N.W. Australia. At present its greatest affinity is with *Nicostratus* (*antè*, p. 475).

1459. *Armachanus monoceros*, sp. n.

Pale brownish-ochraceous; a transverse linear white fascia crossing clavus near apex of scutellum, and an oblique similar fascia near middle of corium; scutellum, clavus, and central area of corium darker in hue; cuneus with a large prominent basal black spot; membrane very pale fuliginous; eyes slaty-grey; body beneath and legs unicolorous.

Length 6 millim.

*Hab.* Ceylon; Yatiyantota (*Green*).

Division *LABOPARIA*.

*Laboparia*, *Reut. Act. Soc. Sc. Fenn.* xiii, p. 567 (1884).

*Halticaria*, *Kirk. Fawn. Hawaiiensis*, iii, pt. ii, p. 139 (1902).

In this division the pronotum is without a transverse constriction; the head broad; rostrum very robust; and the posterior coxæ placed somewhat close together and remote from the lateral margin of the corium.

*Synopsis of Genera.*

- A. Antennæ longer than body . . . . . *HALTICUS*, p. 479.  
 B. Antennæ much shorter than body.  
 a. Broad; lateral margin of corium convex;  
   cuneal fracture very profound . . . . . *BILIA*, p. 480.  
 b. Elongate; lateral margin of corium parallel;  
   cuneal fracture indistinct . . . . . *BERTA*, p. 481.

Genus *HALTICUS*.

*Halticus*, *Hahn, Wanz. Ins.* i, p. 113, pl. 18, ff. A-D (1831);  
*Burm. Handb.* ii (1) p. 277 (1835); *Fieb. Eur. Hem.* pp. 69 & 281  
 (1861); *Reut. Act. Soc. Sc. Fenn.* xxiii, p. 17 (1897), et syn.

*Astemma* (part.), *Amy. & Serv. Hém.* p. 284 (1843).

*Halticocoris*, *Dougl. & Scott, Brit. Hem.* p. 478 (1865).

Type, *H. apterus*, Linn., a Palæarctic and Nearctic species.

*Distribution.* Nearctic, Neotropical, Palæarctic, and Oriental Regions. Probably more widely distributed, though unrecorded.

Broadly subovate; head short, broad, laminately flattened posteriorly and a little produced above the anterior margin of the pronotum; eyes large, touching pronotum; antennæ long, slender, longer than the body; rostrum robust, reaching the intermediate coxæ; pronotum short, broad, tumid at basal area, deflected anteriorly; scutellum of moderate size, subtriangular; hemelytra convexly deflected on each side, the cuneus and membrane posteriorly deflected; posterior femora strongly incrassate; tibiæ spinously setose.

1460. *Halticus minutus*, Reut. *Ent. Tidskr.* v, p. 197 (1884).

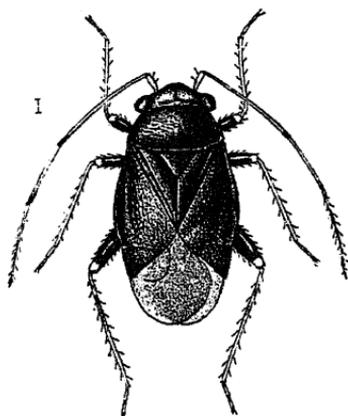


Fig. 312.—*Halticus minutus*.

Black, shining, above somewhat pubescent; first, second, basal area of third, and base of fourth joint of antennæ, apices of femora, tibiæ and tarsi very palely flavescent; apices of tarsi black; second joint of antennæ about equal in length to the lateral margin of the corium, its apex frequently black; third and fourth joints (base excepted) fuscous; pronotum obsoletely transversely strigose.

Length  $1\frac{1}{2}$  to  $1\frac{2}{3}$  millim.

*Hab.* Ceylon; Peradeniya (Green).—Singapore (*vide Reuter*). Cochin-China.

Mr. E. E. Green informs me that the species simulates a *Halticus* beetle, and leaps in the same way. It punctures the leaves of a species of *Ipomœa*. Prof. Giard (C. R. Soc. Biol. (n. s.) iv. pp. 79–82, 1892) has described its injurious action in Cochin-China.

#### Genus *BILIA*, nov.

Type, *B. fracta*, Dist.

*Distribution.* Ceylon.

Broadly subovate; head broad, strongly deflected in front of eyes, which touch the anterior margin of the pronotum; antennæ with the basal joint very short, second at least twice as long as first, subequal in length to third, second and third setose; rostrum short, reaching the anterior coxæ; pronotum broad, a little deflected and laminate on each side, somewhat strongly pilose, the anterior area behind head glabrous, beyond which it is slightly impressed, but not transversely constricted; scutellum small, strongly transversely striated, depressed on each side; corium convexly laminately produced; clavus obliquely suberect, almost at right angles with corium; cuneus a little longer than broad, cuneal fracture exceedingly profound; membrane longly passing the abdominal apex; legs of moderate size.

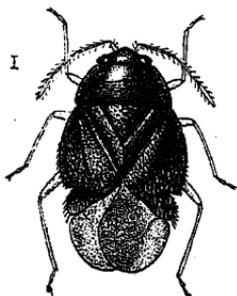


Fig. 313.—*Bilia fracta*.

1461. *Bilia fracta*, sp. n.

Black, strongly palely pilose; extreme apex of head brownish-ochraceous; antennæ, rostrum and legs pale stramineous; membrane pale fuliginous, its basal area piceous; pronotum (excluding glabrous area behind head) finely transversely striate; corium finely punctate; scutellum transversely, somewhat rugosely striate.

Length  $1\frac{1}{2}$  millim.

*Hab.* Ceylon; Peradeniya (Green).

Genus **BERTA**.

*Berta*, *Kirk. J. Bomb. N. H. Soc.* xiv, p. 57 (1902).

Type, *B. lankana*, Kirk.

*Distribution.* Ceylon.

Pilose; head very small, almost roundly perpendicular; antennæ with the second joint subincrassate, thickened towards the apex, much longer than first; rostrum reaching the intermediate coxæ; pronotum and prosternum convex, the former not constricted, lateral margins rounded, not sinuate, posterior margin very slightly sinuate; scutellum moderately large and tumid; corium including cuneus passing abdominal apex; cuneus a little longer than broad; membrane with two basal lateral cells, the innermost very small.

1462. *Berta lankana*, *Kirby* (Capsus), *J. Linn. Soc., Zool.* xxiv, p. 107 (1891); *Kirk.* (*Berta*) *J. Bomb. N. H. Soc.* xiv, p. 57, pl. A, f. 7, pl. B, f. 5 (1902).

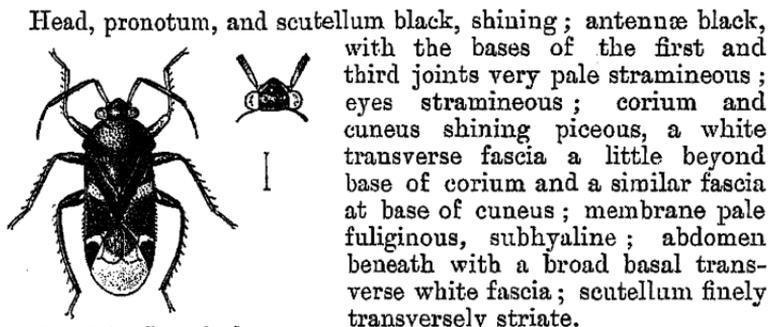


Fig. 314.—*Berta lankana*.

Length 4 millim.

*Hab.* Ceylon; Nitagala, Pundaluoya (*Green*).

Division **PLAGIOGNATHARIA**.

Plagiognatharia, *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 7 (1875).

Ohlamydataria, *Kirk. Faun. Hawaiensis*, iii, pt. ii, p. 131 (1902).

The narrow clypeus, distinctly carinately compressed, is the principal structural character that distinguishes this division; the surface is also more or less shining.

*Synopsis of Genera.*

- A. Body pilose; second joint of antennæ considerably longer than breadth of head including eyes . . . . . **PSALLUS**, p. 482.

- B. Body pubescent; second joint of antennæ about equal in length to breadth of head including eyes ..... *CAMPYLOMMA*, p. 483.

### Genus *PSALLUS*.

*Psallus*, *Fieb. Wien. ent. Monatsb.* ii, p. 320 (1858); *id. Eur. Hem.* pp. 74 & 305 (1861); *Reut. Act. Soc. Sc. Fenn.* xiii, p. 101 (1884).

*Apocremnus*, *Fieb. Wien. ent. Monatsb.* ii, p. 320 (1858).

*Agalliaestes* (part.), *Fieb. Eur. Hem.* pp. 74 & 310 (1861).

*Atractotomus* (part.), *Fieb. Eur. Hem.* pp. 71 & 294 (1861).

*Liops* (part.), *Fieb. Verh. z.-b. Ges. Wien*, xx, p. 254 (1870).

Type, *P. roseus*, Fabr., a Palæarctic species.

*Distribution.* Probably universally distributed, but not yet recorded from the Ethiopian Region.

Body oblong, sometimes subelongate (♂), or oblongly ovate or ovate in ♀, above more or less palely pilose; head vertically inclined; clypeus distinctly prominent, compressed; eyes somewhat large, generally strongly granulate; rostrum reaching or passing the intermediate coxæ; antennæ with the second joint in the ♂ longer than in the ♀ and a little thickened apically; pronotum short, apical margin straight or nearly so, lateral margins straight, base truncate; posterior femora a little incrassate.

The male is more elongate than the female, and the sexes sometimes vary considerably in colour.

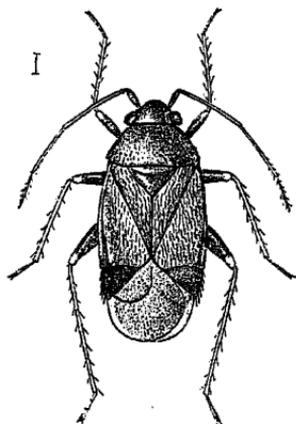


Fig. 315.—*Psallus singalensis*.

#### 1463. *Psallus singalensis*, sp. n.

Black, thickly palely pilose; lateral marginal areas of the corium obscure brownish-ochraceous; cuneus pale castaneous; membrane fuliginous, its apical margin paler; femora piceous, their apices, the whole of the tibiæ, and tarsi (excluding apices) ochraceous; antennæ with the first joint black, second ochraceous with its apex fuscous, third and fourth fuscous; rostrum and trochanters brownish-ochraceous; tibiæ speckled with fuscous; corium and cuneus densely, pronotum and head less thickly palely pilose.

Length 2 millim.

*Hab.* Ceylon; Peradeniya (*Green*).

Allied to the Palæarctic species *P. obscurellus*, Fall.

Genus **CAMPYLOMMA.**

*Campylomma*, *Reut. Act. Soc. Sc. Fenn.* xiii, p. 52 (1884).

*Agalliastes* (part.), *Fieb. Eur. Hem.* pp. 74 & 310 (1861).

*Atomoscelis* (part.), *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 57 (1875).

Type, *C. nigronasuta*, *Reut.*, a Palearctic species.

*Distribution.* Palearctic and Oriental Regions.

Body ovate, pubescent; head shining, vertical, short, rotundately triangular, with eyes a little broader than anterior margin of pronotum; antennæ with the second joint about equal to breadth of head; pronotum shortly trapeziform; posterior femora incrassated, largely punctured with black; tibiæ blackly punctate and spinulose; rostrum reaching the posterior coxæ; membrane biareolate.

1464. *Campylomma livida*, *Reut. Ent. Tidskr.* v, p. 199 (1884).

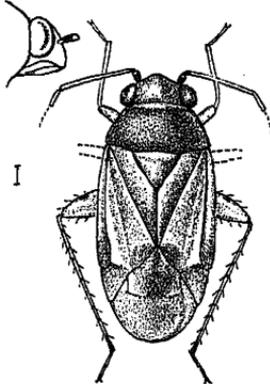


Fig. 316.  
*Campylomma livida.*

Pale ochraceous; head medially testaceous; first joint of antennæ (base and apex excepted) and extreme base of second joint black; femora sparingly speckled with black, posterior femora with three large black punctures on apical half beneath; spinules to tibiæ black; second joint of antennæ equal to breadth of head and about one-third shorter than base of pronotum.

Length, ♂,  $2\frac{1}{2}$  millim.

*Hab.* Bengal (*Copenhagen Mus.*).

I am much indebted to Dr. Meinert for the opportunity of figuring this species.

## Subfamily III. ISOMETOPINÆ.

*Isometopidæ*, *Fieb. Wien. ent. Monatsb.* iv, p. 259 (1860).

*Isometoparia*, *Reut. Bih. Vet.-Ak. Handl.* iii, 1, p. 60 (1875).

The *Isometopinæ*, founded by Fieber as a family, and treated by Reuter as a division, are here considered, as previously explained, a subfamily of the *Capsidæ*. Their principal characteristic is the presence of distinct and well-developed ocelli; in some genera also the scutellum is elongately produced, and in another genus subsequently described the eyes are extremely large and almost meet above the head. The *Isometopinæ* are at present little known, and but few genera and species are recorded. They are minute insects, and require special search and collecting.