

NEW INDIAN HOMOPTERA.

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The material dealt with in this paper belongs to the Zoological Survey of India. In a former paper the Derbidae were dealt with. This paper deals with the Cixiidae, Delphacidae, and Achilidae.

Sixteen of the twenty-six species recorded are considered as new, which indicates the large amount of work still to be done in these families.

The types have been returned to the Zoological Survey of India, and paratypes placed in the H.S.P.A. Experiment Station collection, Honolulu. Measurements are from apex of vertex to anus and from base to apex of one tegmen.

Family CIXIIDAE.

Cixius gravelyi, sp. nov.

Congeneric with *C. nervosa* but the base of vertex more deeply and angularly emarginate.

Male. Length 3.5 mm. ; tegmen 4.7 mm.

Black ; lateral carinae of face and vertex and hind margin of pronotum and the legs light brown, basal portion of abdomen yellow, apical portion brown. Tegmina hyaline, base brown, a broad light brown or yellowish band across from middle of clavus to middle of costa ; stigma brown ; fuscous over apical cells, darker in apical radial cells ; cross-veins infusate ; tubercles small, dark, bearing black macrotrichia. Wings hyaline with brown veins.

Lateral margins of pygofer roundly produced beside anal segment, medio-ventral process angular. Anal segment large, longer than wide, anus about one-fourth from apex, apex rounded and turned ventrad. Genital styles long, narrow, apex acute, the middle of the inner margin produced into an angle. Aedeagus large, complex.

Described from one male from the Darjiling District, East Himalayas, India, elevation 4000 feet (*F. H. Gravely*, June, 1916).

Genus *Oliarus* Stål.

In describing the genus *Mnemosyne* Stål states that the mesonotal carinae are obsolete, but he placed *M. philippina* in the genus although it has five carinae. Fowler in describing the genus says, "the three keels on the scutellum more or less obsolete." Distant places *Oliarus punctipennis* and *M. cingalensis* in *Mnemosyne* although they have five mesonotal carinae.

Apart from the carinae of the mesonotum *Mnemosyne* and *Oliarus* appear to differ only in the width of the vertex, and as the width of the vertex varies in the different species of *Oliarus* it is difficult to draw the line between them. Until the type species of *Mnemosyne* is redescribed I shall consider that it has three mesonotal carinae and describe all those having five, and only differing in the width of vertex, as *Oliarus*.

***Oliarus kemp*, sp. nov.**

Female. Length 4.3 mm.; tegmen 5.3 mm.

Length of vertex 3.3 times the width at base, base slightly wider than apex, inner carinae leaving lateral carinae one-third from base, gradually converging to apex where they meet and touch the apical transverse carina. Face very narrow at base; median carina forked at base. Fronto-clypeal suture straight at sides, the middle half rounded. Median ocellus present a little distance before apex of face. Forking of *Sc* and *R* slightly distad of fork of *Cu*.

Pygofer oblong, broader than long (1.8 to 1). Anal segment small, half the width of pygofer, ovate, anus at apex. Genital styles not quite so long as anal segment. Hind margin of pregenital plate slightly emarginate in middle, the corners forming a small angular projection.

Dark brown; carinae of head and pronotum, abdominal pleura and hind margin of segments yellow. Tegmina hyaline very slightly infuscous, darker over apical portion; veins brown with small tubercles bearing small, black macrotrichia.

Described from one female specimen from Talewadi, near Castle Rock, North Kanara District, Bombay Pres. (*S. Kemp*, October, 1916).

***Oliarus kierpurensis*, sp. nov.**

Male. Length 3.7 mm.; tegmen 5 mm.

Vertex a little longer than width at base (1.3 to 1), base 1.4 times the width at apex. Latero-median carinae leaving lateral carinae about one-third from apex, converging and meeting together a little before apical transverse carina to which they are joined by a short carina; base angularly emarginate. Fronto-clypeal suture forming a half circle. Median ocellus present at apex of face. *Cu* forking slightly basad of *Sc* and *R*.

Lateral margins of pygofer rounded, medio-ventral margin produced into a small, sublanceolate process. Anal segment large, dorsal surface tectiform, ventral surface concave, anus at apex which is slightly narrowed and emarginate. Genital styles large, flattened, elongate, S-shape with the apex widened.

Dark brown; carinae of head and pronotum and the middle of pronotum, legs and basal half of abdominal segments yellow or light brown; carinae of mesonotum slightly lighter than disc. Tegmina clear hyaline, veins light yellow, tubercles small, yellow,

bearing white or yellowish macrotrichia; over the apical area the veins and tubercles are darker.

Female. Length 3.7 mm.; tegmen 5.2 mm. In colour similar to male.

Pygofer wider than long. Anal segment small, reaching about half-way across pygofer, in dorsal aspect quadrate, a little longer than wide, anus at apex. Hind margin of pregenital plate very slightly rounded and minutely emarginate in middle, the margin curved slightly dorsad. Genital styles long, reaching nearly across pygofer.

Described from one male and two females from Kierpur, Bihar, India (*C. Paiva*, October, 1915).

Oliarus goae, sp. nov.

Female. Length 4 mm.; tegmen 5.4 mm.

Length of vertex twice the width at base, base very slightly wider than apex, angularly emarginate; medio-lateral carinae leaving sides one-fourth from apex, straight, converging and meeting in middle slightly before apex. Face narrowed for some slight distance at base, fronto-clypeal suture obscure, median ocellus distinct. *Cu* forking some distance basad of fork of *Sc* and *R*.

Pygofer large, wider than long. Anal segment subdiamond shape, slightly broader than long, apex small, truncate, on dorsal aspect a raised, longitudinal ridge down middle. Hind margin of pregenital plate very slightly curved. Genital styles reaching across pygofer.

Dark brown or black; carinae of head and thorax lighter, more especially so on pronotum; legs lighter brown; hind margin of abdominal segments yellowish. Tegmina hyaline, very slightly opaque and whitish, veins light brown with darker tubercles bearing light brown macrotrichia; a dark mark on margin of clavus at apex of claval vein; fuscous over cross-veins and apical cross-veins and apical veins; stigma dark brown. Wings hyaline with brown veins.

Described from one female from Mormugao, Goa, Portuguese India (*S. Kemp*, November, 1916).

Oliarus turae, sp. nov.

Female. Length 3.8 mm.; tegmen 5.7 mm.

Length of vertex from apex to basal angles slightly greater than width at basal angles; base deeply and angularly emarginate, 1.4 times the width at apex; medio-lateral carinae arising from the sides about one-third from apex, converging and meeting in middle at apex.

Pygofer large, oval, width 1.5 times the length. Anal segment not reaching quite across pygofer, flat, length nearly twice the width, sides slightly curved, width about one-third the width of

pygofer, ovipositor incomplete, the styles reaching about two-thirds across pygofer; pregenital segment small, hind margin straight or very slightly curved.

Dark brown or black; carinae of frons, vertex and pronotum and the margin of pronotum and margin of metanotum light brown, legs light brown. Tegmina with venation as in *O. kurseongensis*, Dist.; clear hyaline with brown veins, stigma brown, tubercles brown bearing black macrotrichia. Wings hyaline with brown veins.

Described from one female from Tura, Garo Hills, Assam, 3500 to 3900 feet elevation (S. Kemp, July, 1917).

Kuvera brunettii, sp. nov.

Male. Length 3.4 mm.; tegmen 4.6 mm.

Lateral margins of pygofer slightly curved, medio-ventral process conical in outline. Anal segment considerably longer than broad, anus about one-third from apex, sides straight to near apex then converging to pointed apex. Genital styles narrow at base, broadly round at apex, outer margin strongly concave, inner margin nearly straight. This forms a sickle-shape organ with handle very thin and blade broad. Aedeagus large and complex.

Dark brown or black; carinae of frons and vertex, the hind margin of pronotum, tegulae, legs, margins of pygofer and genital styles lighter brown. Tegmina hyaline with brown veins which are blacker over apical half; tubercles small with black macrotrichia; stigma dark brown, light at base. Wings hyaline with brown veins.

Female. Length 3.6 mm.; tegmen 5 mm.

In colour similar to male. Pygofer small, slightly wider than long, concave, wax-bearing; ovipositor complete, large, projecting more than half its length beyond apex of pygofer. Anal segment small, about as wide as long, apex truncate, reaching about two-thirds along pygofer.

Described from two males and three females from Darjiling, Eastern Himalayas, India, elevation 7000 feet (E. Brunetti, May, 1917). This species is closely allied to the type species *K. semi-hyalina*, Dist.

Mundopa vagans Dist.

One female from Tura, Garo Hills, Assam, 3500 to 3700 feet elevation (S. Kemp, August, 1917). This agrees with the description but the vertex is not so wide at apex as is indicated in the figure.

Mundopa pashokensis, sp. nov.

Female. Length 2.7 mm.; tegmen 3.7 mm. Apex of vertex slightly narrower than base; width at apex three times the length in middle; base roundly emarginate.

Pygofer small, much longer than wide; ovipositor complete, large, extending nearly half its length beyond apex of pygofer.

Anal segment cylindrical, long, about four times as long as broad.

Dark chocolate brown; lateral carinae of face except the apical third, clypeus except the basal sides, lateral portions of pronotum and the legs, lighter brown. Tegmen hyaline, the apical two-thirds, from slightly before stigma and apex of clavus, dark brown with four light areas, one on costa at stigma, one at apex of clavus, a larger central one stretching from radius to clavus, and one at apex of median veins; a dark band across base; veins same colour as membrane, tubercles minute bearing fine macrotrichia the same colour as veins. Wings hyaline, fuscous, darker over apical half of costal area.

Described from one female from Pashok, Darjiling District, India, 2000 feet elevation (*F. H. Gravely*, May, 1916).

There is a third species in the collection which appears to be undescribed, but as it has no abdomen and the sex is not known, I refrain from naming it.

***Brixia albomaculata* Dist.**

Eight males and six females from Castle Rock, Kanara District, India (*S. Kemp*, October, 1916).

***Brixia plagosa* Dist.**

One male and one female from Tura, Garo Hills, Assam, 3500 to 3900 feet elevation.

These specimens agree with the description except that they have no median carina on face. If the description be correct then this identification may not be correct and Distant's species may be a *Leirioessa* Kirk.

***Leirioessa pulchra*, sp. nov.**

This genus differs from *Brixia* Stål, in the shortness of the antennae; the frons has a median carina and *Sc*, *R* and *M* separate to the basal cell and do not form a stalk.

Male. Length 3 mm.; tegmen 4.6 mm.

Dark chocolate brown; antennae, carinae of face, lateral portion of pronotum and the carinae of mesonotum light brown or yellow, legs and genital styles light brown. Tegmina hyaline with light infuscations and darker markings. A dark mark at base over basal cell and half-way along suture and extending to first claval vein; a large subquadrate mark from costa to cubitus commencing at apex of basal mark and ending at apex of clavus, on the costa it includes two light marks, the basal one triangular and the distal one smaller and round; the apical cells of *R* and *M* dark enclosing two lighter marks; three small marks in a row, one from hind margin to *Cu 2a*, the second from *M 2+3* to *K* and the third at apex of stigma; veins light with minute brown tubercles bearing fine brown macrotrichia.

Described from two males from Talewadi near Castle Rock

North Kanara District, India (S. Kemp, October, 1916). This species comes near to the type, *L. tortricomorpha* Kirk., from Australia.

It is possible that *Cotyleceps* Uhler, and *Leirioessa* Kirk., are the same, as a specimen I identify as *C. marmorata* Uhler, from Japan is generically the same as the above species. It is also probable that both are the same as *Andes* Stål.

***Leirioessa mander* (Walk.).**

Brixia meander (Walk.), Distant, *Faun. Brit. Ind. Rhyn.* III, p. 270 (1906).

Two males from Castle Rock, North Kanara District, Bombay Pres. (S. Kemp, October, 1916).

***Leirioessa nubila* (Walk.).**

Brixia nubila (Walk.), Distant, *Faun. Brit. Ind. Rhyn.* III, p. 270 (1906).

One male and two females from Castle Rock, North Kanara District, (S. Kemp, October, 1916).

If my identifications of these two species be correct then they should not be placed in *Brixia*.

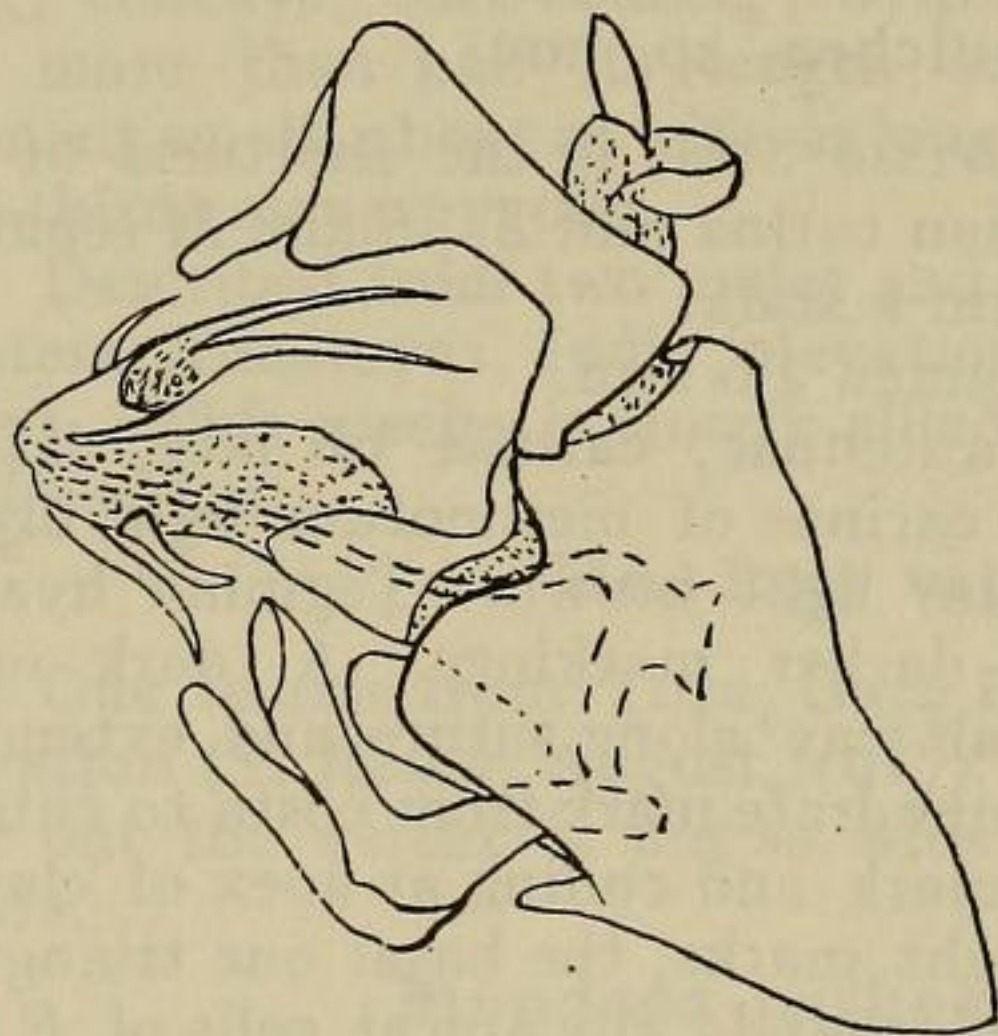
***Borysthenes fascialatus*, sp. nov.**

(Fig. 1.)

The genus *Borysthenes* is distinguished from most of the Cixiidae by the presence of a swollen subantennal process which is fringed with hairs. When at rest the hind margins of the tegmina overlap considerably, but not in the same manner as in the Achilidae and the claval veins do not reach the apex of the clavus.

Male. Length 3 mm.; tegmen 4 mm.

The lateral margins of pygofer produced broadly beside the anal styles, the production on right side being broader than that on the left, medio-ventral edge angularly produced. Anal segment large, anus near base, broad before anus then narrowed to bluntly pointed apex, the edges of the apical portion turned ventrad and produced into an angular process on each side, the one on the left the larger. Genital styles narrow, long,



TEXT-FIG. 1.—*Borysthenes fascialatus*, sp. nov.

Lateral view of male genitalia.

side, the one on the left the larger.

subequal in width throughout, bent at an angle before middle, apex bluntly pointed. Aedeagus complex, consisting of two parts, a large basal portion and an apical portion at an angle to the basal portion. A strong chitinous tube runs through the middle of the basal portion, its apex in connection with the apical portion of aedeagus and its base joined to the structure connecting with the base of genital styles. The outer portion of the basal part of aedeagus is membranous with two large sclerites and having two large spines arising from near the apex. The apical portion consists of a cup-shaped organ from the edge of which two long, slender spines arise, there is a third curved spine from the outer portion of the cup.

Head, pronotum and legs light brown, mesonotum and abdomen dark brown. Tegmina hyaline, fuscous with two light bands and a light mark, the first band from costa at apex of subcostal vein to hind margin, the second from before stigma to hind margin above clavus and the light mark over base of cubitus; veins same colour as membrane without tubercles or macrotrichia.

Female. Length 3.6 mm.; tegmen 4.3 mm.

In colour similar to male.

Pygofer small, longer than broad, depressed down the middle, forming a wax-secreting area; ovipositor complete, moderate in size, reaching to apex of pygofer. Anal segment short, apical angles slightly produced.

Described from five males and three females from Castle Rock, North Kanara District (*S. Kemp*, October, 1916).

***Kinnara spectra* Distant.**

One female specimen which agrees with the original description. Above Tura, Garo Hills, Assam, 3500 to 3900 feet elevation (*S. Kemp*, August, 1917). This genus, like *Borysthenes*, has a subantennal process.

***Kinnara maculata* Distant.**

One male from Talewadi near Castle Rock and two females from Castle Rock, North Kanara District (*S. Kemp*, October, 1916). These agree with Distant's description but the dark mark at base of tegmina is slightly more extensive.

Genus *Commolenda*, Distant.

The genus is described as having two ocelli at the apex of the frons. This, I think, must be an error as no homopteron has a pair of ocelli in that position and if the normal lateral ocelli be present then it possesses four ocelli. Apart from this character I cannot separate it from *Ptoleria* Stål. In *Australoma* Kirk. the vertex is distinctly wider than long and there is no longitudinal median carina.

Australoma brunnia, sp. nov.

Female. Length 3.6 mm.; tegmen 5 mm.

Width of vertex 2.7 times the length. Pygofer much longer than wide, depressed down the middle for the reception of ovipositor which is complete, curved and reaches a little beyond the apex of pygofer; lateral plates short, broad at base, inner margin slightly concave apically convex basally; posterior margin of seventh sternite straight. Anal segment short, convex dorsally flat or slightly concave ventrally; anus at apex.

Head light brown, darker over apical half of lateral carinae of frons and in the basal half of middle of frons; pronotum light brown, darker on hind margin; mesonotum dark brown; legs and abdomen light brown. Tegmina light brown darker over posterior half including clavus, veins same colour as membrane with a double or treble series of minute dark tubercles bearing black macrotrichia.

Described from one female from above Tura, Garo Hills, Assam, 3500 to 3900 feet elevation (S. Kemp, August, 1917).

Kermesia parva, sp. nov.

Female. Length 2 mm.; tegmina 3.6 mm.

Stramineous; tegmina and wings hyaline, milky white with waxy secretion, veins light yellow. Tubercles along first claval vein and Sc + R. The M₃₊₄ and Cu₁ are in contact for a short distance.

Described from one female from Pashok, Darjiling District, 1000 feet elevation (F. H. Gravely, June, 1916). The small size of this species distinguishes it from *K. albida* Mel.

Family DELPHACIDAE.

Nilaparvata sordescens (Motsch.).

Delphax sordescens, Motsch. Bull. Soc. Nat. Mosc. XXXVI, p. 109 (1863).

Liburnia sordescens (Motsch.), in Melichar's *Hom. Faun. Ceylon*, p. 102 (1903); Distant, *Faun. Brit. Ind. Rhyn.* III, p. 486 (1906).

Nilaparvata greeni, Distant, *Faun. Brit. Ind. Rhyn.* III, p. 473 (1906); Muir, *Can. Ent. Fan.* p. 7 (1919).

Kalpa aculeata, Distant, *Faun. Brit. Ind. Rhyn.* III, p. 474 (1906); Muir, *Can. Ent. Fan.*, p. 8 (1919).

Dicranotropis anderida, Kirkaldy, *H. S. P. A. Ent. Bull.* III, p. 133 (1907).

Delphacodes anderida (Kirk.), Muir, *Proc. Haw. Ent. Soc.* III, 4, p. 335 (1917).

One male specimen from Castle Rock, North Kanara District (S. Kemp, October, 1916).

I have accepted Melichar's identification of Motschoulsky's species to be correct. If it be not correct then *N. greeni* will be the name of the insect. It is only separated from *Delphacodes* by the presence of two or three small spines on the hind basitarsus.

The genus includes *D. bakeri* Muir, and another species from Porto Rico not yet described.

***Kelisia fieberi* Muir.**

One female specimen from Tura, Garo Hills, Assam (S. Kemp, July, 1917). This species is not typical of the genus, but had better remain until the genus is revised. This may be the same as *Sogata pusana* Distant.

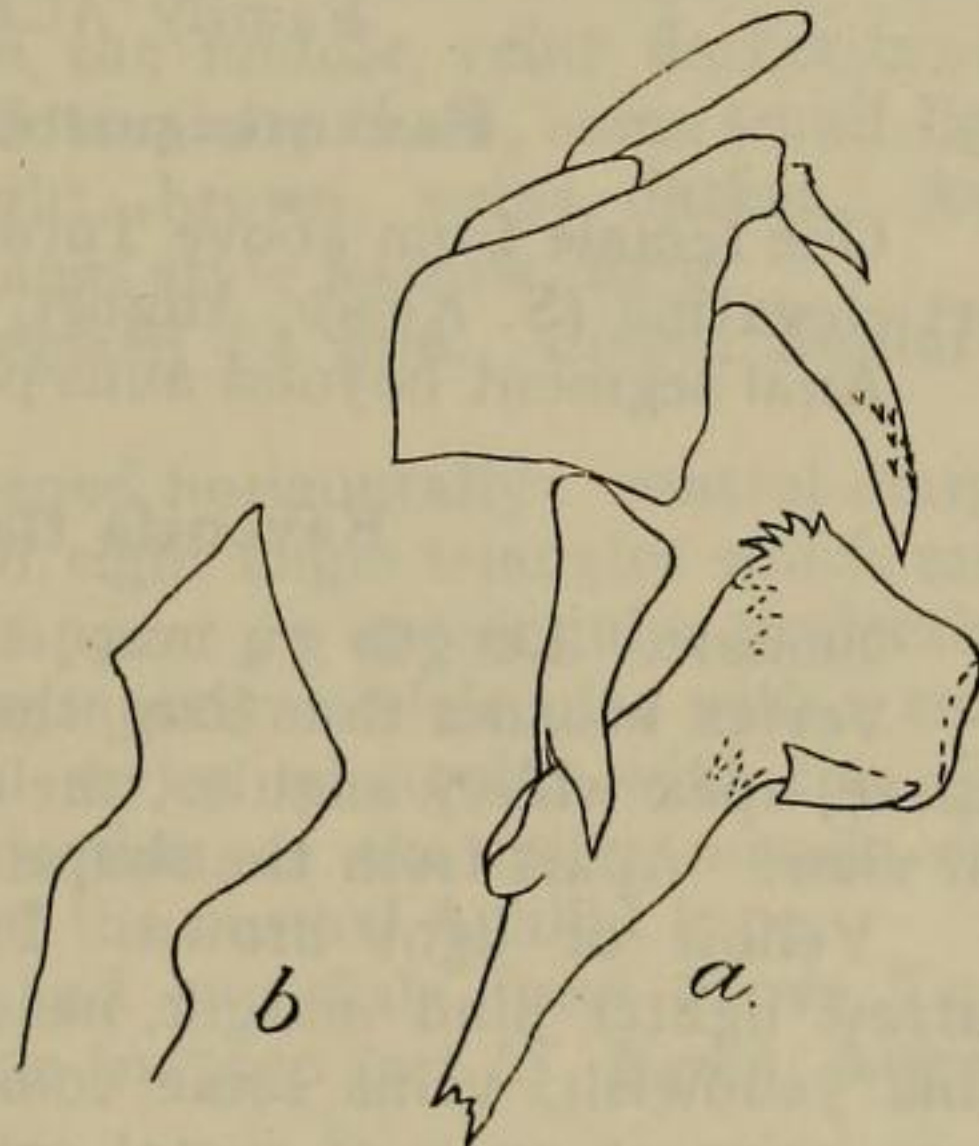
***Euidella kashmirensis*, sp. nov.**

(Fig. 2.)

Male. Macropterous; length 2.8 mm; tegmen 3.7 mm.

Head brown, lighter on vertex; pronotum and mesonotum light brown between carinae, dark brown on sides; abdomen dark brown, yellowish at base; legs light brown. Tegmina hyaline, a dark brown mark over base of radial and median cells and a broad, semicircular mark from apex of costal cell, over subcostal cell the cross-veins and to apical margin between cubital apical veins and first median apical vein. In some specimens, including the type, the dark mark at base is more extensive and extends along costal cell to the apical curved band; veins dark brown with minute tubercles bearing very fine black macrotrichia. Wings hyaline, slightly fuscous with dark brown veins.

Opening of pygofer round, a little wider than long, margins entire; from the medio-ventral edge arises a small process subconical in outline and cleft down the middle. Phragma fairly long, dorsal margin straight, from the middle arises two small spines. Anal segment large with two spines on ventral margin, the one on the right large, strong, with several fine teeth on the apical half, the one on the left about one-fourth the size of the other. Aedeagus slightly flattened laterally, basal two-thirds straight, apical third bent at right angle and slightly wider, a small comb of teeth on dorsal aspect at bend and another on ventral aspect, both inclining to right side, a large flat flange-like spine at apical third on ventral



TEXT-FIG. 2.—*Euidella kashmirensis*, sp. nov.

- a. Lateral view of anal segment and aedeagus.
- b. Full view of right genital style.

aspect. Genital styles large, apex widely angular, inner margin roundly emarginate, outer margin angular.

Female. Macropterous. Length 3.8 mm.; tegmen 4.6 mm. In colour similar to male.

Described from four males and four females from Kashmir, North-West Himalayas (*H. T. Pease*, 1915) and one male from Pashok, Darjiling District, East Himalayas (*F. H. Gravely*, June, 1916). This species is very near to *E. speciosa* (Bohem) of Europe but the genitalia are different. I have only a brachypterous female of the European species for comparison.

Sadia rostrata Melichar.

One female specimen from Eden Gardens, Calcutta (*F. H. Gravely*, November, 1911).

Family ACHILIDAE.

Faventia pustulata (Walker).

One female from above Tura, Garo Hills, Assam, 3500 to 3900 feet elevation (*S. Kemp*, August, 1917).

Anal segment beyond anus pointed and curved ventrad.

Faventia flava, sp. nov.

Female. Length 5.4 mm.; tegmen 7.7 mm.

Vertex broader than long, the base widely and angularly emarginate, apex widely angular, the carinae of face projecting in dorsal view. Apart from the shape of vertex typical of genus.

Yellow or light brown. Pronotum darker brown with a narrow lighter hind margin, head darker between carinae. Tegmina yellowish, veins same colour; fuscous between the oblique cross veins at apex of costal cell, a few small, scattered spots of brown over clavus and corium, a series of six minute dots in apical cells. Wings hyaline, veins light, fuscous over apical portion.

Male. Length 5.4 mm.; tegmen 7 mm. In colour similar to female.

Lateral margins of pygofer roundly produced; medio-ventral angularly produced with the apex narrow and truncate. Genital styles large, apex rounded, produced into a narrow angular or spine-like projection on the outer margin near apex. Anal segment flattened horizontally, broadened slightly to apex which is rounded. When at rest the genital styles come together in the middle line, the medio-ventral process of pygofer filling the space between their bases, the projection on outer margin of genital styles laying between the anal segment and the rounded projection of the lateral margins of pygofer, thus forming a "closed" pygofer.

Described from one male and one female from above Tura, Garo Hills, Assam, 3500 to 3900 feet elevation (*S. Kemp*, August, 1917).

***Majella albomaculata*, sp. nov.**

The genus *Majella* Kirkaldy differs from *Gordia* Melichar in having the vertex much longer than wide with its apex very much narrower than its base. *Phenelia* Kirkaldy differs from both the above by not having the "break" in the tegmina causing the apical portion beyond the apex of costal cell and clavus to drop down over the end of the abdomen, there being a distortion of the veins along that line, especially of the cubitus.

Female. Length 2.8 mm.; tegmen 3.7 mm.

Vertex and face light brown, a dark mark on each side of the median carina of vertex, three dark marks across gena in front of eyes; clypeus dark brown. Pronotum light brown with a series of five or six dark spots behind eyes; mesonotum dark brown with lighter carinae. Coxae dark brown, femora and tibiae light brown with two darker marks on hind tibiae; abdomen dark brown. Tegmina brown, darker over base, a dark mark at apex of costal cell with a small scarlet spot in the middle, veins darker brown with a number of small, white dots along them, some small light dots in costal cell. Wings light brown, veins darker. Anal segment oval, wider than long, anal style narrow, long.

Male. Length 2.9 mm.; tegmen 3.4 mm. Colour similar to female.

Pygofer short, broad, flattened horizontally; ventral margin produced in the middle into two right angle triangles which meet together on the middle line and appear as one angular projection. Anal segment broader than long, nearly semicircular with a small emargination at apex. Genital styles triangular with the apex forming the base, a small projection on the outer margin near apex. The aedeagus complex, of the normal Achilid type.

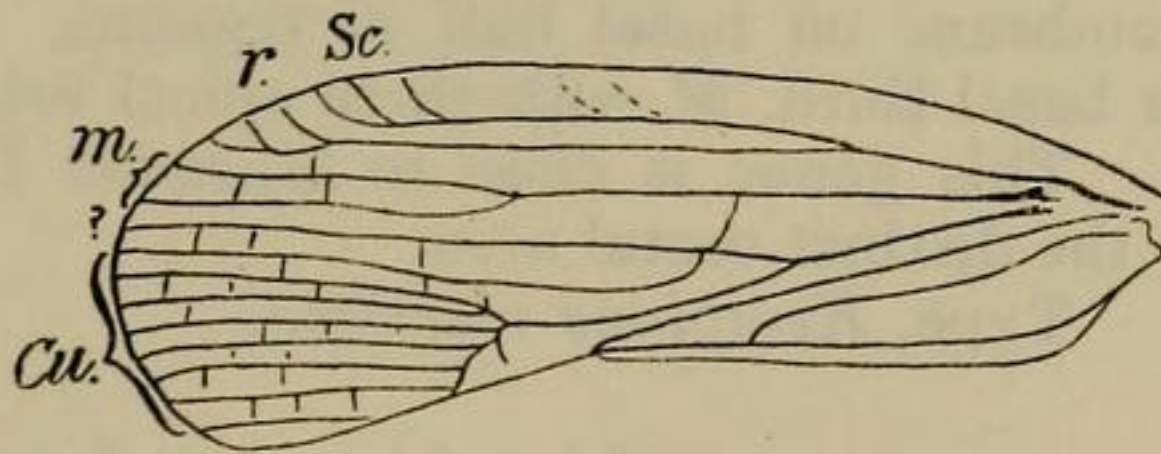
Described from one female and one male from above Tura, Garo Hills, Assam, elevation 3500 to 3900 feet (S. Kemp, August, 1917).

***Rhotala gravelyi*, sp. nov.**

(Fig. 3.)

This species agrees with Walker's generic description as far as it goes, only a comparison with the type will settle the question.

In dorsal view vertex a little broader than long, apex broadly rounded, base roundly emarginate, a small depression in each side, without carinae; the vertex stands up above the pronotum; frons longer than broad, apex broader than base, broadest in front of



TEXT-FIG. 3.—*Rhotala gravelyi*, sp. nov.
Left tegmen.

antennae, smooth and shiny with small pits, no median carina and no true lateral carinae; only the margins as seen in lateral view form carinae; clypeus with lateral and median carinae. Hind tibiae with six spines. Pronotum 5-carinate, the lateral outer ones in front of tegulae very distinct; mesonotum tricarinate with a small, round spot on each side near lateral carinae.

Sc and *R* parting about one-fourth from base, *M* not joining *Sc*+*R* at base, the cubitus with seven or eight apical veins. One of these may be *M* 3+4 touching the cubitus.

Male. Length 7 mm.; tegmen 8.4 mm.

Dark brown, face dark and shiny, light at apex, the front and middle tibiae banded. Tegmina hyaline, brown along costa reaching back to fork of cubitus, slightly brownish over apical area, a series of seven dark spots along margin of clavus, veins darker. Wings fuscous with brown veins.

Pygofer with ventral margin entire, not produced; genital styles large meeting together on middle line, apex rounded. Anal segment slightly flattened horizontally, slightly broader at base than apex; anus at apex which is rounded. Aedeagus complex but not dissected out.

Described from one male from Pashok, Darjiling District, elevation 5500 feet (*F. H. Gravely*, June, 1916).

***Magadha flavisigna* (Walker).**

One female specimen and one with abdomen missing from above Tura, Garo Hills, Assam, 3500 to 3900 feet elevation (*S. Kemp*, August, 1917).

***Kempiana*, gen. nov.**

Vertex slightly broader than long, apex slightly narrower than base, angularly produced, base angularly emarginate, no median carina, lateral carinae large. Frons considerably longer than broad, broadest at apex, tricarinate, the carinae continuing on to the clypeus. Pronotum short, 5-carinate, the carinae behind tegulae short and reaching a curved carina running from the medio-lateral carinae to the lateral margin. Mesonotum tricarinate; the anterior portion between the carinae marked off by a different texture to the rest.

The costa within the membrane forming a distinct costal membrane on basal half of tegmina. *Sc* and *R* joined together for basal third, *M* with three apical veins.

This genus is close to *Magadha* Distant, with the exception of the distinct costal area.

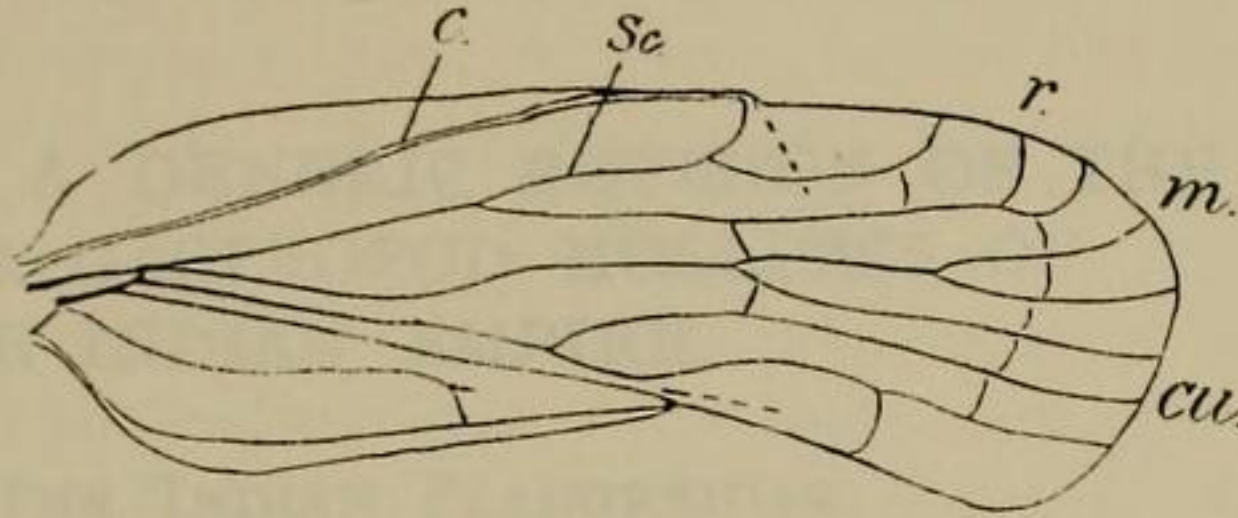
Type, *Kempiana maculata*.

***Kempiana maculata*, sp. nov.**

(Fig. 4.)

Female. Length 7.7 mm.; tegmen 8.4 mm.

Dark brown; vertex lighter with a dark mark across the sides, frons with light marks down the sides which form a band across the middle; clypeus light at base and at apex; pronotum lighter over middle; mesonotum lighter over lateral carinae; abdominal segments with light hind margins.



TEXT-FIG. 4.—*Kempiana maculata*, sp. nov.
Right tegmen.

Tegmina hyaline speckled all over with brown, darkest over middle of subcostal and radial cell and middle of costal membrane and costal cell.

Described from one female from above Tura, Garo Hills, Assam, elevation 3500 to 3900 feet (S. Kemp, August, 1917).