

Catalogue of the Heterocerous Lepidopterous Insects collected at Sarawak, in Borneo, by Mr. A. R. WALLACE, with Descriptions of New Species. By FRANCIS WALKER, Esq., F.L.S.

[Continued from vol. vi. p. 198.]

Fam. ACONTIDÆ, Guén.

Gen. XANTHODES, Guén.

270. *Xanthodes intersepta*, Guén, Noct. ii. 212. 979.

Inhabits also Hindostan and Ceylon.

Gen. ACONTIA, Ochs.

271. *ACONTIA MARGINALIS*, n. s. *Mas et Fæm.* Albida, capite thoraceque antico subochraceis, alis anticis acutis bilineatis, costa spatioque marginali ochraceis, striga marginali alba.

Male and Female. Whitish. Head and fore part of the thorax tinged with ochraceous. Palpi ascending; 2nd joint curved; 3rd lanceolate, about half the length of the 2nd. Antennæ of the male hardly pubescent. Fore wings acute; costa and marginal space ochraceous; this hue very irregular in outline, but most prevalent in front, where it includes a white marginal streak; two oblique lines, the exterior one black-speckled, more distinct than the other. Length of the body 4 lines; of the wings 10 lines.

272. *ACONTIA LEUCOPHÆA*. *Mas.* Alba, subiridescens, alis anticis apice subrotundatis, linea obliqua vix arcuata puncto que discali fuscis, strigis tribus costalibus subapicalibus nigris, punctis marginalibus nigris, alis posticis nigro-cinereis.

Male. White, shining, slightly iridescent, blackish cinereous beneath. Palpi ascending, smooth; 2nd joint curved; 3rd lanceolate, less than half the length of the 2nd. Antennæ minutely pubescent. Abdomen attenuated, extending somewhat beyond the hind wings. Fore wings slightly rounded at the tips, with a hardly curved brown line which extends from the tips to near the base of the interior border; discal point brown; three minute black streaks towards the tip of the costa: space along the interior border with some brown speckles, a few of which are confluent; marginal points black. Hind wings blackish cinereous. Length of the body 5 lines; of the wings 10 lines.

273. *ACONTIA ROSEO-NIVEA*, n. s. *Mas.* Alba, capite ferrugineo, alis fascia submarginali fusca, spatio marginali roseo, alis anticis acutis puncto discali nigro liturisque costalibus fuscis.

Male. White, with a testaceous tinge beneath. Head ferruginous. Palpi short, slender, porrect, not extending beyond the head. Antennæ distinctly pubescent. Wings with an irregular brown submarginal band; marginal space with a rosy tinge. Fore wings acute,

with a black discal point and with some brown costal marks; submarginal band bordered with white on the outer side. Length of the body 4 lines; of the wings 10 lines.

274. *ACONTIA INORDINATA*, n. s. *Fæm.* Alba, fusco subconspersa, abdomine aliquæ posticis cinereis, alis anticis litura discali strigaque posteriore nigris, maculis tribus subtrigonis costalibus plaquea marginali nigro notata fuscis, fimbria fuscescente.

Female. White, slightly brown-speckled. Palpi obliquely ascending; 3rd joint elongate-conical, not more than one-fourth of the length of the 2nd. Abdomen and hind wings cinereous. Fore wings with an irregular black discal mark, whence an irregular black streak proceeds inward to the interior border; three brown nearly triangular costal spots, and a brown marginal patch which contains some black marks; fringe brownish. Length of the body 3 lines; of the wings 8 lines.

275. *ACONTIA XANTHOPHILA*, n. s. *Fæm.* Lutescens, palpis albis articulo 3° cinereo, abdomine albo, alis anticis subrotundatis vix lineatis, alis posticis albis iridescentibus semihyalinis.

Female. Luteous yellow, paler beneath. Palpi white, obliquely ascending; 3rd joint cinereous, elongate-conical, less than half the length of the 2nd. Abdomen white, hardly extending beyond the hind wings. Fore wings slightly rounded at the tips, with some almost obsolete indications of transverse lines. Hind wings white, iridescent, semi-hyaline. Length of the body 4 lines; of the wings 9 lines.

276. *ACONTIA ? INDECISA*, n. s. *Fæm.* Flava, palpis cinereo-fuscis, abdomine cinereo-fusco, alis anticis linea lutea obliqua vix conspicua, linea exteriori undulata e atomis nigris, spatio marginali ochraceo, punctis marginalibus nigris, alis posticis cinereo-fuscis.

Female. Yellow. Palpi cinereous brown, slightly ascending, extending far beyond the head; 2nd joint broad, pilose; 3rd elongate-conical, less than half the length of the 2nd. Abdomen pale cinereous. Fore wings with an oblique very indistinct luteous line, and with a few black speckles; exterior line undulating, composed of black speckles, obsolete in front; space beyond this line ochraceous, black-speckled; marginal points black. Hind wings and underside cinereous brown. Length of the body 3½ lines; of the wings 9 lines.

277. *ACONTIA ? SORDIDA*, n. s. *Fæm.* Sordide cinerea, abdomine aliquæ posticis pallidioribus, alis anticis acutis fusco conspersis, litura discali puncto que apicali nigris, lineis duabus vix conspicuis, punctis costalibus punctisque submarginalibus pallidis, fimbria fusca, alis posticis linea marginali fusca.

Female. Dingy cinereous. Second joint of the palpi broad, slightly fringed. Abdomen and hind wings paler. Fore wings acute, brown-speckled, with an irregular black discal mark and with a black apical point; some slight traces of two irregular lines; a few pale costal

points and a row of pale submarginal points; fringe brown. Hind wings with a brown marginal line. Length of the body 2½ lines; of the wings 7 lines.

278. *ACONTIA ? CUPRINA*, n. s. Cupreο-rufescens, abdomen alisque posticis ferrugineo-cinereis, palpis porrectis, alis anticus nigro subconspersis apice subrotundatis, nota reniformi nigro notata et marginata, lineis duabus nigricantibus undulatis vix conspicuis, fimbria rufescente, margine interiore subexcavato.

Cupreous reddish, paler beneath. Abdomen and hind wings cinereous, with a ferruginous tinge. Palpi porrect; 3rd joint conical, less than half the length of the 2nd. Abdomen not extending beyond the hind wings. Fore wings minutely black-speckled, slightly rounded at the tips; reniform mark nearly round, slightly black-pupilled and -bordered; interior and exterior lines blackish, undulating, very indistinct; fringe dark reddish; interior border slightly excavated exteriorly. Length of the body 4 lines; of the wings 10 lines.

Gen. *DYRZELA*, *Walk.*

279. *Dyrzela incrassata*, *Walk. Cat. Lep.* 3rd ser. 1759.

280. *DYRZELA PARALLELA*, n. s. *Mas et Fæm.* Purpureo-fusca, alis anticus lineis tribus fuscis subobliquis fere parallelis, macula magna costali cupreο-fusca cinereo marginata, punctis marginalibus nigris, alis posticis cupreο-fuscis.

Male. Brown, with purple reflexions. Palpi obliquely ascending, extending far beyond the head; 3rd joint less than half the length of the 2nd. Antennæ moderately pectinated to much beyond half the length. Abdomen elongate-conical, hardly extending beyond the hind wings. Legs thick, fringed. Fore wings with three nearly parallel slightly oblique brown lines; a large dark cupreous-brown cinereous-bordered costal spot beyond the 3rd line; marginal points black. Hind wings cupreous brown. Length of the body 5 lines; of the wings 10 lines.

Female. Third joint of the palpi much more than half the length of the 2nd. Antennæ bare. Fore wings with the lines more undulating; 1st line blackish, broader and more distinct than the other two; costal spot more excavated on the outer side.

Gen. *GARELLA*, n. g.

Fæm. *Corpus robustum. Proboscis brevis. Palpi oblique ascendentibus, verticem superantes; articulus 3^{us} linearis, 2^o non brevior. Antennæ nudæ. Abdomen alas posticas paullo superans. Pedes validi; tibiae posticæ calcaribus quatuor longis. Alæ anticae apice rotundatae, costa convexa, margine exteriore subconvexo vix obliqua.*

Female. Body stout. Proboscis short. Palpi obliquely ascending, rising higher than the vertex; 3rd joint linear, rounded at the tip, as

long as the 2nd. Antennæ smooth. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings rounded at the tips; costa convex; exterior border slightly convex, hardly oblique.

281. GARELLA ROTUNDIPENNIS, n. s. *Fæm.* Schistacea, subtus nigro-cinerea, abdomine alisque posticis obscure cinereis, alis anticis lineis nonnullis angulosis interruptis, fascia basali diffusa fusca, guttis submarginalibus punctisque marginalibus nigris.

Female. Slaty cinereous, blackish cinereous beneath. Abdomen and hind wings dark cinereous, iridescent. Fore wings with some zigzag interrupted black lines; a diffuse brown band near the base; submarginal line composed of black dots; marginal points black. Length of the body 4 lines; of the wings 10 lines.

Gen. BANTANA, n. g.

Fæm. *Corpus robustum.* *Proboscis* distincta. *Palpi* ascendentæ, compressi, verticem superantes; articulus 3^{ra} longi-fusiformis, 2^o non brevior. *Antennæ* subpubescentes. *Abdomen* alas posticas non superans. *Pedes* læves; tibiæ posticæ calcaribus quatuor longissimis. *Alæ* latiusculæ, breviusculæ; anticæ apice rectangulatæ, costa marginæ exteriore vix convexis.

Female. Body stout. Proboscis distinct. Palpi erect, compressed, not broad, rising higher than the vertex; 3rd joint elongate-fusiform, as long as the 2nd. Antennæ minutely pubescent. Abdomen not extending beyond the hind wings. Legs smooth, moderately stout; hind tibiæ with four very long spurs. Wings rather broad and short. Fore wings rectangular at the tips; costa and exterior border hardly convex, the latter hardly oblique.

282. BANTANA ALBIDA, n. s. *Fæm.* Albida, nigro conspersa, thorace antico fuscō, abdomine alisque posticis cinereo-fuscis, alis anticis fasciis duabus diffusis fuscis, 2^a marginali, lineis duabus nigris flexis, 1^a incompleta, linea submarginali nigra angulosa.

Female. Whitish, black-speckled. Thorax brown in front. Abdomen, hind wings, and underside cinereous brown. Fore wings with two irregular and diffuse brown bands; 2nd band marginal; interior and exterior lines black, bent; the former incomplete; a slight intermediate line which is obsolete in front; submarginal line black, zigzag. Hind wings with an æneous tinge. Length of the body 4½ lines; of the wings 11 lines.

Gen. CORTICATA, n. g.

Fæm. *Corpus robustum.* *Proboscis* brevis. *Palpi* oblique ascendentæ, verticem non superantes; articulus 3^{ra} lanceolatus, 2^o vix brevior. *Antennæ* nudæ, graciles. *Abdomen* alas posticas paullo superans.

Pedes lœves. Alæ anticæ sat angustæ, apice rectangulatæ, costa vix convexa, margine exteriore non convexo.

Female. Body stout. Proboscis short. Palpi obliquely ascending, not rising higher than the vertex; 3rd joint lanceolate, nearly as long as the 2nd. Antennæ smooth, slender. Abdomen extending a little beyond the hind wings. Legs smooth. Wings rather narrow. Fore wings rectangular at the tips; costa very slightly convex; exterior border slightly oblique, not convex.

283. *CORTICATA SCOPARIOIDES*, n. s. *Fæm.* Schistacea, thorace fascia nigra, alis anticis fusco subtinctis, maculis duabus costalibus fuscis ex parte nigro marginatis, lineis pallide cinereis denticulatis flexis nigro notatis, punctis marginalibus nigris, alis posticis cinereis semi-hyalinis.

Female. Slaty cinereous. Thorax with a black band in front. Abdomen cinereous, slightly iridescent. Fore wings slightly and partly tinged with brown; two brown partly black-bordered spots on the costa, one near the base, the other before the middle; interior and exterior lines pale cinereous, denticulated, bent, accompanied by some minute black marks; submarginal line more indistinct; marginal points black. Hind wings cinereous, semihyaline. Length of the body 3 lines; of the wings 8 lines.

Gen. ARIOLICA, n. g.

Fæm. *Corpus vix robustum. Proboscis brevis. Palpi graciles, verticem paullo superantes; articulus 3^{us} lanceolatus, 2^o brevior. Antennæ graciles, glabré. Abdomen alas posticas paullo superans. Pedes lœves, graciles. Alæ anticæ acutæ, costa perparum convexa, margine exteriore perobliqua.*

Female. Body hardly stout. Proboscis short. Palpi slender, erect, rising a little higher than the vertex; 3rd joint lanceolate, shorter than the 2nd. Antennæ slender, smooth. Abdomen extending a little beyond the hind wings. Legs smooth, slender; hind tibiae with four long spurs. Wings moderately broad. Fore wings acute; costa very slightly convex; exterior border slightly convex, very oblique.

Allied to *Xanthodes*.

284. *ARIOLICA LINEOLATA*, n. s. *Fæm.* Flava, subtus alba, abdome subaurato, alis anticis albo bilineatis, linea 1^a subrecta, 2^a undulata, reniforme annulo elongato albo, alis posticis albis margine exteriore subaurato.

Female. Yellow, white beneath. Abdomen white, slightly gilded. Fore wings with two slender white lines; interior line nearly straight; exterior line undulating, curved outward; reniform mark represented by a transverse elongated white ringlet. Hind wings white, slightly gilded along the exterior border. Length of the body 5 lines; of the wings 14 lines.

285. *ARIOLICA?* *SIGNATA*, n. s. *Mas.* *Cervina*, robusta, palpis subarcuatis, antennis pubescentibus, alis anticus subacutis, puncto discali nigro, lineis duabus ferrugineis, 1^a undulata, 2^a recta obliqua, spatio exteriore cupreo-fusco lineam nigrum angulosam includente, plaga costali ferruginea lituram cinereum nigro marginatam includente.

Male. Fawn-colour, robust, mostly cinereous beneath. Palpi slightly curved. Antennæ distinctly pubescent. Fore wings slightly acute; costa and exterior border hardly convex; discal point black; interior and exterior lines ferruginous; the former undulating; the latter straight, oblique, more strongly marked; space beyond cupreous brown, including an indistinct black zigzag line; a ferruginous patch along the apical part of the costa, including a cinereous black-bordered costal mark. Length of the body 4? lines; of the wings 10 lines.

Gen. *EULEPA*, n. g.

Mas. *Corpus* sat robustum. *Proboscis* conspicua. *Palpi* ascendentibus, verticem non superantes; articulus 3^{us} brevis. *Antennæ* vix pubescentes. *Abdomen* alas posticas non superans; fasciculus apicalis parvus. *Pedes* sat validi; tibiæ posticae calcaribus quatuor longis. *Alæ* anticeæ apice vix rotundatae, costa recta, margine exteriore subconvexo.

Male. Body moderately stout. Proboscis distinct. Palpi ascending, moderately stout, not rising higher than the vertex; 3rd joint elongate-conical, about one-fourth of the length of the 2nd. Antennæ hardly pubescent. Abdomen not extending beyond the hind wings; apical tuft small. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings hardly rounded at the tips; costa straight; exterior border slightly convex, moderately oblique.

286. *EULEPA NIVEIGUTTA*, n. s. *Mas.* Ochraceo-fusca, alis anticus lituris pallidioribus neonon maculis punctisque albis, lunulis marginalibus nigris, punctis marginalibus albis, alis posticis cupreo-fuscis fimbria cinerea.

Male. Ochraceous brown, mostly cinereous beneath. Abdomen cinereous. Fore wings with some paler marks and with several white spots and points, most of which form two irregular bands; one spot apical; marginal lunules black, separated by white points which extend to the fringe. Hind wings cupreous brown; fringe cinereous. Length of the body 4½-5 lines; of the wings 11-12 lines.

Gen. *DAPHA*, n. g.

Fam. *Corpus* robustum, lœve, squamosum. *Proboscis* brevis, gracilis. *Palpi* porrecti, compressi, caput superantes; articulus 2^{us} supra convexus; 3^{us} lanceolatus, 2ⁱ dimidio non brevior. *Antennæ* glabré, gracieles. *Abdomen* alas posticas paullo superans. *Pedes* breves, graciles, calcaribus longis. *Alæ* anticeæ acutæ, costa vix convexa, margine exteriore subflexo.

Female. Body stout, smooth, squamous. Frontal tuft prominent. Proboscis short, slender. Palpi porrect, compressed, extending rather far beyond the head; 2nd joint convex above; 3rd lanceolate, about half the length of the 2nd. Antennæ smooth, slender. Abdomen tapering, extending a little beyond the hind wings. Legs smooth, slender; spurs long. Wings moderately broad. Fore wings acute; costa hardly convex; exterior border indistinctly bent, slightly oblique hindward.

287. *DAPHA EXHIBENS*, n. s. *Fæm.* Alba, vix testaceo suffusa, alis anticis iridescentibus fusco nigroque conspersis, lineis duabus ochraceis denticulatis obliquis, 1^a incompleta, 2^a integra extus albido marginata apud costam retracta, spatio marginali purpurascente, punctis marginalibus albis, fimbria fusca, alis posticis purpureo-cinereis basi albo-cinereis.

Female. Whitish, with a very slight testaceous tinge. Fore wings iridescent, irregularly brown- and black-speckled, with two ochraceous oblique denticulated lines; 1st line very incomplete; 2nd line entire, whitish-bordered on the outer side, abruptly retracted in front; exterior space mostly with a purplish tinge; marginal points white; fringe brown. Hind wings purplish cinereous, whitish cinereous towards the base. Length of the body 4 lines; of the wings 9 lines.

Gen. *FLAMMONA*, n. g.

Corpus vix robustum. *Proboscis* gracilis. *Palpi* obliqui, vix validi, verticem non superantes; articulus 3^{us} minimus. *Antennæ* valide, glabrae, vix compressæ. *Pedes* laeves; tibiæ posticæ subdilatatae, quadricalcaratae. *Alæ* anticæ elongatae, apice rotundatae, costa recta, margine exteriore subconvexo peroiblico.

Body hardly stout. Frontal tuft flat, prominent. Proboscis slender. Palpi hardly stout, obliquely ascending, not rising higher than the vertex; 3rd joint extremely minute. Antennæ stout, smooth, very slightly compressed. Legs smooth; hind tibiæ slightly dilated, with four moderately long spurs. Wings elongate, moderately broad. Fore wings rounded at the tips; costa straight; exterior border slightly convex, very oblique.

288. *FLAMMONA QUADRIFASCIATA*, n. s. Schistaceo-cinerea, alis anticis fasciis quatuor nigris obliquis subparallelis, 3^a 4^a que intus albo marginatis, striga discali tenui nigra, alis posticis albidis basi cupreorufescensibus.

Slaty cinereous, paler beneath. Abdomen pale cinereous. Fore wings with four oblique nearly parallel black bands; 1st and 2nd bands slightly diverging from each other hindward; 3rd and 4th white-bordered on the inner side; 3rd narrower than the 2nd, broader than the 4th; a slender black discal streak between the 2nd and 3rd bands. Hind

wings whitish, cupreous reddish towards the base. Length of the body 4? lines; of the wings 11 lines.

Gen. DIMIRICA, n. g.

Mas. *Corpus* sat robustum. *Proboscis* distincta. *Palpi* erecti, vix lati, verticem paullo superantes; articulus 3^{us} linearis, 2^o paullo brevior. *Antennæ* pubescentes. *Abdomen* alas posticas non superans; fasciculus apicalis parvus. *Pedes* validi, pilosi; tibiae posticæ calcaribus quatuor longissimis. *Alæ* anticæ amplæ, apice subrotundatae, costa recta, margine exteriore convexo.

Male. Body moderately stout. Proboscis distinct. Palpi erect, hardly broad, rising a little higher than the vertex; 3rd joint linear, rounded at the tip, a little shorter than the 2nd. Antennæ distinctly pubescent. Abdomen not extending beyond the hind wings; apical tuft small. Legs stout, pilose; hind tibiae with four very long spurs. Wings ample. Fore wings slightly rounded at the tips; costa straight; exterior border convex, rather oblique.

289. *DIMIRICA NUBIFERA*, n. s. *Mas.* Albida, subtus fusca, palpis extus ferrugineis, abdomine fusco iridescente, alis anticis cyaneo purpureo suffusis, plagis duabus costalibus lineisque tribus denticulatis undulatis nigricantibus, fimbria nigricante albido strigata, alis posticis fuscis.

Male. Whitish, brown beneath. Palpi ferruginous on the outer side. Thorax ferruginous in front. Abdomen iridescent brown. Fore wings mostly suffused with metallic blue and purplish tints; costa with two blackish patches; one at the base, accompanied by some blackish points; three denticulated undulating blackish lines; fringe blackish, with whitish streaks. Hind wings brown. Length of the body 5 lines; of the wings 14 lines.

Gen. PENZA, n. g.

Mas. *Corpus* robustum. *Proboscis* valida. *Palpi* subascendentes, caput paullo superantes; articulus 3^{us} brevissimus. *Antennæ* subpectinatae, breviusculæ. *Abdomen* alas posticas vix superans. *Alæ* anticæ acutæ, costa recta, margine exteriore convexo.

Male. Body stout. Proboscis robust. Palpi slightly ascending, extending a little beyond the head; 3rd joint extremely short. Antennæ slightly pectinated, rather short and stout. Abdomen hardly extending beyond the hind wings. Wings moderately broad. Fore wings acute; costa straight; exterior border convex, moderately oblique.

This genus and the following one should perhaps be removed from the *Acontidæ*; but their affinities are doubtful.

290. *PENZA PUNCTICEPS*, n. s. *Mas.* Ferrugineo-fusca, abdomine cinereo, alis anticis cinereo suffusis, lineis cinereis angulosis valde in-

distinctis, nota reniformi magna cinerea rufescente marginata, punctis tribus costalibus albidis, alis posticis cinereo-fuscis subtus bilineatis.

Male. Ferruginous brown, cinereous brown beneath. Basal joint of the antennae pale at the tip. Abdomen cinereous. Fore wings suffused with cinereous gloss; transverse lines cinereous, zigzag, very indistinct; reniform mark large, cinereous, much contracted in front, bordered with ferruginous red; costa with three whitish points towards the tip. Hind wings cinereous brown, with two darker lines on the underside. Length of the body 4 lines; of the wings 10 lines.

Gen. CHOLUATA, n. g.

Mas. *Corpus* crassum. *Proboscis* conspicua. *Palpi* robusti, obliqui, verticem non superantes; articulus 3^{us} brevis. *Antennæ* subpectinatae, apices versus simplices. *Abdomen* cristatum, alas posticas paullo superans. *Pedes* robusti, pilosi; tarsi spinosi. *Alæ* latiusculæ, antice apice rectangulatae, costa subconvexa, margine exteriore vix convexo.

Male. Body very robust. Proboscis distinct. Palpi stout, obliquely ascending, not rising so high as the vertex; 3rd joint elongate-conical, about one-fourth of the length of the 2nd. Antennæ very slightly pectinated to two-thirds of the length. Abdomen crested, extending a little beyond the hind wings. Legs robust, pilose; spurs stout, moderately long; tarsi spinose. Wings rather broad. Fore wings rectangular at the tips; costa almost straight; exterior border hardly convex, oblique hindward.

291. **CHOLUATA EBURNEIFERA**, n. s. *Mas.* Obscure ferrugineo-fusca, abdomine cinereo cristicis ferrugineo-fuscis, alis anticis fasciis duabus eburneis non obliquis, 2^a interrupta, fascia exteriore dentata ferruginea, lunulis marginalibus nigris, puncto discali albo, alis posticis basi pallide cinereis subtus albido conspersis.

Male. Dark ferruginous brown, somewhat paler and partly cinereous beneath. Abdomen cinereous, with ferruginous brown crests. Fore wings with two irregular upright ivory-white bands; 2nd band interrupted, more irregular than the 1st, contiguous on the outer side to a dentate ferruginous band; a white discal point; marginal lunules black. Hind wings ferruginous, pale cinereous towards the base; underside with minute whitish speckles; discal spot and zigzag exterior line ferruginous. Length of the body 6 lines; of the wings 14 lines.

Gen. AUTOBA, n. g.

Mas. *Corpus* robustum, lave, squamosum. *Proboscis* conspicua. *Palpi* ascendentibus, laves, sat graciles; articulus 2^{us} arcuatus; 3^{us} parvus, lanceolatus. *Antennæ* pubescentes. *Abdomen* alas posticas vix superans. *Pedes* robusti, brevissimi; calcaria longissima; tarsi latissimi. *Alæ* anticæ amplæ, apice rectangulatae, costa recta, margine exteriore postico convexo.

Male. Body robust, smooth, squamous. Proboscis distinct. Palpi ascending, smooth, rather slender; 2nd joint curved; 3rd minute, lanceolate, less than one-fourth of the length of the 2nd. Antennæ distinctly pubescent. Abdomen hardly extending beyond the hind wings. Legs stout, very short; tarsi very broad; hind tibiae with four very long spurs. Wings ample; fringe long. Fore wings acutely rectangular at the tips; costa straight; exterior border convex and oblique hindward.

292. **AUTOBA VERSICOLOR**, n. s. *Mas.* Cinerea, nigro conspersa, subtus lutescens, capite thoraceque antico fuscis, abdominis basi rufescente, alis fascia fusca obliqua intus diffusa, lineis tribus denticulatis, alis anticis costa rosea nigro bistrigata, alis posticis fimbria saturate rufa.

Male. Cinereous, black-speckled, pale luteous beneath. Head and fore border of the thorax brown. Thorax with a rosy tinge adjoining the brown part. Abdomen reddish towards the base. Wings with a brown band, which is concise on the outer side and diffuse on the inner side, and extends from the tips of the fore wings to half the length of the interior border of the hind wings; interior, exterior, and submarginal lines black, slight, denticulated. Fore wings with a rosy tinge along the costa, which has two exterior oblique black streaks and three more exterior pale points. Hind wings with a deep-red fringe. Length of the body 5 lines; of the wings 12 lines.

Fam. ERASTRIDÆ, Guén.

Gen. ERASTRIA, Ochs.

293. **ERASTRIA SECURIFERA**, n. s. *Mas.* Albida, gracilis, thorace fusco, humeris albis, abdomine longo, alis anticis fuscis, vitta subcostali strigae obliqua lineaque submarginali albis, alis posticis cinereis.

Male. Whitish, slender. Antennæ very minutely pubescent. Thorax brown; shoulders white. Abdomen long, extending beyond the hind wings. Fore wings brown, with a subcostal white stripe, which is abbreviated by an oblique white streak; the two somewhat hatchet-shaped; a white submarginal line, attenuated in front. Hind wings cinereous. Length of the body 3½ lines; of the wings 7 lines.

Fam. ANTHOPHILIDÆ, Dup.

Gen. MICRA, Guén.

294. **MICRA DEROGATA**, var. *Mas.* Alba, alis anticis fascia exteriore obliqua latissima purpurea fuscescente marginata strigam albam extus nigro marginatam includente, fimbria fuscescente albo interlineata, alis posticis margine exteriore fuscescente.

Male. White. Third joint of the palpi lanceolate, less than half the

length of the 2nd. Antennæ minutely pubescent. Fore wings with an oblique exterior very broad purple band which is bordered with brownish on both sides, and contains an oblique white streak which is bordered with black on the outer side; fringe brownish, interlined with white. Hind wings brownish along the exterior border. Length of the body 3 lines; of the wings 7 lines.

Inhabits also Ceylon. It may be distinguished from the Australian *M. derogata* by its smaller size and by a very slight difference in the markings.

Gen. GARIGA, n. g.

Mas. *Corpus* sat gracile. *Proboscis* conspicua. *Palpi* porrecti, validi, caput longe superantes; articulus 3^{us} linearis, 2ⁱ dimidio non brevior. *Antennæ* glabrae. *Abdomen* alas posticas superans; fasciculus apicalis parvus. *Pedes* laves, validi. *Alæ* anticae apice rectangulatae, costa basi subconvexa, margine exteriore postico subobliquo.

Male. Body rather slender. Proboscis distinct. Palpi porrect, stout, extending rather far beyond the head; 3rd joint linear, rounded at the tip, much more slender than the 2nd, and about half its length. Antennæ smooth. Abdomen extending beyond the hind wings; apical tuft small, radiate. Legs smooth, stout; hind tibiae with one of the apical spurs extremely long. Wings moderately broad. Fore wings acutely rectangular at the tips; costa very slightly convex towards the base; exterior border slightly oblique hindward.

295. GARIGA ARGENTILINEA, n. s. *Mas.* Viridis, subtus rufescens, abdomine albo punctis ventralibus nigris, alis anticis lineis duabus denticulatis argenteis, lituris apud marginem interiorem nigris, fimbria alba nigro notata basi cervina, alis posticis rufis fimbria albida.

Male. Green, reddish beneath. Abdomen whitish, with two rows of black points beneath. Fore wings with some irregular black marks along the interior border; the largest mark by the interior angle; two silvery upright denticulated lines; fringe double, fawn-colour towards the base, alternately black and white exteriorly. Hind wings red; fringe whitish. Length of the body 4 lines; of the wings 8 lines.

Gen. CHOESIA, n. g.

Mas. *Corpus* robustum, subcylindricum. *Proboscis* conspicua. *Palpi* ascendentibus, verticem non superantes; articulus 2^{us} arcuatus, latiusculus; 3^{us} minimus. *Antennæ* subpubescentes. *Abdomen* alas posticas longe superans, fasciculis ventralibus floccosis. *Pedes* longiusculi, sat graciles; tibiae posticæ calcaribus longissimis. *Alæ* longiusculæ, sat angustæ; anticae apice rotundatae, costa recta, margine exteriore subconvexa.

Male. Body stout, nearly cylindrical. Proboscis distinct. Palpi as-

cending, not rising higher than the vertex; 2nd joint curved, rather broad; 3rd somewhat elliptical, very minute, not one-sixth of the length of the 2nd. Antennæ minutely pubescent. Abdomen long, extending much beyond the hind wings; underside with long floccose tufts on each side. Legs rather long and slender; hind tibæ with four very long spurs. Wings rather long and narrow. Fore wings rounded at the tips; costa straight; exterior border slightly convex, very oblique.

296. *CHORSIA MACULOSA*, n. s. *Mas.* Albido-cinerea, subtus fuscescens, thorace antico fuscescente, alis anticis plagis costalibus, plaga postica, plaga marginali liturisque fuscis, punctis marginalibus nigris, puncto subtus subapicali albo.

Male. Whitish cinereous, brownish beneath. Thorax brownish in front. Abdomen dingy cinereous. Fore wings with some small slender brown marks, and with three brown costal patches; a hindward brown patch opposite the 2nd costal patch, and another patch on the exterior border; marginal points black; underside with a white subapical point. Length of the body 4 lines; of the wings 10 lines.

Gen. *AUTOMALA*, n. g.

Mas. *Corpus* sat gracile. *Proboscis* conspicua. *Palpi* porrecti, lati, pilosi, securiformes. *Antennæ* validæ, breviusculæ, setulosæ, pubescentes. *Abdomen* alas posticas superans; fasciculus apicalis parvus. *Pedes* lœves, sat graciles. *Alæ* anticæ apice rotundatae, costa recta, margine exteriore convexo sat obliquo.

Male. Body rather slender. Proboscis distinct. Palpi porrect, broad, pilose, securiform, projecting somewhat beyond the head; joints indistinct. Antennæ stout, setulose, pubescent, rather short. Abdomen long, extending beyond the hind wings; apical tuft small. Legs smooth, rather slender; hind tibæ with four long spurs. Wings moderately broad. Fore wings rounded at the tips; costa straight; exterior border convex, rather oblique.

297. *AUTOMALA SEMIDOLOSA*, n. s. *Mas.* Cana, fusco conspersa, abdome fasciis æneo-cinereis fusco bifasciatis, lineis duabus plaque costali nigricantibus, alis posticis sordide cinereis.

Male. Hoary, brown-speckled, dingy cinereous beneath. Abdomen with æneous-cinereous bands. Fore wings with two brown irregular bands; one in the middle; the other broader, marginal; interior and exterior lines blackish, the latter much bent; a blackish patch near the base of the costa. Hind wings dingy cinereous. Length of the body 5 lines; of the wings 10 lines.

Gen. *CHOLIMMA*, n. g.

Fæm. *Corpus* sat gracile. *Proboscis* robusta. *Palpi* porrecti, caput

superantes; articulus 2^{us} latus, securiformis; 3^{us} indistinctus. *Antennæ* graciles. *Abdomen* alas posticas non superans. *Pedes* læves; tibiae subfimbriatae. *Alæ* latiusculæ, breviusculæ; anticæ apice rectangulatae, costa margineque exteriore rectis.

Female. Body rather slender. Proboscis robust, moderately long. Palpi porrect, extending beyond the head; 2nd joint broad, securiform; 3rd indistinct. Antennæ smooth, slender. Abdomen not extending beyond the hind wings. Legs smooth; tibiae slightly fringed; hind tibiae with four long spurs. Wings rather broad and short. Fore wings acutely rectangular at the tips; costa and exterior border straight, the latter hardly oblique.

298. *CHOLIMMA LEUCANIOIDES*, n. s. *Fæm.* Pallide straminea, capite thoraceque albis, alis subtus lunula discali fusca, alis anticis fusco subcospersis, punctis duobus discalibus punctisque marginalibus nigris, spatio marginali cervino, alis posticis extus subcervinis.

Female. Pale straw-colour. Head and thorax white. Wings beneath with a brown discal lunule. Fore wings with minute brown speckles, a few of which are confluent and form a brown point in the interior part of the disk; two black exterior discal points, one behind the other; marginal space suffused with fawn-colour; marginal points black. Hind wings somewhat fawn-coloured exteriorly; marginal points only apparent on the fore part of the exterior border. Length of the body 5 lines; of the wings 12 lines.

299. *CHOLIMMA SUBPUNCTATA*, n. s. *Fæm.* Flavesceni-testacea, alis anticis lituris nonnullis fuscis albido notatis, punctis marginalibus nigris intus albo marginatis, disco subtus fusco, alis posticis fuscis, fimbria pallida.

Female. Yellowish testaceous. Fore wings with some minute, brown, irregular, more or less whitish-pointed marks; marginal points black, white-bordered on the inner side; disk beneath brown. Hind wings brown; fringe and underside yellowish white. Length of the body 4 lines; of the wings 10 lines.

Gen. *BERIA*, n. g.

Mas. *Corpus* sat robustum. *Proboscis* obsoleta aut vix conspicua. *Palpi* porrecti, subdecumbentes, caput superantes; articulus 3^{us} lanceolatus, 2^o brevior. *Antennæ* validæ, setulosæ, pubescentes; articulus 1^{us} fasciculatus. *Abdomen* alas posticas paullo superans; fasciculus apicalis parvus. *Pedes* validi, læves. *Alæ* sat angustæ; anticæ apice subrotundatae, costa recta, margine exteriore subconvexo.

Male. Body moderately stout. Proboscis obsolete or nearly so. Palpi porrect, slightly decumbent, extending somewhat beyond the head; 3rd joint lanceolate, shorter than the 2nd. Antennæ stout, setulose, pubescent; 1st joint with a small apical tuft. *Abdomen* extending a

little beyond the hind wings ; apical tuft small. Legs stout, smooth ; hind tibiae with four long spurs. Wings rather narrow ; fringe long. Fore wings slightly rounded at the tips ; costa straight ; exterior border slightly convex, very oblique.

300. *BERIA RECUSATA*, n. s. *Mas.* Pallide cervina, abdomine cinereo, alis anticis nigro conspersis, linea marginali nigro extus marginata, linea submarginali venisque albis, fimbria albida fusco interlineata, alis posticis albidis nigro marginatis.

Male. Pale fawn-coloured. Abdomen cinereous. Fore wings with black speckles ; veins white ; submarginal line white, nearly parallel to the marginal line, which is also white, and is bordered with black on the outer side ; fringe whitish, interlined with brown ; underside mostly brown. Hind wings whitish, concisely bordered with black ; fringe like that of the fore wings. Length of the body 4 lines ; of the wings 10 lines.

Gen. *MANOBA*, n. g.

Fæm. *Corpus* lave, sat robustum. *Proboscis* gracilis. *Palpi* porrecti, lati, pilosi, caput sat superantes ; articuli indistincti. *Antennæ* glabrae, breviusculæ, sat validæ. *Abdomen* alas posticas vix superans. *Pedes* laves. *Alae* anticæ apice subrotundatæ, costa marginaque exteriore subconvexis.

Female. Body smooth, moderately stout. Proboscis slender. Palpi porrect, broad, pilose, extending rather beyond the head ; joints indistinct. Antennæ smooth, rather stout and short. Abdomen hardly extending beyond the hind wings. Legs smooth ; hind tibiae with four spurs of moderate length. Wings moderately broad. Fore wings slightly rounded at the tips ; costa and exterior border slightly convex, the latter rather oblique.

301. *MANOBA IMPLENS*, n. s. *Fæm.* Alba, subtus sordide cinerea, alis anticis nigro subconspersis, gutta basali punctisque submarginalibus nigris, lineis duabus fuscis apud costam dilatatis postice approximatis, spatio intermedio postico fuscescente, alis posticis subcinereis.

Female. White, shining. Palpi and underside dingy cinereous. Fore wings very slightly and minutely black-speckled, with a black dot in the disk near the base, and with two brown lines which are dilated on the costa and approach each other hindward, where the space between them is brownish ; a few irregular submarginal black points. Hind wings slightly cinereous. Length of the body $3\frac{1}{2}$ lines ; of the wings 9 lines.

Gen. *CARMARA*, n. g.

Fæm. *Corpus* sat robustum. *Proboscis* brevis, gracilis. *Palpi* porrecti, compressi, caput sat superantes ; articulus 2nd subfusiformis ;

3^{as} minimus. Antennæ glabré, graciles. Abdomen alas posticas non superans. Pedes validi, lèves. Alæ fimbria longa duplicita; anticæ apice subrotundatae, costa recta, margine exteriore subconvexo perobliqua.

Female. Body moderately stout. Proboscis short, slender. Palpi porrect, compressed, extending somewhat beyond the head; 2nd joint subfusiform; 3rd extremely minute. Antennæ bare, slender. Abdomen not extending beyond the hind wings. Legs stout, smooth; hind tibiæ with four long spurs. Wings moderately broad; fringe long, double. Fore wings slightly rounded at the tips; costa straight; exterior border slightly convex, very oblique.

302. CARMARA SUBCERVINA, n. s. *Fæm.* Submurino-cervina, alis linea guttulari alba interrupta, punctis marginalibus nigris, alis anticis costa exteriore albido punctata.

Female. Fawn-colour, with a slight tinge of mouse-colour, which is most prevalent on the hind wings and beneath. Wings with an incomplete white guttular line, which is most apparent by the interior border of the hind wings; marginal points black. Fore wings with some whitish points along the exterior part of the costa. Length of the body 4 lines; of the wings 10 lines.

Gen. ENEA, n. g.

Mas. *Corpus* vix robustum. *Proboscis* conspicua. *Palpi* porrecti, brevissimi, gracillimi, caput vix superantes; articulus 3^{as} minimus. *Antennæ* graciles, subpubescentes. *Abdomen* alas posticas paullo superans; fasciculus apicalis longus. *Pedes* graciles, lèves. *Alæ* longisculæ; anticæ peracutæ, costa recta, margine exteriore subconvexo perobliquo.

Male. Body hardly stout. Proboscis distinct. Palpi porrect, very short and slender, hardly extending beyond the head; 3rd joint extremely minute. Antennæ slender, minutely pubescent. Abdomen extending a little beyond the hind wings; apical tuft long. Legs slender, smooth; hind tibiæ with four long spurs. Wings rather long, moderately broad. Fore wings very acute; costa straight; exterior border slightly convex, very oblique.

303. ENEA SIGNICOSTA, n. s. *Mas.* Albida, subtus sordide cinerea fusco varia, alis lunulis marginalibus nigris, alis anticis maculis tribus costalibus trigonis guttaque discali nigris, margine exteriore ex parte subcervino.

Male. Whitish, dingy cinereous and varied with brown on the under-side. Wings with black marginal lunules. Fore wings with three black triangular costal spots; the third much larger than the other two; a black discal dot; exterior border partly and slightly tinged with fawn-colour. Length of the body 4 lines; of the wings 10 lines.

Fam. ERIOPIDÆ, Guén.

Gen. CALLOPISTRIA, Hüb.

304. **CALLOPISTRIA VENTRALIS**, n. s. *Mas.* Ferruginea, abdomine cinereo vitta ventrali maculari nigra, alis anticis lineis duabus nigris albo marginatis, 1^a brevissima, 2^a integra, striga intermedia discali lanceolata argentea, basi margineque exteriore albida, alis posticis fuscis.

Male. Ferruginous, pale cinereous beneath. Palpi dark brown. Antennæ setulose, pubescent. Abdomen cinereous, shining, with a macular black stripe beneath. Wings with black marginal lunules. Fore wings with two black white-bordered lines; 1st line only apparent near the costa, with a black streak by its inner side; 2nd line entire; a silvery lanceolate discal streak between the two lines; basal space of the wing whitish, except along the costa; marginal space whitish, largely and diffusely marked with brown. Hind wings brown. Length of the body 6 lines; of the wings 16 lines.

Gen. CHODDA, n. g.

Fæm. Corpus sat robustum. Proboscis valida. Palpi porrecti, pilosi, subangulati, caput superantes; articulus 3^{us} longiconicus, 2ⁱ dimidio brevior. Antennæ glabré. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ subfimbriatæ. Alæ anticæ apice rectangulatæ, costa recta, margine exteriore subflexo.

Female. Body moderately stout. Proboscis robust. Palpi porrect, pilose, extending beyond the head; 2nd joint oblique; 3rd elongate-conical, less than half the length of the 2nd, with which it forms a slight angle. Antennæ bare. Abdomen hardly extending beyond the hind wings. Legs moderately stout; tibiæ slightly fringed; hind tibiæ with four long spurs. Wings moderately broad. Fore wings rectangular at the tips; costa straight; exterior border slightly bent in the middle, its hind part rather oblique.

Allied to *Callopistria*.

305. **CHODDA SORDIDULA**, n. s. *Fæm.* Cinereo-alba, cervino varia, alis lunulis marginalibus nigris, alis anticis lituris costalibus cervinis nigro tinctis, striga discali lata obliqua fuscescente nigro intersecta, fascia exteriore informi sordide flavescente fusco varia, striga marginali lata obscure fusca, alis posticis apud marginem exteriorem fuscescensibus.

Female. Cinereous white, varied with dull fawn-colour. Wings with black marginal lunules. Fore wings with various fawn-coloured black-tinted marks along the costa; discal mark forming a broad brownish oblique streak, which is partly and transversely intersected by a smaller black oblique streak; an exterior irregular dingy yellowish brown-varied band; a broad streak along the fore part of the exterior border

and the adjoining fringe dark brown. Hind wings diffusely brown towards the exterior border. Length of the body 6 lines; of the wings 16 lines.

Fam. EURHIPIDÆ, Guén.

Gen. PENICILLARIA, Guén.

306. PENICILLARIA ? QUADRINOTATA, n. s. *Mas.* Pallide cervina, palpis subangulatis, antennis subnodosis, abdominis lateribus fasciculatis, pedibus dense fimbriatis, alis anticus fusco substrigatis et subcospersis, maculis duabus costalibus trigonis linea angulata fasciaque diffusa obliqua fuscis, linea exteriore pallida undulata fusco marginata, macula marginali fusca, alis posticis fuscis basi cinereis.

Male. Pale fawn-colour. Palpi obliquely ascending; 3rd joint conical, not more than one-fourth of the length of the 2nd, with which it forms a slight angle. Antennæ simple, forming a slight knot at one-third of the length. Abdomen tufted along each side, not extending beyond the hind wings; apical tuft small. Legs (including the tarsi) densely fringed. Fore wings slightly streaked and speckled with brown; two triangular brown spots on the costa; 1st spot before the middle, accompanied hindward by an angular parallel brown line, behind which there is an incomplete diffuse oblique brown band; 2nd spot subapical; an exterior pale undulating brown-bordered line; a brown spot on the fore part of the exterior border, which is slightly angular; marginal points black, elongated. Hind wings brown, cinereous towards the base. Length of the body 5 lines; of the wings 12 lines.

It hardly agrees with the typical structure of *Penicillaria*, but does not differ sufficiently to form a new genus; and this remark will apply to the eight following species.

Gen. EUTELIA, Hüb.

307. EUTELIA APPROXIMATA, n. s. *Mas.* Cinerea, antennis dimidio basali serrato pubescente, alis anticus angustis nigro cospersis fusco trilineatis, linea basali nigra, litura reniformi fusca sublunata albo marginata, macula costali subapicali trigona fusca, alis posticis fuscescenti-cinereis sublineatis, macula discali subtus nigra.

Male. Cinereous. Palpi ascending a little higher than the vertex; 3rd joint linear, more than half the length of the 2nd, which is marked with black. Antennæ serrated and pubescent to beyond half the length. Tegulae of the thorax forming a dorsal ridge. Abdomen extending beyond the hind wings. Legs smooth. Fore wings narrow, minutely black-speckled; lines brown, except the basal line, which is black, undulating, and diffusely brown-bordered; interior line much bent in front, where it is contiguous to the brown sublunate white-bordered reniform mark; exterior line double, undulating, indistinct; submarginal line dentate, incompletely double, adjoining a brown tri-

angular costal spot; marginal points black; exterior border hardly bent, scarcely dentate, very oblique hindward. Hind wings brownish cinereous, with indistinct brown lines; underside with a brown exterior line and with a black discal spot, which is more conspicuous than that of the fore wings. Length of the body 5 lines; of the wings 14 lines.

308. *EUTELIA DULCILINEA*, n. s. *Mas.* Cinerea, *E. approximata* simillima, alis anticis linea basali non nebulosa, linea interiore nigra minus flexa, linea exteriore obscuriore, linea submarginali minus dentata albo interlineata.

Male. Cinereous, very closely allied to the preceding species, from which it may be distinguished by the following characters. Fore wings with the basal line not shaded; interior line black, less bent; reniform mark elliptical, not lunate; exterior line much darker; submarginal line interlined with white, much less dentate. Hind wings like those of *E. approximata*, with brown marks near the end of the interior border and with brown marginal lunules. Length of the body $5\frac{1}{2}$ lines; of the wings 13 lines.

309. *EUTELIA DIMIDIATA*, n. s. *Fæm.* Cinereo-cervina, alis anticis fusco lineatis, puncto basali nigro, linea interiore duplicata ex parte nigricante, linea media antice angulata et nigricante, linea exteriore duplicata undulata, linea submarginali pallide cinerea dentata nigro notata, macula costali trigona cervina, litura reniformi nigricante oblonga pallido marginata.

Female. Cinereous fawn-colour, more cinereous beneath. Third joint of the palpi lanceolate, hardly shorter than the 2nd. Abdomen extending a little beyond the hind wings. Wings with the exterior border hardly dentate. Fore wings with a black basal point; lines brown, indistinct; interior line double, partly blackish; middle line blackish, and angular in front; exterior line double, undulating; submarginal line pale cinereous, dentate, accompanied by some black marks, contiguous to a triangular costal fawn-coloured spot; reniform mark blackish, oblong, pale-bordered, attenuated in front; marginal points black. Length of the body $5\frac{1}{2}$ lines; of the wings 13 lines.

310. *EUTELIA OBLIQUATA*, n. s. *Fæm.* Pallide cervina, alis anticis nigro subconspersis, plaga basali postica obscuriore, striga basali lineisque nigris, linea basali obliqua abbreviata, lineis exteriore et submarginali denticulatis incompletis, litura reniformi albida magna, macula apicali cana, alis posticis fuscescentibus basi albidis.

Female. Pale fawn-colour, cinereous beneath. Third joint of the palpi lanceolate, less than half the length of the 2nd. Abdomen black-speckled, extending beyond the hind wings. Wings with the exterior border slightly dentate. Fore wings thinly black-speckled, somewhat rounded at the tips, with a darker fawn-coloured patch near the base of the interior border; lines black; basal line oblique, much abbre-

viated at each end; a short oblique costal streak near the base; exterior and submarginal lines denticulated, very incomplete; reniform mark whitish, large; a hoary apical spot; marginal lunules black; exterior border extremely oblique hindward. Hind wings brownish, whitish towards the base. Length of the body 6 lines; of the wings 13 lines.

311. *EUTELIA OPPOSITA*, n. s. *Fæm.* Cervina, femoribus tibiisque posticis dense pilosis, alis anticus nigro subconspersis fusco lituratis, linea obliqua recta, litura reniformi angusta albido marginata nigro unipunctata, spatio exteriore cinereo, macula costali trigona cervina, lineis nonnullis denticulatis fuscis, gutta discali interiore nigricante, alis posticis fuscis vix lineatis.

Female. Fawn-colour, mostly cinereous beneath. Third joint of the palpi linear, about half the length of the 2nd. Hind femora and hind tibiae densely pilose. Wings rather broad, hardly dentate. Fore wings thinly black-speckled, with brown markings; a straight oblique line contiguous to the narrow whitish-bordered reniform mark, which contains a black dot; space beyond this line cinereous, excepting a large triangular fawn-coloured costal spot; several more or less distinct denticulated brown lines; a blackish dot on the interior part of the disk; marginal lunules black; exterior border extremely oblique hindward. Hind wings brown, with some traces of lines, which are most distinct on the 4th inferior vein. Length of the body 7 lines; of the wings 15 lines.

312. *EUTELIA SUBOCELLATA*, n. s. *Fæm.* Cinerea, vertice rufescente, abdominis lateribus fasciculatis, alis anticus lituris nigris et cervinis, fascia recta obliqua testacea interlineata ochraceo marginata, ocello informi strigam nigram emittente, linea exteriore brevi nigra, macula costali subtrigona cervina, alis posticis fuscis lineis duabus obscurioribus.

Female. Cinereous, vertex reddish. Palpi ascending higher than the vertex; 3rd joint linear, shorter than the 2nd. Abdomen extending somewhat beyond the hind wings, with two tufts on each side towards the tip, which is quadrate. Wings with the exterior border slightly dentate. Fore wings with a few small irregular black and fawn-coloured marks, and with a straight oblique testaceous band, which is interlined and bordered with ochraceous and is excavated by a large irregular ocellus; the latter is cinereous, black and fawn-coloured, and emits a black streak to the hind end of a short upright black line; this line is contiguous to a large nearly triangular fawn-coloured costal spot which contains three white costal points; marginal points black; tips rectangular; exterior border slightly bent, extremely oblique hindward; underside with a red diffuse subcostal streak and with three oblique brown lines. Hind wings brown above, with five darker brown lines, which are most distinct on the underside, where there is

a blackish discal spot. Length of the body 8 lines; of the wings 17 lines.

313. *EUTELIA ? CONSENTANEA*, n. s. *Fæm.* Cinerea, femoribus tibiisque dense pilosis, alis anticis striga basali cervina, fascia obliqua cervina abbreviata, litura reniformi incompleta albido notata, linea exteriore cana subundulata vix obliqua fusco marginata, linea submarginali pallida vix conspicua, alis posticis fuscis, gutta subitus discali nigricante.

Female. Cinereous. Thorax cinereous fawn-colour. Palpi obliquely ascending, hardly rising higher than the vertex; 2nd joint pilose; 3rd linear, less than half the length of the 2nd. Abdomen extending a little beyond the hind wings. Femora and tibiæ densely clothed with long hairs. Wings broad; marginal points black; exterior border slightly dentate. Fore wings rectangular at the tips, with a fawn-coloured streak proceeding from the base, and with an oblique fawn-coloured band, which is abbreviated by the whitish-marked incomplete reniform spot; a hoary brown-bordered slightly undulating hardly oblique exterior line; submarginal line paler than the ground-hue, very indistinct; exterior border hardly bent, very oblique hindward. Hind wings brown; underside with a blackish discal dot and with an exterior denticulated very distinct dark brown line. Length of the body 6 lines; of the wings 14 lines.

314. *EUTELIA INSTRUCTA*, n. s. *Mas.* Alba, capite rufo nigro consperso, abdomine alas posticas superante cristis tribus rufis nigro conspersis, alis anticis pallide ochraceis, lineis exterioribus obscurioribus undulatis approximatis parallelis, fasciis duabus obliquis albis, 1st lituram retiformem emittente, spatio marginali pallide cervino maculas duas nigro-cinereas includente, alis posticis fascia exteriore lata informi fusca.

Male. White. Head red, black-speckled. Palpi ascending as high as the vertex; 3rd joint subfusiform, a little shorter than the 2nd. Antennæ pubescent, and slightly pectinated to much beyond half the length. Abdomen extending far beyond the hind wings, with three red black-speckled hindward crests. Legs short, thick; tibiæ reddish brown, speckled with black and white. Wings long; exterior border slightly dentate. Fore wings pale ochraceous, with some darker undulating approximate parallel exterior lines; two oblique very irregular white bands; 1st band emitting to the white costa from its inner side a net-shaped white mark; 2nd band very incomplete, accompanied by an irregular line formed of black speckles; marginal space pale fawn-colour, with two blackish-cinereous marginal spots; submarginal points black, marked with white; a chalybeous black dot on the interior border. Hind wings with a broad irregular exterior brown band, which is marked with black towards the interior border; marginal space pale fawn-colour, with an incomplete blackish line. Length of the body 9 lines; of the wings 20 lines.

Gen. *VARNIA*, n. g.

Fam. *Corpus* crassum. *Proboscis* non conspicua. *Palpi* vix robusti, oblique ascendentibus, frontem superantes; articulus 3^{us} lanceolatus, 2^{us} dimidio non longior. *Antennæ* validæ, glabræ. *Abdomen* alas posticas superans; fasciculus apicalis parvus. *Pedes* validi, densissime pilosi. *Alæ* margine exteriore exciso; anticæ acute, costa recta.

Female. Body thick. Proboscis not distinct. Palpi hardly stout, obliquely ascending, rising higher than the front; 3rd joint lanceolate, about half the length of the 2nd. Antennæ stout, smooth. Abdomen elongate-conical, extending beyond the hind wings; apical tuft small. Legs stout, most densely clothed with long hairs; spurs long. Wings moderately broad; exterior border deeply and irregularly notched. Fore wings acute; costa straight.

Allied to *Eutelia*.

315. *VARNIA MINIATA*, n. s. *Fam:* Læte miniata, subtus cinereo-fusca, capite thoraceque fuscis, hujus fascia rufa, abdomen vitta fusca guttisque lateralibus flavis, alis strigis transversis fasciisque nigris, alis posticis macula discali magna angulata vitrea.

Female. Bright red-lead colour, mostly cinereous brown beneath. Head and thorax brown, the latter with a red band. Abdomen with a brown stripe and with two rows of yellow dots. Legs reddish brown; hind tibiæ densely tufted along the whole length; the hairs rosy and very long, shorter and brownish towards the tips. Wings with irregular black bands and transverse streaks. Hind wings with a large angular vitreous discal spot. Length of the body 8 lines; of the wings 15 lines.

*Fam. PLUSIDÆ, Boisd.*Gen. *PLUSIA*, *Ochs.*

316. *Plusia verticillata*, Guén. *Noct.* ii. 344. 68.

Inhabits also South Africa, Hindostan, Ceylon, China, Java, and Australia.

The following ten species do not represent the typical forms of *Plusia*, and some of them may be considered as sufficiently distinct to form new genera.

317. *PLUSIA FERRIPUNCTUM*, n. s. *Mas.* Flava, ochraceo varia, alis anticis ochraceo confertim conspersis, fasciis duabus obliquis argenteis, 1^a lata punctum ferrugineum includente costam versus abbreviata, 2^a maculari submarginali, alis posticis rufescensibus, subtus albis rufescente quadrilineatis, fasciculo discali interiore floccoso.

Male. Yellow, varied with ochraceous. Frontal tuft prominent. Antennæ pubescent. Abdomen pale. Fore wings thickly speckled with dull ochraceous, the speckles here and there confluent; two irregular oblique silvery bands; 1st band broad, much abbreviated towards the

costa, where it contains a ferruginous point; 2nd band macular, submarginal; exterior border with an ochraceous festoon; underside mostly reddish, with brown submarginal points. Hind wings reddish; underside white, with four reddish lines and with an interior floccose discal tuft. Length of the body 6 lines; of the wings 14 lines.

318. *PLUSIA STIPATA*, n. s. *Fem.* Cinerea, palpis nigricantibus, abdome subcristato, alis anticis ex atomis nigris undulato-lineatis, lineis tribus albidis, 1^a 3^aque costam versus retractis, 3^a duplicata postice obsoleta, lunulis marginalibus nigris intus albo marginatis, macula costali basali alba, alia posticis fuscescenti-cinereis subhyalinis fusco late marginatis.

Female. Cinereous. Palpi compressed, obliquely ascending, mostly blackish; 3rd joint lanceolate, less than half the length of the 2nd. Abdomen very slightly crested. Fore wings with some irregular transverse more or less undulating lines of black speckles; three irregular whitish shining lines; 1st line acutely retracted towards the costa, where it is approximate to the 2nd line; 3rd line obsolete hindward, irregularly double, acutely angular and very much recurved towards the costa; marginal lunules black, elongated, bordered with white on the inner side; a white costal spot near the base. Hind wings brownish cinereous, very slightly hyaline, with a broad brown border. Length of the body 4½ lines; of the wings 12 lines.

319. *PLUSIA PALLIDA*, n. s. *Mas.* Cinerea, palpis fuscis, thorace fascia fusca, abdomine alas posticas superante, alis anticis nigro conspersis purpurascente tinctis, striga obliqua fascia que lata fuscis, hac strigam albam anticam includente, disco postico cinereo, striga apud marginem interiorem alba obliqua ochraceo notata, lunulis marginalibus nigris intus albo marginatis.

Male. Cinereous. Palpi brown; 3rd joint conical, not more than one-sixth of the length of the 2nd. Antennae smooth. Abdomen extending beyond the hind wings. Thorax with a brown band and with brown sides. Fore wings black-speckled, purplish-tinged, with a brown streak which is dilated from the middle of the base to the interior border, and with a broad brown band which has a cinereous disk hindward and in front contains a white streak; the latter extends to the exterior border and emits an angular white line to the costa; an oblique white ochraceous-marked streak along the basal part of the interior border; marginal lunules black, bordered with white on the inner side. Wings beneath with a very broad brown border and with a brown discal spot. Length of the body 8 lines; of the wings 17 lines.

320. *PLUSIA DUPLICILINEA*, n. s. *Fem.* Cinerea, capite thorace que antico ferrugineo-fuscis, alis anticis latiusculis ferrugineo-fuscis, lineis albidis duplicatis, 1^a angulata, 2^a recurrente, 3^a undulata, 4^a simplici

angulosa, lunulis marginalibus fuscis intus albido marginatis, alis posticis fusco-cinereis, litura discali lineaque exteriore fuscis.

Female. Cinereous, shining. Head and fore part of the thorax ferruginous brown. Palpi hardly ascending; 2nd joint broad; 3rd conical, acute, not more than one-sixth of the length of the 2nd. Abdomen not extending beyond the hind wings. Wings rather broad. Fore wings ferruginous brown; lines whitish, double, interior line forming an outward angle; middle line oblique, proceeding from the costa to the disk, where it is single and abruptly recurved, and rejoins the costa alongside of the interior line; exterior line undulating; submarginal line single, zigzag; marginal lunules brown, whitish-bordered on the inner side. Hind wings brownish cinereous, with a brown discal mark and with a brown exterior line, which are most apparent on the underside. Length of the body 6 lines; of the wings 15 lines.

321. *PLUSIA INAPERTA*, n. s. *Fæm.* Fusca, abdomine cinereo alas posticas vix superante, alis anticis cupreo tinctis, lineis tribus nigricantibus undulatis valde indistinctis, spatio marginali pallido, punctis submarginalibus nigris, gutta puncto que discalibus albidis, alis posticis albidis fusco latissime marginatis.

Female. Brown, cinereous beneath. Palpi rising a little higher than the vertex; 3rd joint lanceolate, much shorter than the 2nd. Abdomen cinereous, hardly extending beyond the hind wings. Fore wings tinged with cupreous; three very indistinct undulating blackish lines; 2nd line not apparent hindward; marginal space paler, including black submarginal points; discal mark small, whitish, forming a dot and a point. Hind wings whitish, with a very broad brown border; underside with a brown discal dot. Length of the body 6 lines; of the wings 14 lines.

322. *PLUSIA INORNATA*, n. s. *Fæm.* Cinereo-fusca, abdomine alas posticas non superante, alis anticis vix acutis, lineis cinereis nigrisque denticulatis subobsoletis, costa margine que exteriore perobliquo subconvexis, alis posticis subtus cinereis lunula discali fusca.

Female. Cinereous brown, shining, more cinereous beneath. Palpi rising a little higher than the vertex; 3rd joint lanceolate, about one-third of the length of the 2nd. Abdomen not extending beyond the hind wings. Fore wings hardly acute, with some almost obsolete traces of cinereous and black denticulated lines; costa and exterior border slightly convex, the latter very oblique. Hind wings brownish cinereous; underside cinereous, with a brown discal lunule. Length of the body 5 lines; of the wings 14 lines.

323. *PLUSIA NIVEIPLAGA*, n. s. *Mas.* Ochraceo-fusca, antennis serratis pubescentibus, abdomine alas posticas non superante, alis anticis apice subrotundatis, macula magna oblonga gutta puncto que discalibus niveis rufescente inclusis, alis posticis cinereo-fuscis.

Male. Ochraceous brown, shining, brownish cinereous beneath. Palpi

not rising so high as the vertex ; 3rd joint conical, less than one-fourth of the length of the 2nd. Antennæ stout, serrated, pubescent. Abdomen not extending beyond the hind wings. Fore wings slightly rounded at the tips, with a large oblong bright white discal spot, which is connected in front with a white dot, and has a white point near its inner side ; space about the spot mostly red. Hind wings cinereous brown. Length of the body 4 lines ; of the wings 12 lines.

324. *PLUSIA DETEGENS*, n. s. *Mas.* Rufescenti-cinerea, antennis sub-setulosis, femoribus tibiisque fimbriatis, alis anticis latiusculis, striga lata basali fasciisque duabus exterioribus diffusis rufescensibus ex parte nigro marginatis, linea intermedia cinerea undulata fusco marginata, litura reniformi cinerea obliqua nigro et rufescente marginata, alis posticis cinereo-fuscis fimbria testacea.

Male. Dark cinereous, with a reddish tinge. Palpi rising a little higher than the vertex ; 2nd joint fringed ; 3rd lanceolate, less than half the length of the 2nd. Antennæ stout, very minutely setulose. Femora and tibiae thickly fringed. Wings rather broad, with black marginal lunules. Fore wings with reddish partly black-bordered marks, which consist of a broad streak proceeding from the base and two exterior diffuse bands ; a cinereous intermediate undulating brown-bordered line ; reniform mark cinereous, oblique, bordered with black and reddish. Hind wings cinereous brown, with a testaceous fringe. Length of the body 6 lines ; of the wings 16 lines.

325. *PLUSIA INVICTA*, n. s. *Fæm.* Cervina, abdomine cinereo alas posticas vix superante, tibiis pilosis, alis anticis acutis, linea exteriore obseuriore recta obliqua, litura reniformi cinerea elongata coarctata, costa marginaque exteriore subconvexis, alis posticis cinereo-fuscis.

Female. Fawn-colour, shining, cinereous beneath. Palpi slender, rising a little higher than the vertex ; 3rd joint elongate-conical, a little more than one-fourth of the length of the 2nd. Abdomen, cinereous, hardly extending beyond the hind wings. Tibiae pilose. Fore wings acute ; lines almost obsolete, except the exterior one, which is straight, oblique, and a little darker than the ground-hue ; reniform mark cinereous, elongate, much straitened in the middle ; costa and exterior border slightly convex, the latter very oblique. Hind wings cinereous brown. Length of the body 5 lines ; of the wings 12 lines.

326. *PLUSIA ? ALBOSIGNATA*, n. s. *Mas.* Cervina, antennis sub-setulosis, alis anticis vix acutis, lineis duabus rectis obliquis parallelis pallidis, linea 3^a exteriore angulosa indistincta, striga discali alba, punctis marginalibus nigris, alis posticis fusco-cinereis.

Male. Fawn-colour, cinereous beneath. Antennæ very minutely setulose. Wings moderately broad. Fore wings hardly acute, with two pale straight oblique parallel dark-bordered lines ; 3rd line exterior, zigzag, indistinct, nearly parallel to the others ; a short white discal streak adjoining the 2nd line ; marginal points black. Hind wings

brownish cinereous, with brown marginal points. Length of the body 5 (?) lines; of the wings 12 lines.

Gen. *CANÆA*, n. g.

Fæm. *Corpus robustum.* *Proboscis conspicua.* *Palpi ascendentēs.* *Antennæ graciles.* *Abdomen alas posticas non superans.* *Pedes sat graciles;* tibiæ subfimbriatæ. *Alae amplæ, elongatæ;* anticæ acutæ, vix falcatae, costa recta, margine exteriore perobliquo vix convexo; posticæ angulo interiore producto.

Female. Body stout. Proboscis distinct. Palpi ascending. Antennæ slender. Abdomen not extending beyond the hind wings. Legs rather slender; tibiæ slightly fringed; hind tibiæ with four long spurs. Wings ample, elongate. Fore wings acute, slightly inclining to the falcate form; costa straight; exterior border hardly convex, very oblique hindward. Hind wings with the interior angle prominent.

327. *CANÆA SEMITESSELLATA*, n. s. *Fæm.* *Pallide straminea, alis fusco subtessellatis, fasciis duabus cervinis, alis anticis fasciis connexis, alis posticis fasciis valde interruptis.*

Female. Pale straw-colour. Wings incompletely and irregularly tessellated with little transverse brown streaks; two fawn-coloured bands; 2nd band very irregular, partly connected with the 1st band in the fore wings, much interrupted in the hind wings. Length of the body 8 lines; of the wings 20 lines.

Gen. *OSCA*, n. g.

Mas. *Corpus robustum.* *Proboscis conspicua.* *Palpi porrecti, breves, graciles,* caput per paullo superantes; articulus 3^{us} longiconicus, 2ⁱ triente non longior. *Antennæ pubescentes.* *Abdomen alas posticas non superans.* *Pedes læves, graciles, calcaribus longis.* *Ala longæ, sat angustæ;* anticæ vix acutæ, costa recta, margine exteriore perobliquo.

Male. Body stout. Proboscis moderately long. Palpi porrect, short, slender, extending very little beyond the head; 3rd joint elongate-conical, about one-third of the length of the 2nd. Antennæ distinctly pubescent. Abdomen not extending beyond the hind wings. Legs smooth, slender; hind tibiæ with four long spurs. Wings long, rather narrow. Fore wings hardly acute; costa straight; exterior border extremely oblique.

This genus has a slight resemblance to some of the *Arctiidæ*.

328. *OSCA GUTTULOSA*, n. s. *Mas.* Alba, capite thoraceque antico cervinis subtus roseis, alis anticis fasciis quatuor obliquis e maculis guttisque fuscis, alis posticis fasciis roseis indeterminatis, alis subtus lituris costalibus nigris.

Male. White. Head and fore part of the thorax dull fawn-colour, rosy

beneath. Fore wings with four oblique irregular bands, which are composed of shining brown spots and dots; veins most rosy on the underside. Hind wings with the bands much more incomplete and mostly rosy. Wings beneath with minute black marks along the costa. Length of the body 5 lines; of the wings 16 lines.

Fam. CALPIDÆ, Guén.

Gen. DEVA, Walk.

329. *DEVA INFUNDENS*, n. s. *Mas.* Ochracea, abdomine basi cinereo, tibiis anterioribus rufescensibus, alis anticis aurato-cervinis fusco lineatis, linea 1^a undulata, 2^a lata recta obliqua extus purpurascente marginata, 3^a indistincta incompleta undulata, 4^a recta obliqua, alis posticis fuscescenti-cinereis æneo tinctis.

Male. Ochraceous, pale beneath. Palpi long, much compressed, hardly curved; 2nd joint fringed; 3rd acute, about half the length of the 2nd. Antennæ very thickly setulose and pubescent. Abdomen cinereous towards the base. Anterior tibiae reddish. Fore wings gilded fawn-colour, with brown lines; space about the base of the costa purple-tinged; 1st line undulating, near the base; 2nd broad, straight, oblique, diffusedly bordered with purple on the outer side; 3rd line indistinct, incomplete, undulating; 4th straight, oblique, nearly contiguous to the 2nd on the interior border; apical space purple-tinged; exterior part of the costa with five white points; fringe cinereous, interlined with brown. Hind wings brownish cinereous, with an æneous tinge. Length of the body 5 lines; of the wings 12 lines.

Gen. ARIPPARA, n. g.

Mas et Fem. Corpus crassum. *Fasciculus* frontalis productus. *Proboscis* distincta. *Palpi* porrecti, rostriformes, lati. *Antennæ* maris setulose, pubescentes. *Abdomen* alas posticas non superans. *Pedes* robusti. *Alæ* anticæ vix acutæ, costa recta, margine extiore vix convexo.

Male and Female. Body thick. Frontal tuft prominent. Proboscis distinct. Palpi porrect, rostriform, broad, slightly acute, not longer than the breadth of the head; joints indistinct. Antennæ stout, setulose and pubescent in the male. Abdomen not extending beyond the hind wings. Legs robust; spurs stout, moderately long. Wings moderately broad. Fore wings hardly acute; costa straight; exterior border hardly convex, moderately oblique.

330. *ARIPPARA INDICATOR*, n. s. *Mas et Fem.* Obscure cervina, nigro conspersa, alis anticis spatio medio pallidiore, lineis interiore et exteriore adhuc pallidioribus, puncto discali nigro elongato obliquo, alis posticis cinereis fusco conspersis, linea exteriore recta pallide cinerea.

Female. Dull fawn-colour, minutely black-speckled. Fore wings with the middle space slightly paler, and bounded by the still paler interior

and exterior lines; interior line a little more undulating than the exterior line, to which it is much more approximate on the interior border than on the costa; discal point black, oblique, elongated. Hind wings cinereous, brown-speckled, with a straight pale-cinereous exterior line, and with the more exterior space slightly darker. Length of the body 6 lines; of the wings 14 lines.

Male. Paler. Fore wings with a larger discal point. Length of the body 4 lines; of the wings 11 lines.

Gen. NERTOBRIGA, n. g.

Fem. *Corpus* robustum. *Proboscis* conspicua. *Palpi* graciles, ad frontem applicati, verticem non superantes; articulus 3^{us} lanceolatus, 2^d dimidio brevior. *Antennæ* graciles. *Abdomen* cristatum, alas posticas non superans. *Pedes* laeves, validi; tibiæ posticeæ calcaribus quatuor longis. *Ale* breviusculæ, latiusculæ; anticeæ apice rectangulæ, costa basi subconvexa, margine interiore valde convexo.

Female. Body stout. Proboscis moderately long. Palpi slender, erect, applied to the head, not rising higher than the vertex; 3rd joint lanceolate, less than half the length of the 2nd. Antennæ slender. Abdomen crested, not extending beyond the hind wings. Legs smooth, stout; hind tibiæ with four long spurs. Wings rather short and broad. Fore wings rectangular at the tips; costa very slightly convex towards the base; exterior border oblique hindward; interior border very convex.

331. *NERTOBRIGA REVERSA*, n. s. *Fem.* Fuscescenti-rufa, abdomine cinereo cristis fuscis, alis anticis linea recta obliqua, spatio exteriore cinerascente, macula costali subapicali elongata cinerea albido marginata, linea interiore undulata indistincta, alis posticis æneo-fuscis.

Female. Brownish red, mostly cinereous beneath. Abdomen cinereous, with brown crests. Fore wings with a straight ferruginous line, which extends from the tips to the middle of the interior border; space beyond the line tinged with cinereous; an elongated cinereous whitish-bordered spot near the tip of the costa; an undulating indistinct interior line. Hind wings æneous brown, with a cinereous fringe. Length of the body 5 lines; of the wings 12 lines.

Fam. HYBLÆIDÆ, Guén.

Gen. HYBLÆA, Fabr.

332. *Hyblæa tortricoides*, Guén. Noct. ii. 391. 1252.

333. *Hyblæa erycinoides*, Walk. Cat. Lep. 3rd ser. no. 1792.
Inhabits also Malacca.

Gen. NOLASENA, Walk.

334. *NOLASENA GRATISSIMA*, n. s. *Fem.* Luteo-viridis, subtus ochra-

cea, abdomine viridi-ochraceo alas posticas superante, alis anticis glauco-viridibus, fasciis duabus obscurioribus vix undulatis albido marginatis, punctis marginalibus nigris albo marginatis, costa ochracea, macula apicali fusca, alis posticis ochraceis basi viridescentibus.

Female. Luteous green, bright ochraceous beneath. Palpi porrect, subfusiform, extending beyond the head; 3rd joint subfusiform, shorter and narrower than the 2nd. Abdomen greenish orange, extending beyond the hind wings. Fore wings glaucous green, with two upright darker green hardly undulating bands, the 1st whitish-bordered on the inner side, the 2nd on the outer side; marginal points black, white-bordered; costa dull ochraceous, with white points towards the tip; a brown apical spot. Hind wings bright ochraceous, greenish towards the base. Length of the body 5 lines; of the wings 12 lines.

335. *NOLASENA DULCISSIMA*, n. s. *Fam.* Leete viridis, subtus alba, capite lutescente, palpis pedibusque purpurascensibus, abdomine albo apice subtus rufo, alis anticis luteo conspersis et marginatis, lineis duabus flavescentibus subparallelis, guttis marginalibus connexis purpurascensibus rufo marginatis, alis posticis albis roseo marginatis.

Female. Bright green; white beneath. Head with a luteous tinge. Palpi purplish, ascending higher than the vertex; 3rd joint linear, as long as the 2nd. Antennæ slender. Abdomen white, hardly extending beyond the hind wings, red at the tip beneath. Legs mostly purplish. Fore wings mostly luteous along the borders and with luteous speckles in the disk; two upright pale yellowish nearly parallel lines; marginal dots connected, purplish, red-bordered; costa with three elongated whitish points towards the tip. Hind wings white, with a diffuse rosy border. Length of the body 5 lines; of the wings 12 lines.

This and the preceding species might be separated from *Nolasena* and form two new genera.

Fam. GONEPTERIDÆ, Guén.

Gen. COSMOPHILA, Boisd.

336. *COSMOPHILA SCITIPENNIS*, n. s. *Mas.* Ochracea, abdomine alas posticas superante, pedibus posticis albidis fimbriatis, alis anticis fusco lineatis, spatio exteriore subalbido nebulis fuscis, linea 1^a basali, 2^a angulata, 3^a recta obliqua, 4^a angulata postice abbreviata.

Male. Bright ochraceous. Underside, abdomen, and hind wings paler. Palpi erect, rising higher than the vertex; 3rd joint much shorter and more slender than the 2nd. Antennæ very minutely setulose. Abdomen extending beyond the hind wings. Hind legs whitish; femora and tibiae thickly fringed. Fore wings with brown lines; space beyond the middle partly clouded with brown and tinged with whitish; 1st line basal; 2nd forming an acute outward angle; 3rd straight,

oblique; 4th angular, not extending beyond half the breadth from the costa. Length of the body 7 lines; of the wings 16 lines.

337. *COSMOPHILA FUSCIFRONS*, n. s. *Fæm.* Testaceo-flava, nigro conspersa, capite antico palpisque obscure fuscis, alis linea obliqua recta nigricante subduplicata, spatio exteriore cervino puncta nigra includente, alis anticis linea ochracea non obliqua, puncto discali nigro, gutta costali subapicali alba, margine exteriore angulato.

Female. Testaceous yellow, very thinly black-speckled. Head, except the vertex and palpi, dark brown. Palpi erect, rising higher than the vertex; 3rd joint more slender and much shorter than the 2nd. Wings with an oblique straight blackish slightly doubled line; space beyond the line fawn-colour, including an indistinct row of black points. Fore wings with an upright dull ochraceous line; a black discal point near the outer side of the latter; a white costal subapical dot; exterior border distinctly angular. Length of the body 7 lines; of the wings 17 lines.

338. *COSMOPHILA? INCONCLUSA*, n. s. Læte ochracea, abdomine cinereo, alis fasciis duabus diffusis schistaceo-cinereis, 2^a marginali, punctis marginalibus nigris, alis anticis costa obscure schistaceo-cinerrea, margine exteriore vix flexo, alis posticis costæ dimidio basali albo. Bright orange. Abdomen and underside cinereous. Wings with two dark-slaty cinereous diffuse irregular bands; 2nd band marginal; marginal points black. Fore wings dark-slaty cinereous along the costa; exterior border hardly bent. Hind wings shining white along the basal half of the costa. Length of the body 6 lines; of the wings 16 lines.

Gen. ANOMIS, Hübn.

339. *Anomis fulvida*, Guén. Noct. ii. 397. 1259.

Inhabits also Hindostan and Ceylon.

Var. *Female.* Reddish fawn-colour, cinereous beneath. Abdomen and hind wings brown. Fore wings with the interior and exterior lines brown, zigzag, the latter very much bent; submarginal line cinereous, zigzag, very indistinct; discal point white. Hind wings with a whitish fringe.

Note.—*Gonitis albifibia* seems to be a variety of this species. *G. combinans* and *G. revocans* probably belong to the genus *Anomis*.

Gen. BANISIA, n. g.

Fæm. Corpus crassum. Proboscis conspicua. Palpi ascendentis, verticem non superantes; articulus 3^{us} longiconicus, 2ⁱ triente non longior. Antennæ glabrae. Abdomen lanceolatum, alas posticas non superans. Pedes longiusculi; tibie posticæ fimbriatae. Ala latiusculæ; anticæ peracuteæ, costa marginaque exteriore rectis.

Female. Body thick. Proboscis distinct. Palpi ascending, not rising

higher than the vertex; 3rd joint elongate-conical, not more than one-third of the length of the 2nd. Antennæ smooth. Abdomen lanceolate, not extending beyond the hind wings. Legs rather long; hind tibiæ thickly fringed, with four spurs of moderate length. Wings rather broad. Fore wings very acute; costa and exterior border straight, the latter rather oblique.

Type, *B. fenestrifera*.

Allied to *Gonitis*.

340. *BANISIA FENESTRIFERA*, n. s. *Fam.* Rufesceni-cervina, alis nigro subtessellatis, alis anticis macula discali vitrea lituraque marginali subapicali nigra, alis posticia fimbria apice alba.

Female. Reddish fawn-colour. Wings irregularly and minutely tessellated with black, the markings much more distinct on the underside than above. Fore wings with a large vitreous discal spot; underside with an irregular black mark on the fore end of the exterior border. Hind wings with a white-tipped fringe. Length of the body 5 lines; of the wings 14 lines.

341. *BANISIA ? TETRAGONATA*, n. s. *Mas.* Pallide cervina, vix robusta, abdomine alas posticas superante, alis fusco lineatis et subtessellatis, maculis duabus subhyalinis duabusque nigricantibus discalibus quadratis, alis anticis acutis, margine exteriore postico perobliqua.

Male. Pale fawn-colour, hardly stout. Third joint of the palpi not one-fourth of the length of the 2nd. Antennæ stout. Abdomen extending beyond the hind wings. Wings indistinctly tessellated with brown; six or seven slight hardly undulating brown lines; two small quadrate nearly hyaline discal spots, each accompanied by a quadrate blackish spot. Fore wings acute; exterior border very oblique hindward. Length of the body 5 lines; of the wings 12 lines.

Gen. *RUSICADA*, Walk.

342. *RUSICADA LIGNIGERA*, n. s. *Mas.* Pallidissime cervina, abdomine alas posticas vix superante, alis anticis apud costam pallidioribus fusco notatis, margine interiore albido, plaga apud angulum interiore ferruginea cinereo-fusco suffusa guttam pallidam includente, alis posticias æneis basi cinereis.

Male. Wood-colour or very pale fawn-colour. Palpi obliquely ascending; 3rd joint linear, acute, full half the length of the 2nd. Antennæ very minutely pubescent. Abdomen keeled, hardly extending beyond the hind wings. Legs very stout; spurs long. Fore wings paler and with regular brown marks along the costa; space along the interior border irregularly whitish; a ferruginous mark near the base of the interior border and a ferruginous patch by the interior angle, the patch tinged with cinereous brown and containing a pale dot; marginal points black, very minute. Hind wings æneous, cinereous to-

wards the base and along the interior border; fringe hoary, interlined with ferruginous. Length of the body 5 lines; of the wings 14 lines.

343. *RUSICADA?* *BASISCRIPTA*, n. s. *Fem.* Albido-cinerea, palpis subarcuatis verticem superantibus, abdomine alas posticas vix superante, femoribus tibiisque densissime vestitis, alis latiusculis nigro subconspersis, linea exteriore cervina subduplicata costam versus flexa albo interlineata, alis anticis basi fuscis, lineis duabus obscurioribus albido marginatis, margine exteriore cervino, plaga marginali subapicali alba.

Female. Whitish cinereous. Palpi erect, much compressed, slightly curved, ascending above the vertex; 3rd joint linear, acuminated, much shorter and more slender than the 2nd. Abdomen hardly extending beyond the hind wings; femora and tibiae most densely clothed. Wings rather broad, very thinly black-speckled; discal point and submarginal points black; an oblique exterior slightly double fawn-coloured line, which in the fore wings forms a rounded angle and is interlined with white towards the costa. Fore wings very acute; base brown, containing two darker-brown whitish-bordered lines; marginal space pale fawn-colour, darker towards the costa, where it contains a white patch; a black apical spot and a black spot on the angle of the exterior border. Length of the body 7 lines; of the wings 16 lines.

This species differs much from the typical structure of *Rusicada*, and may form a new genus.

Fam. TOXOCAMPIDÆ, Guén.

Gen. TOXOCAMPA, Guén.

344. *TOXOCAMPA?* *DECERNENS*, n. s. *Fem.* Cinereo-cervina, palpis porrectis extus fuscis, alis fusco conspersis et quadrilineatis, alis anticis purpureo subtinctis, spatio submarginali fusco lineam pallide testaceam includenti, macula discali nigra magna oblongo-quadrata, alis posticis lineis quatuor fuscescensibus minus determinatis.

Female. Cinereous fawn-colour. Palpi porrect; 2nd joint brown on the outer side; 3rd conical, hardly one-fourth of the length of the 2nd. Wings brown-speckled; marginal points black. Fore wings slightly purple-tinged, with four zigzag brown lines; 4th line partly obliterated by the brown submarginal space, which is intersected by an abbreviated pale testaceous line; a large oblong-quadrata black discal spot; exterior border hardly bent. Hind wings with four less distinct brownish lines. Length of the body 6 lines; of the wings 16 lines.

345. *TOXOCAMPA?* *OBLITERANS*, n. s. *Mas.* Cinereo-cervina, palpis fuscis, pedibus dense pilosis, alis fusco conspersis, spatio marginali lato fuscescente, alis anticis litura reniformi lineisque quatuor angulosis fuscis, linea 5^a pallida abbreviata subarcuata, alis posticis lineis duabus rectis indistinctis, margine interiore dense fimbriato.

Male. Cinereous fawn-colour, stout. Palpi brown, excepting the 3rd joint, which is extremely minute. Antennæ setulose, pubescent. Legs stout, thickly pilose. Wings brown-speckled, with a broad brownish marginal space; marginal points black. Fore wings with the reniform mark and four zigzag lines brown, indistinct; 5th line pale, very slightly curved, much abbreviated at each end. Hind wings with two indistinct straight lines; interior border thickly fringed. Length of the body 7 lines; of the wings 17 lines.

346. *TOXOCAMPA ? NIGRIPALPIS*, n. s. *Mas.* Pallide cinereo-cervina, fasciculo frontali producto, palpis nigris, abdomine alas posticas superante crista duabus nigris, alis anticis nigro subconspersis vix falcatis, linea exteriore pallida marginata subundulata, linea submarginali punctulari maculisque duabus posticis nigris, alis posticis fuscescenti-cinereis.

Male. Pale cinereous fawn-colour, hardly stout. Frontal tuft porrect, very prominent. Palpi black, obliquely ascending; 3rd joint pale, somewhat truncated, not one-sixth of the length of the 2nd. Antennæ serrated, pubescent. Abdomen attenuated, extending beyond the hind wings, with two small black-tipped crests near the base. Legs smooth. Wings with black marginal lunules. Fore wings thinly black-speckled, slightly lilac-tinged, hardly falcate; exterior line pale, dark-bordered, slightly undulating, nearly upright, contiguous to a black spot on the interior border; a larger black spot near the base of the interior border; submarginal line indicated by black points. Hind wings brownish cinereous, with a straight nearly obsolete brown line, which is black and distinct by the interior angle. Length of the body 7 lines; of the wings 15 lines.

The three preceding species hardly belong to *Toxocampa*, but form a transition from it to the two following genera, in which the characters of *Toxocampa* are still more altered.

Gen. SARTHIDA, n. g.

Mas. *Corpus robustum.* *Proboscis conspicua.* *Palpi ascendentibus, subarcurati, verticem vix superantes;* articulus 2^{us} latissimus; 3^{us} gracilissimus, apice incisus, 2^d dimidio brevior. *Antennæ longæ, subpectinatae.* *Pedes validi, pilosi;* tibiæ posticæ calcaribus quatuor longis. *Alæ anticæ apice rectangulatæ, costa recta, margine exteriore subobliquo vix convexo.*

Male. Body stout. Proboscis distinct. Palpi ascending, slightly curved, hardly rising higher than the vertex; 2nd joint very broad; 3rd very slender, notched near the tip, not half the length of the 2nd. Antennæ long, slightly pectinated; branches pubescent. Legs stout; femora and tibiæ pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings rectangular at the tips; costa straight; exterior border hardly convex, slightly oblique.

347. **SARTHIDA SIGNIFERA**, n. s. *Mas.* Pallide cinerea, palpis extus nigris, alis anticis fusco subconspersis lineis duabus diffusis fuscescens-tibus, 2^a albo punctata, fascia exteriore cervina costam versus obsoleta, lituris orbiculari et reniformi atris, hac magna cinereo strigata.

Male. Pale cinereous. Second joint of the palpi black on the outer side. Fore wings thinly brown-speckled, with two brownish diffuse lines; exterior line bent in front, accompanied by white points, succeeded by a pale fawn-coloured band, which is obsolete towards the costa; orbicular and reniform marks deep black, nearly round; the latter large, including a curved cinereous streak. Length of the body 7 (?) lines; of the wings 18 lines.

Gen. OROBA, n. g.

Mas. *Corpus* robustum. *Proboscis* conspicua. *Palpi* compressi, verticem longe superantes; articulus 3^{us} acutus, 2^o vix brevior. *Antennæ* longiusculæ, subserratae. *Abdomen* alas posticas superans. *Pedes* longiusculi; femora pilosa; tibiae posticae calcaribus quatuor longis. *Ale* latiusculæ; anticæ apice subrotundatae, costa recta, margine exteriore subconvexo subobliquo.

Male. Body stout. Proboscis distinct. Palpi erect, long, compressed, ascending much higher than the vertex; 3rd joint acute, nearly as long as the 2nd. Antennæ rather long, very minutely serrated. Abdomen extending beyond the hind wings. Legs rather long; femora pilose; hind tibiae with four long spurs. Wings rather broad. Fore wings slightly rounded at the tips; costa straight; exterior border slightly convex and oblique.

348. **OROBA SURRIGENS**, n. s. *Mas.* Cervina, subtus albida, alis macula discali fusca subtus nigra, alis anticis lineis quinque subundulatis subparallelis, alis posticis linea diffusa fasciaque lata marginali fuscis.

Male. Fawn-colour, whitish beneath. Abdomen cinereous fawn-colour. Wings with a discal brown spot, which on the underside is black and very conspicuous. Fore wings with five brown slightly undulating nearly parallel lines. Hind wings with a diffuse brown line and a broad brown marginal band. Length of the body 8 lines; of the wings 18 lines.

Gen. DORSIPPA, n. g.

Mas. *Corpus* vix robustum. *Proboscis* conspicua. *Palpi* breves, lati, erecti; articulus 3^{us} conicus, minimus. *Antennæ* setulosæ, pubescentes. *Abdomen* alas posticas vix superans. *Pedes* sat validi; tibiae posteriores dense fimbriatae, calcaribus quatuor longis. *Ale* latiusculæ; anticæ apice rectangulatae, costa recta, margine exteriore subconvexo.

Male. Body hardly stout. Proboscis distinct. Palpi short, broad, vertical; 3rd joint conical, very minute. Antennæ setulose, pubescent. Abdomen hardly extending beyond the hind wings. Legs

moderately long and stout; posterior tibiae thickly fringed with long hairs; hind tibiae with four long spurs. Wings rather broad. Fore wings rectangular at the tips; costa straight; exterior border slightly convex and oblique.

349. *DORSIPPA NOTABILIS*, n. s. *Mas.* Cinereo-cervina, alis anticis spatio marginali obscuriore, puncto basali, litura discali clavata, lineola transversa, maculis duabus costalibus punctisque marginalibus nigris. *Male.* Cinereous fawn-colour. Fore wings with black marginal points, with a black point in the disk near the base; discal mark black, clavate, followed by a transverse little black line; two black costal spots, the exterior one much larger than the other, and followed by three black costal points; space along the exterior border darker fawn-colour. Length of the body 5 lines; of the wings 12 lines.

Gen. *LACIBISA*, n. g.

Mas. *Corpus* crassum. *Proboscis* conspicua. *Palpi* robusti, ascendentes, verticem non superantes; articulus 2 arcuatus, 3^{us} minimus. *Antennæ* subpubescentes. *Abdomen* subcylindricum, alas posticas superans; fasciculus apicalis dense lanuginosus. *Pedes* validi; tibiae fimbriatae, calcaribus longissimis. *Alæ* anticæ apice rotundatae, costa recta, margine exteriore vix convexo.

Male. Body very stout. Proboscis distinct. Palpi stout, ascending, not rising so high as the vertex; 2nd joint curved; 3rd joint extremely minute, less than one-eighth of the length of the 2nd. Antennæ minutely pubescent. Thorax smooth, with large tegulae. Abdomen nearly cylindrical, extending beyond the hind wings; apical tuft densely lanuginous. Legs stout; tibiae fringed; hind tibiae with four very long spurs. Wings moderately broad. Fore wings rounded at the tips; costa straight; exterior border hardly convex, moderately oblique.

350. *LACIBISA BIFARIA*, n. s. *Mas.* Cervina, alis anticis fusco subconspercis et quadrilineatis, linea 1^a basali, gutta discali nigra, fascia marginali cinerea intus nigro-fusco marginata, punctis marginalibus nigris pallido marginatis.

Male. Fawn-colour, paler and with a cinereous tinge beneath. Wings slightly brown-speckled. Fore wings with four transverse parallel nearly straight and upright brown lines; 1st line basal; a black discal dot near the exterior side of the 3rd line; marginal space cinereous, dilated in the middle and excavated in front of the interior side, where it is broadly but irregularly bordered with blackish brown; marginal points black, pale-bordered. Length of the body 8 lines; of the wings 17 lines.

Gen. *CARTEIA*, n. g.

Fem. *Corpus* robustum. *Proboscis* conspicua. *Palpi* validi, vix as-

cendentes, caput paullo superantes ; articulus 3^{us} brevissimus. *Antennæ* subsetulose. *Abdomen* alas posticas vix superans. *Pedes* læves, sat robusti ; *tibiae* subfimbriatae, calcaribus longissimis. *Alæ* latiusculæ ; *anticæ* acutæ, costa margineque exteriore rectis.

Female. Body stout. Proboscis distinct. Palpi hardly ascending, extending a little beyond the head ; 2nd joint stout ; 3rd conical, not more than one-sixth of the length of the 2nd. Antennæ minutely setulose. Abdomen hardly extending beyond the hind wings. Legs smooth, moderately stout ; tibiæ very slightly fringed ; hind tibiæ with four long spurs. Wings rather broad. Fore wings acute ; costa and exterior border straight, the latter rather oblique.

351. *CARTEIA NEBULILINEA*, n. s. *Fem.* Cinereo-cervina, alis anticis nigro conspersis, linea interiore fusca subdenticulata, linea exteriore recta obliqua nigricante fusco late marginata, linea submarginali fusca diffusa undulata, punctis marginalibus nigris, alis posticis fusco late marginatis.

Female. Cinereous fawn-colour. Fore wings black-speckled, with a slight denticulated brown interior line, and with a blackish, straight, oblique, more conspicuous exterior line, which is broadly and diffusedly bordered with brown on the outer side ; submarginal line brown, diffuse, undulating ; marginal points black. Hind wings broadly bordered with brown. Wings beneath with a blackish discal dot and with a blackish guttular exterior line. Length of the body 7 lines ; of the wings 16 lines.

Fam. HOMOPTERIDÆ, Boisd.

Gen. HOMOPTERA, Boisd.

352. *HOMOPTERA INTRACTABILIS*, n. s. *Mas.* Fusca, abdominis punctis dorsalibus ventreque pallide testaceis, alis linea exteriore denticulata et venarum fasciis pallide testaceis, gutta discali nigricante indistincta, alis anticis lituris costalibus testaceis, alis posticis margine exteriore denticulato.

Male. Brown, rather slender, paler beneath. Antennæ very minutely pubescent. Abdomen with pale testaceous dorsal points ; underside pale testaceous. Wings with numerous transverse dull pale testaceous bands on the veins ; exterior line pale dull testaceous, denticulated ; discal dot blackish, indistinct ; underside with the pale hue more prevalent. Fore wings with many testaceous marks along the costa. Hind wings with the exterior border denticulated. Length of the body 7 lines ; of the wings 18 lines.

353. *HOMOPTERA BIARMIOIDES*, n. s. *Fem.* Fuscescenti-cinerea, ferrugineo conspersa, alis subdentatis, lineis duabus ferrugineo-fuscis dentatis, linea submarginali diffusa, punctis marginalibus nigris, litura reniformi annulari oblonga.

Female. Brownish cinereous, speckled with ferruginous, paler beneath.

Palpi rising higher than the vertex; 3rd joint lanceolate, shorter than the 2nd. Wings slightly dentate; interior and exterior lines ferruginous brown, dentate; marginal space partly clouded by the diffuse submarginal line; marginal points black. Fore wings acute; reniform mark represented by an oblong ringlet; exterior border very oblique. Length of the body $3\frac{1}{2}$ lines; of the wings 10 lines,

[To be continued.]

On the Japanese Species of *Leiostraca*. By ARTHUR ADAMS, F.L.S.

[Read Jan. 15, 1863.]

In the "Annals" for 1861 I described twelve new species of *Leiostraca* from Japan. To these I am now enabled to add many more from the same seas. The Inland Sea, or Seto-Uchi, I found very prolific in species of this genus, as I did also Yobuko and Uraga, at both of which places I obtained a portion of the bottom. From the circumstance of their living in deep water, they are seldom to be observed alive; and, indeed, nearly all the species mentioned in this communication were obtained (with considerable labour), from mud-washings and the sifted produce of the dredge, in a dead state, and often with the markings obscure.

Gen. LEIOSTRACA, H. & A. Ad.

A. *Species concoloris.*

1. *Leiostraca turgidula*, A. Ad. *Annals*, 1861.

Hab. Gotto; Tsu-Sima.

2. *Leiostraca lanceata*, A. Ad. *Annals*, 1861.

Hab. Seto-Uchi; Mino-Sima; Gotto.

3. *Leiostraca Leachii*, A. Ad. *Annals*, 1861.

Hab. Mino-Sima; Gotto.

4. *Leiostraca paxillus*, A. Ad. *Annals*, 1861.

Hab. Mino-Sima; Gotto.

5. *Leiostraca clara*, A. Ad. *Annals*, 1861.

Hab. Gotto; Mino-Sima.

6. *Leiostraca labiata*, A. Ad. *Annals*, 1861.

Hab. Mino-Sima.

7. *Leiostraca nitida*, A. Ad. *Annals*, 1861.

Hab. Okosiri; Yobuko.

8. *Leiostraca clavella*, A. Ad. *Annals*, 1861.

Hab. Sado.