

Catalogue of the Dipterous Insects collected at Dorey, New Guinea, by Mr. A. R. WALLACE, with Descriptions of New Species. By FRANCIS WALKER, Esq., F.L.S.

[Read June 21st, 1860.]

Fam. CULICIDÆ, *Haliday*.

Gen. CULEX, *Linn.*

1. *Culex obturbans*, *Walk.* See vol. iv. p. 91.
2. *CULEX ZONATIPES*, n. s. *Mas.* Ferrugineus, pedibus fuscis, femoribus basi pallidis, genubus tarsorumque fasciis quatuor albis, alis cinereis, venis nigris ciliatis.

Very nearly allied to *C. impatibilis* (vol. iv. p. 91), but distinct.

Male. Ferruginous; proboscis about half the length of the body; legs brown; femora pale at the base; knees white; tarsi with four broad white bands; wings cinereous; veins black, fringed. Length of the body $2\frac{1}{2}$ lines; of the wings 4 lines.

3. *CULEX FILIPES*, n. s. *Fem.* Ferrugineus, capite abdomineque nigris, pedibus nigricantibus longissimis, femoribus basi pallidioribus, alis cinereis, venis nigris ciliatis.

Female. Ferruginous; head and abdomen black; proboscis less than half the length of the body; legs blackish, very long; femora somewhat paler towards the base; wings cinereous; veins black, fringed. Length of the body $2\frac{1}{2}$ lines; of the wings 4 lines.

Fam. TIPULIDÆ, *Haliday*.

Gen. LIMNOBIA, *Meigen*.

In the wings of the following species the subcostal is connected with the radial by a transverse veinlet at its tip; the apical veins are curved towards their tips; the 2nd externo-medial springs from the 1st at before one-third of its length, and is connected near its base with the 3rd by a transverse veinlet; the 3rd is connected in like manner with the subanal.

4. *LIMNOBIA STRIGIVENA*, n. s. *Mas.* Cinereo-cervina, thorace antico attenuato, pedibus longissimis, femoribus fascia nigra subapicali, tibiis apice nigricantibus, alis albidis longis angustis, venis pallide testaceis nigro conferte fasciatis, halteribus albidis apice nigricantibus.

Male. Cinereous fawn-colour, slender; head oblong; antennæ short; thorax attenuated in front; legs testaceous, slender, very long;

femora with a black subapical band; tibiæ with blackish tips; wings whitish, long, narrow; veins pale testaceous with numerous black bands; halteres whitish with blackish tips. Length of the body 5-7 lines; of the wings 16-20 lines.

The wing-veins of the following species are much like those of *L. strigivena*; but the veinlet between the 2nd and 3rd externo-medial veins is much nearer the base of the former.

5. *LIMNOBIA QUADRIFURCA*, n. s. *Fæm.* *Cervina*, vix *gracilis*, antennis nigricantibus pallido cinctis, thorace vittis quatuor piceis antice connexis, abdomine vitta dorsali nigra, pedibus nigricantibus, femoribus pallidis apice nigricantibus fascia subapicali pallida, tibiis basi pallido fasciatis, alis pallide cinereis, costa fulva, venis pallide testaceis nigro conferte cinctis, linea subapicali obliqua nigricante.

Female. Fawn-colour, hardly slender; antennæ short, blackish, with pale rings; thorax with four piceous stripes, which are united and form a piceous disk in front; abdomen with a black dorsal stripe; legs blackish; femora pale, blackish towards their tips, near which there is a pale band; tibiæ with a pale band at the base; wings pale cinereous; costa tawny; veins pale testaceous, with very numerous black rings; an oblique blackish line at the base of the apical areolets. Length of the body 7 lines; of the wings 16 lines.

The wing-veins of the next species differ much from those of the two preceding *Limnobiæ* in structure, though the veins are slightly curved near the tip of the wing; the veinlet which connects the cubital vein with the 1st externo-medial vein is nearly opposite the veinlet which connects the 1st and 3rd externo-medial veins and emits the 2nd.

6. *LIMNOBIA PERDECORA*, n. s. *Mas.* *Picea*, breviuscula, sat robusta, thorace antico perangusto, abdomine pallide testaceo apicem versus nigro, pedibus piceis longis, femoribus testaceis apice nigricantibus, alis ferrugineis, costa fascisque duabus nigricantibus, macula costali subapicali nivea.

Male. Piceous, rather short and stout; mouth prominent; antennæ short, with the 1st joint long; thorax very narrow in front; abdomen pale testaceous, black towards the tip; legs piceous, long, slender; femora testaceous, blackish at their tips; wings ferruginous, irregularly blackish along the costa, and with two irregular blackish bands which converge hindward and enclose the transverse veinlets; a snow-white spot near the tip of the costa; halteres pale testaceous. Length of the body 7 lines; of the wings 14 lines.

7. *LIMNOBIA TERMINALIS*, n. s. *Fæm.* *Ochracea*, capite nigro, antennis setaceis, thorace vitta lanceolata picea postice abbreviata guttis-que duabus lateralibus nigris, abdomine fasciis duabus apiceque nigris, pedibus nigris, femoribus basi ochraceis, alis fusciscenti-cinereis, venis halteribusque nigris.

Female. Ochraceous; head black; antennæ short, setaceous; thorax

with a lanceolate piceous stripe which is abbreviated hindward, and with a black dot on each side; abdomen black towards the tip, and with two black bands, one near the base, the other before the middle; legs black; femora towards the base, and coxæ, ochraceous; wings brownish cinereous; veins and halteres black. Length of the body $5\frac{1}{2}$ lines; of the wings 9 lines.

Gen. TIPULA, *Linn.*

8. TIPULA CONGRUENS, n. s. *Fam.* Cinereo-fusca, oculis lurido cinctis, antennis setaceis setulosis, thoracis lateribus suturisque vittaque fusco marginata ferrugineis, abdominis segmentis cinereo marginatis apice ferrugineo, pedibus ferrugineis longissimis, tibiis tarsisque testaceis, alis cinereis, costa lurida.

Female. Cinereous brown, pale cinereous beneath; head lurid about the eyes; antennæ short, setaceous, setulose; thorax ferruginous on each side and along the sutures, and with a ferruginous stripe, which is bordered with brown and is abbreviated hindward; abdomen ferruginous at the tip; hind borders of the segments pale cinereous; legs ferruginous, slender, very long; tibiæ and tarsi testaceous; wings cinereous; costa lurid; veins black; subanal vein towards the tip, and the veinlet which connects it with the discal areolet, tinged with brown. Length of the body 10 lines; of the wings 24 lines.

Gen. PACHYRHINA, *Macq.*

9. PACHYRHINA TRIPARTITA, n. s. *Mas.* Lutea, antennis nigris setaceis setosis basi luteis, thoracis disco, metathoracis fascia abbreviata, abdominis apice pedibusque nigris, femoribus basi luteis, alis cinereis apud costam luridis.

Male. Luteous; antennæ black, setaceous, setose, luteous at the base; disk of the thorax black, excepting the sutures; metathorax with an abbreviated black band; abdomen black towards the tip; legs black; femora towards the base, and coxæ, luteous; wings cinereous, lurid along the costa; veins and stigma black; subcostal vein thick. Length of the body 6 lines; of the wings 11 lines.

Gen. GYNOPLISTIA, *Westw.*

10. GYNOPLISTIA FULVICEPS, n. s. *Fam.* Picea, capite fulvo, antennis nigris pectinatis basi fulvis, abdomine ochraceo basi apiceque nigris, pedibus nigris, femoribus ochraceis, alis cinereis, costa maculis duabus costalibus fasciisque duabus exterioribus nigricantibus, halteribus rufescentibus apice nigris.

Female. Piceous; head tawny; antennæ black, moniliform, pectinated, tawny at the base, with 8 branches; metathorax with two reddish spots; pectus with two testaceous streaks on each side; abdomen ochraceous, black at the base and towards the tip, which is reddish; legs black; femora ochraceous, except at the base and towards the

tips; wings cinereous, blackish along the costa, with two blackish costal spots, and with two exterior blackish bands, of which the first is abbreviated hindward, and the second is apical; veins black, yellow at the base; halteres reddish, with black tips. Length of the body 5 lines; of the wings 8 lines.

Fam. STRATIOMIDÆ, *Haliday*.

Gen. PTILOCERA, *Wied.*

11. *Ptilocera quadridentata*, *Wied.* See vol. i. p. 7.

Gen. STRATIOMYS, *Geoffr.*

12. *STRATIOMYS BIFASCIA*, n. s. *Mas.* Nigra, antennis basi flavescens, thoracis tomento aurato, abdominis margine fasciis duabus ventre pedibusque flavescens, alis limpida, halteribus albidis.
Male. Black; 1st and 2nd joints of the antennæ yellowish, shorter together than the flagellum, which ends in a short bent style; thorax with gilded tomentum; abdomen shining—border, underside, and two bands yellowish; legs yellowish; wings limpid; veins and halteres whitish. Length of the body 3 lines; of the wings 5 lines.

Gen. CLITELLARIA, *Meigen*.

13. *CLITELLARIA OBESA*, n. s. *Mas.* Cærulescenti-nigra, crassa, antennis rufescentibus lanceolatis, thorace fasciis sex obliquis, abdominis fasciis duabus apiceque argenteo pubescentibus, genibus tarsisque ferrugineis, alis nigricantibus, halteribus albis.
Male. Bluish black, very thick; antennæ reddish, lanceolate, ending in a short blackish style, as long together as the breadth of the head; thorax on each side with three oblique silvery pubescent bands; scutellum with silvery pubescence, which also forms two bands on the abdomen, and covers the tip of the same; legs black; knees and tarsi ferruginous; wings blackish, cinereous along the hind border and at the tips; veins black; halteres white. Length of the body 4 lines; of the wings 7 lines.

Gen. SARGUS, *Fabr.*

14. *SARGUS LONGIPES*, n. s. *Mas.* Cupreo-purpureus, capite antice subtusque albedo, antennis testaceis, abdomine basi albedo, pedibus longis albidis, tibiis posticis nigris, tarsis posticis niveis, alis cinereis, halteribus albis.
Male. Cupreous purple; head whitish in front and beneath; antennæ testaceous; thorax with a whitish callus along each side; abdomen whitish at the base; legs long, whitish; tips of the tarsi and hind tibiæ black; hind tarsi pure white, black at the base; wings cinereous; veins black; halteres white. Length of the body 5½ lines; of the wings 10 lines.

Gen. TINDA, *Walk.*

15. TINDA RECEDENS, n. s. *Mas.* Nigra, nitens, antennis piceis basi rufescentibus, pedibus halteribusque rufescentibus, femoribus posticis extus apices versus nigricantibus, alis obscure cinereis apud costam nigricantibus.

Male. Black, shining; epistoma very prominent, furrowed above; antennæ piceous, reddish towards the base; abdomen elongate-elliptical, a little longer and broader than the thorax; legs reddish; hind femora blackish on the outer side towards the tips; wings dark cinereous, blackish along the costa; veins black; halteres reddish. Length of the body 3 lines; of the wings 5 lines.

Gen. SARUGA, *Walk.*

16. Saruga conifera, *Walk.* See vol. iv. p. 102.

Gen. OBRAPA, *Walk.*

17. Obrapa perilampoides, *Walk.* See vol. iii. p. 82.

18. Obrapa celyphoides, *Walk.* See vol. iii. p. 83.

Fam. TABANIDÆ, *Leach.*Gen. TABANUS, *Linn.*

19. TABANUS DOREICUS, n. s. *Mas.* Piceo-niger, fulvo-tomentosus, antennarum articulo 3^o rufo subcornuto, abdomine basi obscure rufescente, pedibus nigris, alis obscure fuscis, halteribus albidis.

Male. Piceous-black; head with tawny tomentum in front and beneath; callus long and slender; eyes somewhat flattened in front, with extremely small facets; 3rd joint of the antennæ red, with a small horn; thorax with tawny tomentum; pectus with cinereous tomentum; abdomen dark reddish towards the base; legs quite black; wings dark brown, dark cinereous along the hind border; veins black, ferruginous towards the base; fore branch of the cubital vein simple, slightly undulating; halteres whitish. Length of the body 8 lines; of the wings 16 lines.

Fam. ASILIDÆ, *Leach.*Subfam. DASYPOGONITES, *Walk.*Gen. DIOCTRIA, *Meig.*

20. DIOCTRIA CLAVIVENTRIS, n. s. *Fæm.* Nigra, capite argenteo, mystace albo, antennis basi fulvis, thorace vittis tribus maculisque

humeralibus cinereis, abdomine clavato fasciis fulvis, pedibus fulvis, femoribus posticis nigro variis, alis cinerascentibus, halteribus testaceis.

Female. Black; head with silvery-white tomentum; mystax composed of a few white bristles; antennæ linear, 1st and 2nd joints tawny; thorax with three stripes and with humeral spots of cinereous tomentum; metathorax with testaceous tomentum; pectus with whitish tomentum; abdomen clavate; hind borders of the segments and tip pale; 1st and 2nd bands much broader than the others; legs tawny; hind femora mostly black above; wings pale cinereous, darker towards the tips; veins black; halteres pale testaceous. Length of the body 6 lines; of the wings 12 lines.

Subfam. LAPHRITES, *Walk.*

Gen. LAPHRIA, *Fabr.*

21. LAPHRIA REPLENS, n. s. *Mas et fœm.* Cyanea, capite aurato sub-
tus albo, antennis nigris articulo 3^o fusiformi, pedibus albo setosis,
alis nigricantibus basi cinereis. *Mas.* Abdomine nigricante basi viridi.
Fœm. Abdomine purpureo basi cyanescenti-viridi.

Much resembling *L. complens*, from which it is especially distinct by the curved lower transverse veinlet of the wings; it may be distinguished by the same character from *L. comes*, to which it is very nearly allied, but it differs also from the latter by the longer union of the two sub-costal veins. *Male and female.* Blue; head brilliantly gilded, white behind and beneath, where it is clothed with white hairs; mystax with a few black bristles; antennæ black; 3rd joint fusiform; thorax with a tawny mark on each side in front; pectus white; legs with white bristles; wings blackish, cinereous towards the base, the latter hue much more prevalent towards the costa than it is hindward; veins and halteres black. *Male.* Abdomen almost black, green at the base. *Female.* Abdomen purple, bluish-green at the base. Length of the body 5-7 lines; of the wings 10-12 lines.

22. LAPHRIA LITURIFERA, n. s. *Mas et fœm.* Cinereo-nigra, capite
aurato sub-
tus albo, mystace pallido setis quatuor nigris, antennarum
articulo 3^o longi-fusiformi, thorace vittis duabus pallide auratis lineis-
que duabus nigris, abdomine cyaneo guttis lateralibus transversis ar-
genteis, alis obscure cinereis, halteribus pallide flavis.

Male and Female. Cinereous-black; head with pale gilded tomentum, white beneath and in front; mystax with a few pale bristles and with four more stout black bristles; 3rd joint of the antennæ elongate-fusiform; thorax with an oblique pale gilded streak on each side in front, with a pale gilded stripe on each side, and with three paler marks on each side of the disk, where there are two black lines; pectus and a band on the metathorax silvery white; abdomen blue, with

transverse silvery-white dots along each side; legs blue, with black bristles and with white hairs; wings dark cinereous, paler along the costa for full half the length; veins black; halteres pale yellow. Length of body 9-10 lines; of the wings 18 lines.

23. *LAPHRIA ARDESCENS*, n. s. *Fam.* Ochracea, capite aurato, antennarum articulo 3° lanceolato, thorace vitta lata nigricante lineas duas nigras includente, abdomine fasciis tribus nigris, alis testaceo-cinereis nigricante bifasciatis.

Female. Ochraceous, nearly cylindrical; head with gilded tomentum; antennæ a little longer than half the breadth of the head; 3rd joint lanceolate; thorax with a broad blackish stripe which includes two black lines and is dilated into two lobes on each side hindward; pectus with two black bands; abdomen with three black bands, the first abbreviated; legs very stout; wings testaceous-cinereous, with two very broad blackish bands, of which the 1st is abbreviated towards the costa; veins tawny, partly black. Length of the body 8 lines; of the wings 16 lines.

24. *LAPHRIA DISCIPLINA*, n. s. *Mas.* Ochracea, robusta, capite aurato, antennarum articulo 3° nigro lanceolato, thoracis disco nigricante, alis nigricantibus basi limpidis.

Male. Ochraceous, stout, with paler hairs and bristles; head with pale gilded tomentum; mystax with many pale gilded bristles; mouth black, except at the base; antennæ a little shorter than half the breadth of the head; 3rd joint black, lanceolate; disk of the thorax blackish; pectus with two blackish bands; claws black; wings blackish and with black veins, limpid and with pale veins at the base and along more than half the length of the costa. Length of the body 7 lines; of the wings 12 lines.

25. *LAPHRIA TRIPARS*, n. s. *Mas.* Ochracea, antennis parvis articulo 3° lanceolato, abdominis segmentis 4° 5°que nigris, alis ochraceo subinctis nigro bifasciatis.

Male. Ochraceous; mystax with several bristles; antennæ not longer than half the breadth of the head; 3rd joint lanceolate; abdomen with a broad black band which occupies the 4th and 5th segments; legs robust; wings nearly limpid, with a very slight ochraceous tinge and with two black bands; 1st band broader than the 2nd, which is apical; veins ochraceous, black in the bands. Length of the body 5 lines; of the wings 9 lines.

26. *LAPHRIA BIPARS*, n. s. *Mas.* Ochracea, capite albido, antennis nigris articulo 3° sublineari, abdomine apicem versus nigro, alis nigricantibus basi limpidis.

Male. Ochraceous; head with whitish tomentum; epistoma quite flat; mystax with very few whitish bristles; mouth and antennæ black; 3rd joint of the latter almost linear, slightly attenuated at each

- end; abdomen rather flat; 5th, 6th, and 7th segments black; wings blackish and with black veins, limpid, and with ochraceous veins towards the base. Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.
27. *Laphria puer*, *Dol.* See p. 147.

Subfam. ASILITES, *Walk.*

Gen. TRUPANEA, *Macq.*

28. *TRUPANEA COMPLENS*, n. s. *Mas et fœm.* Nigra, capitis pilis albis, antennarum articulo 3^o fusiformi, thorace vittis tribus cinereis latis indistinctis lineisque duabus testaceis, abdominis segmentis ochraceo marginatis, femoribus subtus tibiisque rufis, alis cinereis, halteribus fulvis. *Fœm.* Abdomine apicem versus styliformi.

Male and Female. Black, horny beneath; head thickly clothed beneath with white hairs; epistoma very prominent; mystax with many black bristles; 3rd joint of the antennæ fusiform; arista as long as the three preceding joints; thorax with three broad indistinct cinereous stripes which are divided by two more testaceous lines, the latter hue passing into cinereous towards the pectus; hind borders at the abdominal segments with ochraceous bands, which are most distinct in the male; femora red beneath; tibiæ red, with black tips; wings cinereous; radial areolet with the usual slate-coloured disk; veins black, of the ordinary structure; halteres tawny. *Male.* Abdominal appendages rather large. *Female.* Four last abdominal segments styliform. Length of the body 10-11 lines; of the wings 18-20 lines.

Allied to *T. strenua*.

Gen. ASILUS, *Linn.*

29. *ASILUS LÆVIS*, n. s. *Mas.* Pallide testaceo-cinereus, sat gracilis, parce pilosus, capite mystaceque albis, antennarum articulo 3^o nigro lanceolato, thorace vittis quatuor nigricantibus, abdomine nigro segmentis pallido marginatis, pedibus halteribusque fulvis, alis cinereis apice nigricantibus.

Male. Pale testaceous-cinereous, rather slender, with very few hairs and bristles; head with shining white tomentum, which is very slightly gilded in front; epistoma flat; mystax with several white bristles; mouth black, shining; antennæ tawny; 3rd joint black, lanceolate, a little longer than the 2nd joint; arista a little longer than the 3rd joint; thorax with four blackish stripes, the lateral pair obliquely interrupted as usual; hind part with three elongated black spots; abdomen blackish, except the hind borders of the segments; tip black, shining, with very small appendages; legs tawny; tarsi piceous towards the tips; claws black; wings cinereous, tips obliquely blackish;

veins black ; forks of the cubital vein undulating ; halteres tawny.
Length of the body 6 lines ; of the wings 12 lines.

Allied to *A. tenuicornis*, but very distinct in the structure of the veins.

Gen. OMMATIUS, *Illiger*.

30. *Ommatius noctifer*, *Walker*. See vol. iii. p. 88.

31. OMMATIUS NANUS, n. s. *Mas*. Cinereo-niger, antennis minimis, abdominis segmentis cano marginatis, pedibus flavescensibus, femoribus tibiisque apice tarsisque nigris, alis cinereis apice nigricantibus, halteribus flavescensibus.

Male. Cinereous black ; head and pectus with hoary tomentum ; antennæ very small ; arista very long and slender ; hind borders of the abdominal segments hoary ; legs yellowish ; femora and tibiæ towards the tips, and tarsi, black ; wings cinereous, with blackish tips ; veins black ; 1st externo-medial vein not straight, as in *O. noctifer*, but undulating ; halteres yellowish. Length of the body 4½ lines ; of the wings 8 lines.

Gen. DAMALIS, *Fabr*.

32. DAMALIS LUGENS, n. s. *Mas*. Rufescenti-ochracea, antennis thoracis disco abdominisque dorso nigris, pedibus obscure rufis, femoribus tibiis apice tarsisque nigris, alis nigricanti-fuscis, halteribus apice albis.

Male. Dull reddish ochraceous ; mouth, antennæ, disk of the thorax, and dorsal abdominal segments, except towards the base, black ; legs dark red ; femora, except at the base, tibiæ towards the tips, and tarsi black ; wings blackish brown, black along the costa towards the base ; veins black ; halteres with ivory-white knobs. Length of the body 3½ lines ; of the wings 8 lines.

Fam. LEPTIDÆ, *Westw*.

Genus LEPTIS, *Fabr*.

33. *Leptis ferruginosa*, *Wied*. See vol. i. p. 118 ; vol. iv. p. 110.

Fam. BOMBYLIDÆ, *Leach*.

Genus ANTHRAX, *Fabr*.

34. *Anthrax Pelops*, *Walk*. See vol. iii. p. 90. This seems to be a variety of *A. Dorycus*, *Boisd*. *Voy. de l'Astrolabe*, pl. 12. f. 12.

Fam. EMPIDÆ, *Leach*.

Genus HYBOS, *Fabr*.

35. *Hybos bicolor*, *Walk*. See vol. iii. p. 91. Var. ? *Mas*. Testaceus, thorace vittis duabus indistinctis pallidioribus, abdomine nigro basi testaceo, tibiis posticis nigris, alis nigricantibus.

Male. Testaceous; eyes black; antennæ small; arista long and slender; thorax with two indistinct paler stripes; abdomen black, testaceous at the base; hind femora incrassated, serrated beneath; hind tibiæ black, slightly curved; wings blackish; veins black. Length of the body 3 lines; of the wings 7 lines.

Fam. DOLICHOPIDÆ, *Leach.*

Gen. PSILOPUS, *Meigen.*

36. *PSILOPUS VARIIPENNIS*, n. s. *Fam.* Læte viridis, capite pectoreque albis, vertice purpurascenti-cyaneo, antennis nigris basi testaceis, thorace vittis duabus cupreis vittaque dorsali atra, abdomine fasciis quatuor atris apicem versus cupreo micante, pedibus halteribusque flavis, alis albidis fasciis duabus connexis lituraque costali basali nigris.

Female. Brilliant green; head shining white in front and behind; vertex brilliant purplish blue; mouth tawny; antennæ black, testaceous towards the base; arista as long as the thorax; thorax with a deep black dorsal stripe and with a cupreous stripe on each side; pectus shining white; abdomen with four deep-black bands, brilliant cupreous towards the tip; legs pale yellow; tarsi and hind tibiæ black; wings whitish limpid, with a blackish costal mark near the base, and with two black bands; 1st band connected with the 2nd by the costa, widely interrupted in the middle; 2nd very broad, subapical, nearly extending to the hind border; veins black; fore branch of the præ-brachial vein slightly curved; discal transverse vein undulating; halteres pale yellow. Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

Fam. SYRPHIDÆ, *Leach.*

Gen. CERIA, *Fabr.*

37. *CERIA ANNULIFERRA*, n. s. *Fam.* Nigra, capite flavo vittis tribus nigris, arista albida, thoracis fascia, scutelli margine abdominisque maculis duabus fascisque tribus flavis, femoribus tibiisque basi flavis, alis cinereis dimidio costali nigris.

Nearly allied to *C. relictura* and to *C. relictæ*. See vol. iii. pp. 93, 94.

Female. Black; head pale yellow, with a black vertex and a slender black stripe, and with a broad black stripe on each side of the very prominent peristoma; arista of the antennæ whitish; thorax with a slender yellow band which is dilated on the pectus, and with a yellow humeral callus on each side; hind border of the scutellum yellow; abdomen with a triangular yellow spot on each side of the base, and with slender yellow bands on the hind borders of the 2nd, 3rd, and 4th segments; femora, and tibiæ towards the base, yellow, this hue most prevalent on the hind legs; wings cinereous, black for nearly half the breadth from the costa; interior border lurid; vein black; halteres pale yellow. Length of the body 7 lines; of the wings 12 lines.

Gen. ERISTALIS, *Latr.*

38. *Eristalis splendens*, *Leguill.* See vol. iii. p. 95.
39. *ERISTALIS BOMBOIDES*, *Walk.* See vol. iv. p. 119. *Fæm?* *Atra*, capite nigro-cyanescente, thorace fascia ænea fasciaque anteriore cinerea, scutelli margine postico æneo, abdomine æneo fasciis duabus connexis atris, tibiis basi pallide flavis, alis cinereis dimidio costali nigricante.
- Female.* Deep black; head bluish black, shining, with white tomentum behind and on each side in front; antennæ black; thorax with a cinereous band in front, and with a middle æneous band; hind border of the scutellum also æneous; abdomen æneous, with two deep-black bands which are connected in the middle; legs shining; tibiæ pale yellow towards the base; wings cinereous, blackish for half the breadth from the costa; veins black; halteres pale yellow. Length of the body 5 lines; of the wings 9 lines.
40. *ERISTALIS OBSCURATA*, n. s. *Mas et Fæm.* *Atra*, capite albido, thorace fascia media chalybea abbreviata fasciaque anteriore æneo-albida, scutelli margine chalybeo, abdomine maculis tribus transversis apiceque chalybeis, tibiis halteribusque testaceis, alis cinereis costæ dimidio basali lurido.
- Male and Female.* Deep black; head covered with whitish tomentum, excepting the vertex and the callus in front; antennæ black; arista bare; thorax with a coppery whitish band in front, and with a much abbreviated chalybeous band in the middle; hind border of the scutellum chalybeous; abdomen whitish at the base, with three transverse chalybeous spots and a chalybeous tip; tibiæ dingy testaceous, piceous towards the tips; wings cinereous, lurid brown along half the length in front; veins black; halteres testaceous. Length of the body 4 lines; of the wings 8 lines.

Gen. BACCHA, *Fabr.*

41. *BACCHA BASALIS*, n. s. *Mas.* Chalybeo-nigra, thorace maculis duabus lateralibus flavis, abdomine fulvo contracto fasciis duabus piceis apicem versus nigro fusiformi, pedibus pallide fulvis, tibiis posticis fascia subapicali picea, alis cinereis vitta diffusa nigricante, halteribus pallidis.
- Male.* Chalybeous black; head with whitish tomentum beneath and about the eyes; thorax on each side with a yellow spot, which is prolonged into a band on each side of the pectus; the latter with a livid spot on each side by the alulæ; abdomen tawny and much contracted for nearly two thirds of its length from the base, black and fusiform from thence to the tip, with two piceous bands in the middle; legs pale tawny; hind tibiæ with a piceous subapical band; wings cinereous, with a middle faint diffuse blackish band, which is obsolete hindward; veins black, tawny at the base; halteres pale. Length of the body $5\frac{1}{2}$ lines; of the wings 9 lines.

Fam. MUSCIDÆ, *Latr.*Subfam. TACHINIDES, *Walk.*Gen. NEMORÆA, *Macq.*

42. NEMORÆA POSTULANS, n. s. *Mas.* Albido-cinerea, vix lata, capite argenteo, frontalibus nigris, thorace lineis quatuor nigris, abdomine longi-ovato tessellato maculis duabus basalibus rufescentibus, alis cinereis.

Male. Whitish cinereous, hardly broad, and in that character approaching the genus *Phorocera*, with many black bristles; head silvery white, with white hairs beneath; frontalia black, widening towards the face, with a row of bristles along each side; facialia without bristles; epistoma not prominent; antennæ not reaching the epistoma; 3rd joint linear, about four times the length of the 2nd; arista slender, nearly four times the length of the 3rd joint; thorax with four black lines; abdomen elongate-oval, somewhat tessellated, much longer than the thorax, with a diffuse reddish spot on each side at the base, legs stout; wings cinereous; veins black; præbrachial vein forming a rounded and hardly obtuse angle at its flexure, straight from thence to the tip; discal transverse vein undulating, parted by much less than its length from the border, and from the flexure of the præbrachial; alulæ white. Length of the body 5 lines; of the wings 10 lines.

Gen. EURYGASTER, *Macq.*

43. EURYGASTER MUTANS, n. s. *Fœm.* Cinerea, lata, capite cano, thorace lineis quatuor nigris, scutello rufo, abdomine longi-ovato cinclis albis lateribus rufis, alis cinereis.

Female. Cinereous, broad, with black bristles; head dingy hoary; frontalia black, almost linear, with minute bristles along each side; facialia with bristles towards the epistoma, which is not prominent; antennæ not reaching the epistoma; 3rd joint linear, about 4 times the length of the 2nd; arista slender, very much longer than the 3rd joint; thorax with four slender black lines; scutellum red; abdomen elongate-oval, red along each side, except towards the tip; fore borders of the segments white; legs stout; wings cinereous; veins black; præbrachial vein forming a very obtuse angle at its flexure, hardly curved from thence to its tip; discal transverse vein nearly straight, parted by half its length from the border, and by more than half its length from the flexure of the præbrachial; alulæ white. Length of the body 5 lines; of the wings 10 lines.

Gen. PHOROCERA, *Macq.*

44. PHOROCERA CONVERTENS, n. s. *Mas.* Nigra, capite argenteo, frontalibus atris, thorace lineis quatuor nigris, abdomine longi-conico

lateribus rufescentibus fasciis tribus albis latis interruptis, pedibus longiusculis, alis cinereis, venis fusco nebulosis.

Male. Black, bristly; head silvery white; frontalia deep black, slightly widening towards the face, which is oblique, having on each side a row of black bristles, which are continued along part of the facialia; the latter with bristles towards the epistoma, which is not prominent; antennæ almost reaching the epistoma; 3rd joint very slightly widening from the base to the tip, about six times the length of the 2nd; arista slender, nearly twice the length of the 3rd joint; thorax with four black lines; abdomen elongate-conical, reddish along each side, except towards the tip, with three broad widely interrupted shining white bands; legs rather long; wings cinereous, clouded with brown about the veins; præbrachial vein forming a right angle at its flexure, very slightly curved inward from thence to its tip; discal transverse vein undulating, parted by much less than its length from the border, and from the flexure of the præbrachial; alulæ white. Length of the body 5 lines; of the wings 10 lines.

Subfam. DEXIDES, *Walk.*

Gen. RUTILIA, *Desvoidy.*

45. RUTILIA GLORIFICANS, n. s. *Mas.* Læte cyaneo-viridis, capite strigis duabus anticis cervino-tomentosis, frontalibus atris, antennis piceis; thorace vittis quatuor interruptis nigris, abdomine nigro basi semihyalino fasciis tribus interruptis viridibus micantibus, pedibus piceo-nigris, femoribus basi rufescentibus, alis fuscescenti-cinereis basi nigricantibus.

Male. Brilliant bluish green; head on each side of the peristoma with a triangular streak of dull fawn-coloured tomentum, which is continued round part of the eye; frontalia deep black, elongate-triangular; antennæ piceous; thorax with four interrupted black stripes, of which the outer pair are abbreviated at each end, and the middle pair are widened and much abbreviated hindward; abdomen black, semihyaline towards the base in some aspects, with three brilliant green interrupted bands, which are very concave on each side of the hind border; legs piceous black; femora reddish towards the base; wings brownish cinereous, blackish towards the base; veins black, piceous at the base; præbrachial vein forming a rounded and slightly obtuse angle at its flexure, near which it is slightly curved inward, and is thence straight to its tip; discal transverse vein slightly undulating, parted by less than half its length from the border, and by much more than half its length from the flexure of the præbrachial; alulæ brownish cinereous. Length of the body $7\frac{1}{2}$ lines; of the wings 15 lines.

46. *Rutilia moneta*, *Gerstaecker, Stett. Ent. Zeit.* vol. xxi. (1860) p. 200 (Formosia).

Note. *Rutilia callipygos*, *Gerst. Stett. Ent. Zeit.* vol. xxi. (1860) p. 178

(Formosia), seems to be distinct from the following species, though nearly allied to it:—

47. *RUTILIA LUCIGENA*, n. s. *Mas et Fœm.* Læte cyanea, capitâ tomento albo, frontalibus atris, antennis pedibusque nigris, thorace vittis quatuor interruptis nigris, abdomine atro fascia interrupta maculis quatuor posterioribus subquadratis cyaneis micantibus, alis fusciscentibus basi nigricantibus. *Fœm.* Frontalibus purpureo marginatis.

Male and Female. Brilliant blue; head with white tomentum on each side in front; frontalia deep black; antennæ and legs black; thorax with four interrupted black stripes, which resemble those of the preceding species, with the exception of the outer pair being longer and narrower; abdomen deep black, its brilliant bluish marks hardly differing from those of *R. moneta* which it also resembles in the colour and structure of the wings. *Male.* Frontalia elongate-triangular. *Female.* Head purple on each side of the linear frontalia. Length of the body 8 lines; of the wings 16 lines.

These three species, and especially the two latter, are very closely allied, and may be termed subspecies.

Gen. DOLESCHALLA, n. g.

- Mas et Fœm.* *Corpus* gracile, cylindricum. *Facies* subobliqua. *Palpi* longi, graciles. *Antennæ* epistoma non attingentes; articulus 3^{us} 2^o quadruplo longior; arista plumosa. *Abdomen* longum. *Pedes* longi, graciles. *Alæ* angustæ. *Mas.* Abdomen longissimum. *Fœm.* Abdomen brevius et latius.

Male and Female. Body slender, cylindrical, with a few bristles. Head as broad as the thorax; frontalia widening in front; face slightly oblique; facialia without bristles; epistoma prominent. Mouth slender, with long slender palpi. Antennæ not reaching the epistoma; 3rd joint linear, slender, about four times longer than the 2nd; arista plumose, rather longer than the 3rd joint. Abdomen and legs long and slender. Wings narrow; præbrachial vein forming a slightly acute angle at its flexure, near which it is much curved inward, and is thence straight to its tip, the latter being at a short distance from the tip of the cubital vein; discal transverse vein undulating, parted by hardly less than half its length from the border, and by about its length from the flexure of the præbrachial; alulæ large. *Male.* Abdomen very long. *Female.* Abdomen long, a little broader than that of the male.

The name of this genus, which has some affinity to *Scotiptera*, is in remembrance of the late Dr. Doleschall, whose researches and publications have contributed much to the knowledge of the Diptera of the Dutch East Indies.

48. *DOLESCHALLA CYLINDRICA*, n. s. *Mas.* Cinereo-nigra, capite

thoracisque vittis tribus auratis, frontalibus atris, abdomine fasciis quatuor latis sordide fulvis, alis fuscis apud costam nigricantibus, halteribus testaceis. *Fem.* Capite albo, frontalibus latis, thoracis vittis albidis, abdomine fasciis duabus apiceque fuscis, segmentorum marginibus anticis albidis.

Male. Cinereous black; head with pale gilded tomentum; frontalia deep black, widening in front; a slender middle stripe and two broad lateral stripes on the thorax, and a band on the pectus pale gilded; abdomen with four broad dingy tawny bands; 1st band interrupted; 2nd and 3rd deeply notched; 4th entire; wings brown, blackish along the costa; veins black; halteres testaceous. *Female.* Head white; frontalia broad, linear; stripes and bands of the thorax whitish; abdomen with two bands and the tip shining brown; fore borders of the segments whitish. Length of the body 7-9 lines; of the wings 11-12 lines.

Gen. GYMNSTYLIA, *Macq.*

49. GYMNSTYLIA INVITA, n. s. *Mas.* Nigra, gracilis, capite albo, frontalibus atris, antennarum articulo 3^o longissimo, thoracis vitta dorsali lateribus pectoreque albo-schistaceis, abdomine compresso fasciis duabus latis glauco-albidis, pedibus longis gracillimis, alis angustis cinereis.

Male. Black, slender; head white; frontalia deep black, very narrow; eyes bare; antennæ reaching the epistoma; 3rd joint linear, slender, about six times as long as the 2nd joint; arista rather longer than the 3rd joint; thorax with a dorsal stripe, the sides and the pectus slaty-white; abdomen compressed, with two broad glaucous-whitish bands; legs long, very slender; wings narrow, cinereous; veins black; præbrachial vein forming a rounded and very obtuse angle at its flexure, from whence it is slightly curved inward to its tip; discal transverse vein undulating, parted by much less than half its length from the border, and by a little more than its length from the flexure of the præbrachial; alulæ white. Length of the body 4 lines; of the wings 7 lines.

Gen. PROSENA, *St.-Farg.*

50. PROSENA LURIDA, n. s. *Mas.* Testacea, argenteo-tomentosa, capite antico tumido, frontalibus nigris, thorace vittis quatuor indistinctis obscurioribus, abdomine tessellato segmentis nigro marginatis, femoribus nigris, tibiis posticis apice piceis, alis lurido-cinereis.

Male. Testaceous, with silvery whitish tomentum; head tumid in front; frontalia black, very narrow, widening towards the face; mouth black, testaceous at the base, as long as the thorax; antennæ testaceous; 3rd joint long, slender, not reaching the epistoma; thorax with four indistinct darker stripes; abdomen tessellated with whitish tomentum; hind borders of the segments black; coxæ and femora black; tips of

hind tibiæ piceous; wings lurid-cinereous; veins black, testaceous at the base: præbrachial vein forming a very obtuse angle at its flexure, slightly curved inward nearer its tip; discal transverse vein deeply undulating, parted by full half its length from the border, and by about its length from the flexure of the præbrachial; alulæ white. Length of the body $4\frac{1}{2}$ lines; of the wings 9 lines.

Subfam. MUSCIDES, *Walk.*

Gen. MUSCA, *Linn.*

51. MUSCA DITISSIMA, n. s. (Gen. *Lucilia*, *Desv.*) *Mas.* Cuprea, capite fulvo, palpis antennisque rufescenti-fulvis, scutello viridi, abdomine cupreo-rufo fasciis cyanescenti-viridibus, pedibus nigris, alis obscure fuscis.

Male. Cupreous; head tawny, with whitish tomentum beneath and about the eyes; proboscis black; palpi and antennæ reddish tawny; scutellum and hind border of the scutum bright green; abdomen cupreous red, with bluish-green bands; legs black; wings dark brown; veins black; præbrachial vein forming a rounded and obtuse angle at its flexure, slightly curved inward from thence to its tip; discal transverse vein deeply undulating, parted by half its length from the border, and by less than its length from the flexure of the præbrachial; alulæ whitish, with testaceous borders. Length of the body 4 lines; of the wings 8 lines.

This species has also been discovered by Mr. Wallace in Celebes; but the specimen from the latter island was too imperfect to be described.

52. MUSCA SARCOPHAGOIDES, n. s. (Gen. *Caliphora*? *Desv.*) *Mas.* Nigra, cinereo-tomentosa, frontalibus atris, antennis rufescentibus, oculis nudis, thorace vittis quatuor nigris, abdomine tessellato, alis cinereis basi et apud costam luridis.

Male. Black, with cinereous tomentum; frontalia deep black, widening much in front; epistoma rather prominent; antennæ reddish, not reaching the epistoma; eyes bare; thorax with four slender black stripes; abdomen tessellated like that of a *Sarcophaga*; legs stout, black; wings cinereous, lurid at the base and along part of the costa; veins black; præbrachial vein forming an obtuse angle at its flexure, very slightly curved inward from thence to its tip; discal transverse vein undulating, parted by less than half its length from the border, and by much more than half its length from the flexure of the præbrachial; alulæ lurid cinereous. Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.

53. MUSCA MESEMBRINOIDES, n. s. (Gen. *Calliphora*? *Desv.*) *Fem.* Nigra, tomento cinereo vix aurato, frontalibus atris, oculis nudis, antennis longis, thorace lineis quatuor nigris, abdomine tessellato, pedibus robustis, alis fusciscenti-cinereis apud costam diffuse nigricantibus.

Female. Black, with very slightly gilded cinereous tomentum; frontalia deep black, linear; eyes bare; antennæ nearly reaching the epistoma; 3rd joint about six times the length of the 2nd; thorax with four slender black lines; abdomen tessellated; legs black, very stout; wings brownish cinereous, diffusedly blackish along the costa; veins black; præbrachial vein forming a rounded hardly obtuse angle at its flexure, slightly curved inward from thence to its tip; discal transverse vein deeply undulating, parted by nearly half its length from the border, and by very much more than half its length from the flexure of the præbrachial; alulæ lurid whitish. Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.

54. *MUSCA CALLIPHOROIDES*, n. s. (Gen. *Graptomyza*, *Desv.*) *Mas.* Nigricanti-cyanea, tumida, capite albo, palpis fulvis, antennis piceis longis basi rufescentibus, thorace vittis quatuor auratis, pectore testaceo, abdomine fasciis duabus basique albidis, femoribus fulvis, alis cinereis, costa venisque fusco marginatis.

Male. Blackish-blue, tumid; head white with white hairs beneath; a stout bristle on each side of the peristoma; mouth black; palpi tawny; antennæ piceous, reaching the peristoma, reddish towards the base; 3rd joint full six times the length of the 2nd; thorax tawny in some aspects, with four pale gilded stripes; middle stripes much abbreviated hindward, narrower than the lateral stripes, which are connected hindward by a band; pectus testaceous; abdomen with two narrow whitish bands hindward, whitish towards the base, with the exception of a widely interrupted blackish-blue band; legs black; coxæ and femora tawny; wings cinereous, brown along the costa and along the veins; veins black; præbrachial vein forming a rounded right angle at its flexure, much curved inward from thence to its tip; discal transverse vein very slightly undulating, parted by a little more than half its length from the border, and by much more than half its length from the flexure of the præbrachial; alulæ cinereous, with testaceous borders. Length of the body $4\frac{1}{2}$ lines; of the wings 9 lines.

55. *MUSCA TRIFASCIA*, n. s. (Gen. *Ochromyia*, *Macq.*) *Fæm.* Testacea, capite albido, frontibus ferrugineis, antennis longis rufescentibus, thorace aurato, abdomine fasciis tribus nigris, tibiis tarsisque piceis, alis cinereis apud venas subluridis.

Female. Testaceous; head whitish; frontalia ferruginous, broad, slightly widening in front; sides of the peristoma prominent, with stout black bristles; mouth black, reddish towards the tip; antennæ reddish, nearly reaching the epistoma; 3rd joint about six times the length of the 2nd; thorax with gilded pubescence; abdomen with three black bands; tibiæ and tarsi piceous; wings cinereous, slightly lurid along the veins; veins black, testaceous towards the base; præbrachial vein forming an extremely obtuse angle at its flexure, very slightly curved inward from thence to its tip; discal transverse vein slightly undula

ting, parted by hardly half its length from the border, and by much more than half its length from the flexure of the præbrachial. Length of the body 4 lines; of the wings 8 lines.

Subfam. ANTHOMYIDES, *Walk.*

Gen. SPILOGASTER, *Macq.*

56. *Spilogaster xanthoceras*, *Walk.* See vol. iv. p. 141.

Subfam. HELOMYZIDES, *Fallén.*

Gen. HELOMYZA, *Fallén.*

57. *HELOMYZA NIVISTRIGA*, n. s. *Fam.* Testacea, palpis latiusculis, abdomine apicem versus lanceolato, alis æneo-nigris basi limpidis albo quinquestrigatis.

Female. Testaceous, with some stout black bristles; face flat, shining, with a groove on each side; mouth and palpi short, the latter rather broad; arista black; abdomen lanceolate towards the tip; wings æneous-black, limpida at the base, adorned with five white streaks; 1st and 2nd streaks extending from the costa to the middle of the disk, where the 1st is connected with a vitreous streak which extends to the hind border; 3rd streak oblique, discal; 4th and 5th lanceolate; 4th subapical, longer than the 5th, which joins the hind border; veins black, testaceous towards the base, white in the streaks; cubital and præbrachial veins curved; discal transverse vein oblique, slightly angular, parted by full four times its length from the border, and by a little less than its length from the præbrachial transverse, which is rather long. Length of the body 7 lines; of the wings 12 lines.

58. *HELOMYZA QUADRIFERA*, n. s. *Fam.* Testacea, abdomine apicem versus lanceolato, dimidio postico nigro, alis nigris basi et apud marginem posticum limpidis, macula costali alba subquadrata.

Female. Testaceous, like the preceding species in structure; hind half of the abdomen black, lanceolate towards the tip; the black hue extending most on each side; wings black, limpida at the base and along the hind border, with a white subquadrate costal spot, opposite to which the black hue extends nearly to the hind border; veins black, testaceous in the limpida part; cubital and præbrachial veins nearly straight; discal transverse vein straight, parted by less than half its length from the border, and by about its length from the præbrachial transverse. Length of the body 5 lines; of the wings 9 lines.

Subfam. BORBORIDES, *Haliday.*

Gen. COTAMBA, n. g.

Mas. Corpus sat latum. Caput supra planum. Oculi nudi. Os parvum. Palpi breves. Antennæ brevissimæ; articulus 3^{us} magnus,

rotundus; arista pubescens, apice nuda. *Abdomen* longiconicum. *Pedes* robusti; tibiæ posticæ subarcuatæ; metatarsi postici sat crassi. *Alæ* sat amplæ.

Male. Body moderately broad. Head as broad as the thorax, flat above. Eyes bare. Epistoma not prominent. Mouth and palpi small. Antennæ very short; 3rd joint large, round; arista pubescent except near the tip. Abdomen elongate-conical. Legs rather stout; hind tibiæ slightly curved; hind metatarsi rather thick. Wings rather ample; subcostal and mediastinal veins united, ending at rather before half the length of the wing; radial vein ending at about four-fifths of the length; cubital and præbrachial veins parallel to each other; discal transverse vein straight, ending at about twice its length from the præbrachial transverse and from the border.

This genus seems to unite the *Borborides* with the *Oscinides*.

59. COTAMBA FUMIFERA, n. s. *Mas.* Nigra, nitens, pubescens, capite antennis tarsisque rufescentibus, pedibus pubescentibus, alis nigricantibus costa pubescente.

Male. Black, shining; body, legs, and costa of the wings pubescent; head, antennæ, and tarsi reddish; wings blackish, rather paler towards the exterior border; veins black. Length of the body $2\frac{1}{2}$ lines; of the wings 5 lines.

Subfam. ORTALIDES, *Haliday.*

Gen. LAMPROGASTER, *Macq.*

60. *Lamprogaster marginifera*, *Walk.* See vol. ii. p. 111.

61. LAMPROGASTER PATULA, n. s. *Fæm.* Testacea, latiuscula, capite nigro fasciato, oculis albido cinctis, antennis brevissimis, arista subplumosa, scutello bispinoso, abdomine supra purpureo, alis sublurido-cinereis.

Female. Testaceous, rather broad; head rather narrower than the thorax, whitish about the eyes, with a band above the antennæ and facia lia blackish; antennæ hardly more than half the length of the epistoma; arista minutely plumose; scutellum with two short stout spines; abdomen purple; base, oviduct, and underside testaceous; wings cinereous, with a slight lurid tinge; veins testaceous; discal transverse vein hardly curved, not oblique, parted by less than half its length from the border, and by more than its length from the præbrachial transverse, which is black and stout. Length of the body 7 lines; of the wings 12 lines.

62. LAMPROGASTER COSTALIS, n. s. *Mas et Fæm.* Piceo-nigra, capite halteribusque testaceis, oculis albido cinctis, arista nuda, thorace vittis duabus cinereis, abdomine obscure rufo, ventre pedibusque testaceis, alis subcinereis fusciscente transverse trilineatis.

Male and Female. Piceous black, shining; head testaceous, whitish

about the eyes; arista bare; thorax with a cinereous stripe along each side; abdomen dark red; sutures blackish; underside and legs testaceous; wings slightly cinereous, with three brownish transverse lines; 1st line extending from the base of the cubital vein; 2nd including the præbrachial transverse vein, and extending thence to the costa, where it is dilated; 3rd short, subcostal, opposite the discal transverse vein; veins testaceous; discal transverse vein straight, upright, parted by one-fourth of its length from the border, and by very much more than its length from the discal transverse; halteres testaceous. Length of the body 5-6 lines; of the wings 10-12 lines.

63. *LAMPROGASTER BASALIS*, n. s. *Mas.* Cyanea, viridi purpureoque subincta, capite testaceo supra nigro, pectore ferrugineo, abdomine vitta postica diffusa rufescente, pedibus testaceis, alis subcinereis vitta costali nigra vittaque exteriore ochracea.

Male. Blue, slightly tinged with green and purple; head testaceous; vertex black; mouth striped with black; arista black, bare; pectus mostly ferruginous; abdomen with a diffuse reddish stripe hindward, piceous beneath; legs testaceous; wings slightly cinereous, with a black stripe along half the length of the costa, and with a narrower ochraceous stripe from thence to the tips; veins testaceous, black towards the base; præbrachial vein slightly angular where it is joined by the discal transverse; the latter slightly curved, parted by less than half its length from the border, and by hardly more than its length from the præbrachial transverse; halteres testaceous. Length of the body 5-6 lines; of the wings 10-12 lines.

64. *LAMPROGASTER VENTRALIS*, n. s. *Mas et Fœm.* Fulva, capite pedibusque testaceis, thorace cyanescente subincto, abdomine purpureo basi testaceo, alis cinereis apud costam subochraceis. *Mas.* Abdomine subtus hamis duobus conicis testaceis.

Male and Female. Tawny; head testaceous; mouth mostly piceous; arista pubescent; thorax with a slight bluish tinge; abdomen purple, testaceous at the base; legs testaceous; wings cinereous, slightly ochraceous along the costa; veins testaceous; discal transverse vein slightly curved, parted by full one-third of its length from the border, and by much more than its length from the præbrachial transverse; præbrachial vein very slightly angular; halteres testaceous. *Male.* Abdomen with a conical testaceous appendage on each side beneath. Length of the body 5 lines; of the wings 10 lines.

Gen. POTICARA, n. g.

Mas et Fœm. *Corpus* latiusculum. *Caput* brevissimum. *Palpi* parvi. *Antennæ* epistoma non attingentes; articulus 3^{us} linearis, 2^o quadruplo longior; arista plumosa. *Abdomen* angustum, thorace paullo longius. *Alæ* subdilatatæ; costa convexa.

Mas. Caput thorace valde latius; facies brevissima, latissima. *Fœm.* Caput thorace paulo latius.

Male and Female. Body rather broad. Head very short. Mouth and palpi small. Antennæ not near reaching the epistoma; 3rd joint linear, rounded at the tip, four times the length of the 2nd; arista plumose. Abdomen much narrower, but little longer than the thorax. Legs moderately long and slender. Wings slightly dilated; costa convex; radial vein curved, joining the costa at rather beyond two-thirds of the length of the latter; cubital and præbrachial veins slightly undulating; discal transverse vein slightly undulating, emitting a stump outward in front, parted by one-fourth of its length from the border and from the præbrachial transverse; the latter oblique, almost straight, rather long. *Male.* Head much broader than the thorax; face and epistoma extremely short and broad. *Female.* Head a little broader than the thorax; face extremely short; epistoma large. Wings rather less ample than those of the male.

65. POTICARA TRIARCUATA, n. s. *Mas et Fœm.* Nigro-cyanea, capite fascia rubra, scutello postico rufescente, abdomine fusiformi, pedibus nigris, femoribus flavescenti-albis, alis albidis, linea costali disco radiisque nigris.

Male and Female. Dark blue, with tomentum somewhat sericeous; front with a deep-red band; antennæ transverse, suture of the thorax and hind part of the scutellum reddish; pectus shining; abdomen fusiform, shining towards the tip; legs black; femora yellowish white, black towards the tips; wings whitish limpid, with a black line along the exterior part of the costa; disk irregularly black, emitting four black lines to the costa, the fourth joining the costal line; two black curved lines proceeding from the disk to the hind border, parallel to the costal line; veins and halteres black. *Male.* Face and epistoma yellowish white. *Female.* Face and epistoma reddish. Length of the body 4 lines; of the wings 8 lines.

Gen. MYSTIA, n. g.

Mas. Corpus latiusculum. Caput thorace vix latius; frons depressa; facies latissima; genæ tumidæ. Antennæ epistoma non attingentes; articulus 3^{us} lanceolatus, 2^o quadruplo longior; arista plumosa. Abdomen ovatum, thorace paulo brevius vix latius. *Pedes* robusti.

Male. Body rather broad. Head hardly broader than the thorax; front depressed; face very broad; epistoma slightly prominent; genæ tumid. Mouth large. Antennæ not reaching the epistoma; 3rd joint lanceolate, full four times the length of the 2nd; arista plumose. Scutellum prominent. Abdomen oval, a little shorter, but hardly broader than the thorax. Legs stout. Wings moderately broad; præbrachial vein slightly angular at its junction with the præbrachial transverse vein; the latter straight, not oblique, parted by one sixth of its length from the border, and by a little more than its length

from the very oblique and rather long discal transverse vein; subanal vein curved.

66. *MYSTIA ATTRAHENS*, n. s. *Mas*. Picea, capite albido lineis nigris, thoracis disco vittis duabus latis nigris interlineatis, abdomine cyanescenti-purpureo maculis duabus basalibus rufescentibus, pedibus nigris, femoribus pallidis, alis subcinereis, costa maculaque nigricantibus.

Male. Piceous; head whitish, with two black bands between the eyes, and with two black stripes on each side of the face; disk of the thorax whitish cinereous, with two broad black stripes, which are interlined with whitish cinereous; metathorax whitish cinereous; abdomen bluish purple, with a reddish spot on each side at the base; legs black; fore femora ferruginous, with black tips; posterior femora yellow, with black tips; wings slightly cinereous, blackish along the costa and along the præbrachial transverse line, and with a blackish spot at the hind end of the præbrachial transverse vein; veins black. Length of the body 4 lines; of the wings 8 lines.

Gen. *DACUS*, *Fabr.*

67. *DACUS DEVIUS*, n. s. *Mas et Fem*. Piceo-niger, capite cyaneo vitta antica testacea, arista albida pubescente, thorace vittis tribus cinereis, tibiis anticis ferrugineis, tibiis posterioribus albidis, tarsis posterioribus testaceis, alis cinereis, costa venisque transversis fusco nebulosis.

Male and Female. Piceous black, with slight cinereous tomentum; head blue, whitish about the eyes, ferruginous and with a short broad testaceous stripe in front; antennæ reaching the epistoma; 3rd joint slender, linear, full six times the length of the 2nd; arista whitish, pubescent, much longer than the 3rd joint; thorax with three cinereous stripes; pectus pale cinereous; fore tibiæ ferruginous; posterior tibiæ whitish, with black tips; posterior tarsi testaceous; wings cinereous; exterior part of the costa and transverse veins irregularly clouded with brown; veins black; cubital vein hardly angular; præbrachial transverse vein long, very oblique; halteres whitish. *Male*. Abdomen cylindrical, testaceous towards the tip, longer than that of the female; præbrachial transverse vein curved, parted by one-fourth of its length from the border, and by much less than its length from the discal transverse. *Female*. Abdomen slightly attenuated at each end; præbrachial transverse vein nearly straight, parted by hardly more than half its length from the discal transverse. Length of the body 5-5½ lines; of the wings 9-10 lines.

Distinguishable by the wing-veins from *D. divergens* and from *D. addens*, to which it is much allied.

68. *DACUS INSTABILIS*, n. s. *Fem*. Fulvus, oculis albido cinctis, epistomate guttis duabus nigris, thoracis disco abdomineque cyaneis,

hujus apice fulvo, ventre nigro, pedibus testaceis, alis cinereis basi costaque luridis.

Female. Tawny; head whitish about the eyes and on the disk of the face; epistoma prominent, with a black dot on each side; antennæ not reaching the epistoma; third joint about thrice the length of the 2nd; arista bare, very slender; disk of the thorax, and abdomen except the tip, blue; underside of the abdomen black; legs testaceous; wings cinereous, lurid at the base and along the costa; veins tawny; discal transverse vein curved, parted by less than half its length from the border, and from very much more than its length from the præbrachial transverse. Length of the body 4 lines; of the wings 8 lines.

69. *DACUS SORDIDUS*, n. s. *Fæm.* Piceo-cyaneus, capite antico ferrugineo, oculis albido cinctis, abdomine apicem versus attenuato, femoribus anticis tarsisque posterioribus fulvis, alis cinereis, striga costali, apicibus spatique apud venam transversam discalem fuscis.

Female. Piceous blue; head cinereous beneath, ferruginous in front, whitish about the eyes; pectus cinereous; abdomen pilose, testaceous beneath at the base, attenuated towards the tip; oviduct prominent; legs piceous; fore femora and posterior tarsi tawny; posterior tibiæ tawny towards the tips; wings cinereous; a short costal streak, tips, and space about the discal transverse vein brown; veins black, tawny at the base; discal transverse vein slightly curved, parted by half its length from the border, and by very much more than its length from the præbrachial transverse; halteres testaceous. Length of the body 4 lines; of the wings 7 lines.

70. *DACUS LITURATUS*, n. s. *Fæm.* Nigricanti-cyaneus, oculis albido cinctis, antennis piceis, arista plumosa, thorace vittis duabus nigris, abdomine fusiformi apicem versus attenuato, femoribus albis, alis albis basi et apud marginem anteriorem pallide cinereis, striga basali fascia obliqua plagaque subapicali nigris.

Female. Blackish blue, rather slender, head whitish about the eyes; epistoma tawny; antennæ piceous, very much shorter than the face; 3rd joint about thrice the length of the 2nd; arista plumose; thorax with two black stripes; abdomen fusiform, attenuated towards the tip; legs black, rather slender; coxæ and femora white, the latter with black tips; wings white, pale cinereous at the base and along part of the interior border; basal streak, an oblique band which is abbreviated hindward, and a very large subapical patch black; veins black, hardly undulating; præbrachial vein straight, oblique, parted by about one-fourth of its length from the border, and by half its length from the præbrachial transverse, which is long and oblique; halteres white. Length of the body 4 lines; of the wings 8 lines.

71. *DACUS?* *NIGRILINEA*, n. s. *Fæm.* Testaceus, gracilis, thorace lineis tribus nigris, abdomine lanceolato apicem versus cuneiformi apice maculisque duabus nigris, alis subcinereis angustis costa nigra.

Female. Testaceous, slender; thorax with three black lines, of which the middle one is much more slender than the others; pectus with a black streak on each side; abdomen lanceolate, cuneiform and shining towards the tip, about twice the length of the thorax; tip and a spot on each side beyond the middle black; wings narrow, slightly cinereous; costa black from one-fourth of its length to the end of the præbrachial vein; veins black; discal transverse vein straight, oblique, parted by less than one-fourth of its length from the border, and by full twice its length from the præbrachial transverse. Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

72. *DACUS CONCISUS*, n. s. *Fem.* Niger, gracilis, capite flavo maculis nigris, arista plumosa, thorace vittis quatuor flavis, abdomine fusiformi petiolato apice attenuato fulvo maculis duabus basalibus flavis, femoribus flavo vittatis, alis limpidis nigricante bivittatis.

Female. Black, slender; head yellow, with four black spots on the hind part; front with a black dot on each side, and with a black spot which is furcate hindward; face with an interrupted black band; antennæ tawny, not reaching the epistoma; 3rd joint linear, about one-third of the length of the 2nd; arista plumose; thorax with four yellow stripes, of which the outer pair are curved and extend obliquely along the sides of the pectus; metathorax with a yellow stripe; abdomen fusiform, petiolated at the base, attenuated at the tip, with a yellow spot near the base, and another near the tip which is tawny; femora with a yellow band near the base, tawny towards the tips; tarsi yellowish towards the base; wings limpid, with two blackish stripes which are united towards the base—one costal, the other occupying the middle part of the hind border; veins black; præbrachial vein very slightly angular; discal transverse vein oblique, nearly straight, parted by less than one-fourth of its length from the border, and by a little more than its length from the long oblique præbrachial transverse vein; halteres yellow. Length of the body 4 lines; of the wings 8 lines.

Gen. RIOXA, *Walk.*

73. *RIOXA FORMOSIPENNIS*, n. s. *Mas.* Testacea, capite vitta nigra, arista plumosa, thoracis vittis sex metathorace abdominisque fasciis tribus nigris, femoribus posticis piceis, alis nigricantibus basi costaque luridis, punctis septem discalibus strigisque posticis albis.

Male. Testaceous, with black bristles; head with a black stripe above; antennæ not more than half the length of the face; 3rd joint conical, less than twice the length of the 2nd; arista long, plumose; thorax with six black stripes, the middle pair dislocated in the middle; pectus with two black stripes hindward; metathorax black, shining; abdomen with three black bands, the 3rd very broad; hind femora piceous; wings blackish, lurid in front and behind at the base, with white

streaks along the hind border, and with seven white points in the disk. Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.

Subfam. SEPSIDES, *Walk.*

Gen. CALOBATA, *Fabr.*

74. CALOBATA CONTRARIA, n. s. *Mas et Fœm.* Nigra, capite vitta cinerea antice cyaneo, antennis ferrugineis, abdomine lanceolato subtus lurido, femoribus posterioribus fascia subapicali flavescente, tarsi albis, alis cinereis medio apiceque late fuscescentibus.

Male and Female. Black; head blue in front, with a cinereous stripe above; antennæ ferruginous; pectus with slight cinereous tomentum; abdomen lanceolate, lurid beneath; femora yellowish towards the base; posterior femora with a yellowish subapical band; tarsi white, except at the base; wings cinereous; middle part and tips broadly and diffusely brownish; veins black; cubital and præbrachial veins converging towards each other beyond the discal transverse vein; the latter straight, not oblique, parted by less than its length from the border, and by more than four times its length from the discal transverse vein. Length of the body $4-4\frac{1}{2}$ lines; of the wings $7\frac{1}{2}-8$ lines.

75. CALOBATA FLAGIATA, n. s. *Fœm.* Nigra, gracilis, oculis lurido cinctis, antennis brevissimis, abdomine apicem versus lanceolato, pedibus piceis, femoribus posterioribus vix dilatatis, tarsi basi testaceis, alis subcinereis apice obscurioribus fascia nigricantē latissima.

Female. Black, slender, with slight cinereous tomentum; head lurid about the eyes; antennæ very short; abdomen lanceolate hindward; legs piceous, long, slender; posterior femora ferruginous, very slightly dilated; tarsi testaceous towards the base; wings slightly cinereous, darker cinereous at the tips, with a very broad middle blackish band; veins black; cubital and præbrachial veins slightly converging towards each other exteriorly; discal transverse vein straight, parted by much less than its length from the border, and by nearly four times its length from the præbrachial transverse. Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.

Subfam. PSILIDES, *Walk.*

Gen. MICROPEZA, *Maoq.*

76. MICROPEZA FORFICULOIDES, n. s. *Mas.* Nigra, cylindrica, gracillima, subcompressa, thorace antico attenuato, abdomine apice forcipato, pedibus posterioribus longissimis, femoribus posterioribus fulvis, alis nigricantibus postice cinereis.

Male. Black, cylindrical, somewhat compressed, very slender; antennæ short; 3rd joint conical, longer than the 2nd; thorax attenuated in front; abdomen less than twice the length of the thorax, furnished at

the tip with two erect forceps-like appendages; legs very slender; posterior legs very long; posterior femora tawny; wings blackish, cinereous along the hind border; veins black; cubital and præbrachial veins very slightly converging towards each other; postbrachial vein very near the præbrachial; discal transverse vein parted by about its length from the border, and by about six times its length from the præbrachial transverse; halteres testaceous. Length of the body 5 lines; of the wings 7 lines.

Gen. NERIUS, *Fabr.*

77. *Nerius duplicatus*, *Wied.* See vol. iii. p. 125.

78. NERIUS MANTOIDES, n. s. *Mas.* Piceus, capite subtus pectoreque ferrugineis, arista albida, pedibus fulvis, femoribus anticis subserratis, tibiis anticis apice dilatatis, alis fuscescenti-cinereis. *Fæm.* Obscurior, pedibus piceis simplicibus.

Male. Piceous; head beneath and pectus ferruginous; 3rd joint of the antennæ lanceolate; arista whitish, apical; abdomen shorter than the thorax; legs tawny, long, stout; fore femora slightly dilated, minutely serrated beneath; fore tibiæ dilated towards their tips; wings brownish cinereous; veins black; cubital and præbrachial veins converging towards each other exteriorly; discal transverse vein oblique, parted less than its length from the border, and by more than twice its length from the præbrachial transverse; halteres tawny. *Female.* Darker than the male; legs piceous, simple. Length of the body 4-4½ lines; of the wings 7-8 lines.

This species may be distinguished by its wings from *N. tibialis*, which it resembles in structure.

Fam. HIPPOBOSCIDÆ, *Leach.*

Gen. ORNITHOMYIA, *Olfers.*

79. ORNITHOMYIA DOREICA, n. s. *Fæm.* Picea, capite thoracis lateribus anticis pectore pedibusque pallide viridibus, femoribus tibiisque piceo vittatis, tarsis piceis, alis cinereis.

Female. Piceous, shining, with black bristles; head, pectus, and legs pale green; sides of the thorax in front pale green, including a piceous spot; femora and tibiæ striped with piceous; tarsi piceous; wings cinereous; veins black, very strongly marked. Length of the body 3½ lines; of the wings 9 lines.

80. ORNITHOMYIA EXILIS, n. s. Picea, capite pedibusque obscure viridibus, alis cinereis.

Piceous, shining; head and legs dull green; wings cinereous; veins black. Length of the body 1½ line; of the wings 3 lines.

81. ORNITHOMYIA PLANA, n. s. Pallide viridis, alis cinereis.

Pale green; claws black; wings cinereous; veins black. Length of the body 2 lines; of the wings 4½ lines.