

Catalogue of the Dipterous Insects collected in Waigiou, Mysol, and North Ceram by Mr. A. R. WALLACE, with Descriptions of New Species. By FRANCIS WALKER, Esq., F.L.S.

[Read Feb. 5, 1863.]

MYSOL.

Fam. BIBIONIDÆ, *Haliday*.

Gen. *PLECIA*, *Heffmanægg*.

1. *Plecia dorsalis*, *Walk.* See Vol. I. p. 5.

Fam. CULICIDÆ, *Haliday*.

Gen. *MEGARHINA*, *Desvoidy*.

2. *Megarhina immisericors*, *Walk.* See Vol. IV. p. 90.

Gen. *CULEX*, *Linna.*

3. *Culex obturbans*, *Walk.* See Vol. IV. p. 91.

Fam. TIPULIDÆ, *Haliday*.

Gen. *LIMNOBIA*, *Meigen*.

Div. Wings with two discal areolets; veins complete, not forked; the usual transverse veinlet between the second and third externo-medial veins.

4. *LIMNOBIA AURORATRA*, n. s. *Fam.* *Atra*, antennis capite duplo longioribus, alis nigris, fascia ochracea bipunctata, gutta subcostali alba.

Female. Deep black, rather stout. Antennæ about twice the length of the head. Abdomen less than twice the length of the thorax. Legs long. Wings black, with a broad bright ochraceous band, which is slightly dilated on the costa and on the hind border; two blackish points on the exterior part of the band, one costal, the other on the hind border; a white subcostal dot near the exterior border of the band. Length of the body 5 lines; of the wings 12 lines.

Div. Wings with a discal areolet; veins complete; cubital vein forked; the usual transverse veinlet between the second and third externo-medial veins.

5. *LIMNOBIA SELECTISSIMA*, n. s. *Mas.* Ochracea, capite nigro, antennis thorace vix brevioribus, abdomine lineis duabus anticis apiceque nigris, pedibus fuscis, femoribus flavescens apice nigris, alis cinereis, venis nigro marginatis, halteribus ochraceis apice nigris.

Male. Ochraceous, slender. Head black. Antennæ black, ochraceous at the base, nearly as long as the thorax. Thorax very short, slightly attenuated in front. Abdomen broader hindward, with a black line along each side from the base to the middle; tip black. Legs brown, slender; femora dull yellowish, with black tips; tibiæ and tarsi minutely setulose. Wings cinereous, with black veins, which have black borders; these are very broad along the costa, and thus the surface appears to be reticulated; halteres ochraceous, with black tips. Length of the body 5 lines; of the wings 9 lines.

Gen. GYMNOPLISTIA, *Westw.*

6. GYMNOPLISTIA MELANCHOLICA, n. s. *Mas et Fem.* Nigra, capite subochraceo, pedibus piceo-nigris, alis cinereis. *Mas.* Abdomine fasciis flavis, alis apud costam nigricantibus nigro bimaculatis. *Fem.* Alis, costa fasciisque tribus nigricantibus.

Male and Female. Black. Head dull ochraceous. Antennæ brownish, pale at the base, very broadly pectinated in the male. Abdomen of the male with yellow bands, except towards the tip. Legs piceous black. Wings cinereous; veins black. *Male.* Wings blackish along the costa and at the tips; two black spots extending from the costa to the disk. *Female.* Wings with the costa, the tips, and three broad bands blackish; 1st and 2nd bands connected. Length of the body 6-7 lines; of the wings 13-14 lines.

Nearly allied to *G. fulviceps* and to *G. jurgiosa*.

Fam. STRATIOMIDÆ, *Haliday.*

Gen. STRATIOMYS, *Geoffr.*

7. STRATIOMYS RESTRICTA, n. s. *Mas.* Nigra, antennis parvis basi flavescens, thorace pectoreque subaurato tomentosis, scutello spinis duabus flavescens, abdomine flavescens maculis quatuor nigris angulatis subconvexis, pedibus flavescens, alis albidis limpidis.

Male. Black. Antennæ yellowish towards the base, shorter than half the breadth of the head. Thorax and pectus with slightly gilded tomentum. Scutellum with two yellowish spines. Abdomen yellowish green (in the living state), with four black, angular, nearly connected spots. Legs yellowish. Wings whitish limpid; veins pale yellow. Length of the body 4 lines; of the wings 6 lines.

Gen. SALDUBA, *Walk.*

8. SALDUBA GRADIENS, n. s. *Fem.* Nigra, obscura, capite nitente, antennis basi rufescentibus, thorace vittis duabus cinereis, abdomine suturis apiceque nitentibus, pedibus rufescentibus, tibiis apice nigris, tarsis albidis apice nigris, alis nigricantibus, halteribus rufescentibus.

Female. Black, dull, most nearly allied to *S. singularis*. Head shining. Antennæ reddish towards the base. Thorax with two indistinct cinereous stripes. Abdomen shining on the sutures and at the tip. Legs reddish; tibiæ with black tips; tarsi whitish, with black tips. Wings blackish; veins black; halteres reddish. *Var.* Smaller; legs darker. Length of the body 3-4 lines; of the wings 5-7 lines.

9. *SALDUBA AREOLARIS*, n. s. *Mas.* Nigra, obscura, thorace vittis quatuor cinereis, pectore abdomineque nitentibus, hoc clavato, pedibus flavis, femoribus tibiisque posticis nigris, alis cinereis nebulosis, halteribus albidis.

Male. Black, dull, most nearly allied to *S. hilaris* and to *S. diphysoides*. Antennæ longer than the breadth of the head. Thorax with four cinereous stripes; the middle pair connected on the scutellum. Pectus and abdomen shining, the latter clavate. Legs yellow; tarsi black towards the tips; hind femora, except at the base and hind tibiæ, black. Wings cinereous, partly clouded with darker cinereous; veins black; halteres whitish. Length of the body $5\frac{1}{2}$ lines; of the wings 9 lines.

Gen. *ADRAGA*, *Walk.*

10. *Adraga univitta*, *Walk.* See Vol. III. p. 82.

Gen. *OBRAPA*, *Walk.*

11. *Obrapa perilampoides*, *Walk.* See Vol. III. p. 82.

Gen. *AULANA*, n. g.

Fam. Clitellariæ affinis. *Corpus* sat latum. *Caput* thorace antico paullo latius. *Antennæ* subsetaceæ, acutæ, thorace vix breviores; articuli suturis indistinctis. *Thorax* antice productus et angustatus; scutellum magnum, longiconicum, subascendens. *Abdomen* breve, latum. *Pedes* inermes, breviusculi. *Alæ* mediocres.

Female. Body moderately broad. Head a little broader than the fore part of the thorax. Antennæ nearly as long as the thorax, slightly tapering from the base to the tips, which are acute; joints compact. Thorax convex, narrower in front; scutellum elongate-conical, very large and prominent, obliquely ascending. Abdomen slightly convex, much broader but not longer than the thorax. Legs unarmed, rather short. Wings with the veins much like those of *Clitellaria* in structure; areolet rhomboidal, with oblique transverse veinlets.

12. *AULANA CONFIRMATA*, n. s. *Fam.* Nigra, vix nitens, cinereo sub-tomentosa, antennis basi fulvis, pedibus pallide flavis, femoribus nigris, tibiis posticis piceis, alis cinereis costa exteriori fusco nebulosa, halteribus niveis.

Female. Black, hardly shining, with slightly cinereous tomentum. Antennæ very much longer than the breadth of the head, tawny towards

the base. Legs pale yellow; femora mostly black; hind tibiæ mostly piceous. Wings cinereous, clouded with brown along the exterior part of the costa; veins black, tawny at the base; halteres pure white. Length of the body 3 lines; of the wings 6 lines.

Gen. *MUSAMA*, n. g.

Fæm. *Corpus* breve, latum. *Caput* thorace non latius. *Antennæ* breves, subfusiformes, valde compactæ; arista longa, filiformis. *Thorax* convexus; scutellum subascendens, bispinosum. *Abdomen* subdepressum, thorace brevius et multo latius. *Pedes* inermes. *Alæ* mediocres.

Female. Body short, broad. Head as broad as the thorax. *Antennæ*, including the arista, rather more than half the breadth of the head; scape short; flagellum subfusiform, with very short and compact joints; arista filiform, much longer than the flagellum. *Thorax* convex; scutellum prominent, slightly ascending, armed with two apical spines. *Abdomen* rather flat, shorter and much broader than the thorax. Legs unarmed. Wings with the veins much like those of *Oxycera* in structure; discal areolet large.

13. *MUSAMA PAUPERA*, n. s. *Fæm.* Nigra, subnitens, antennis fulvis, arista alba, pedibus piceis, tarsis posterioribus albidis apice nigricantibus, alis cinereis, halteribus piceis.

Female. Black, short, broad, slightly shining. *Antennæ* tawny; arista white. Legs piceous; posterior tarsi whitish, with blackish tips. Wings cinereous; veins and halteres piceous. Length of the body 2 lines; of the wings 4 lines.

Gen. *SARGUS*, *Fabr.*

14. *Sargus quadrifasciatus*, *Walk.* See Vol. V. p. 146.

Fam. *TABANIDÆ*, *Leach.*

Gen. *TABANUS*, *Linn.*

15. *TABANUS EXAGENS*, n. s. *Mas.* Piceus, cinereo tomentosus, capite subtus pectoreque canis, antennis nigris cornu parvo acuto, thorace vittis quatuor canis, abdomine maculis trigonis et segmentorum marginibus canis, alis obscure cinereis.

Male. Piceous, with cinereous tomentum. Head beneath and pectus hoary. Eyes composed of very small facets. *Antennæ* black, with a small but acute horn; flagellum acute, curved, rather long. *Thorax* with four slight hoary stripes. *Abdomen* with a triangular hoary spot on each segment, whose hind border is also hoary. Wings dark cinereous; veins black; fore branch of the cubital vein rectangular near the base, where it rejects a short branch. Length of the body 7 lines; of the wings 14 lines.

16. *TABANUS FACILIS*, n. s. *Fem.* Fulvus, capite antico albido, antennis rufis basi piceis articulo 3^o apice nigro cornu parvo, thorace vittis quinque nigria, tarsis piceis, alis cinereis costam versus fuscescentibus, halteribus pallide luteis.

Female. Tawny. Head whitish in front; callus black, very slender. Proboscis black. Antennæ red, piceous at the base; 3rd joint curved, black towards the tip, with a small horn. Thorax with five black stripes, of which the outer pair are very short and slender. Tarsi piceous. Wings cinereous, mostly tinged with brown along the costa; veins black, tawny towards the base; fore branch of the cubital vein forming a rounded angle near the base, very slightly curved from thence to its tip; halteres pale luteous. Length of the body 8 lines; of the wings 16 lines.

17. *TABANUS SYLVIDES*, n. s. *Fem.* Fulvus, capite subtus pectoreque canis, antennis apice nigris cornu brevissimo minimo, abdomine maculis trigonis subobsoletis et segmentorum marginibus canis, ventre tarsisque piceis, alis obscure cinereis, costa venisque fusco nebulosis.

Female. Tawny. Head beneath and pectus hoary. Callus between the eyes piceous, long, slender. Proboscis black. Antennæ slender, black towards the tips; horn of the flagellum extremely small and short. Abdomen elongate-conical, piceous beneath; hind borders of the segments hoary, each with a nearly obsolete triangular hoary dorsal spot. Tarsi piceous. Wings dark cinereous, brown along the costa and along the neighbouring veins; veins black, tawny at the base; fore branch of the cubital vein forming a rounded angle near its base, not forked; halteres piceous. Length of the body 6 lines; of the wings 14 lines.

Fam. ASILIDÆ, *Leach.*

Subfam. LAPHRETES, *Walk.*

Gen. LAPHRIA, *Fabr.*

18. *Laphria requisita*, *Walk.* See Vol. IV. p. 105.

19. *Laphria congrua*, *Walk.* See Vol. V. p. 277.

20. *Laphria consors*, *Walk.* See Vol. III. p. 85.

21. *Laphria flagrantissima*, *Walk.* See Vol. III. p. 86.

22. *Laphria germana*, *Walk.* See Vol. III. p. 86.

23. *Laphria puer*, *Doleschall.* See Vol. V. p. 147.

24. *LAPHRIA DIVULSA*, n. sp. *Fem.* Nigra, obscura, oculis argenteo marginatis, mystace e setis nonnullis albis, antennis flagello sublineari, abdomine punctato guttis lateralibus transversis albidis, tibiis rufis apice nigris, alis nigricantibus basi cinereis, halteribus rufescentibus.

Female. Black, stout, dull. Face silvery along the eyes; mystax with a few white bristles. Antennæ a little shorter than the breadth of the head; flagellum nearly linear. Thorax slightly cinereous; pectus hoary. Abdomen minutely punctured; hind borders of the segments with a transversely elongated whitish dot on each side; underside cinereous. Legs stout, setose; tibiæ red, except towards the tips. Wings blackish, cinereous towards the base; veins black, with the usual structure; halteres reddish. Length of the body 5 lines; of the wings 8 lines.

Subfam. ASILITES, *Walk.*

Gen. TRUPANEA, *Macq.*

25. *TRUPANEA TRANSACTA*, n. sp. *Fem.* Nigra, robusta, capite cano pilis albidis, mystace e setis albidis nigrisque, thoracis vittis quinque scutello pectoreque cinereis, abdomine stylato segmentis cano marginatis, tibiis rufis apice nigris, alis fusciscenti-cinereis vitta subopaca, halteribus rufescentibus.

Female. Black, robust. Head hoary; hind part clothed with whitish hairs, and thickly beset with black bristles; underside thickly clothed with whitish hairs; epistoma very prominent; mystax with black bristles above, and with whitish bristles below. Thorax with five cinereous stripes; scutellum and pectus cinereous. Abdomen much narrower than the thorax; hind borders of the segments with hoary bands, which are most distinct on each side; underside cinereous; apical part stylate, compressed. Legs thick, bristly; tibiæ red, with black tips. Wings brownish cinereous; radial areolet with the usual cinereous somewhat opaque stripe; veins black; halteres reddish. Length of the body 11 lines; of the wings 16 lines.

Gen. ASILUS, *Linna.*

26. *ASILUS DEPULSUS*, n. sp. *Mas.* Fuscus, capite subargenteo, mystace e setis flavescenti-albis, antennis nigra articulo 3° lanceolato, thoracé vittis tribus flavescenti-cinereis, pectore cano, abdomine fulvo apice piceo, pedibus luteis, genibus posterioribus nigris, tarsis nigris basi luteis, alis cinereis apice nigricantibus, halteribus flavis,

Male. Brown. Head silvery whitish, clothed behind and beneath with white hairs; epistoma prominent; mystax composed of many yellowish-white bristles. Proboscis and palpi black. Antennæ black; 3rd joint lanceolate; arista a little longer than the 3rd joint. Thorax with three yellowish-cinereous stripes; sides and pectus hoary. Abdomen with bright tawny tomentum; tip piceous, red beneath; appendages much developed. Legs luteous, thick, with black spines; posterior knees black; tarsi black, luteous at the base; pulvilli luteous. Wings cinereous, blackish towards the tips; veins black; forks of the cubital vein undulating; 1st externo-medial vein slightly curved; 3rd joining

the 4th at some distance from the border; halteres yellow. Length of the body 10 lines; of the wings 16 lines.

27. *ASILUS DIDYMOIDES*, n. s. *Fœm.* Fuscus, *A. tenuicorni* valde affinis, capite argenteo, mystace e setis paucis nigris albisque, palpis luteis, antennis luteis articulo 3^o nigro minimo, thoracis vittis tribus scutello pectoreque canis, abdomine fasciis cinereis apice nigro, pedibus fulvis, alis cinereis apice nigricantibus, halteribus pallide fulvis.

Female. Brown. Head silvery white, slightly clothed beneath with white hairs; epistoma convex; mystax composed of some black and white bristles. Eyes flat in front. Proboscis black, luteous at the base; palpi luteous. Antennæ black; 1st and 2nd joints luteous; 3rd conical, very small, not more than one-fourth of the length of the arista. Thorax with three hoary stripes; sides, scutellum, and pectus hoary. Abdomen nearly flat; hind borders of the segments cinereous; tip black, shining. Legs tawny, with a few black bristles. Wings cinereous, blackish towards the tips; veins black; forks of the cubital vein undulating; 3rd externo-medial vein joining the 4th at a short distance from the border; halteres pale tawny. Length of the body 8 lines; of the wings 16 lines.

Closely allied to the Celebes species *A. tenuicornis*; but the abdomen is broader and more flat, and the posterior femora have not black tips.

Gen. *OMMATIUS*, *Illiger*.

28. *Ommatius noctifer*, *Walk.* See Vol. III. p. 88.
 29. *Ommatius nanus*, *Walk.* See Vol. V. p. 237.
 30. *Ommatius retrahens*, *Walk.* See Vol. III. p. 88.

Gen. *LEPTOGASTER*, *Meigen*.

31. *Leptogaster longipes*, *Walk.* See Vol. III. p. 89.

Fam. *LEPTIDÆ*, *Westw.*

Gen. *LEPTIS*, *Fabr.*

32. *Leptis ferruginosa*, *Wied.* See Vol. I. p. 118.

Gen. *CHRYSOPIELA*, *Macq.*

33. *CHRYSOPIELA STYLATA*, n. s. *Fœm.* Fulva, capite antennis pedibusque nigris, pectore argenteo, abdomine fasciis tribus apiceque stylato nigris, femoribus fulvis, alis subcinereis apices versus nigricantibus, areolis margaritaceo maculatis.

Female. Tawny, nearly allied to *C. vacillans* and to *C. guttipennis*. Head and antennæ black. Pectus silvery. Abdomen with three black bands, black and stylate towards the tip. Legs black; femora and hind coxæ tawny; hind femora with black tips. Wings slightly cine-

reous, irregularly blackish towards the tips, the blackish part extending along the veins to the disk; hinder veins blackish-bordered; a pearly spot in each areolet, but only apparent in some aspects. Length of the body 5 lines; of the wings 8 lines.

Fam. BOMBYLIDÆ, *Leach.*

Subfam. BOMBYLITES, *Walk.*

Gen. ANTHRAX, *Fabr.*

34. *Anthrax Pelops*, *Walk.* See Vol. III. p. 90.

Fam. EMPIDÆ, *Leach.*

Gen. EPICEIA, *Walk.*

35. *Epiceia ferruginea*, *Walk.* See Vol. V. p. 149.

Fam. DOLICHOPIDÆ, *Leach.*

Gen. PSILOPUS, *Meig.*

36. *Psilopus benedictus*, *Walk.* See Vol. III. p. 91.

37. *Psilopus lucigena*, *Walk.* See Vol. III. p. 91.

38. *Psilopus superans*, *Walk.* See Vol. V. p. 150.

39. *PSILOPUS SUBRECTUS*, n. s. *Mas.* *Læte viridis, cyaneo purpureoque varius, palpis antennis pedibus halteribusque flavis, abdomine fasciis nigris, femoribus posticis apice nigris, alis cinereis.*

Male. Bright green, varied with blue and purple. Palpi and legs pale yellow. Antennæ pale yellow; arista black, somewhat shorter than the body. Abdomen bright green, mostly blue or purple towards the base; a black band on the base of each segment. Hind femora with black tips. Wings cinereous; veins black, tawny at the base; fore branch of the prebrachial vein much curved inward; discal transverse vein very slightly curved outward; halteres pale yellow. Length of the body 5 lines; of the wings 9 lines.

40. *PSILOPUS MODERATUS*, n. s. *Fam.* *Viridescenti-cyaneus, capite purpureo, palpis antennis pedibus halteribusque nigris, pectore cano, abdomine viridi, alis cinereis.*

Female. Greenish blue, nearly allied to *P. abruptus*. Head purple. Palpi, antennæ, and legs black. Arista as long as the thorax. Thorax green hindward. Pectus hoary. Abdomen green. Tibiæ bristly. Wings cinereous; veins black; fore branch of the prebrachial vein much curved inward; discal transverse vein very slightly undulating; halteres black. Length of the body $2\frac{1}{2}$ lines; of the wings 5 lines.

Gen. DOLICHOPUS, *Latr.*

41. DOLICHOPUS PULCHRICEPS, n. s. *Fam.* Testaceus, capite supra purpureo, facie argentea, thorace vitta lata purpurea, alis cinereis.

Female. Testaceous, paler beneath, with black bristles. Head purple above; face silvery. Third joint of the antennæ minute, nearly round. Thorax with a broad purple stripe. Posterior tibiæ with two rows of black spines. Wings cinereous; veins black, straight, testaceous at the base; discal transverse vein very slightly curved outward. Length of the body $2\frac{1}{2}$ lines; of the wings $5\frac{1}{2}$ lines.

Gen. DIAPHORUS, *Meigen.*

42. Diaphorus resumens, *Walk.* See Vol. III. p. 93.

Fam. SYRPHIDÆ, *Leach.*Gen. ERISTALIS, *Latr.*

43. Eristalis bomboides, *Walk.* See Vol. IV. p. 119.

44. Eristalis lucilioides, *Walk.* See Vol. V. p. 284.

45. Eristalis inscripta, *Doleschall.* See Vol. V. p. 151.

Var. β. Male. Black. Vertex blue; a broad silvery stripe on each side of the face. Antennæ reddish. Thorax with two oblique blue streaks on each side, and with two double blue stripes; scutellum bluish purple. Abdomen bluish purple at the base, with an anterior interrupted band which is dilated on each side; apical part gold-colour, with six elongated black spots, of which the two lateral pairs are oblique.

Var. γ. Male. Thorax with purple stripes and streaks; hind part and scutellum tawny. Abdomen chalybeous hindward; spots brown.

46. ERISTALIS ŒQUIPARS, n. s. *Mas.* Nigra, capite vittis duabus latis albido-cinereis, antennis rufescentibus, thorace vittis duabus cinereis fascia interrupta apiceque chalybeo-viridibus, abdomine sub-æneo-testaceo maculis septem elongatis fulvis disco basali nigro, pedibus nigris, alis cinereis, halteribus pallide testaceis.

Male. Black. Head with a broad, whitish-cinereous stripe on each side of the face. Antennæ reddish; arista bare. Thorax with two indistinct cinereous stripes, and with an interrupted chalybeous-green band; hind part and pectus chalybeous green. Abdomen testaceous, with a slight æneous tinge; base black, except on each side; seven elongated tawny spots, three dorsal and two on each side. Legs black. Wings cinereous; veins black; halteres pale testaceous. Length of the body 6 lines; of the wings 12 lines.

This may be a variety of *E. inscripta*.

47. ERISTALIS POSTSCRIPTA, n. s. *Mas.* Nigra, capite vittis duabus albido-cinereis, antennis rufescentibus, thorace chalybeo-viridi vittis

tribus anticis fasciæque nigris, abdomine fasciis duabus apiceque chalybeo-viridibus, fascia 2^a interrupta, vittis tribus posticis nigris, tarsis basi genibusque rufis, alis cinereis.

Male. Black. Head whitish-cinereous beneath, and with a whitish-cinereous stripe on each side of the face. Antennæ reddish; arista bare. Thorax chalybeous green, with three short black stripes in front, and with a black band at the base of the scutellum. Abdomen with two bands and the hind part chalybeous green; 1st band basal; 2nd widely interrupted; three black stripes on the hind part. Tarsi towards the base, and knees, dark red. Wings cinereous; veins black; stigma brown. Length of the body 4 lines; of the wings 9 lines.

48. *ERISTALIS ERYTHROPYGA*, n. s. *Mas.* Obscure cyanea, facie albida, callo antico rufescente, antennis fulvis, thorace postico purpureo, abdomine rufescente basi nigro fasciis duabus cyaneo-purpureis, tibiis obscure rufis, tarsis piceis, alis cinereis, halteribus fulvis.

Male. Dark blue. Face with whitish tomentum, except along the calus, which is reddish in front. Antennæ tawny; arista bare. Thorax purple hindward. Abdomen reddish; basal part black, with two bluish-purple bands; second band interrupted in the middle, notched hindward on each side. Tibiæ dark red. Tarsi piceous. Wings cinereous; veins black; halteres tawny. Length of the body 4½ lines; of the wings 10 lines.

49. *ERISTALIS PLACENS*, n. sp. *Fem.* Nigra, capite cinereo antice testaceo, antennis fulvis, thorace vittis quinque canis, scutello lateribusque fulvis, pectore strigis duabus obliquis testaceis, abdomine fasciis duabus maculisque quatuor obliquis punctisque duobus testaceis, segmentis chalybeo marginatis, pedibus halteribusque testaceis, femoribus nigro fasciatis, alis limpidis, costa nigro bipunctata.

Female. Black. Head cinereous; fore part testaceous, with paler tomentum. Antennæ tawny; arista bare. Thorax with five hoary stripes. Sides and scutellum tawny. Pectus hoary in front, with an oblique testaceous streak on each side. Abdomen with two testaceous bands near the base; 2nd band slightly interrupted, dilated on each side; hind borders and sides of the segments chalybeous; 3rd and 4th segments with an oblique testaceous spot on each side; 5th with two testaceous points. Legs testaceous; femora with black bands, which are broadest in the hind femora. Wings limpid; veins black, tawny towards the base; costa with two black points; halteres testaceous. Length of the body 6 lines; of the wings 10 lines.

Gen. *AXONA*, n. g.

Mas. Corpus subfusiforme. Caput breviconicum. Oculi maximi. Antennæ brevissimæ; articulus 3^{us} rotundus; arista nuda. Abdo-

men thorace paullo angustius. *Pedes* sat graciles. *Alæ* acutæ, vena cubitali valde flexa, vena anali subundulata.

Male. Body subfusiform. Head prominent, short conical, very little narrower than the thorax; front and epistoma convex. Eyes very large. Ocelli nearly contiguous, seated on a slight protuberance of the hind border. Antennæ very short; 3rd joint round; arista bare. Abdomen a little longer than the thorax. Legs rather slender. Wings acute; cubital vein very deeply bent; veinlet at the base of the subapical areolet curved outward; anal vein slightly undulating.

50. *AXONA VOLUCELLOIDES*, n. sp. *Mas.* Purpurascenti-cyanea, facie vittis duabus argenteis, antennis nigris, thorace disco antico nigro vittis duabus argenteis, abdomine apicem versus fulvo, tibiis basi tarsisque piceis, alis cinereis, vitta lata costali fusca, halteribus pallide testaceis.

Male. Purplish blue. Face with two lateral silvery stripes which are dilated towards the epistoma. Antennæ black. Thorax with the middle fore part black, silvery along the fore border, and with two silvery stripes. Abdomen tawny towards the tip and on each side of the 3rd segment; underside tawny along each side. Tibiæ towards the base, and tarsi, piceous. Wings cinereous, with a broad brown costal stripe, which does not extend to the tips, and is interlined hindward; veins black; halteres pale testaceous. Length of the body 10 lines; of the wings 20 lines.

Gen. SYRPHUS, *Fabr.*

51. *Syrphus ægrotus*, *Fabr.* See Vol. I. p. 124.

52. *Syrphus ericetorum*, *Fabr.* See Vol. III. p. 97.

Gen. BACCHA, *Fabr.*

53. *Baccha tripartita*, *Walk.* See Vol. V. p. 285.

54. *Baccha purpuricola*, *Walk.* See Vol. III. p. 129.

Mas? Fulva, capite antico pallide flavo-subchalybeo, antennis testaceis, thoracis disco obscuro, pectore strigis duabus transversis pallide flavis, abdomine fasciis tribus fusciscentibus apicem versus purpurascente, femoribus posticis fusciscentibus fasciatis, alis obscure fuscis basi cinereis.

Male? Tawny. Head in front pale yellow with a slight chalybeous tinge. Antennæ testaceous. Thorax with a black disk; pectus with a transverse pale yellow streak on each side in front. Abdomen with three brownish bands on the fore part, which is petiolated; apical part broad, purplish. Femora yellowish, hind femora with a brownish band. Wings dark brown, cinereous at the base. Length of the body 6 lines; of the wings 14 lines.

Fam. MUSCIDÆ, *Latr.*Subfam. TACHINIDÆ, *Walk.*Gen. MASICERA, *Macq.*

55. *MASICERA MYSOLANA*, n. s. *Fam.* Nigra, capite argenteo, frontalibus atris, oculis pubescentibus, thorace cinereo vittis quatuor nigris, abdomine longe ovato albido vix tessellato apicem versus nigro nitente, alis cinereis.

Female. Black, thickly beset with black bristles. Head silvery; frontalia deep black, linear; facialia without bristles; epistoma not prominent. Eyes pubescent. Antennæ extending to the epistoma; 3rd joint linear, about six times the length of the 2nd; arista slender, very much longer than the 3rd joint. Thorax and pectus with cinereous tomentum; the former with four indistinct black stripes. Abdomen elongate-oval, a little longer than the thorax, with glistening whitish tomentum, hardly tessellated; apical part black, shining. Wings cinereous; veins black; præbrachial vein forming a rounded, hardly oblique angle at its flexure; discal transverse vein slightly undulating, parted by much less than its length from the border and from the flexure of the præbrachial vein. Length of the body 5 lines; of the wings 10 lines.

Gen. EURYGASTER, *Macq.*

56. *EURYGASTER INTERDICTA*, n. s. *Fam.* Nigra, lata, brevis, capite cinereo subtus albido, frontalibus atris, thorace antico cinereo vittis quatuor nigris, scutello albido, abdominis segmentis 3^o 4^oque rufescentibus, alis obscure cinereis basi nigricantibus, alulis albis.

Female. Black, broad, short, thickly beset with bristles. Head cinereous, whitish beneath; frontalia deep black, linear; facialia without bristles, except towards the epistoma, which is not prominent. Eyes bare. Antennæ little more than half the length of the face; 3rd joint hardly thrice the length of the 2nd; arista long, slender. Thorax in front cinereous, with four slender black stripes; scutellum whitish. Abdomen not longer than the thorax; 3rd and 4th segments reddish, with whitish tomentum; 2nd segment slightly reddish on each side. Wings dark cinereous, blackish towards the base; veins black; præbrachial vein forming a well-defined obtuse angle at its flexure; discal transverse vein slightly undulating, parted by much less than its length from the border and from the flexure of the præbrachial vein; alulæ large, white. Length of the body 4 lines; of the wings 8 lines.

Gen. TRICHOPROSOPA, *Macq.*

57. *TRICHOPROSOPA*? *DIVISA*, n. sp. *Mas.* Nigra, gracilis, capite albido, vertice subaurato setis duabus longis, frontalibus atris, thorace vittis tribus cinereis subauratis, pectore strigis duabus obliquis subau-

ratis, abdomine longo subcylindrico maculis duabus anticis lividis, pedibus longis, tibiis posticis pallide piceis, alis angustis obscure cinereis apices versus nigricantibus.

Male. Black, slender, with black bristles. Head whitish, slightly gilded, with two long bristles on the hind border of the vertex; frontalia deep black, linear; facialia without bristles; epistoma slightly prominent. Eyes bare. Antennæ reaching the epistoma; 3rd joint linear, rounded at the tip, twice the length of the 2nd; arista slender, much longer than the 3rd joint. Thorax with three approximate cinereous slightly gilded stripes, of which the middle one is much broader than the others; pectus with an oblique slightly gilded streak on each side. Abdomen much longer than the thorax, nearly cylindrical, slightly thicker hindward, with a large livid spot on each side near the base; fore borders of the 2nd and 3rd segments and tip cinereous. Legs long; hind tibiæ pale piceous. Wings narrow, dark cinereous, blackish for nearly half the length from the tips; veins black; præbrachial vein forming an obtuse angle, and emitting a very short branch at its flexure, slightly undulating thence to its tip, which joins the cubital vein near the tip of the latter; discal transverse vein slightly undulating, parted by less than half its length from the border, and by more than half its length from the flexure of the præbrachial vein; alulæ pale cinereous. Length of the body 8 lines; of the wings 14 lines.

Subfam. DEXIDES, *Walk.*

Gen. DEXIA, *Meigen.*

58. *Dexia alulifera*, *Walk.* See Vol. V. p. 157.

Gen. PROSENA, *St. Farg.*

59. *Prosenia argentata*, *Walk.* See Vol. III. p. 102.

Subfam. SARCOPHAGIDES, *Walk.*

Gen. SARCOPHAGA, *Meigen.*

60. *SARCOPHAGA INNOTATA*, n. s. *Fam.* Nigra, capite albedo, frontilibus atris, thorace vittis duabus lateribus pectoreque cinereis, abdomine cano subtessellato, alis cinereis, alulis albis.

Female. Black. Head whitish; frontalia deep black, linear. Thorax with two cinereous stripes; sides and pectus also cinereous. Abdomen slightly tessellated with hoary, shining, notched patches. Wings cinereous; veins black; præbrachial vein forming a sharply formed right angle at its flexure, nearly straight thence to its tip; discal transverse vein very slightly undulating, parted by more than half its length from the border and from the flexure of the præbrachial vein; alulæ white. Length of the body 6 lines; of the wings 10 lines.

Subfam. MUSCIDES, *Walk.*

Gen. SILBOMYIA, *Macq.*

61. *Silbomyia costalis*, *Walk.* See Vol. V. p. 159.

62. *SILBOMYIA DECRESCENS*, n. s. *Mas.* Aurato-viridis, capite flavescenti-albo, vertice viridi, frontalibus atris, palpis antennisque nigris, pectore maculis duabus argenteis, abdomine basi suturisque cyaneo-purpureis, alis cinereis costam versus nigris.

Male. Golden green, nearly allied to *S. opulenta*. Head yellowish white; vertex green; frontalia deep black, linear, with bristles along each side; face very deeply grooved on each side. Proboscis, palpi, and antennæ black, the latter nearly reaching the epistoma. Pectus with a silvery-white spot on each side. Abdomen bluish purple at the base and along the sutures. Tibiæ and tarsi black. Wings cinereous, black along the costa; the blackish part extending diffusely along the veins; veins black; præbrachial vein forming a slightly rounded and obtuse angle at its flexure, slightly curved inward thence to its tip; discal transverse vein very slightly undulating, parted by a little more than half its length from the border and from the flexure of the præbrachial vein. Length of the body 5 lines; of the wings 10 lines.

Gen. CHRYSOMYIA, *Desv.*

63. *CHRYSOMYIA DIVITIOSA*, n. s. *Fem.* Purpurea, crassa, capite argenteo antice aurato, frontalibus atris, palpis piceis, antennis nigris, thorace antico cano vittis duabus albis, pectore maculis quatuor albis, abdomine fascia subapicali interrupta argentea, alis obscure cinereis basi nigris, halteribus piceis.

Female. Purple, broad, thick, with black bristles. Head silvery, brightly gilded in front; frontalia deep black, linear; epistoma prominent. Proboscis and antennæ black. Palpi piceous. Thorax hoary in front, with a white stripe on each side of the fore part. Pectus with two bright white spots on each side. Abdomen with a silvery interrupted subapical band. Tibiæ and tarsi black. Wings dark cinereous, black towards the base; veins black; præbrachial vein forming a hardly obtuse angle at its flexure, very slightly curved inward thence to its tip; discal transverse vein slightly undulating, parted by half its length from the border, and by more than half its length from the flexure of the præbrachial vein; alulæ cinereous; halteres piceous. Length of the body 7 lines; of the wings 14 lines.

Gen. PYRELLIA, *Desv.*

64. *PYRELLIA PORPHYRICOLA*, n. s. *Mas.* Purpurea, palpis, antennis pedibusque nigris, thoracis tomento cinereo, alis cinereis, alulis nigricanti-cinereis, halteribus nigris.

Male. Purple, closely allied to *P. obtrusa*. Head, proboscis, palpi,

and antennæ black. Thorax with slight cinereous tomentum in front. Legs black. Wings cinereous; veins black; præbrachial vein forming a much-rounded and very obtuse angle at its flexure, almost straight thence to the tip; discal transverse vein hardly undulating, parted by full half its length from the border, and by a little less than its length from the flexure of the præbrachial vein; alulæ blackish cinereous; halteres black. Length of the body 4 lines; of the wings 7 lines.

Gen. *MUSCA*, *Linn.*

65. *MUSCA SORDIDISSIMA*, n. s. *Mas.* Nigra, cinereo subtomentosa, alis nigricantibus, alulis sordide cinereis.

Male. Black; slightly covered with cinereous tomentum. Wings blackish; veins black; præbrachial vein forming a very obtuse angle at its flexure, very slightly curved inward thence to the tip; discal transverse vein nearly straight, parted by full half its length from the border, and by about its length from the flexure of the præbrachial vein; alulæ dingy cinereous. Length of the body 4 lines; of the wings 7 lines.

66. *MUSCA ARICIOIDES*, n. s. *Mas.* Rufescenti-fulva, capite antice cano, palpis nigris, antennis testaceis, thoracis disco piceo, abdomine cano-subtessellato fasciis duabus piceis, pedibus nigris, alis obscure cinereis.

Male. Reddish tawny. Head hoary in front. Eyes bare. Proboscis and palpi black. Antennæ testaceous; 3rd joint about four times the length of the 2nd. Thorax piceous on the disk. Rectus with a hoary band. Abdomen paler towards the tip, with two piceous bands, slightly tessellated with hoary reflexions. Legs black; femora at the base and coxæ reddish tawny. Wings dark cinereous; veins black, tawny towards the base; flexure of the præbrachial vein forming a curve which is very near the border; discal transverse vein slightly undulating, parted by more than half its length from the border; and by more than its length from the flexure of the præbrachial vein; alulæ whitish cinereous. Length of the body 4 lines; of the wings 7 lines.

This species seems to connect the Muscides with the Anthomyides.

Gen. *OCHROMYIA*, *Macq.*

67. *Ochromyia promittens*, *Walk.* See Vol. IV. p. 134.

Gen. *GRAPTOMYZA*, *Desc.*

68. *Graptomyza calliphoroides*, *Walk.* See Vol. V. p. 245.

Subfam. *ANTHOMYIDES*, *Walk.*

Gen. *ARICIA*, *Macq.*

69. *ARICIA ALBICORNIS*, n. s. *Mas et Fæm.* Ochraceo-fulva, capite

antico argenteo, frontalibus fœminæ atris, palpis nigris, antennis albis basi fulvis, thoracis disco abdominisque fasciis duabus nigris, tibiis tarsisque nigris, alis obscure cinereis.

Male and Female. Ochraceous tawny. Head silvery in front; frontalia of the female deep black. Proboscis and palpi black. Antennæ white, tawny at the base. Disk of the thorax black. Abdomen with two black bands on the hind borders of the second and third segments. Tibiæ and tarsi black. Wings dark cinereous; veins black, tawny at the base; præbrachial vein slightly curved towards the tip; discal transverse vein slightly undulating, parted by much more than half its length from the border, and by much more than its length from the præbrachial transverse vein. Length of the body $4\frac{1}{2}$ lines; of the wings 10 lines.

This species also inhabits New Guinea; and *Spilogaster xanthoceras* is mentioned erroneously as a native of that country, in Vol. V. p. 246.

70. *Aricia significans*, Walk. See Vol. III. p. 107.

71. *Aricia contraria*, Walk. See Vol. IV. p. 140.

72. *ARICIA LEUCOCEROS*, n. s. *Fœm.* Fulva, capite antico albo, antennis albido-flavis basi fulvis, thoracis disco piceo vitta fulva, abdomine fasciis tribus piceis, 3_a interrupta, tibiis tarsisque piceis, alis cinereis costam versus fulvescentibus.

Male. Tawny, with black bristles. Head white in front. Proboscis and palpi black. Antennæ whitish yellow, tawny at the base. Disk of the thorax piceous, with a tawny stripe. Abdomen rather paler than the thorax, with three piceous bands; 1st band convex on the fore border; 2nd angular in the middle of the fore border; 3rd widely interrupted. Legs rather long; tibiæ and tarsi piceous. Wings cinereous, with a tawny tinge in front; veins black, tawny towards the base; cubital and præbrachial veins slightly approaching each other towards the border; discal transverse vein slightly undulating, parted by less than its length from the border, and by a little more than its length from the præbrachial transverse vein. Length of the body 5 lines; of the wings 10 lines.

73. *ARICIA BIPLAGA*, n. s. *Fœm.* Testacea, capite nigro albo tomentoso, antennis albido-flavis, thoracis disco nigricante fasciis tribus canis, abdomine nigro apicem versus cano-tessellato, alis fusciscenti-cinereis, alulis albidis.

Female. Testaceous, with black bristles. Head black, with white tomentum. Proboscis and palpi piceous. Antennæ whitish yellow. Disk of the thorax blackish, with three hoary stripes. Abdomen black, and lightly tessellated with hoary reflexions towards the tip. Tibiæ darker than the femora; tarsi piceous. Wings brownish cinereous; veins black, tawny towards the base; cubital vein very slightly curved towards the tip; discal transverse vein hardly undulating, parted by

more than half its length from the border, and by more than its length from the præbrachial transverse vein; alulæ whitish. Length of the body 4 lines; of the wings 8 lines.

74. *ARICIA PROLIXA*, n. s. *Fæm.* Fulva, capite nigro, oculis albidis cinctis, antennis albidis flavis, thorace vitta lata nigra, abdomine fasciis duabus guttisque duabus posticis nigris, tibiis tarsisque piceis, alis cinereis.

Female. Tawny, with black bristles. Head black, with whitish tomentum in front and along the eyes. Proboscis and palpi black. Antennæ whitish yellow. Thorax with a broad black stripe which extends to the base of the scutellum. Abdomen with two black bands, and with a black dot on each side near the tip. Tibiæ and tarsi piceous. Wings cinereous; veins black, tawny towards the base; cubital and præbrachial veins very slightly converging towards the tip; discal transverse vein slightly bent inward, parted by much more than half its length from the border, and by hardly more than its length from the præbrachial transverse vein; alulæ whitish cinereous. Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.

Gen. *CÆNOSIA*, *Meigen*.

75. *CÆNOSIA LITURATA*, n. s. *Fæm.* Glauco-cana, capite antico testaceo, oculis albidis cinctis, antennis testaceis, abdomine vittis quatuor e maculis nigris, pedibus halteribusque testaceis, alis cinereis.

Female. Glaucoous hoary, with black bristles. Head testaceous in front, whitish along the eyes. Palpi and antennæ testaceous, the latter extending to the epistoma; arista plumose. Abdomen with four rows of elongated black spots. Legs testaceous; tarsi piceous. Wings cinereous; veins black, testaceous towards the base; discal transverse vein straight, parted by its length from the border, and by almost twice its length from the præbrachial transverse vein; alulæ white; halteres testaceous. Length of the body 3 lines; of the wings 5 lines.

Subfam. *BORBORIDES*, *Halliday*.

Gen. *COTAMBA*, *Walk*.

76. *Cotamba fumifera*, *Walk*. See Vol. V. p. 247.

Subfam. *HELOMYZIDES*, *Fallén*.

Gen. *HELOMYZA*, *Fallén*.

77. *Helomyza atripennis*, *Walk*. See Vol. III. p. 109.
 78. *Helomyza observana*, *Walk*. See Vol. IV. p. 143.
 79. *HELOMYZA MERITORIA*, n. s. *Fæm.* Testacea, thorace vittis duabus

pallidioribus, abdomine lanceolato vittis duabus fuscis, alis nigricantibus, maculis tribus marginalibus unaque costali punctoque discali limpidis, spatio basali limpido striga nigricante.

Female. Testaceous, with black bristles. Head paler in front and about the eyes. Antennæ about half the length of the face. Arista thinly and minutely pectinated. Thorax with two paler stripes. Abdomen lanceolate, longer and much narrower than the thorax, with a brown stripe along each side. Tarsi, except towards the base, and hind knees brownish. Wings blackish; basal part limpid, with the exception of a blackish streak; a limpid angular spot on the middle of the costa; three limpid, partly connected spots on the interior border; a limpid point in front of the discal transverse vein; veins black, testaceous at the base; discal transverse vein nearly straight, parted by less than half its length from the border, and by more than its length from the præbrachial transverse vein. Length of the body 6 lines; of the wings 10 lines.

80. *HELOMYZA FISSIFERA*, n. s. *Fæm.* Testacea, arista plumosa, abdomine e guttis nigris bilineato, alis cinereis, venis nigricante nebulosis.

Female. Testaceous, with black bristles. Antennæ not reaching the epistoma; arista plumose. Abdomen with two rows of black dots. Legs paler than the body. Wings cinereous; veins black, testaceous towards the base; longitudinal veins, towards the tips, and transverse veins blackish-clouded; discal transverse vein straight, parted by half its length from the border, and by much more than its length from the præbrachial transverse vein. Length of the body $2\frac{1}{2}$ lines; of the wings 6 lines.

Allied to *H. restituta*.

Gen. *SCIOMYZA*, *Fallén*.

81. *Sciomyza leucomelana*, *Walk.* See Vol. IV. p. 144.

Subfam. *LAUXANIDES*, *Walk.*

Gen. *LONCHEA*, *Fallén*.

82. *Lonchea inops*, *Walk.* See Vol. III. p. 110.

Subfam. *ORTALIDES*, *Haliday*.

Gen. *ORTALIS*, *Fallén*.

83. *ORTALIS LEUCOMERA*, n. s. *Fæm.* Obscure viridis, capite rufescente punctis duobus nigris, antennis testaceis, abdomine pedibusque nigris, tarsis albis, alis albis nigro quadrifasciatis, fascia 1^a abbreviata, 2^a furcata, 4^a interrupta, halteribus albis.

Female. Dark-green, shining, with black bristles. Head reddish, black towards the peristoma, and with a black point on each side of the

vertex. Antennæ testaceous, short; arista minutely plumulose. Abdomen and legs black; tarsi white. Wings white, with four blackish bands; 1st band abbreviated hindward; 2nd forked near the costa; 4th apical, obliquely divided in the middle; veins black; discal transverse vein straight, parted by less than its length from the border, and by much more than its length from the præbrachial transverse vein; halteres white. Length of the body 3 lines; of the wings 6 lines.

Gen. STRUMETA, *Walk.*

84. STRUMETA HELOMYZOIDES, n. s. *Mas et Fæm.* Testacea, thorace pectoreque nigro quadrivittatis, abdomine ovato (*mas*) aut lanceolato (*fæm.*) apicem versus nigricante, alis nigricantibus postice cinereis.

Male and Female. Testaceous, with long black bristles. Antennæ much less than half the length of the face; arista plumose. Thorax with four black stripes; inner stripes extending along the sides of the scutellum; outer stripes extending to the fore wings. Pectus with two black stripes on each side. Abdomen blackish towards the tip, oval in the male, lanceolate in the female. Wings blackish, hind part cinereous for more than half the breadth, and for two-thirds of the length from the base; veins black; discal transverse vein nearly straight, parted by half its length from the border, and by much more than its length from the præbrachial transverse vein. Length of the body 5-6 lines; of the wings 10-11 lines.

Gen. LAMPROGASTER, *Macq.*

85. Lamprogaster marginifera, *Walk.* See Vol. III. p. 111.

86. Lamprogaster scutellaris, *Walk.* See Vol. III. p. 112.

87. LAMPROGASTER SEPSOIDES, n. s. *Fæm.* Cyaneo-purpurea, capite antico rufescente, oculis albo cinctis, antennis rufescentibus, thorace vittis duabus anticis cinereis, scutello abdomineque purpureis, pedibus piceis, tarsis argenteis apice nigris, alis subcinereis nigro quadrivittatis, striga 1^a basali, 2^a 3^aque transversis, 4^a costali subapicali.

Female. Bluish purple, with black bristles. Head reddish, black above, white about the eyes. Antennæ reddish; arista bare. Thorax with an indistinct cinereous stripe on each side in front; scutellum and abdomen purple, the latter dull ferruginous beneath. Legs piceous; tarsi silvery, black towards the tips. Wings slightly cinereous, with an irregular black basal streak, with a black streak along the apical part of the costa, and with two intermediate transverse black streaks, of which the first is abbreviated hindward, and the second is interrupted between the cubital vein and the præbrachial vein and extends along the discal transverse vein; veins tawny, black towards the tips; halteres tawny, with black knobs. Length of the body 5 lines; of the wings 10 lines.

Gen. DACUS, *Fabr.*

88. *Dacus pubiseta*, *Walk.* See Vol. V. p. 294.

Var. Paler, probably immature; markings of the wings less distinct.

89. *Dacus lituratus*, *Walk.* See Vol. V. p. 251.

Gen. POLYARA, *Walk.*

90. *Polyara insolita*, *Walk.* See Vol. III. p. 123.

Female. Abdomen lanceolate, about thrice the length of the thorax; two-thirds of the length forming a style, which is concave except towards the tip. Length of the body 8 lines.

Subfam. SEPSIDES, *Walk.*

Gen. CALOBATA, *Fabr.*

91. *Calobata diffundens*, *Walk.* See Vol. VI. p. 17.

92. *CALOBATA CONTINGENS*, n. s. *Mas.* Cinereo-nigra, capite argenteo, oculis albo cinctis, abdomine fasciis tribus subargenteo-cinereis, femoribus posterioribus flavescens bifasciatis, femoribus posticis basi flavescens, tarsis anticis albis, alis cinereis nigricante trifasciatis.

Male. Cinereous black. Head silvery, white about the eyes. Pectus with a slight silvery tinge. Abdomen with three cinereous bands, which have a slight silvery tinge. Legs black; posterior femora with two yellowish bands, one subapical, the other apical; hind femora yellowish at the base; fore tarsi white, except at the base. Wings cinereous, with three broad blackish bands, of which the 3rd is apical; veins black; cubital and præbrachial veins connected near the tips. Length of the body 6 lines; of the wings 10 lines.

Closely allied to *C. albitarsis*.

93. *CALOBATA IMMISCENS*, n. s. *Mas.* Nigra, antennis rufis, thoracis disco subcinereo, ventre ferrugineo, pedibus fulvis, tarsis posterioribus, femoribus anticis, apice tibiisque anticis nigris, femoribus posterioribus subfasciatis, tarsis anticis albis basi nigris, alis cinereis fusciscentibus obsolete bifasciatis.

Male. Black. Antennæ red. Disk of the thorax slightly cinereous. Abdomen ferruginous beneath. Legs tawny; posterior femora with almost obsolete darker bands; posterior tarsi, fore femora towards the tips, and fore tibiæ black; fore tarsi white, black at the base. Wings cinereous, with two very indistinct brownish bands, of which the 2nd is apical; veins black; cubital and præbrachial veins nearly united at the tips. Length of the body $6\frac{1}{2}$ lines; of the wings 10 lines.

Gen. CARDIACEPHALA, *Macq.*

94. *Cardiacephala debilis*, *Walk.* See Vol. III. p. 124.

Subfam. PSILIDES, *Walk.*Gen. MICROPEZA, *Macq.*

95. *Micropeza fragilis*, *Walk.* See Vol. I. p. 37.

Gen. ANGITULA, *Walk.*

96. *Angitula longicollis*, *Walk.* See Vol. III. p. 123. *Elaphomyia polita*, *Saund. Trans. Ent. Soc., New Series*, v. 416, pl. 12. f. 6, pl. 13. f. 1.

Gen. ELAPHOMYIA, *Saunders.*

97. *Elaphomyia cervicornis*, *Saund. Trans. Ent. Soc. New Series*, v. 414, pl. 12. f. 4, 5.

Subfam. HYDROMYZIDES, *Holiday.*Gen. NOTIPHILA, *Fallén.*

98. *NOTIPHILA ORTALIDOIDES*, n. s. *Fam.* Atræ, obscura, capite antico argenteo, thorace postico et abdomine cinereo tomentosus, tarsis piceis basi albidis, alis nigris, fasciis duabus interruptis punctisque tribus discalibus albis, halteribus pallidis.

Female. Deep black, dull. Head silvery in front. Antennæ nearly reaching the epistoma; 3rd joint linear, rounded at the tip; arista plumose. Thorax hindward and abdomen with slight cinereous tomentum. Tarsi piceous, whitish towards the base. Wings black, with two white interrupted bands, and with three white points on the disk nearer the base; veins black; discal transverse vein straight, parted by less than its length from the border, and by more than its length from the præbrachial transverse vein; halteres pale. Length of the body $2\frac{1}{4}$ lines; of the wings 5 lines.

99. *NOTIPHILA UNICOLOR*, n. s. Ferruginea, antennis fulvis arista plumosa, abdomine piceo segmentis cinereo marginatis, pedibus fulvis, alis fuscescenti-cinereis, halteribus albidis.

Ferruginous. Antennæ tawny, very short; 3rd joint conical; arista plumose. Abdomen piceous; hind borders of the segments cinereous. Legs tawny. Wings brownish cinereous; veins black; discal transverse vein straight, parted by much more than its length from the border, and by much more than twice its length from the præbrachial transverse vein; halteres whitish. Length of the body $1\frac{1}{2}$ line; of the wings $3\frac{1}{2}$ lines.

Fam. HIPPOBOSCIDÆ, *Leach.*Gen. ORNITHOMYIA, *Leach.*

100. *Ornithomyia Batchianica*, *Walk.* See Vol. V. p. 300.

WAIGIOU.

Fam. MYCETOPHILIDÆ, *Haliday*.Gen. LEIA, *Meigen*.

1. *LEIA INDIVISA*, n. s. *Fam.* Ochracea, antennis nigris basi ochraceis, abdomine clavato depresso, tibiis tarsisque subsetulosis, alis cinereis plagis tribus obscurioribus, venulis duabus subcostalibus nigro nebulosis.

Female. Ochraceous. Antennæ black, except at the base. Ocelli nearly contiguous, in a line with the hind border of the eyes. Abdomen depressed, increasing in breadth from the base to the tip. Legs rather long and slender; tibiæ and tarsi minutely setulose, a little darker than the femora and coxæ. Wings cinereous, with two elongated darker cinereous spots along the hind border, the second also apical; costa with a darker cinereous apical streak; veins black, ochraceous at the base; two oblique subcostal veinlets clouded with black. Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.

This species, in the structure of the wing-veins, differs somewhat from all the European groups of the genus.

Fam. STRATIOMIDÆ, *Haliday*.Gen. NERUA, *Walk*.

2. *Nerua scenopinoides*, *Walk*. See Vol. III. p. 81.

Fam. ASILIDÆ, *Leach*.Subfam. LAPHRITES, *Walk*.Gen. LAPHRIA, *Fabr*.

3. *Laphria complens*, *Walk*. See Vol. IV. p. 106.
 4. *Laphria manifesta*, *Walk*. See Vol. III. p. 87.
 5. *Laphria aperta*, *Walk*. See Vol. III. p. 87.
 6. *Laphria puer*, *Doleschall*. See Vol. V. p. 147.
 7. *LAPHRIA AURIBASIS*, n. s. *Fam.* Cupreo-nigra, capite pilis aureis vestito, mystace e setis nigris, antennarum articulo 3^o lineari, abdomine basi subtusque aurato pilis apicalibus nigris, pedibus aurato pilosis, femoribus incrassatis, alis nigricantibus basi cinereis, halteribus flavo-albis.

Female. Cupreous black, stout. Head with brightly gilded hairs in front, thickly clothed beneath with less gilded hairs; mystax composed of several black bristles. Proboscis, palpi, and antennæ black; 3rd joint of the antennæ linear, elongate-conical towards the tip. Pectus with gilded tomentum. Abdomen brightly gilded beneath and at the base above; tip black, shining, with black hairs. Legs robust, thickly covered with long gilded hairs; femora much incrassated; tarsi with

black bristles. Wings blackish, cinereous towards the base; veins black; halteres yellowish white. Length of the body 10 lines; of the wings 18 lines.

Subfam. ASILITES, *Walk.*

Gen. ASILUS, *Linn.*

8. *ASILUS BILIGATUS*, n. s. *Mas.* Cervinus, capite antico albido, mystace e setis albis, antennis nigris, thorace vittis quatuor fuscis, abdomine fusco segmentis cinereo marginatis apice nigro, pedibus luteis, alis cinereis apice nigricantibus, halteribus flavescentibus.

Male. Fawn-colour, with a few black bristles. Head whitish in front; epistoma not prominent; mystax composed of several white bristles. Proboscis, palpi, and antennæ black; 3rd joint of the antennæ lanceolate; arista a little longer than the 3rd joint. Thorax with four brown stripes, the lateral pair interrupted. Pectus hoary. Abdomen brown; hind borders of the segments cinereous; tip black, shining. Legs luteous, robust, with a few black bristles; tarsi piceous towards the tips. Wings cinereous, blackish towards the tips; veins black; halteres yellowish. Length of the body 10 lines; of the wings 18 lines.

Gen. OMMATIUS, *Illiger.*

9. *Ommatius lucifer*, *Walk.* See Vol. III. p. 88.

10. *OMMATIUS INVEHENS*, n. s. *Fam.* Niger, sat robustus, facie albida, mystace e setis albis, thoracis suturis lateribus pectoreque canis, abdomine clavato segmentis cinereo marginatis apice fulvo, tarsis posticis basi tibiisque fulvis, alis nigricanti-cinereis, halteribus pallide flavis.

Female. Black, rather stout. Face whitish; mystax composed of white bristles. Third joint of the antennæ conical, very small. Shoulders, sutures and sides of the thorax, and pectus hoary. Abdomen clavate, rather flat, less than twice the length of the thorax; hind borders of the segments cinereous; tip tawny. Legs stout; tibiæ tawny; hind tarsi tawny towards the base. Wings blackish cinereous; veins black; halteres pale yellow. Length of the body 6 lines; of the wings 13 lines.

Fam. BOMBYLIDÆ, *Leach.*

Subfam. THEREVITES, *Walk.*

Gen. THEREVA, *Latr.*

11. *Thereva congrua*, *Walk.* See Vol. III. p. 90.

Subfam. BOMBYLITES, *Walk.*

Gen. ANTHRAX, *Fabr.*

12. *Anthrax Pelops*, *Walk.* See Vol. III. p. 90.

13. *Anthrax semiscita*, *Walk.* See Vol. I. p. 118.

14. *Anthrax prætendens*, *Walk.* See Vol. IV. p. 111.

Fam. SYRPHIDÆ, *Leach.*

Gen. ERISTALIS, *Latr.*

15. *Eristalis splendens*, *Leguillon.* See Vol. III. p. 95.

Gen. SYRPHUS, *Fabr.*

16. *Syrphus ægrotus*, *Fabr.* See Vol. I. p. 124.

Fam. CONOPIDÆ, *Leach.*

Gen. CONOPS, *Linn.*

17. *CONOPS METAXANTHA*, n. s. *Mas.* Nigra, capite sulcato, facie aurata, abdomine apicem versus aurato subtus fulvo, femoribus apice tibiisque rufescentibus, alis cinereis antice fusciscentibus, halteribus flavis apice fulvis.

Male. Black, with slight cinereous tomentum. Head broader than the thorax; vertex transversely furrowed; front longitudinally furrowed; face with bright pale-gilded tomentum. Antennæ longer than the breadth of the head, lanceolate towards the tips, which are stylate. Abdomen gilded towards the tip, which is tawny beneath. Femora, towards the tips, and tibiæ dull red. Wings cinereous, brownish in front; veins black; halteres pale yellow, with tawny knobs. Length of the body 7 lines; of the wings 14 lines.

Fam. MUSCIDÆ, *Latr.*

Subfam. DEXIDES, *Walk.*

Gen. RUTILIA, *Desv.*

18. *Rutilla moneta*, *Gerstæcker.* See Vol. V. p. 241.

19. *Rutilla lucigena*, *Walk.* See Vol. V. p. 242.

Gen. DOLESCHALLA, *Walk.*

20. *DOLESCHALLA CONSORS*, n. s. *Fam.* Picea, capite argenteo, frontibus atris, vittis duabus anticis antennisque nigris, thoracis vitta, lateribus pectoreque argenteis, abdomine subchalybeo fasciis tribus atris duabusque albidis, pedibus longis, alis angustis cinereis, costa et venarum marginibus nigris, alulis albidocinereis.

Female. Piceous, slender, cylindrical. Head silvery white; frontalia deep black, broad, linear; a black stripe on each side of the epistoma. Antennæ black, nearly reaching the epistoma; 3rd joint linear, slen-

der, about six times the length of the 2nd. Thorax with a silvery stripe, which is attenuated in front; sides and pectus silvery. Abdomen with a chalybeous tinge, more than twice the length of the thorax; 2nd, 3rd, and 4th segments with broad deep-black bands on their hind borders; 3rd and 4th with whitish fore borders. Legs long. Wings narrow, cinereous, black along the costa and along the borders of the veins; præbrachial vein much curved at its flexure, straight thence to the tip; discal transverse vein curved inward, parted by less than half its length from the border, and by less than its length from the flexure of the præbrachial vein; alulæ whitish cinereous. Length of the body 7 lines; of the wings 12 lines.

21. *DOLESCHALLA GONYPEDOIDES*, n. s. *Mas.* Obscure fusca, capite argenteo, frontalibus atris, antennis nigris basi fulvis, abdomine longissimo maculis octo lateralibus conicis chalybeo-testaceis, pedibus nigris longissimis, alis obscure cinereis, costa venisque nigricante nebulosis.

Male. Dark brown. Head silvery white; frontalia deep black, widening in front. Proboscis, palpi, and antennæ black; the latter not reaching the epistoma, tawny at the base. Thorax cinereous along the sutures; sides and pectus whitish. Abdomen thrice the length of the thorax, with four large conical testaceous chalybeous-tinged spots on each side. Legs black, very long. Wings dark cinereous; costa and borders of the veins blackish-clouded; præbrachial vein very near the border, and emitting a short branch at its flexure, near which it is curved inward, straight thence 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 vein; alulæ pale cinereous. Length of the body 9 lines; of the wings 12 lines.

Gen. *PROSENA*, *St. Farg.*

22. *PROSENA PECTORALIS*, *Walk.* See Vol. III. p. 101.

Female? Blackish. Head silvery white; frontalia deep black, slightly widening in front. Antennæ tawny, not reaching the epistoma. Thorax with two whitish stripes; sides and pectus white. Abdomen oval, whitish, with long stout bristles; a deep-black band on the hind border of each segment. Legs black; coxæ and femora tawny, the latter with black tips. Wings cinereous, diffusedly and indistinctly brownish-bordered along the veins; præbrachial vein forming an obtuse angle at its flexure, very slightly curved inwards thence to the tip; discal transverse vein slightly undulating, parted by half its length from the border, and by less than its length from the flexure of the præbrachial vein.

There are two errors in the description referred to above. The specimen there characterized is a male, and is not a *Dezia*.

Subfam. MUSCIDES, *Walk.*

Gen. SILBOMYIA, *Macq.*

23. *Silbomyia costalis*, *Walk.* See Vol. V. p. 159.

Gen. MUSCA, *Linn.*

24. *Musca obscurata*, *Walk.* See Vol. III. p. 105.

Subfam. HELOMYZIDES, *Fallén.*

Gen. DRYOMYZA, *Fallén.*

25. *Dryomyza semicyanea*, *Walk.* See Vol. III. p. 109.

Gen. XARNUTA, *Walk.*

26. *Xarnuta leucotelus*, *Walk.* See Vol. I. p. 28.

Subfam. ORTALIDES, *Haliday.*

Gen. ADRAMA, *Walk.*

27. *Adrama selecta*, *Walk.* See Vol. III. p. 118.

Gen. STRUMETA, *Walk.*

28. *STRUMETA CONCISA*, n. s. *Fœm.* Fulva, subtus albido-flava, thoracis lateribus piceis, scutello albido-flavo, abdomine nigro antice albido-flavo, pedibus albido-flavis, alis nigro-fuscis, costa cinereo maculata, margine postico cinereo maculis fuscis.

Female. Tawny, whitish yellow beneath. Antennæ not reaching the epistoma; 3rd joint linear, rounded at the tip; arista minutely setulose. Thorax piceous along each side; scutellum whitish yellow. Abdomen oval, black, shining, broader, but hardly longer, than the thorax; basal half whitish yellow. Legs whitish yellow. Wings blackish, brown along the costa and towards the hind border, which is cinereous, with several brown spots; costa with a few cinereous spots; veins black; cubital vein deeply undulating, emitting a branch towards the costa near its tip, which is abruptly curved and joins the costa; discal transverse vein nearly straight, parted by less than half its length from the border, and by about its length from the præbrachial transverse vein; halteres pale. Length of the body $2\frac{1}{2}$ lines; of the wings 7 lines.

Gen. POTICARA, *Walk.*

29. *POTICARA TRICURVATA*, n. s. *Mas.* Nigra, capite antico flavo, antennis rufescentibus, arista plumosa, scutello metathorace pectoreque purpureis aut cyaneis, abdomine fusiformi purpurascenti-cyaneo, pedibus piceis, femoribus flavis, alis nigris, lituris costalibus et marginalibus limpidis.

Male. Black. Head bright yellow in front; epistoma very large. Antennæ reddish; 3rd joint short, slender, linear; arista plumose. Thorax with a slight cinereous bloom; scutellum, metathorax, and pectus dark purple or blue, shining. Abdomen fusiform, dark purplish blue, not longer, but very much narrower, than the thorax. Legs piceous; coxæ and femora yellow. Wings black, ample, with a limpid costal space, which is divided by two streaks; each of the latter has a lurid band; hind exterior space limpid, with two streaks, of which the first is dilated on each side of the discal transverse vein; hind border limpid towards the base; veins black, contorted; præbrachial transverse vein and discal transverse vein forming a continuous curved line. Length of the body 5 lines; of the wings 12 lines.

Gen. *PLATYSTOMA*, *Latr.*

30. *PLATYSTOMA PROTENSA*, n. s. *Fæm.* Cinerea, capite antennisque lutescentibus, facie alba, thorace vittis sex fuscis, abdomine fasciis piceis, pedibus nigricantibus, alis cinereis fasciis nonnullis interruptis aut guttularibus tribusque integris nigricantibus, halteribus albidis.

Female. Cinereous. Head dull luteous; face white. Antennæ dull luteous, about half the length of the face; 3rd joint linear, rounded at the tip, full four times the length of the 2nd; arista setulose at the base. Thorax with six brown stripes. Abdomen oval, a little shorter and narrower than the thorax, with a piceous band on the hind border of each segment. Legs blackish. Wings cinereous, with several blackish bands, which are interrupted or composed of dots, with the exception of the three last; of these the 1st includes the discal transverse vein, and is incompletely forked in front; the 3rd is apical, and is connected with the 2nd on the costa; discal transverse vein straight, parted by one-fourth of its length from the border, and by very much more than its length from the præbrachial transverse vein; halteres whitish. Length of the body 7 lines; of the wings 14 lines.

Gen. *DACUS*, *Fabr.*

31. *Dacus pectoralis*, *Walk.* See Vol. III. p. 114.

32. *Dacus lituratus*, *Walk.* See Vol. V. p. 251.

33. *DACUS SEPEDONOIDES*, n. s. *Mas.* Fulvus, capite macula nigricante, oculis albidis cinctis, thorace guttis duabus anticis nigris, abdomine compresso subclavato, alis cinereis apud venas fulvis apice nigricantibus.

Male. Tawny. Head whitish along the eyes; a large triangular blackish spot between the eyes. Antennæ extending beyond the epistoma; 3rd joint slightly widening towards the tip, full six times the length of the 2nd; arista bare. Thorax with a black dot on each side of the fore border. Abdomen compressed, subclavate, very much longer and narrower than the thorax. Wings cinereous, tawny along the costa

and along the veins, blackish towards the tips; veins tawny, black towards the tips; discal transverse vein curved outward, parted by hardly one-fourth of its length from the border, and by much more than its length from the oblique præbrachial transverse vein. Length of the body 8 lines; of the wings 14 lines.

34. *DACUS CURVIFER*, n. s. *Fam.* Piceus, capite fulvo, facie nigro bipunctata, thorace vittis quatuor nigris, maculis duabus lateralibus scutelloque fulvis, abdomine nigro fascia ventrequè fulvis, pedibus pallide fulvis, alis limpidis vittis duabus fasciisque tribus fusciscentibus.

Female. Piceous. Head tawny; face with a black point on each side. Antennæ extending beyond the epistoma; 3rd joint linear, slender, more than four times the length of the 2nd; arista bare. Thorax tomentose, with four slender black stripes, the outer pair abbreviated; a large spot at the base of each fore wing and the scutellum pale tawny. Abdomen black, oval, broader but not longer than the thorax; 2nd segment pale tawny; underside tawny. Legs pale tawny. Wings limpid, with two brownish stripes, and with three irregular brownish bands; 1st stripe costal; 2nd along the anal vein; 1st band connecting the two stripes; 2nd very broad, recurved inward towards the costa; 3rd oblique; discal transverse vein hardly undulating, parted by one-fourth of its length from the border, and by a little less than its length from the oblique præbrachial transverse vein. Length of the body 5 lines; of the wings 9 lines.

Gen. *TRYPETA*, *Meigen.*

35. *Trypeta multistriga*, *Walk.* See Vol. III. p. 119.

Subfam. *ACHIIDEÆ*, *Walk.*

Gen. *ACHIAS*, *Fabr.*

36. *Achias lativdens*, *Walk.* See Vol. III. p. 121.

Male? Piceous. Head whitish yellow in front; face with three black stripes; genæ much developed; petioles of the eyes longer than the space between them, with a yellow stripe in front. Thorax with five cinereous stripes; middle stripe double; pectus cinereous; scutellum purple. Abdomen purplish blue, with two large cinereous spots on each side, pale at the base.

37. *ACHIAS ASPICIENS*, n. s. *Fam.* Picea, capite fulvo fasciis duabus vittisque quatuor nigris, oculis subpetiolatis, thorace vittis quatuor rufescentibus, abdomine fulvo apice piceo, tarsis posticis femoribusque flavis, illis femoribusque anticis apice piceis, alis limpidis costa nigra, vena transversa discali fusco nebulosa.

Female. Piceous. Head tawny, with two black bands in front; face with two black stripes; an oblique black stripe on each side between the face and the genæ; eyes with short petioles, extending beyond

the sides of the thorax. Thorax with four reddish stripes. Abdomen dull tawny, fusiform, narrower and much longer than the thorax, piceous towards the tip. Femora yellow; fore femora with piceous tips; hind tarsi yellow, piceous towards the tips. Wings limpid, black along the costa, diffusely clouded with brown about the discal transverse vein; veins black, pale towards the base; discal transverse vein straight, parted by less than one-fourth of its length from the border, and by much more than its length from the præbrachial transverse vein. Length of the body 6 lines; of the wings 12 lines.

Subfam. PSILIDES, *Walk.*

Gen. MICROPEZA, *Macq.*

38. *Micropeza prolixa*, *Wal.* See Vol. V. p. 299.

39. MICROPEZA PERCLUSA, n. s. *Mas.* Nigra, nitens, gracillima, epistomate albo, pectore fulvo, abdomine fulvo longo compresso apice nigro, pedibus piceis, coxis femoribusque posterioribus fulvis, his piceo fasciatis, tibiis tarsisque anticis albidis, alis nigricantibus basi fasciisque tribus cinereis.

Male. Black, shining, very slender. Epistoma white. Proboscis tawny. Antennæ extending much beyond the epistoma; 3rd joint linear, rather broad, rounded at the tip; arista minutely setulose. Pectus mostly tawny. Abdomen tawny, much compressed, very much longer than the thorax, increasing in depth towards the tip, which is black. Legs piceous, slender; coxæ tawny; posterior femora tawny, with a piceous band; fore tibiæ and fore tarsi whitish. Wings blackish, cinereous at the base, and with three cinereous bands; veins black; cubital and præbrachial veins converging exteriorly; discal transverse vein straight, parted by its length from the border, and by about thrice its length from the præbrachial transverse vein. Length of the body 6 lines; of the wings 7 lines.

Subfam. SEPSIDES, *Walk.*

Gen. ANGITULA, *Walk.*

40. *Angitula longicollis*, *Walk.* See Vol. III. p. 123.

NORTH CERAM.

Fam. MYCETOPHILIDÆ, *Holiday.*

Gen. SCIARA, *Meigen.*

1. *SCIARA PONDEROSA*, n. sp. (Sect. 1, *Meigen.*) *Fam.* Atræ, valida, antennis robustis, thorace crasso, alis amplius nigricanti-cinereis apud costam nigricantibus.

Female. Deep black, robust. Antennæ stout, full half the length of

the body. Thorax thick. Abdomen a little longer than the thorax. Legs stout. Wings ample, blackish cinereous, blackish along the costa; veins black. Length of the body 2 lines; of the wings 6 lines.

Fam. CULICIDÆ, *Haliday*.

Gen. MEGARHINA, *Desv.*

2. *Megarhina immisericors*, *Walk.* See Vol. IV. p. 90.

Fam. TIPULIDÆ, *Haliday*.

Gen. LIMNOBIA, *Meigen*.

Div. Body and legs very slender. Antennæ in the male minutely setulose, in the female plumose or beset with long bristles. Wings with two discal areolets; veins not forked; the usual transverse veinlet between the second and third externo-medial veins.

3. *LIMNOBIA DELECTATA*, n. s. *Mas et Fem.* Nigra, pedibus piceis, alis cinereis. *Mas.* Thorace rufo, abdomine fasciis luteis, alarum maculis quatuor costalibus transversis fuscis. *Fem.* Thorace piceo, abdomine fasciis albis, alarum maculis latis nigris.

Male and Female. Black. Legs piceous. Wings cinereous. Halteres tawny, with black knobs. *Male.* Thorax red. Abdomen with a luteous band on the fore border of each segment. Wings with four transverse brown spots along the costa; veinlet between the 2nd and the 3rd exterior medial veins clouded with brown. *Female.* Thorax piceous. Abdomen with a white band on the fore border of each segment. Wings with black spots, which are broader than those of the male. Length of the body 4-5 lines; of the wings 9½-11 lines.

Div. Wings narrow, with a discal areolet; subcostal vein abruptly curved to the cubital vein at some distance from the tip of the wing; externo-medial veins long, not forked; veinlet between the third externo-medial vein and the subanal vein beyond the end of the discal areolet.

4. *LIMNOBIA INNOTABILIS*, n. s. *Fem.* Ochracea, alis cinereis, venis nigris, vena subcostali flavescente.

Female. Ochraceous. Wings cinereous; veins black; subcostal vein yellowish. Length of the body 6 lines; of the wings 16 lines.

Gen. TIPULA, *Linn.*

5. *Tipula infidens*, *Walk.* See Vol. IV. p. 92.

Fam. STRATIOMIDÆ, *Haliday*.Gen. NERUA, *Walk.*

6. *Nerua scenopinoides*, *Walk.* Vol. III. p. 81.

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

7. *TABANUS OBSCURATUS*, n. s. *Fœm.* Piceus, capite antico ferrugineo, antennarum articulo 3^o rufo apice piceo, thoracis lateribus nigro pilosis, pedibus nigris, alis fuscis areolis cinereo strigatis.

Female. Piceous. Head ferruginous in front; callus very slender. Third joint of the antennæ dark red, piceous towards the tip, with a very small horn. Thorax with black hairs on each side. Legs black. Wings dark brown, paler at the tips and along the hind border, with slight cinereous streaks in the disks of the areolets; veins black; fore branch of the cubital vein forming a rounded angle near its base, slightly curved thence to its tip. Length of the body 8 lines; of the wings 17 lines.

Closely allied to *T. doreicus*.

Var. Abdomen broader, shorter. Wings paler.

This may be a distinct species.

Fam. ASILIDÆ, *Leach*.Subfam. LAPHRITES, *Walk.*Gen. LAPHRIA, *Fabr.*

8. *Laphria Taphius*, *Walk.* See Vol. IV. p. 105.
 9. *Laphria Vulcanus*, *Wied.* See Vol. I. p. 10.
 10. *Laphria requisita*, *Walk.* See Vol. IV. p. 105.
 11. *Laphria socia*, *Walk.* See Vol. III. p. 84.
 12. *Laphria congrua*, *Walk.* See Vol. V. p. 277.

Subfam. ASILITES, *Walk.*Gen. ASILUS, *Linn.*

13. *Asilus introducens*, *Walk.* See Vol. IV. p. 108.

This specimen has a more distinct difference between the interior and exterior colours of the wings than that of the Celebes *A. introducens*.

Gen. OMMATIUS, *Illiger*.

14. *OMMATIUS BACCHOIDES*, n. s. *Mas.* Niger, capite cano, mystace albo, abdomine clavato segmentorum suturis ferrugineis, pedibus crassis, alis nigricantibus costa nigra dilatata, halteribus fulvis.

Male. Black. Head hoary in front; face with black hairs; mystax and underside with white hairs. Pectus hoary. Abdomen clavate, cinereous beneath, about twice the length of the thorax; sutures of the segments ferruginous. Legs short, thick. Wings blackish, black along the costa, which is dilated; veins black; halteres tawny. Length of the body 6 lines; of the wings 10 lines.

15. *Ommatius retrahens*, *Walk.* See Vol. III. p. 88.

Gen. *LEPTOGASTER*, *Meigen.*

16. *Leptogaster tarsalis*, *Walk.* See Vol. V. p. 281.

Fam. *LEPTIDÆ*, *Westw.*

Gen. *LEPTIS*, *Fabr.*

17. *Leptis ferruginosa*, *Wied.* See Vol. I. p. 118.

Fam. *BOMBYLIDÆ*, *Leach.*

Gen. *ANTHRAX*, *Fabr.*

18. *Anthrax Pelops*, *Walk.* See Vol. III. p. 90.

19. *Anthrax semiscita*, *Walk.* See Vol. I. p. 118.

Var. Transverse veinlets of the wings not clouded with black.

20. *ANTHRAX EMISSA*, n. s. *Fam.* *Nigra*, capite pilis anticis albis, thoracis marginibus abdominisque lateribus basi luteo pilosis, abdomine plagis duabus apicalibus albido pilosis, alis cinereis triente basali costaque nigris.

Female. Black. Head with white hairs in front. Thorax along the fore border and on each side, and abdomen on each side at the base, with luteous hairs. Pectus with whitish hairs. Abdomen with a patch of whitish hairs on each side at the tip. Wings cinereous, black for one-third of the length from the base and along the costa, except at the tips; veins black; radial vein slightly curved near its tip; fore fork of the cubital vein much curved, forming a right angle near its base, which rejects a long branch; three externo-medial veins, subanal vein, and anal vein of the usual structure. Length of the body 5 lines; of the wings 14 lines.

Fam. *EMPIDÆ*, *Leach.*

Gen. *EPICEIA*, *Walk.*

21. *Epiceia ferruginea*, *Walk.* See Vol. V. p. 149.

Fam. DOLICHOPIDÆ, *Leach.*Gen. PSILOPUS, *Meigen.*

22. *PSILOPUS SETICORNIS*, n. s. *Mas et Fæm.* Viridescenti-cyaneus, capite purpureo, facie argentea, antennis pedibusque nigris, arista longissima, thorace *fæm.* purpureo, abdomine aurato-viridi fasciis atris, tibiis flavescentibus, alis cinereis apud costam nigricantibus, halteribus nigris.

Male. Greenish blue. Head purple; face silvery white. Proboscis and antennæ black. Arista of the antennæ much longer than the thorax. Pectus slightly silvery. Abdomen golden green, with deep-black bands, which include the sutures between the segments. Legs black, long, slender; tibiæ yellowish. Wings cinereous, blackish along the costa; veins and halteres black; fore branch of the præbrachial vein slightly curved; discal transverse vein very undulating. Length of the body 3 lines; of the wings 6 lines.

Female. Thorax purple. Length of the body 2 lines; of the wings $4\frac{1}{2}$ lines.

23. *Psilopus benedictus*, *Walk.* See Vol. III. p. 91.

24. *Psilopus egens*, *Walk.* See Vol. III. p. 92.

Fam. SYRPHIDÆ, *Leach.*Gen. ERISTALIS, *Latr.*

25. *Eristalis splendens*, *Leguillou.* See Vol. III. p. 95.

26. *ERISTALIS MERODONTOIDES*, n. s. *Mas et Fæm.* Nigra, facie lateribus cinereis, thoracis tomento fuscescente lateribus subfulvis, scutello sordide flavescente, abdomine fascia interrupta fulva fasciisque duabus canis, femoribus posticis incrassatis, alis cinereis apud costam subfuscis, alulis flavescenti-cinereis, abdomine elongato subcompresso.

Male and Female. Black. Face with cinereous tomentum on each side. Thorax with brownish tomentum; sides slightly tawny; scutellum pale dingy yellowish. Abdomen with an interrupted tawny band on the 2nd segment, and with two hoary bands on the fore borders of the 3rd and 4th segments. Hind femora incrassated; hind tibiæ curved. Wings cinereous, diffusedly brown along the costa; veins black, tawny towards the base; alulæ yellowish cinereous. *Male.* Abdomen slightly compressed towards the tip, much longer than that of the female; appendages very large. Length of the body 8-9 lines; of the wings 16 lines.

Gen. SYRPHUS, *Fabr.*

27. *Syrphus ægrotus*, *Fabr.* See Vol. I. p. 124.

Fam. MUSCIDÆ, *Latr.*Subfam. TACHINIDÆ, *Walk.*Gen. MASICERA, *Macq.*

28. *MASICERA SARCOPHAGATA*, n. s. *Mas.* Nigra, capite albo subaurato, frontalibus atris, facie obliqua argentea, thorace cano vittis quatuor nigris, abdomine tessellis subauratis et pilis nonnullis apicalibus ochraceis, alis cinereis, alulis albis.

Male. Black. Head white, slightly gilded, with cinereous hairs behind and beneath; frontalia deep black, slightly widening in front; face oblique, silvery; epistoma not prominent. Antennæ nearly reaching the epistoma; 3rd joint linear, rounded at the tip, full four times the length of the 2nd; arista slender. Thorax bristly, with hoary tomentum, which is interrupted by four black stripes. Abdomen elongate-oval, much longer than the thorax, tessellated with pale gilded tomentum, with a few ochraceous apical hairs. Legs stout, bristly. Wings cinereous; veins black; præbrachial vein forming a right angle at its flexure, near which it is slightly curved, and is thence straight to its tip; discal transverse vein curved inward, parted by less than its length from the border and from the flexure of the præbrachial vein; alulæ white. Length of the body 9 lines; of the wings 14 lines.

Gen. RUTILIA, *Desv.*

29. *Rutilia angustipennis*, *Walk.* See Vol. III. p. 101.

Gen. PROSENA, *St. Farg.*

30. *PROSENA SECEDENS*, n. s. *Fem.* Cana, capite albido, frontalibus obscure rufis, antennis luteis, thorace vittis quatuor nigris, abdomine fasciis tribus latis atris, alis fusciscentibus apud costam obscurioribus, alulis albido-cinereis, halteribus fulvis.

Female. Hoary, stout. Head whitish, shining; frontalia dark red, widening in front. Proboscis tawny, black towards the tip. Antennæ luteous, not reaching the epistoma, which is prominent. Thorax with four slender black stripes. Abdomen oval, a little longer than the thorax, with three broad deep-black bands, of which the 1st is basal; some long spines towards the tip. Legs rather long. Wings brownish, darkest towards the costa; veins black; præbrachial vein emitting an extremely short branch at its flexure, which is acutely rectangular, very slightly curved thence to its tip; discal transverse vein slightly undulating, parted by nearly half its length from the border, and by much more than half its length from the flexure of the præbrachial vein; alulæ whitish cinereous; halteres tawny. Length of the body 5 lines; of the wings 9 lines.

31. *PROSENA COACTA*, n. s. *Fem.* Nigra, cano tomentosa, capite albo, frontalibus ferrugineis, antennis fulvis, thorace vittis quatuor ni-

gris, scutelli apice fulvo, abdomine fulvo albido-micaceo segmentorum marginibus posticis nigro trimaculatis, coxis femoribusque fulvis, alis cinereis, venis fusco subnebulosis, halteribus flavis.

Female. Black, with hoary tomentum. Head white, with a slight fawn-coloured tinge on each side of the frontalia, which are ferruginous and linear. Proboscis black, tawny towards the base. Antennæ tawny, not near reaching the epistoma. Thorax with four indistinct black stripes. Scutellum tawny towards the tip. Abdomen oval, tawny, a little longer than the thorax, with whitish reflections; three rows of black spots on the hind borders of the segments. Legs long; coxæ and femora tawny. Wings cinereous; veins black, slightly clouded with brown; præbrachial vein forming a slightly rounded and obtuse angle at its flexure, straight thence till near its tip, where it is slightly bent; discal transverse vein undulating, parted by much more than half its length from the border, and by much less than its length from the flexure of the præbrachial vein; alulæ whitish cinereous; halteres pale yellow. Length of the body 5 lines; of the wings 10 lines.

Subfam. SARCOPHAGIDÆ, *Walk.*

Gen. SARCOPHAGA, *Meigen.*

32. SARCOPHAGA BREVIS, n. s. *Fœm.* Nigra, breviuscula, capite albidio, frontilibus atris, palpis ferrugineis, thorace vittis quatuor canis, abdomine ovato maculis cinereis nitentibus quadrifariam tessellato, alis cinereis, alulis albis, halteribus fulvis.

Female. Black, rather short. Head whitish, shining; frontalia deep black, hardly widening in front. Palpi ferruginous. Thorax with four well-defined hoary stripes. Pectus hoary. Abdomen oval, not longer than the thorax, distinctly tessellated with four rows of shining cinereous spots; underside hoary. Wings cinereous; veins black, with the usual structure; alulæ white; halteres tawny. Length of the body 5 lines; of the wings 10 lines.

Subfam. MUSCIDÆ, *Walk.*

Gen. PYRELLIA, *Desv.*

33. Pyrellia obtusa, *Walk.* See Vol. III. p. 105.

Gen. OCHROMYIA, *Macq.*

34. Ochromyia promittens, *Walk.* See Vol. IV. p. 134.

Gen. MUSCA, *Linn.*

35. MUSCA PRÆCOX, n. s. *Mas.* Nigra, sat angusta, capite argenteo thorace vittis tribus canis, abdomine cano lurido vittâ dorsali suturisque nigris, alis fusciscenti-cinereis.

Male. Black, rather narrow. Head silvery in front. Eyes bare. Antennæ rather short. Thorax with three hoary stripes. Pectus hoary. Abdomen oval, lurid, with hoary tomentum, not longer than the thorax; dorsal stripe and sutures of the segments black. Wings brownish cinereous; veins black; præbrachial vein forming a rounded obtuse angle at its flexure, slightly curved inward thence to its tip; discal transverse vein slightly curved, parted by more than half its length from the border, and by more than its length from the flexure of the præbrachial vein. Length of the body $2\frac{3}{4}$ lines; of the wings 5 lines.

Subfam. LAUXANIDES, *Walk.*

Gen. LONCHÆA, *Fallén.*

36. *Lonchæa inops*, *Walk.* See Vol. III. p. 110.

Subfam. ORTALIDES, *Haliday.*

Gen. PLATYSTOMA, *Latr.*

37. *PLATYSTOMA TARSALIS*, n. s. *Fæm.* Nigra, capite albo, frontilibus rufis antice nigris, peristomatis lateribus antennisque piceis, thorace vittis quatuor cinereis, scutello nitente, abdomine albido fasciis duabus nigris apice styliformi, tarsis basi albis, alis cinereis nigro quadrifasciatis, fascia 1^a antice flexa et dilatata, 2^a 3^aque antice flavescente strigatis, 4^a apud costam angulata, halteribus flavescens.

Female. Black, dull. Head white; frontalia red, black in front; peristoma piceous on each side. Proboscis and palpi black. Antennæ piceous, not reaching the epistoma. Thorax with four slight cinereous stripes; sides and pectus cinereous; scutellum shining. Abdomen whitish, abruptly styliform at the tip, not longer than the thorax, with two black bands, of which the 2nd is apical. Tarsi white towards the base. Wings cinereous, with four black bands; 1st band incomplete hindward, bent inward and dilated in front, where it is accompanied by some little transverse black streaks; 2nd and 3rd bands transversely streaked with yellowish in front; 4th band angular in front, and extending along the costa to the tip of the wing; veins black; discal transverse vein nearly straight, parted by one-fourth of its length from the border, and by much more than its length from the præbrachial transverse vein; halteres pale yellowish. Length of the body 6 lines; of the wings 12 lines.

Gen. LAMPROGASTER, *Macq.*

38. *Lamprogaster marginifera*, *Walk.* See Vol. III. p. 111.

Gen. DACUS, *Fabr.*

39. *Dacus imitans*, *Walk.* See Vol. IV. p. 150.

Gen. TRYPETA, *Meigen*.

40. TRYPETA MELALEUCA, n. s. *Mas*. Nigra, nitens, gracilis, capite antennisque testaceis, oculis albo cinctis, abdomine longe ovato, tibiis tarsisque testaceis, alis nigris basi strigisque quatuor posticis unaque costali albis.

Male. Black, shining, slender. Head testaceous, white about the eyes. Antennæ testaceous, not reaching the epistoma; arista bare. Abdomen elongate-oval, not longer than the thorax. Tibiæ and tarsi testaceous. Wings black, white at the base, and with five white transverse streaks, of which one forms a triangular costal spot, and three extend from the disk to the hind border; the 5th is very small, and is on the interior border opposite the costal spot; discal transverse vein straight, parted by less than half its length from the border, and by less than its length from the præbrachial transverse vein; halteres testaceous. Length of the body $1\frac{1}{2}$ line; of the wings $3\frac{1}{2}$ lines.

Subfam. HYDROMYZIDES, *Haliday*.Gen. OCHTHERA, *Latr*.

41. Ochthera innotata, *Walk*. See Vol. IV. p. 171.

Fam. HIPPOBOSCIDÆ, *Leach*.Gen. ORNITHOMYIA, *Olfers*.

42. Ornithomyia Batchianica, *Walk*. See Vol. V. p. 300.

GORRITE.

1. RUTILIA IGNOBILIS, n. s. *Fam*. Obscure æneo-viridis, capite albido, frontalibus atris, antennis nigris basi rufescentibus, scutello viridescenti-fulvo, abdomine lato nigricanti-viridi, alis cinereis basi costæque dimidio interiore nigris.

Female. Dark æneous green. Head whitish; frontalia deep black, widening in front. Proboscis black. Palpi piceous. Antennæ black, not near reaching the epistoma, reddish at the base. Scutellum dark greenish tawny. Abdomen blackish green, much broader than the thorax. Legs black. Wings cinereous, mostly black at the base and along more than half the length of the costa; veins black; præbrachial transverse vein clouded with black; præbrachial vein forming a right angle at its flexure, curved inward thence to its tip; discal transverse vein undulating, parted by nearly half its length from the border, and by much less than its length from the flexure of the præbrachial vein. Length of the body $5\frac{1}{2}$ lines; of the wings 13 lines.