

- XI. *On the Diptera of St. Vincent (West Indies)*. By PROFESSOR SAMUEL WENDELL WILLISTON. (*Doli-chopodidæ* and *Phoridæ*, by PROFESSOR J. M. ALDRICH.) Communicated by DAVID SHARP, M.A., F.R.S., on behalf of the Committee for investigating the Flora and Fauna of the West Indies.

[Read March 4th, 1896.]

PLATES VIII., IX., X., XI., XII., XIII. and XIV.

[THIS paper is a list, accompanied with descriptions, of the Diptera found in the island of St. Vincent, by Mr. H. H. Smith, the well-known American entomologist, who was sent to the islands by F. D. Godman, Esq., F.R.S., to assist the Committee in its investigations. Some general remarks by the Author will be found at the end of the paper. A second memoir, treating of the Diptera of the neighbouring island of Grenada, will, it is hoped, be almost immediately ready for publication, the present instalment having been in the hands of the Committee for upwards of two years.—D. S.]

CECIDOMYIIDÆ.

DIPLOSIS.

Loew, Dipt. Beitr., iv., 20, 1850.

1. *Diplosis pictipes*, n. sp.

♂. Face yellow. Antennæ as long as the wings, yellow, the joints alternately double, with their petioles as long as the thickened portion. Mesonotum opaque red; two slender stripes and the middle portion behind yellow. Abdomen reddish-yellow. Legs black; the distal two-fifths of the front femora, the immediate tip of the hind femora, the tip of the hind tibiæ; a broad ring on the second, third, and fourth joints of all the tarsi, and the terminal portion of the fifth joint, light yellow. Wings with black hair, forming irregular markings; third vein gently curved, terminating just beyond the tip of the wing. Length $1\frac{1}{2}$ mm.

Four specimens.

Two specimens. St. Vincent. Sea-level. This species does not fully agree with the characters of *Ilythea* in the structure of the face, but the differences are not sufficient to establish a new genus, which would otherwise be required.

DROSOPHILIDÆ.

STEGANA.

Meigen, Syst. Besch., vi., 79, 1830.

Front uniformly reddish or yellowish ; legs yellow . *tarsalis*, n. sp.
Front with a broad, black hour-glass-shaped stripe ; legs for the
most part blackish *horæ*, n. sp.

1. *Stegana tarsalis*, n. sp. (Pl. XIII., figs. 149, front leg of ♂ ; 149a, middle tarsus of ♂ ; 149b, palpus ; 149c, wing.)

♂. Front at the anterior end about one-fourth of the width of the head, at the vertex about one-third ; reddish-yellow, shining. Antennæ yellow, the third joint on the distal half or two-thirds black ; about three times as long as wide, gradually tapering ; arista long-plumose. Face, cheeks and occiput, except at the upper part, light-yellow ; palpi yellow, the tip brownish. Mesonotum and scutellum brownish-red, shining ; scutellum flattened, with a sharp border ; pleuræ with a horizontal, deep brown or black stripe, above which the colour is more like that of the mesonotum, below which the colour is light-yellow. Abdomen elongate ovate, brownish-black in colour. Legs light-yellow, all the femora brownish near the extremity ; second, third, and fourth joints of the front tarsi much dilated transversely and deep black in colour ; middle and hind tarsi short and strong, compressed ; hind tibiæ dilated ; front femora with some bristles at the outer part. Wings deep brown anteriorly, becoming less strong posteriorly ; second vein nearly parallel with costa for a large part of its length ; third strongly convex anteriorly ; first posterior cell very narrowly open ; ultimate section of the fourth vein not twice the length of the penultimate section. Length 3 mm.

♀. Third joint of the antennæ a little larger ; front tarsi not dilated and wholly yellow.

So far as I am able to learn from the literature at my command, but two species of this genus have been hitherto made known, *S. curvipennis*, Fallen, and *S. coleo-*

ptrata, Scop., both European, and both said to occur in North America, by Loew. In the descriptions of *S. coleoptrata*, to which species the above seems closely allied, no mention is made of the peculiar male tarsi.

2. *Stegana horæ*, n. sp. (Pl. XIII., fig. 150, antenna of ♀.)

♀. Front narrower above than in *S. tarsalis*; yellow, with a broad, black, hour-glass-shaped stripe reaching nearly to the root of the antennæ. Antennæ yellow; third joint except the upper basal portion, black, rather longer than in *S. tarsalis*. Face yellow; cheeks black below the eyes. Proboscis yellow; palpi black. Occiput on the lower portion, yellow. Mesonotum and scutellum deep brown, almost black; a large spot on the humeri light-yellow. Pleuræ light-yellow with a horizontal black stripe, connected with the black of the mesonotum near the root of the wings; below this stripe there is a narrow yellow one above the black or dark-brown coxæ. Abdomen black. Legs deep brown, the knees, the tip of all the tarsi, the basal portion of the four posterior tibiæ, and all the tarsi light-yellow; tarsi less compressed than in *S. tarsalis*; middle tibiæ with a row of bristles on the outer side; front femora with a few long bristles near the outer end. Wings as in *S. tarsalis*. Length 3 mm.

Two specimens. St. Vincent.

DEOSOPHILA.

Fallen, Dipt. Suec., Geomyzid., 4, 1823.

The present collection includes, as is seen, a very large number of species belonging to this genus. I have scrutinized them with the utmost care, and have given, I trust, descriptions which will enable them to be recognized again. I have been able to recognize but a single species previously described, though it is possible that there may be others which have been already named. The difficulty in the determination of the obscurer coloured species from remote localities, is, however, so great that only a direct comparison of specimens from different habitats will settle the question of their identity. Two species are included in the list (Nos. 17 and 18) which may not properly belong to the genus, but which would in all probability be sought for here.

TABLE OF SPECIES.

1. Wings distinctly spotted	2
Wings not spotted	5
2. Front vittate	3
Front not vittate	4
3. Wings with a blackish spot at the tip	2 <i>vittatifrons</i> , n. sp.
Wings with the cross-veins clouded	4 <i>annulata</i> , n. sp.
4. Wings variegated	1 <i>ornatipennis</i> , n. sp.
Wings with clouds on the cross-veins	3 <i>sororia</i> , n. sp.
5. Mesonotum vittate	6
Mesonotum not vittate	9
6. Mesonotum deep brown with two narrow brownish stripes, as though continuous with the narrow frontal orbits; pleuræ light-yellow	5 <i>bilineata</i> , n. sp.
Not such marked species	7
7. Tip of the first section of the costal vein black, 8 <i>fasciola</i> , n. sp. Tip of the costal vein not black	8
8. Larger species; thorax deep brown	6 <i>coffeata</i> , n. sp.
Smaller species, thorax yellowish	7 <i>bellula</i> , n. sp.
9. Mesonotum deep black; legs light-yellow	10
Mesonotum not deep black.	13
10. Head and thorax deep shining-black	17 n. sp.
Pleuræ in part at least light-yellow	11
11. Head, mesonotum, scutellum and the upper part of the pleuræ opaque velvety black	9 <i>opaca</i> , n. sp.
Mesonotum and scutellum shining	12
12. Abdomen black.	11 <i>pleuralis</i> , n. sp.
Abdomen with yellow and black markings	10 <i>thoracis</i> , n. sp.
13. Mesonotum brilliant blue or purple	12 <i>splendida</i> , n. sp.
Mesonotum not shining blue	14
14. Mesonotum grey, with numerous small, rounded, dark brown spots	13 <i>punctulata</i> , Loew
Mesonotum not spotted	15
15. Front legs black, with the four distal joints of the front tarsi light-yellow	14 <i>procnemis</i> , n. sp.
Front legs not black, with the distal joints of the tarsi yellow	16
16. Front and face narrow; the costal vein terminates at the tip of the third longitudinal vein.	15 <i>frontalis</i> , n. sp.
Front and face of the usual width; the costal vein reaches the tip of the fourth longitudinal vein	17
17. Mesonotum in ground-colour black, opaque brownish- greyish pollinose	18 <i>pollinosa</i> , n. sp.
Mesonotum shining, reddish or yellowish.	18

18. Third section of the costal vein nearly as long as the second ; front metallic-blue at the vertex
16 *verticis*, n. sp.
Third section of the costal vein not more than one-half of the length of the second section ; front not at all blue 19
19. Wings distinctly clouded along the anterior part
19 *limbata*, n. sp.
Wings uniformly yellowish or brownish hyaline 20
20. Third section of the costal vein short, not longer than the penultimate section of the fourth vein, the second and third veins nearly parallel 21
Third section of the costal vein distinctly longer than the penultimate section of the fourth vein, the second and third veins not at all parallel 22
21. Small, more yellowish species. 21 *similis*, n. sp.
Larger, more brownish species 22 *illota*, n. sp.
22. Light-yellow species, the abdomen with brownish bands
20 *pallida*, n. sp.
Reddish-brown, the abdomen black 23 *nana*, n. sp.

1. *Drosophila ornatipennis*, n. sp. (Pl. XIII., fig. 151, wing.)

♂, ♀. Front broad, light-yellow above, somewhat orange-yellow below. Remainder of head yellow. Third joint of the antennæ oval ; face carinate. Mesonotum opaque-yellow, with six narrow dark-brown stripes, the middle pair coalescent, and the outermost ones connected at the suture with the adjacent ones. Abdomen opaque, deep brown, with interrupted grey cross-bands. Legs yellow ; femora sometimes infuscated. Wings variegated ; a blackish spot at the proximal end of the submarginal and the first basal cells, including also the outer part of the costal cell ; one on the anterior cross-vein ; a narrow one on the posterior cross-vein and outer part of the fifth vein ; a larger one about the middle of the second section of the costal vein, reaching to the third vein, and continues less deeply coloured in the anterior portion of the first basal cell with that on the posterior cross-vein, and more or less completely with ones on the outer ends of the second, third and fourth veins, the colour surrounding these spots is more purely hyaline, in the posterior cells and anal angle, subhyaline. Length 2 mm.

Numerous specimens. St. Vincent

2. *Drosophila vittatifrons*, n. sp. (Pl. XIII., fig. 152, wing.)

♂, ♀. Front about one-third of the width of the head, a little broader above; yellow, the slender shining median triangle reaching two-thirds of the distance to the root of the antennæ, on either side of which there is a deep brown or black stripe, the two convergent anteriorly. Antennæ yellow, third joint somewhat brownish, and elongate oval in shape. Face pallid-yellow, in the middle with a very prominent carina; cheeks with a brownish spot below the eyes. Palpi blackish at the tip; proboscis and the lower portion of the occiput, yellow. Mesonotum shining yellow with six slender brown stripes, the median pair separated by a line, the outer ones not continued in front of the suture; more outwardly in front, on either side there is a slender strigula reaching as far as the suture. Pleuræ and legs wholly yellow. Abdomen black, the immediate base yellowish; the narrow lateral margin of the second and third segments, and the fourth and fifth except a median triangle, yellow. Wings nearly hyaline; a blackish subquadrate spot at the tip of the wing, in the submarginal and first posterior cell, reaching from the tip of the second to the tip of the fourth vein; second section of the costal vein more than twice the length of the third section. Length $1\frac{1}{4}$ –2 mm.

Numerous specimens. With these specimens there are several in which the front is yellow or brownish-yellow, and the spot at the tip of the wing is apparent only as a blackish cloud. They appear to be immature specimens.

3. *Drosophila sororia*, n. sp.

♂, ♀. Head and antennæ yellow, opaque; front rather more than one-third of the width of the head, a little broader above; arista with only a few rays. Thorax light reddish-yellow, opaque. Abdomen reddish-brown or blackish, probably in life with black hind margins to the segments. Legs wholly yellow. Wings lightly tinged with blackish, more noticeable along the costa and at the tip; a rather broad, dark cloud on the cross-veins, and indistinct clouds on the veins at the tip of the wing, that of the second vein, however, distinct; third section of the costal vein short; posterior cross-vein straight. Length $1\frac{1}{4}$ mm.

Four specimens. St. Vincent.

4. *Drosophila annulata*, n. sp.

♂, ♀. Front less than one-third of the width of the head; silvery-grey and opaque black. Antennæ reddish-yellow, the first joint above, and the third at the base, blackish. Face blackish, greyish dusted; median carina yellowish, nose-like, subsulcate. Mesonotum opaque coffee-brown, with narrow, irregular, yellowish-grey markings. Scutellum darker brown, its basal angles and the apex greyish. Abdomen black, the narrow angles of the segments yellow, forming more or less complete bands, and a narrow yellow stripe in the middle of the posterior segments. Femora, except the yellow tip, dark brown; tibiæ yellow, with a basal and terminal brown ring; tarsi yellow. Wings subhyaline, with blackish clouds on the cross-veins, and a black spot at the tip of the first section of the costal vein. Length $2\frac{1}{2}$ mm.

Fifteen specimens. St. Vincent.

5. *Drosophila bilineata*, n. sp.

♂. Front of equal width, not widened above; opaque velvety black, the orbits and a slender median line opaque yellowish-grey. Face light yellow, on the sides above dusted like the frontal orbits. Cheeks and the dilated palpi black, the cheeks yellow behind. Face distinctly receding, carinate in the middle. Antennæ brownish-yellow or brown, the third joint more than twice as long as wide; arista with about five rays above and three below. Occiput black above. Mesonotum and scutellum opaque deep brown, the former with two narrow stripes, not reaching the hind margin, and appearing like continuations of the frontal orbits. Pleuræ light-yellow. Abdomen oval, not elongate; opaque deep brown or black, the fifth segment, except sometimes a small spot in the middle, the remainder of the abdomen, and the narrow lateral margin of all the segments yellow. Legs light-yellow. Wings greyish hyaline; ultimate section of the fourth vein not twice the length of the penultimate section. Length $1\frac{1}{2}$ mm.

Three specimens. St. Vincent.

6. *Drosophila coffeata*, n. sp.

♂, ♀. Dark coffee-brown. Front at the lower part a little less than one-third of the width of the head, with two opaque, anteriorly convergent, velvety black stripes. Basal joints of the antennæ yellowish, the third joint brownish on its margin, only a little longer than broad; arista with four rays above. Face yellow,

brown in the middle ; strongly carinate. Mesonotum with three inconspicuous whitish stripes in front. Scutellum black, brownish pollinose in an oblique light. Pleuræ nearly black. Abdomen black or brownish-black. Legs luteous. Wings tinged with brownish ; ultimate section of the fourth vein not twice the length of the penultimate section ; third section of the costal vein less than half the length of the second section. Length 3-4 mm.

Numerous specimens. St. Vincent.

7. *Drosophila bellula*, n. sp.

♂, ♀. Front broader above ; the orbits yellowish, in the middle a large truncated triangle brown, the inner portion of which—the vertical triangle—lighter coloured, or yellow. Antennæ yellow, the base in the larger part of the short third joint blackish ; arista pectinate above and below. Face and cheeks yellow, the former carinate. Mesonotum brown, with three greyish-yellowish stripes, the middle one broader and more diffuse in front, narrow behind. Scutellum brownish, yellowish on the borders. Pleuræ brown, with two slender yellowish stripes. Abdomen black or dark brown, the segments with a more or less narrow yellowish anterior border. Legs yellow. Wings yellowish hyaline ; second section of the costa about three times the length of the third section. Length 2 mm.

Eight specimens. St. Vincent.

8. *Drosophila fasciola*, n. sp.

♂, ♀. Front broader above ; the orbital margins yellowish (at their lower part a brownish spot) ; two convergent brown stripes, within which the vertical triangle is lighter coloured ; the front is wholly opaque. Antennæ yellowish ; the short third joint brown at the base. Face yellowish, the thin median carina nose-like, not appreciably sulcate. Cheeks brown. Mesonotum opaque greyish-yellowish, with incomplete brown stripes and irregular spots ; in the middle behind, the brown forms a large triangle, bisected by a slender yellowish line. Scutellum opaque yellowish, brownish towards its base ; the four bristles each arise from a small blackish spot. Pleuræ brown, yellowish vittate. Abdomen brown, the segments yellow or yellowish in front. Wings yellowish hyaline ; tip of the first section of the costa black ; third section of the costa not one-half the length of the second section. Legs yellow ; base of all the femora brown or blackish ; all the tibiae with a proximal and distal brown ring. Length 2 mm.

Five specimens.

9. *Drosophila opaca*, n. sp.

♂, ♀. Front broad, more than one-third of the width of the head, considerably broader above; deep opaque black. Antennæ reddish-brown or blackish, the third joint more or less blackish on the upper margin; second joint tumid, with two or three bristles; third joint about twice as long as wide; arista with long rays, about eight in number, on the upper side. Face black, lightly dusted; cheeks narrow. Palpi black. Mesonotum and scutellum wholly deep opaque, velvety black. Pleuræ opaque black, yellow below, a slender yellow line along the dorso-pleural suture. Halteres yellow. Abdomen opaque black and light-yellow; the first segment yellow; the next three segments yellow, with the sides black, extending more or less across the hind margin, and leaving the yellow as a semi-oval space; fifth segment yellow, with a posterior band; sixth segment yellow. Legs, including the coxæ, wholly light-yellow. Wings with a distinct brownish tinge; penultimate section of the fourth vein about one-half the length of the ultimate section; the third vein terminates at the extreme tip of the wing; third section of the costal vein more than one-half the length of the second section. Length $1\frac{1}{2}$ mm.

Numerous specimens. St. Vincent.

10. *Drosophila thoracis*, n. sp.

♀. Front a third of the width of the head, broader above; opaque or brown or black, the narrow orbits and median triangle shining. Antennæ lutescent yellow, the third joint a little blackish and rather elongate. Face luteous yellow, distinctly carinate above, the oral margin narrowly blackish. Cheeks yellow behind. Proboscis yellow. Mesonotum shining deep brown or nearly black. Scutellum black, shining. Uppermost part of the pleuræ, near the dorso-pleural suture, black, below light-yellow; metanotum nearly black. Abdomen shining black, the middle of the first and second segments, anterior border of the fourth and fifth segments and the ovipositor, yellow; third segment yellow with a narrow, interrupted black band. Venter and legs light yellow. Wings yellowish hyaline; the third costal section two-thirds of the length of the second section. Length 2 mm.

Two specimens. St. Vincent. "In fungi."

11. *Drosophila pleuralis*, n. sp.

♀. Front yellow below, on the upper part blackish. Antennæ reddish or yellowish, the third joint more or less infuscated and rather long; arista with five rays above. Face,

cheeks, and the lower part of the occiput light-yellow; facial carina small. Mesonotum and scutellum deep shining black or nearly black. Pleuræ and legs wholly light-yellow. Abdomen black, moderately shining, the fifth segment on the sides and the venter yellow. Wings nearly hyaline, the third section of the costal vein little more than one-half the length of the second section; penultimate section of the fourth vein about one-third the length of the ultimate section. Length 2 mm.

One specimen. St. Vincent.

12. *Drosophila splendida*, n. sp.

♂, ♀. The large frontal triangle metallic-blue, the sides more brownish and the frontal lunule yellow. Antennæ yellow, the third joint somewhat brownish; arista thickly and long plumose. Face opaque yellow, somewhat blackish in the concavities, with a slight median carina. Mesonotum brilliant deep metallic-blue; scutellum deep opaque black; pleuræ black but little shining. Abdomen black, the basal segments more or less yellow, apparently in life with distinct markings. Legs yellow; all the femora more or less black. Wings greyish or yellowish hyaline; third section of the costal vein two-thirds the length of the second section. Anal cell incomplete. Length 2 mm.

Four specimens. St. Vincent.

13. *Drosophila punctulata*.

Drosophila punctulata, Loew, Centur., ii., 100.—Cuba.

Four specimens. St. Vincent.

14. *Drosophila procnemis*, n. sp.

♂. Front broad, broader above; opaque yellow, the narrow orbits greyish. Antennæ yellow, the third joint brownish; arista with three or four rays above and two below. Face and cheeks yellow, the former not carinate, the latter narrow. Thorax shining reddish-yellow, with black hair. Abdomen rather elongate, deep shining black. Legs yellow, the front femora for the most part, the front tibiæ and the front metatarsi deep brown or black, the remaining joints of the front tarsi light-yellow. Wings tinged with greyish; the third and fourth veins are gently convergent, the former terminating at the tip of the wing; the

third section of the costal vein is about three-fourths the length of the second section, and the penultimate section of the fourth vein about one-third the length of the ultimate section; costal cell infuscated; anal cell complete. Length 2 mm.

Four specimens. The wings are whitish at the tip.

15. *Drosophila frontalis*, n. sp.

♂, ♀. Front narrow, more than twice as long as wide, less than one-third of the width of the face, of equal width above and below, and not wider than the face; opaque light-yellow, in some specimens with a shade of brown above. Third joint of the antennæ fully twice as long as wide. Antennæ, face, and lower part of the occiput light-yellow, the occiput elsewhere blackish; cheeks linear; face not carinate. Mesonotum and scutellum light reddish-yellow, moderately shining. Pleuræ light-yellow. Abdomen yellow or light reddish-yellow, rather elongate; the second segment, except the narrow front margin, the third and fourth segments each with three spots, of which the median one is the larger, black; fifth segment of the female small, with a black spot on each side. Legs wholly light-yellow. Wings yellowish or greyish hyaline; third section of the costal vein less than half the length of the second section; penultimate section of the fourth vein less than half the length of the ultimate section; the costal vein terminates at the tip of the third vein. Length 2½ mm.

Eight specimens. St. Vincent.

16. *Drosophila verticis*, n. sp.

♀. Front very broad above; yellow, the vertical stripes and a stripe or spot near the orbits, metallic-blue; lower part of the front wholly yellowish. Antennæ yellow, the third joint brown; arista with long rays above and below. Face yellow, flat, not carinate. Mesonotum shining reddish-yellow; scutellum opaque brown on its upper surface. Pleuræ more brown. Abdomen apparently yellow, with brown posterior bands to the segments. Legs yellow. Wings nearly hyaline; third section of the costal vein two-thirds or more the length of the second section; anal cell incomplete, the vein closing the cell outwardly indistinct or wanting. Length 2 mm.

Two specimens. St. Vincent.

17. *Drosophila*, sp. ?. (Pl. XIV., fig. 153, wing.)

♂. Deep shining black. Front very broad, broader than long. Antennæ blackish; third joint narrow and pointed. Face not more than half the width of the front, gently convex in the middle, the narrow orbits, the inferior margin and the cheeks greyish dusted. Legs, including the front coxæ, wholly light-yellow. Wings nearly hyaline; third costal section a little longer than the second. Length 2 mm.

One specimen. "Union Is., Oct."

18. *Drosophila pollinosa*, n. sp.

♂. Black in ground-colour, thickly pollinose. Front longer than broad, only a little broader above; densely yellowish-grey pollinose, with four rows of bristles, the median ones not extending quite as far as the orbital ones. Antennæ reddish-yellow, the third joint rounded, the arista with but few rays on the upper side. Face greyish-pollinose, like the front, flat or with a slight carina above; vibrissæ present; cheeks not broad. Thorax densely pollinose, the mesonotum and scutellum yellowish-grey, the pleuræ more grey; apex of the scutellum reddish. Abdomen black, yellowish-grey dusted. Legs reddish-yellow. Wings nearly hyaline; anterior cross-vein situated before the insertion of the first vein; third section of the costal vein only a little shorter than the second section. Halteres yellow. Length 2 mm.

Two specimens. St. Vincent. In all probability the present species belongs among the *Ephydridæ*, but the very flat face and the presence of vibrissæ will lead one to search for the species in this genus. The presence of the additional row of frontal bristles, the few rays to the antennal arista, the small carina, and the partial absence of the anal cell are all characters out of accordance with those of this genus, as well as the general colouring of the species.

19. *Drosophila limbata*, n. sp.

♂, ♀. Head, thorax and legs yellow or reddish-yellow, but little or not at all shining; third joint of the antennæ brownish; face carinate. Abdomen yellow, with a posterior black band to the segments, the bands broader in the middle and narrow at the sides. Wings distinctly clouded with blackish along the front border, filling out the costa, marginal and submarginal cells, and reaching

the middle of the first posterior cell ; behind, the wing is distinctly lighter coloured, but not hyaline ; on the posterior cross-vein there is an indistinct cloud ; third section of the costal vein about one-third the length of the second section. Length 2 mm.

Twelve specimens. St. Vincent.

20. *Drosophila pallida*, n. sp.

♂, ♀. Yellow, not shining, the mesonotum light reddish-yellow and a little shining ; face obtusely carinate above, not nose-like. Abdomen reddish-yellow, with a narrow brownish posterior border to the segments. Front broad, broader above. Wings distinctly yellowish ; second section of the costal vein fully twice the length of the third section. Length $1\frac{1}{2}$ mm.

Twelve specimens. St. Vincent. In most of the specimens the narrow brown bands of the abdomen are visible, but in some the whole abdomen is brown. The penultimate section of the fourth vein is very nearly equal to one-half the length of the ultimate section. A single female specimen agrees in other respects but has the third costal section about three-fourths the length of the second section and the penultimate section of the fourth vein not more than one-third the length of the ultimate section.

21. *Drosophila similis*, n. sp.

♂, ♀. Very much like *D. pallida*, but is larger, and the third section of the costal vein is very short, not longer than the penultimate section of the fourth vein. The second and third veins are parallel through nearly their whole length, and the second vein is unusually long. In most of the specimens the abdomen is brown, but in some there are black or brown bands as in *D. pallida*. The colour is reddish-yellow, sometimes more purely yellow. Length $2-2\frac{1}{2}$ mm.

Numerous specimens. St. Vincent.

22. *Drosophila illota*, n. sp.

♀. Yellowish or brownish-red, the abdomen brown or blackish, the legs yellow. Front as broad or broader than long, a little wider above, opaque brownish or ochraceous yellow, the ocellar tubercle blackish. Third joint of the antennæ twice as broad as long, blackish ; arista with two or three rays on the under side.

Face more yellowish, in the middle with a strong, obtuse carina, leaving a deep depression on each side in which is lodged the antenna. Palpi and proboscis yellowish. Mesonotum a little shining. Abdomen more reddish toward the base. Wings with a brownish tinge; penultimate section of the fourth vein about one-half as long as the ultimate section; posterior cross-vein nearly as long as the ultimate section of the fifth vein; third section of the costa not half the length of the second section. Length $2\frac{1}{2}$ mm.

Two specimens. St. Vincent.

23. *Drosophila nana*, n. sp.

♂; ♀. Front a little broader above; brown, somewhat yellowish below. Antennæ yellow, the third joint oval, brownish. Face obscure yellowish-brown; carina small, low, confined to the upper part of the face. Arista with four or five rays above and two long ones below. Mesonotum yellowish-brown, shining; pleuræ more blackish. Abdomen oval, black, shining. Legs lutescent yellow. Wings yellowish hyaline; third section of the costal vein more than one-half the length of the second section; anal cell incomplete, its outer cross-vein indistinct. Length $1\frac{1}{2}$ mm.

Six specimens. St. Vincent.

PHORTICA.

Schiner, Wien. ent. Monatschr., vi., 1862. *Amiota*, Loew, Centur., ii., 93, 1862.

1. *Phortica scutellaris*, n. sp.

♀. Front opaque black, brownish pollinose, a little wider posteriorly, less than one-third the width of the head. Antennæ brownish-yellow or yellow, the first two joints brownish; arista long plumose. Face flattened, grey pollinose. Thorax black, thinly greyish-yellowish pollinose and but little shining; scutellum flattened, opaque-black. Abdomen black or brownish-black, more or less yellowish in the middle and at the tip; venter yellow. Legs wholly light-yellow. Wings greyish hyaline, distinctly pubescent; cross-veins approximated, the penultimate section of the fourth vein scarcely as long as the first section of the third vein; second and third veins nearly parallel, the distance between

their tips not twice as great as that between the tips of the fourth and third veins.

♂. Second, third, and fourth joints of the front tarsi dilated, the first joint stout; the whole tarsi and the tip of the tibiae blackish.

Length 2 mm.

Five specimens. St. Vincent. I refer this species with some doubt to the present genus, as it does not have the typical markings of *Phortica*. There is a complete posterior basal cell; otherwise the species resemble those of *Drosophila*. The oral vibrissæ are weak. The bristles of the front are strong and reach nearly to the oral margin; there is no preapical bristle to the hind tibiae.

OSCINIDÆ.

ELACHIPTERA.

Macquart, Hist. Nat. Dipt. Suites a Buffon, ii., 621, 1835; *Crassiseta*, Von Roser, Verh. Wurt. Dipt. Nachtrag, 1840.

1. *Elachiptera flavida*, n. sp.

♂, ♀. Light reddish colour, the arista black, and the legs more purely yellow. Vertical triangle large, reaching nearly to the root of the antennæ, shining. Head usually a purer yellow than the mesonotum and abdomen. Mesonotum shining. Scutellum trapezoidal, with two moderate-sized bristles on the angles. Abdomen of some specimens brownish, probably from desiccation. Wings hyaline, with a slight yellowish tinge; third section of the costal vein only a little shorter than the second. Length 2-2½ mm.

Ten specimens. St. Vincent.

HIPPELATES.

Loew, Centur., iii., 67, 1863.

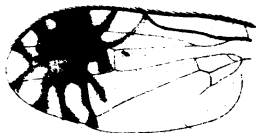
- | | |
|---|------------------------------|
| 1. Proboscis elongate, folding backwards (<i>Siphomyia</i>) . . . | 2 |
| Proboscis not elongate | 3 |
| 2. Thorax black, thinly greyish dusted. | <i>proboscideus</i> , n. sp. |
| Thorax yellow, the mesonotum, except on the sides and | |
| behind, black, thickly yellowish dusted | <i>dorsatus</i> , n. sp. |



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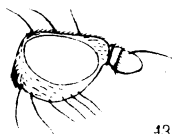
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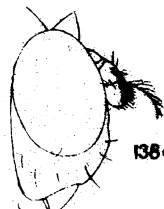
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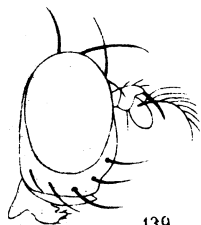
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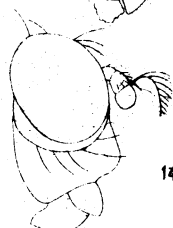
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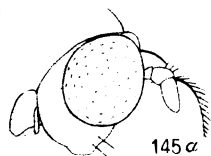
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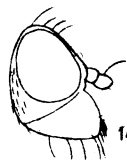
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146a



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147a



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149a



149c



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Edwin Wilson Cambridge

WEST INDIAN DIPTERA.