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AFRICAN TACHINIDAE—III

By C. H. CURRAN

The preceding papers in this series were published in Novitates Nos. 751 and 1022. The present contribution contains descriptions of a number of species that appear to be of considerable economic importance in the control of pests of cultivated crops. Unless otherwise stated the types are in The American Museum of Natural History.

DEXILLA WESTWOOD

The species placed in *Dexia* in my papers on the African Tachinidae belong to *Dexilla* as recently pointed out by Townsend. The following key will separate the species known to me.

Table of Species Legs black......8. 2.—Bend of fourth vein with appendage... Bend of fourth vein without appen-3.—Third vein with two or three basal setae, if with two the abdomen not Third vein with a single basal seta; abdomen vittate...uniseta Curran. 4.—Facial carina broadened and rather flattened below; antennae reaching less than halfway to vibrissae . . . 6. Facial carina sharp throughout; antennae reaching at least halfway to 5.—Pollen brown-ochreous or cinnamon brown; veins strongly clouded with Pollen cinereous; veins weakly clouded with brownish (Europe)... rustica Fabricius. 6.—Abdomen with median dark vitta (Kenya).....orphne Curran. Abdomen with black apical seg-

mental fasciae (Cameroons)
venusta Curran.
7.—A broad median vitta and lateral
margins of the abdomen blackish,
the intervening yellowish area whit-
ish pollinosevarivittata Curran.
Abdomen with median dark vitta
and yellowish pollen (Uganda)
inappendiculata Austen.
8.—Mesonotum with four black vittae
(Cape)pusio Walker.
Mesonotum with three black vittae
(Cape)lugens Wiedemann.
9.—Proboscis wholly pale reddish10.
Proboscis brown beneath, the ab-
domen mostly brownish in ground
color (S. Rhodesia)
cuthbertsoni, n. sp.
10.—Abdomen with milky white pollen (S.
Rhodesia) rhodesia, n. sp.
Abdominal pollen yellowish11.
11.—Crossveins on apical half of wings
conspicuously clouded with brown
(Cape)afra Curran.
Apical half of the wing rather uni-
formly brown except behind, the
crossveins only slightly darkened
(Liberia)bequaerti, n. sp.
. , , , , , , , , , , , , , , , , , , ,

mental fasciae (Cameroons)

Dexilla cuthbertsoni, new species

Blackish, the legs yellowish; fourth abdominal segment sometimes reddish; proboscis brown. Length, 7 to 9 mm.

FEMALE.—Head blackish, the face reddish in ground color. Front wider than one eye, dull brown; six to nine pairs of frontals and two pairs of strong orbitals; occllars long; outer verticals short; parafrontals with only a few scattered hairs. Occiput with the pollen brown above, yellowish below. Cheeks almost as wide as the eye-height, the anterior portion brownish red. Parafacials wide, with pale brassy yellow pollen; middle of face with pale yellowish pollen, the carina conspicuously widened below. Palpi yellow. Proboscis brown with yellow

labellae. Antennae reddish, the arista with long black rays.

Thorax black, the pleura cinereous pollinose; mesonotum brown pollinose with the sides cinereous yellow to dull golden-yellow, with four slender black vittae and a black stripe on each side behind the base of the wings. Acrosticals 1-1; dorsocentrals 2-3 or 3-3; two intra-alars and two sternopleurals. Hair black. Scutellum brown with the free border cinereous or yellowish pollinose.

Legs reddish; tarsi black.

Wings very strongly tinged with dark brown, the base broadly pale. Squamae tinged with brown.

Abdomen black, the fourth segment sometimes reddish; pollen brown, toward the sides of the second segment sometimes mostly cinereous except apically, the hairs and bristles arising from black spots. Hair wholly black. Second segment with a pair of marginals, the third and fourth each with a row.

Types.—Holotype, female, and three paratypes, females, Vumba Mountains, Southern Rhodesia, March, 1935 (A. Cuthbertson).

Dexilla rhodesia, new species

Mostly reddish, with whitish and cinnamon brown pollen. Length, 8 mm.

Female.—Head reddish in ground color, the parafrontals and part of the occiput above the middle black; pollen white, brownish on the parafrontals. Front almost half as wide as the head, gently widening anteriorly; eight or nine pairs of frontals, the upper pair reclinate; two pairs of proclinate orbitals; hair short, coarse and sparse; ocellars long and strong; outer verticals scarcely differentiated. Occiput with sparse black bristly hair and with yellowish pile beneath the neck. Cheeks as wide as the eye-Vibrissae strong; one to three weak height. bristles above them. Facial ridge yellowish, of medium width. Proboscis and palpi reddish yellow. Antennae pale orange, the arista brownish at the base.

Thorax reddish, the mesonotum mostly blackish in ground color; pollen whitish on the pleura and sides of the mesonotum, cinnamon brown dorsally, but the whitish pollen extends inward in front of the suture. The dark vittae are represented by a pair of short, interrupted dorsocentrals, a triangular sublateral spot in front of the suture and a short sublateral stripe behind the suture; above the base of the wings is a large opaque black spot. Acrosticals 0–1; dorsocentrals 2–3; two sternopleurals; three pairs of strong marginal scutellars, the apical pair decussate.

Legs reddish, the tarsi becoming brownish apically.

Wings tinged with brown, brownish along the veins and in the stigmal cell; the base whitish. Squamae whitish. Halteres yellow.

Abdomen reddish with white pollen above, the sides with pale brownish pollen, the venter cinereous pollinose. The hairs arise from small brown spots, the bristles from large ones, giving a fasciate appearance to the segments, the first segment mostly brownish.

HOLOTYPE.—Female, Salisbury, Southern Rhodesia, December 24, 1911.

Dexilla bequaerti, new species

Abdomen reddish yellow with incomplete median black vitta and dark segmental apices; wings brownish on apical two-thirds except behind. Length, 10 mm.

Male.—Head blackish in ground color above, the lower half reddish yellow; pollen cinereous, yellowish on the front and parafacials. Front narrow above, strongly widening on the anterior half; seven pairs of frontals and two or three bristly hairs; ocellars long and strong; verticals weak. Occiput with coarse black hairs, below the neck with sparse yellow pile. Cheeks almost three-fourths as wide as the eye-height, the anterior soft part pale reddish brown. Facial carina sharp on its whole length. Proboscis and palpi reddish yellow. Antennae pale orange, the rays of the arista brown.

Thorax blackish in ground color, the humeri and anterior and posterior portions of the pleura yellowish. Pollen cinereous on the pleura and sides of the mesonotum, brownish on the dorsum, the black vittae conspicuous. Acrosticals 1-1; dorsocentrals 3-3; three pairs of strong marginal scutellars, the apical pair cruciate; two sternopleurals.

Legs reddish, the tarsi black.

Wings brownish on almost the apical twothirds except posteriorly, yellowish brown basally, grayish posteriorly, the bend of the fourth vein with a short appendage, the crossveins scarcely darkened. Squamae brownish yellow. Halteres yellow.

Abdomen rusty reddish yellow, with a black median vitta extending from the base to the apex of the third segment and with apical segmental fascia formed by blackish dots about the bases of the bristles. Pollen rich brownish yellow, practically absent on the sides and under surface, the hairs arising from pale brown spots.

HOLOTYPE.—Male, Du River Camp No. 3. Liberia (J. Bequaert).

HERMYA DESVOIDY

DESVOIDY, 1830, Mem. Acad. Roy. Sci. Inst. France, IV, p. 266.

Paraphania Brauer and Bergenstamm, 1889, Denk. Akad. Wissen. Wien., LVI, p. 141. Liancosmia Speiser, 1910, Kil.-Meru. Exped., X, p. 157.

With the exception of ditissima Speiser all of the species of Hermya closely resemble each other. All are black with the

head, thorax and abdomen more or less pollinose: the wings are blackish with more or less violaceous reflections (only in pictipennis, n. sp., with yellowish in the middle anteriorly); antennae black, the base of the third segment sometimes partly reddish. The bristles of the thorax are somewhat variable, but there are normally three posterior dorsocentrals and three sternopleurals. In ditissima Speiser there may be one to three posterior dorsocentrals and two to three sternopleurals and the apical cell may be closed or narrowly open as in the other species.

In the species before me the male genitalia are distinctive and readily separate the species. The females are difficult to separate and apparently display no characters except in the arrangement of the pollen and the color of the squamae.

Townsend (Manual of Myiology, III, pp. 74, 75) separates Liancosmia Speiser on the presence of only two sternopleurals, one postsutural dorsocentral and the closed apical cell. I have not seen a specimen with only two sternopleurals but the material before me shows the other characters mentioned, in some specimens. In view of the variation *Liancosmia* must be placed as a synonym of Hermya. On page 75 Townsend states that the third vein is bare but this is not the case. All of my specimens have the third vein haired but the hairs are difficult to see because of the dark color of the wing. Of the characters used by Townsend for the separation of Hermya and Orectocera Wulp (p. 75) only the comparative length of the vibrissae is of value. Infra-squamal setulae are usually present but they are very fine, vary in number and are difficult to see.

TABLE OF SPECIES 1.—Abdomen reddish. . ditissima Speiser.

Abdomen black in ground color2.
2.—Face golden
Face whitish, sometimes with brassy
tinge4.
3.—Wings conspicuously bicolored, the
costa broadly dull yellowish on the
median half o pictipennis, n. sp.
Wings not bicolored, brownish black,

becoming brown posteriorly
4.—Lower lobe of squamae brownish
Lower lobe of squamae white, usually
with brown rim5.
5.—Squamae without brown rim
$\dots \dots $ φ diabolus Wiedemann.
Squamae with deep brown border6.
6.—Face brassy10.
Face pure white7.
7.—Malealbifacies, n. sp.
Females8.
8.—Abdomen, from anterior view, with-
out pollen on the dorsum
♀ <i>nitida</i> , n. sp.
Abdomen with pollen on the dorsum
9.
9.—Abdomen mostly pollinose above
♀ confusa, n. sp.
Abdomen with a faint, median, white
pollinose vitta on the basal half or
more, more extensively pollinose
apicallyalbifacies, n. sp.
10.—Abdomen, viewed from certain angles,
wholly whitish pollinose; arms of
posterior forceps obtuse apically;
second abdominal segment without
marginalsconfusa, n. sp.
Abdomen whitish pollinose on the
middle and sides, brownish polli-
nose between; arms of posterior
forceps acute apically; second ab-
dominal segment with pair of
marginalsvittata, n. sp.
Hermya ditissima Speiser

becoming brown posteriorly

Hermya ditissima Speiser

Liancosmia ditissima Speiser, 1910, Kil.-Meru. Exped., X, p. 157.

This species is easily distinguished by the orange-colored abdomen and scutellum and the orange and black-striped mesonotum. The posterior dorsocentrals vary from one to three and the apical cell may be closed just before the wing margin. The abdomen is not quite as elongate as in the other species. I have material from Liberia and the Belgian Congo.

Hermya diabolus Wiedemann

Ocuptera diabolus Wiedemann, 1819, Zool. Mag., III, p. 26.

Tachina diabolus WIEDEMANN, 1830, Ausser. Zweifl., II, p. 302.

H. afra Desvoidy, 1830, Mem. Acad. Roy. Soc. Inst. France, IV, p. 227.

H. hottentota Desvoidy, 1830, idem., p. 227. Paraphania diabolus Brauer and Bergen-STAMM, 1889, Denkschr. Akad. Wissen. Wien, p.

Townsend (Manual of Myiology, IV, pp. 270, 276, and VII, p. 122) places afra and hottentota as synonyms of diabolus, repeating the synonymy given in Ann. Mag. Nat. Hist., VIII, p. 389, 1931. The types of the Desvoidy species are lost and the synonymy should be accepted to avoid confusion. There can be little doubt that the above names refer to the same species since all were from the Cape of Good Hope.

In the male the face and parafrontals are golden pollinose, the occiput with white pollen and pile; basal antennal segments and base of third brownish red. Thorax with white pollen, the mesonotum with four black vittae that appear brown when seen from in front and do not nearly reach the posterior border. Squamae brown with white base. Abdomen black, from certain views thinly covered with whitish or pale yellowish pollen, the sides and under surface more thickly pollinose. The posterior forceps are united basally, the basal portion truncate apically and with a long. rather stout arm extending forward on each side, these arms obtuse and converging apically.

In the female the head is white pollinose and the squamae are wholly white with pale yellowish rim. The abdomen is more thickly white pollinose.

Specimens before me are from Liberia. Belgian Congo and Southern Rhodesia.

Hermya nitida, new species

Shining black, with thin pollen; facial pollen with brassy tinge. Length, 14 to 16 mm.

Male.—Face with very pale brassy yellowish pollen; front black, the pale pollen extending from the face almost to the middle of the parafrontals; occiput with cinereous pollen and pale yellow pile; parafacials and cheeks reddish in ground color; second antennal segment brownish red.

Thorax with whitish pollen; mesonotum with four black vittae, the outer pair very broad; mesopleura with brownish pollen.

Wings blackish with violaceous reflections; squamae brownish with white base.

Abdomen shining above, the under surface thinly cinereous and yellowish-brown pollinose. Arms of the posterior forceps about one-fourth as long as the basal section, their apical half directed obliquely upward (away from the body when $in \ situ$).

Female.—Pollen silvery white, the parafacials black on the outer half. Under surface of abdomen with thicker, cinereous pollen. Squamae white, the border narrowly brown.

Types.—Holotype, male, Stanleyville, Congo, April 10, 1915; allotype, female, Stanleyville, March, 1915; paratype. male, Lisala, Congo, October, 1924 (J. Bequaert). The two types were collected by Lang and Chapin.

Hermya confusa, new species

Black, with whitish pollen; squamae white

with brown rim. Length, 13 to 15 mm.

Male.—Head with pale brassy pollen, the parafrontals brown, the occiput white pollinose and pale yellow pilose; parafacials and cheeks reddish in ground color; base of third antennal segment narrowly reddish.

Thorax with white pollen, that on the mesonotum thin and divided by four black vittae that are sometimes only narrowly separated.

Squamae white with brown border.

Abdomen with white pollen on the whole surface when seen from certain angles, the pollen thicker on the sides and ventral surface. Second segment usually with a pair of discals in front but without marginals; third usually with a pair of discals and marginals. Arms of the posterior forceps about one-third as long as the basal section, carried straight forward and with obtusely rounded apex.

Female.—Face white pollinose; much more conspicuously yellowish-white polli-

Types.—Holotype, male, Stanleyville, Congo, March, 1915; allotype, female, Stanleyville, April, 1915. Paratypes: male, Stanleyville, September 26–30, 1910; three males, Medje, Congo, July, August and September, 1910, and one male, Bengamisa, Congo, September 29, 1914; all collected by Lang and Chapin.

Hermya vittata, new species

Abdomen with whitish pollinose median vitta and brown pollen on at least the two basal segments and sometimes on the third; face with brassy tinge. Length, 13.5 to 14 mm.

Male.—Pollen white, on the face with slight to strong brassy tinge; occiput white second antennal segpollinose and pilose; ment and narrow base of the third more or less reddish.

Thorax with whitish pollen, the black mesonotal vittae broad, those on each side only weakly separated from each other.

Squamae white with brown border.

Abdomen with the fourth segment, sides, under surface and a median dorsal vitta white pollinose, the vitta with or without yellow tinge, the second and sometimes the third segment brown pollinose. Second and third segments each with a pair of discals and marginals. Arms of the posterior forceps one-third as long as the basal section, straight and tapering to the apex.

Types.—Holotype, male, Eden, Cameroons (J. A. Reis); paratype, male, Stanleyville, Congo, March, 1915 (Lang and Chapin).

The male is readily distinguished from related species by the straight, acute arms of the posterior forceps, and from *confusa*, in addition, by the presence of marginals on the second abdominal segment. The female should also show marginals on this segment.

Hermya albifacies, new species

Face white pollinose in both sexes; squamae white with brown border; abdomen wholly thinly white pollinose. Length, 11 to 12 mm.

Male.—Face and occiput white pollinose; pile of the occiput white. Second antennal segment and base of third obscurely reddish.

Thorax with white pollen, the mesonotum with four shining black vittae, those on each side only narrowly separated from each other. Squamae white, with brown border.

Abdomen thinly white pollinose above, more thickly so below. Second to fourth segments each with a pair of discals, the second with two, third with four, the fifth with a row of marginals.

FEMALE.—Head missing. Pollen of thorax and abdomen as in the male, second abdominal segment without marginals, third with two, the fourth without apical row.

Types.—Holotype, male, Stanleyville, Congo, April 7, 1915; allotype, female, Stanleyville, March, 1915; paratype, male, Stanleyville, March, 1915, all collected by Lang and Chapin.

This species is smaller and narrower than any of the others and the male is readily recognized by the pure white face. The arms of the genitalia are at least one-third as long as the basal part, slender and slightly clavate apically.

Hermya pictipennis, new species

Wings brown, with a broad yellowish costal stripe extending from the basal fourth to the apical third. Length, 12 mm.

Male.—Face and cheeks golden; front dull black, with a white spot on each side anteriorly; occiput white pollinose, pale yellow pilose; apex of the second and base of the third antennal segments reddish.

Thorax with cinereous pollen, the mesonotum with four dark brownish vittae, the mesopleura brownish on the anterior half.

Wings brown, paler posteriorly and in the large cells, with a dull reddish-yellow costal stripe extending from the basal fourth to the apical third. Squamae brown, with darker border and white base.

Abdomen with thin brownish pollen above and whitish pollen on the sides and under surface. Second segment with a pair of discals but no marginals, the third without discals but with pair of marginals.

HOLOTYPE.—Male, Uganda, September, 1923.

The genitalia have not been spread but the bicolored wings are distinctive.

Fischeria capensis, new species

Abdomen reddish yellow with narrow dark vitta and black apex; legs reddish; wings somewhat brownish on apical half. Length, 9 to 10 mm.

Male.—Face, anterior half of cheeks and posterior oral margin yellow in ground color, the facial depression mostly darkened, the front and occiput black; pollen white, brassy yellow on the upper third of the front and occiput. Front narrow, with parallel sides on more than the upper half, the frontal vitta deep black and of almost uniform width; hair absent; thirteen to sixteen pairs of long fine frontals, two below the base of the antennae, none reclinate; ocellars long. Verticals weak, the outer verticals weak or Occipital pile yellowish; not differentiated. occipital cilia and hair of the cheeks black. Cheeks one-sixth the eye-height, with sparse coarse hairs. Parafacials slightly narrowing below. Proboscis short; palpi yellow, cylindrical. Antennae brown, the two basal segments reddish; arista long pubescent, the rays twice as long as its basal thickness.

Thorax brownish in ground color, the pleura with cinereous, the dorsum with golden pollen which leaves four narrow, incomplete and interrupted shining black vittae. Acrosticals 2-1 or 3-1; dorsocentrals 3-3; intra-alars 3; sternopleurals 2-1. Scutellum brownish with yellowish apex, the pollen golden or golden brown.

Legs reddish yellow, the tarsi black. Claws and pulvilli elongate.

Wings hyaline basally, strongly tinged with brown on the apical half. Squamae translucent pale brownish. Halteres yellow.

Abdomen elongate conical, yellowish or reddish yellow, the hair black. First and second segments and basal half of the third with narrow black or brown vitta, the third blackish on the apical half or less; fourth segment shin-

ing castaneous to black; bases of third and fourth segments narrowly whitish pollinose. First and second segments without median marginals although the second may have a pair of subappressed bristle-like hairs; third and fourth segments each with a row of marginals.

Types.—Holotype, male, East London, South Africa, January 11, 1925 (H. K. Munro); paratype, male, East London, March 1, 1924. The type has been returned to Mr. Munro.

This species differs from *bicolor* Desvoidy, of Europe, by the longer pubescent arista.

SIPHONA MEIGEN

Most of the material belonging to this genus has been on hand for a considerable time, specimens being added occasionally. Most of the species are similar in general appearance and also resemble the species of *Actia*, differing in having a very long, geniculate proboscis and a longer head, the face being little retreating.

Table of Species¹

TABLE OF SPECIES
1.—Femora blackmelania Bezzi.
Femora reddish2.
2.—First vein bare4.
First vein with at least a long bristle
near the apex, or several bristles 3.
3.—First vein with only a single strong
bristle near the apex. munroi, n. sp.
First vein with short bristles
<i>bevisi</i> , n. sp.
4.—Palpi clear yellowish6.
Palpi brown or reddish brown5.
5.—Antennae wholly black
Basal antennal segments brownish
redcapensis, n. sp.
6.—Arista wholly blackish, not con-
trastingly bicolored
Basal aristal segments reddish or
yellowish, the apical segment black
8.
7.—Front brown, antennae wholly black,
wings infuscated
obscuripennis, n. sp.
Front dull orange to reddish brown,
the basal antennal segments some-
what reddish, wings at most tinged
with brown10.

¹ S. abbreviata Villeneuve, from Madagascar, is omitted.

8.—Mesonotum with three w	eak brown
vittae which are strongl	y indicated
in frontvitta	ta, n. sp.
Mesonotum without disti	nct vittae.
	Q

9.—Mesonotum yellowish cinereous, with trace of narrow brown median vitta on posterior half..nigroseta, n. sp. Mesonotum brownish on the disc, the sides cinereous yellow.........

.....geniculata DeGeer.

Siphona munroi, new species

Reddish, the mesonotum black; abdomen with black markings; first vein with one strong bristle apically. Length, 5 mm.

Female.—Frontal vitta dull orange, the parafrontals brownish in ground color, the pollen yellowish brown, dense on the parafrontals. Six or seven pairs of frontals, upper orbitals Occiput dark above, with cinereous pollen. Face, cheeks and lower occiput yellow in ground color and white pollinose. Cheeks onefifth as wide as the eye-height; parafacials with about six very short setulae above, slightly narrowing below. Palpi long, curved, yellow; proboscis as long as the body, brown with reddish base and apex. Antennae reddish, the third segment brownish on the apical half, about three and one-half times longer than wide, gently curved upward. Arista black beyond the base of the third segment; second segment about onesixth as long as the third.

Thorax yellowish, the mesonotum and scutellum dark in ground color, pollen white on the pleura, yellowish on the mesopleura and sides of the mesonotum, yellowish brown on the mesonotum and scutellum; apex of scutellum broadly yellowish in ground color.

Legs reddish, the tarsi black; apical three segments of the front tarsi slightly broadened.

Wings cinereous hyaline; first vein with a strong bristle near the apex, the third with strong bristles extending from the base almost to the small crossvein. Squamae white.

Abdomen reddish yellow, with ochraceous pollen; in the middle with a broad black vitta on the first three segments and a spot on the fourth, the pollen brownish on the posterior portions of the dark spots on the second and third segments and on the dark spot on the fourth; sides of second and third segments with a conspicuous black or reddish dark spot posteriorly. Incisures slightly paler than the disc of the segments. Hair black and appressed.

Holotype.—Female, Fort Jackson,

South Africa, May 7, 1925 (H. K. Munro); returned to Mr. Munro.

This species is readily distinguished from all others known to me by the presence of the single bristle on the first vein.

Siphona bevisi, new species

Rusty yellowish, with dark mesonotum and abdominal apex; first vein setulose on whole length. Length, 4.5 mm.

MALE.—Front with brownish-orange pollen, the parafrontals with cinereous pollen on the outer half or less; five or six pairs of frontals. Occiput brownish in ground color, grayish pollinose, the orbits whitish. Face, cheeks and lower occiput yellow, white pollinose. Cheeks about one-fifth as wide as the eye-height. Parafacials with a few weak setulae above. Palpi yellow, moderately long and gently curved; proboscis yellowish, brown on the median half, slightly longer than the body. Antennae brownish, the basal segments more reddish; third segment wide, about two and a half times as long as wide, the lower apex broadly rounded. Arista brown, the second segment about onethird as long as the apical segment.

Mesonotum dark in ground color; pollen whitish on the sides of thorax, grayish brown on the mesonotum. Scutellum brownish, the apex broadly yellow.

Legs reddish yellow, the tarsi black.

Wings cinereous hyaline; first vein with bristles on the whole length, the third bristled to well beyond the small crossvein. Squamae white.

Abdomen rusty yellowish, the broad apices of the third and fourth segments, and a median vitta on the fourth, brown, the bases of the segments with whitish pollen. Hair black, appressed.

HOLOTYPE.—Male, Umbilo, Durban, Natal, August 16, 1914 (A. L. Bevis).

The setose first vein distinguishes this from all described African species.

Siphona cuthbertsoni, new species

Blackish, with brownish and brownish-yellow pollen and with brown palpi. Length, 4.5 mm.

Male.—Front and occiput black in ground color, the parafrontals brownish-yellow pollinose, the frontal vitta reddish brown; six or seven pairs of frontals and two pairs of orbitals. Face, cheeks and the broad posterior oral border reddish yellow in ground color and dull yellowish pollinose. Cheeks not over one-seventh as wide as the eye-height. Parafacials with two or three setulae above. Palpi brown, becoming reddish basally; proboscis brown, as long as the body. Antennae black, not large, the third begment two and one-half times longer than wide, the lower apex broadly rounded, the upper

apex sharply rounded. Arista black, the second segment not over one-fifth as long as the third.

Thorax black, cinereous pollinose, the mesonotum cinereous yellow, with three broad brownish vittae. Apex of scutellum yellow, the pollen cinereous yellow.

Legs reddish, the tarsi black; apices of the femora darkened above.

Wings cinereous hyaline, third vein bristled almost to the small crossvein. Squamae grayish yellow.

Abdomen blackish, the sides broadly reddish on the basal half, the under surface reddish yellow on more than the basal half; pollen grayish yellow, the hairs arising from the darker spots so that the abdomen appears brownish with broad, pale incisures.

FEMALE.—Frontal vitta brownish red. General color slightly darker, the abdomen without reddish.

Types.—Holotype, male, Salisbury, Southern Rhodesia, December, 1934, and allotype, female, Salisbury, January, 1935 (A. Cuthbertson).

Siphona capensis, new species

Palpi brownish on apical half; antennae brownish red basally. Length, 4 mm.

FEMALE.—Front dull orange, the parafrontals grayish-yellow pollinose; six or seven pairs of frontals. Occiput black in ground color, except behind the mouth, cinereous pollinose, the orbits whitish. Face and cheeks yellow, white pollinose. Cheeks about one-seventh as wide as the eye-height; parafacials becoming almost linear below, with two or three setulae above. Palpi reddish basally, brown on the apical half; proboscis brown, shorter than the body. Antennae black, the basal segments brownish red, the third segment almost three times as long as wide, the lower apex broadly rounded. Arista black, the second segment about one-sixth as long as the third.

Thorax cinereous pollinose, the mesonotum cinereous yellow and with three brown vittae that do not reach the anterior margin. Scutellum cinereous pollinose, the apex broadly reddish yellow.

Legs reddish, the tarsi black. Front tarsi simple.

Wings cinereous hyaline. Squamae with grayish-yellow tinge.

Abdomen with cinereous yellow pollen; first segment with a pair of well-separated brown spots posteriorly, the following segments each with an elongate median spot on the basal half forming an interrupted vitta, the hairs arising from somewhat darker spots.

HOLOTYPE.—Female, East London, South Africa, March 28, 1923 (H. K. Munro); returned to Mr. Munro.

Siphona obscuripennis, new species

Blackish, the wings considerably infuscate; mesonotum with five brown vittae and additional spots. Length, 5 mm.

FEMALE.—Front and occiput black in ground color, the front brown pollinose with the orbits dull yellowish; five pairs of frontals. Occiput cinereous pollinose, the orbits yellowish. Face, cheeks and lower occiput yellow, the face pale dull yellowish pollinose, the cheeks with whitish pollen. Cheeks one-fifth as wide as the eye-height. Parafacials very slightly narrowing below, with three or four setulae above. Palpi reddish with brown tips; proboscis brown, longer than the body. Antennae blackish; third segment scarcely three times as long as wide, narrowing basally, widest at the apical fifth, the lower apex very broadly rounded. Second segment of arista a little more than one-fourth as long as the third segment.

Thorax black, the pleura cinereous pollinose, the humeri grayish yellow. Mesonotum yellowish brown, with five brown vittae, the middle and outer ones complete, the dorsocentral pair extending to behind the middle, and in addition with brown spots so that the mesonotum is chiefly brown. Scutellum with yellow apex, the pollen brown.

Legs reddish, the tarsi black; tips of femora blackish, at least on upper surface.

Wings strongly tinged with blackish brown. especially in front. Squamae cinereous white.

Abdomen blackish, the incisures broadly grayish yellow, the sides of the first segment and the basal half of the venter reddish yellow. The pollen is grayish yellow, the apical half of the segments with more or less shining, interrupted or entire brownish bands resulting from the spots surrounding the bristles.

Holotype.—Female, Vumba tains, Southern Rhodesia, March, 1935 (A. Cuthbertson, 4095).

Siphona vittata, new species

Arista wholly black; abdomen mostly reddish. Length, 4 to 5 mm.

Male.—Front golden-brown to reddish brown, the parafrontals brownish golden: five pairs of frontals; posterior orbital weak. Front and occiput black in ground color, the occiput cinereous pollinose. Face, cheeks and lower occiput yellow, white pollinose. Cheeks about one-sixth as wide as the eye-height. Parafacials narrow, with a single row of three to five setulae above. Palpi reddish; proboscis not as long as the body, black with the apex broadly reddish. Antennae black, the basal segments short, reddish; third segment broad, about two and one-half times longer than wide, the apex broadly rounded. Second aristal segment about one-fifth as long as the third, three or four times as long as wide.

Thorax black, the humeri and pleura cinereous pollinose, the mesonotum brownish yellow, somewhat golden, with three brownish vittae which are darker and contiguous in front, the median one paler, sometimes weak and always obsolete behind. Scutellum brown with the apical third yellow.

Legs reddish, the tarsi black.

Wings with light brownish tinge. Squamae tinged with luteous.

Abdomen reddish, with a narrow median black vitta and dark spots surrounding the bristles, particularly on the third segment. The third segment has a dark, sometimes blackish spot, laterally surrounding the bristles and the fourth is more or less darkened in ground color laterally in the middle and bears a definite brownish spot on the under surface. The spots from which most of the hairs arise are reddish and inconspicuous, the incisures narrowly whitish.

FEMALE.—Frontal vitta golden-brown above, becoming yellowish in front; base of third antennal segment broadly reddish, the second segment of the arista little more than twice as long as wide; dark spots on abdomen larger and more conspicuous, each segment with dark lateral spots. In the female the ground color of the abdomen is mostly brownish.

Types.—Holotype, male and paratypes, three males, Salisbury, Southern Rhodesia, April 30, 1938 (C1085), and allotype, female, Salisbury, June 1935 (A. Cuthbertson).

Siphona nigroseta, new species

Blackish, with cinereous and brownish-gray

pollen; arista wholly black. Length, 4 mm. Female.—Frontal vitta brownish yellow pollen rather ochraceous; six or seven pairs of frontals; upper orbital strong. Parafrontals and occiput dark in ground color; occiput with cinereous pollen. Face, cheeks and lower occiput yellow, white pollinose. Cheeks almost onefourth as wide as the eye-height. Parafacials narrowing below, with four to six setulae above. Palpi yellow; proboscis brown, as long as the body. Antennae black, the basal segments brownish red; third segment rather narrow, the lower apex broadly rounded. Second segment of the arista one-third as long as the third, the arista wholly blackish.

Thorax black, cinereous pollinose, the mesonotum with pale brownish-yellow pollen and with indications of a narrow median brown vitta on the posterior half; apex of scutellum reddish.

Legs reddish, the tarsi black; apical three segments of front tarsi slightly broadened.

Wings cinereous hyaline. Squamae whitish. Abdomen black, with very pale brownishyellow pollen, the incisures and venter cinereous. The dorsum of the abdomen is almost uniform in color but the bristles arise from conspicuous shining brown spots.

HOLOTYPE.—Female, Pretoria, Transvaal, January 23, 1931 (H. K. Munro); returned to Mr. Munro.

Siphona laticornis, new species

Black, with pale pollen; second aristal segment yellowish. Length, 4 to 4.5 mm.

Male.—Frontal vitta dull orange to brownish orange, the parafrontals with brownish yellow to ochraceous pollen, the orbits rather whitish; five or six pairs of frontals. Parafrontals and occiput black in ground color, the occiput cinereous pollinose. Face, cheeks and lower occiput yellow, white pollinose. Cheeks one-fifth as wide as the eye-height. Parafacials slightly narrowed below, with four to six setulae above. Palpi yellow; proboscis not quite as long as the body. Antennae black, the basal segments reddish; third segment very broad, about twice as long as wide, the lower apex rather sharply rounded; second segment of the arista reddish, almost to quite one-third as long as the third segment.

Thorax black, the pleura and sides of the mesonotum cinereous pollinose, the mesonotum with yellowish-brown pollen posteriorly which becomes cinereous in front of the suture, the anterior border with indications of the beginning of three dark vittae. Scutellum with yellowish apex.

Legs reddish, the tarsi black.

Wings cinereous hyaline. Squamae yellowish white.

Abdomen reddish with cinereous yellow pollen, a narrow black vitta on the second and third segments, the bristles arising from large dark spots, or the abdomen may be much more extensively dark in ground color due to the fusion of the dark areas.

Types.—Holotype, male, Pretoria, South Africa, September 23, 1917, and paratype, male, East London, S. Africa, February 17, 1919 (H. K. Munro); the type returned to Mr. Munro.

Siphona vixen, new species

Blackish, the abdomen largely reddish; base of third antennal segment reddish. Length, 5 mm.

FEMALE.—Front and occiput black in ground color; frontal vitta brownish red, the parafrontals brownish yellow with the orbits grayish on the lower half; five or six pairs of frontals; anterior orbital strong, the posterior weak. Occiput cinereous pollinose, yellow in ground color on almost the lower half. Face and cheeks yellow, white pollinose. Cheeks almost one-fourth as wide as the eye-height. Parafacials narrowing below, with four to six setulae above. Palpi yellow; proboscis considerably shorter than the body. Antennae reddish, the third segment black on the apical three-fourths, rather narrow, the lower apex very broadly rounded.

Thorax black, the pleura and sides of the mesonotum cinereous pollinose, the mesonotum reddish-brown pollinose, becoming grayish in front, in the middle with a reddish brown vitta. Scutellum brown with reddish apex.

Legs reddish, the tarsi black; apical segments of the front tarsi distinctly widened.

Wings tinged with brown, especially in front. Squamae yellowish with brown reflection.

Abdomen brown and reddish, usually mostly reddish, with brown median vitta that expands to unite with the dark spots surrounding the bristles on the second and third segments, and with large brown spots surrounding the bristles on the fourth segment and on the sides and under surface of the intermediate segments, the pollen dull yellowish. At times the dark areas are extended so that the abdomen is almost half brownish above and chiefly brownish on the under surface.

Types.—Holotype, female, and paratype, female, Salisbury, Southern Rhodesia, January 1935 (A. Cuthbertson); paratype, female Pretoria, Transvaal, February 3, 1916 (H. K. Munro).

Siphona geniculata De Geer

Musca geniculata DE GEER, 1776, Mem. Ins., VI, p. 20 (f.).

This species has been recorded from northern Africa but is not represented in the material before me.

Kuwanimyia africana, new species

Black with cinereous pollen; apical cell closed. Length, 4.5 mm.

Male.—Head cinereous pollinose, the hair black. Front one-third the head-width, slightly widening anteriorly; six pairs of frontals, the upper two reclinate, the lower situated below the apex of the second antennal segment; parafrontal hair sparse; ocellars long; outer verticals short and poorly developed; occipital pile whit-Cheeks one-seventh as wide as the eyeheight, with sparse hair. Parafacials narrow. Facial depression deep, the oral margin but little produced. Face receding in profile, the ridges with six bristles on lower two-thirds. Palpi reddish. Antennae black, the basal segments short, the third segment long and broad, reaching to the oral margin, the apex truncate with the lower corner rounded; arista thickened on less than the basal half, the second segment four or five times as long as thick, not as long as the thickened portion of the third segment. Eyes bare, the antennae arising opposite their upper fourth.

Thorax cinereous pollinose, the mesonotum with four black vittae and with some brownish pollen on disc behind the suture; acrosticals 3-3; dorsocentrals 3-4; three intra-alars and three sternopleurals. Scutellum black, the border with thin cinereous pollen.

Legs black; claws and pulvilli short; middle

tibiae with two strong antero-dorsal bristles, the posterior tibiae with isolated bristles.

Wings cinereous hyaline, the veins mostly luteous; apical cell closed just before the wing margin, ending well before the tip of the wing; third vein with three bristles basally. Squamae whitish, with pale yellow rim; halteres brown.

Abdomen shining black; second segment with narrow interrupted basal fascia, the third and fourth with wider, interrupted basal white pollinose fasciae, that on the fourth occupying more than the basal third of the segment, that on the second linear and sometimes partly obliterated. First segment with a pair of weak marginals, the second with stronger pair; third and fourth segments with row of marginals, the fourth with a row of discals.

Types.—Holotype, male, and paratype, male, Salisbury, Southern Rhodesia, November 13, 1936, from nest of *Dasyproctus bipunctatus* in gladiolus.

This species differs from the genotype by the presence of weak marginals on the first abdominal segment.

Phorocera leo, new species

Shining black; occipital pile black; face setose above. Length, 6.5 to 7 mm.

FEMALE.—Head blackish in ground color, and with black hair, the anterior oral margin and a median facial stripe yellowish; pollen cinereous white, more grayish on the parafrontals. Front two-thirds as wide as one eye; about ten pairs of frontals and two proclinate orbitals; ocellars short but rather strong. Cheeks about one-third the eye-height, the hair bristle-like anteriorly. Parafacials with hair on almost the upper third. Facial ridges with bristles on more than the lower half. Palpi brownish red. Antennae blackish, the basal segments brownish red; third segment about twice as long as the second, its upper apex angular; arista thickened on the basal half. Eyes with cinereous pile.

Thorax shining black, with rather thin brownish-gray pollen; dorsocentrals 3-4; acrosticals 3-3; sternopleurals normally 1-1-2. Scutellum broadly reddish on its free border, with three pairs of marginals and a pair of weak, more or less decussate apicals.

Legs blackish, the tibiae brownish red; posterior tibiae moderately closely ciliate.

Wings hyaline, the veins yellowish; third vein with three bristles basally. Squamae white; halteres brownish red.

Abdomen shining black; intermediate segments thinly cinereous pollinose except on a narrow median line and the broad apex, and without discals, the second segment with or without a pair of suberect marginals, the fourth segment with irregularly placed discals.

Types.—Holotype, female, and paratype,

female, Umtali, Southern Rhodesia, March 21 and 22, 1916. The paratype is in the Southern Rhodesia Government collection.

This species is related to *laevis* Villeneuve but may be at once distinguished by the presence of hair on the parafacials. In *laevis* there may be two or three downwardly directed hairs below the frontals, and this species has the sternopleurals 1–2.

CHROMATOPHANIA VILLENEUVE

This genus was established by Brauer and Bergenstamm for *Gonia picta* Wiedemann, and in 1913 Villeneuve added two additional species but was uncertain of the status of the second. The species may be separated as follows:

TABLE OF SPECIES

1.—Only two postsutural acrosticals and dorsocentrals; third antennal segment longer than the second; thorax dark reddish in ground color; no clear spot in the brown field in the apical cell......picta Wiedemann.

Three postsutural acrosticals and four

3.—Mesopleura black pilose......

fenestrata Villeneuve.

Mesopleura yellow pilose...dubia, n. sp.

Chromatophania dubia, new species

Thorax blackish in ground color, densely dull ochraceous or brownish-yellow pollinose; abdomen reddish to brownish, with grayish-yellow pollen. Length, 12 mm.

Female.—Ground color of the head concealed by thick pollen, but partly dark and partly reddish. Front wider than one eye, ochraceous with reddish median vitta; seven to nine pairs of frontals, the upper two reclinate but the anterior of these is weak and situated outside the frontal row; two pairs of strong orbitals; ocellars and outer verticals long; frontal hair sparse and rather fine. Occiput and cheeks yellow

pollinose, the pile yellowish. Cheeks somewhat more than one-third as wide as the eye-height, with fine, sparse yellow hair, one or two black bristles and two or three coarse, black hairs. Parafacials clothed with yellow hair, as wide as the third antennal segment and not narrowing below. Face white pollinose, the depression not sunken. Palpi reddish, clavate. Antennae dark reddish, rising above the middle of the eyes and reaching to the oral margin, the second segment distinctly longer than the third, the third angulate above, the lower corner rounded; arista thickened to the apical fifth, the second segment about five times as long as thick and at least one-fifth as long as the third. Eyes bare.

Thorax blackish in ground color but the pleura show some yellowish areas and the humeri and scutellum are yellow. Pollen dense, ochraceous dorsally becoming cinereous on the pleura. Hair black dorsally, yellow on the pleura. Acrosticals 3–3; dorsocentrals 3–4; two intraalars; three sternopleurals; propleura pilose; prosternum bare. Two pairs of strong marginal scutellars, a weak basal pair and a pair of short decussate apicals.

Legs reddish, the tarsi black.

Wings hyaline and with yellow veins before the small crossvein, beyond brown with the apex and posterior border broadly gray and a gray area in the apical cell. Squamae dull yellowish. Halteres yellow.

Abdomen reddish to castaneous, the first segment black in the middle and basally. Hair black, yellowish on the under surface of the first segment. From posterior view the bases of the second to fourth segments are rather broadly yellowish white or white pollinose but the pollen is variable and these bands increase in width when seen from various angles. From some views the whole abdomen appears whitish or pale yellowish pollinose. Second segment with a pair of strong marginals, the third with a row of strong submarginals and a median row of discals.

Types.—Holotype, female, Mt. Mlanje, Nyasaland, October 27, 1912 (S. A. Neave). Paratype, female, Mlanje, Nyasaland, May 19, 1913 (S. A. Neave). The type is in the British Museum.