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# RECORDS AND DESCRIPTIONS OF AFRICAN SYRPHIDAE.—IV (DIPTERA)

## BY C. H. CURBAN

In this concluding part of the records the remaining genera of the Eristalinae are covered. They comprise a rather difficult section of the family since several of the genera contain species resembling those placed in other groups, and the generic limits are not clearly drawn.

#### MALLOTA MEIGEN

I am acquainted with only two African species that belong here, but only in the widest sense. The species closely resemble Simoides and many of the specimens of pallidibasis Bigot have the marginal cell short petiolate, so that the two genera are easily confused. It is possible that both should be united, insofar as the African species are concerned, under Simoides.

### TABLE OF SPECIES

## Mallota dasyops Wiedemann

Eristalis dasyops Wiedemann, 1819, Zool. Mag., I, p. 18.
pachymera Bezzi, 1915, Syrph. Ethiopian

Reg., p. 99.

Male, Umtali, Southern Rhodesia, September 9, 1927 (W. J. Hall); male, Cape Town, South Africa (J. C. Bridwell).

I have examined the type of this species and compared it with my specimens, thus verifying the above synonymy. The hind femora are more strongly swollen than in the other species.

#### Mallota aenigma Bezzi

Bezzi, 1912, Ann. Mus. Genova, XLV, p. 434. Described from the Island of Fernando Po and recorded by Bezzi from Southern Rhodesia. This latter record probably refers to extrema Loew.

## Mallota extrema Loew

Helophilus extrema Loew, 1857, Ofvers. Kongl. Vet. Akad. Forh., XIV, p. 380.

M. pallidibasis Curran, 1927, Bull. Amer. Mus. Nat. Hist., LVII, p. 65.

I have no additional records of this species but believe that I am able to clear up the identity of the specimens I recorded as pallidibasis Bigot in the Congo report. I do not think that extrema has been correctly identified since it was described although Bezzi placed it in Mallota. It may be readily distinguished from similarly colored species by the presence of a tuft of hair on the clypeus (at the base of the proboscis). The marginal cell is sometimes closed and short petiolate, although generally open.

#### SENASPIS MACQUART

Bezzi proposed the name Protylocera for this genus but the change of name was unnecessary. He emended Senaspis Macquart to Stenaspis, the name thereby becoming a homonym. In its original form Senaspis does not conflict with any other generic name and must be retained.

## TABLE OF SPECIES

## Senaspis nigrita Bigot

pollinose..... aesacus Walker.

Dolichomerus nigrita BIGOT, 1859, Ann. Soc. Ent. France, p. 431 (f.).

Male and two females from Sikora, Madagascar.

## Senaspis melanthysana Speiser

 $Protylocera\ melanthysana\ Speiser,\ 1914,\ Jahrb.\ ver\ Nassau,\ LXVI,\ p.\ 122.$ 

Senaspis elliotti Curran, 1927, Bull. Amer. Mus. Nat. Hist., LVII, p. 69.

Male, Bamania, Congo, May 11, 1924 (J. Bequaert).

All the specimens recorded as *elliotti* in my paper on the Belgian Congo Diptera belong here.

#### Senaspis elliotti Austen

Austen, 1909, Trans. Zool. Soc. London, XIX, p. 90.

Female, Boswenda, Congo, October 22, 1914; female, Mt. Ruwenzori, Congo, April 26, 1914 (J. Bequaert); female, Mulata Mts., Harrar Prov., Abyssinia, October 22, 1925 (B. Brown); female, Kikuya Escarpment, British East Africa (A. Ford); female, Uganda, November 23–27, 1926 (G. L. R. Hancock).

#### Senaspis aesacus Walker

Helophilus aesacus WALKER, 1849, List Dipt. Brit. Mus., III, p. 609.

Male and female, Du River Camp No. 3, Liberia, 1926; female, Lubutu, Congo, January 22, 1915; female Mbaga, Congo, July, 1914; female, Thysville, Congo (J. Bequaert); male and female, Lukulela, Congo, January 1 and 7, 1931 (J. P. Chapin); female, Lourenco Marques (H. A. Junod).

## Senaspis haemorrhoa Gerstaecker

Plagiocera haemorrhoa Gerstaecker, 1871, Arch. für Naturg., XXX, p. 363.

Female, Stanleyville, Congo; male, Lubutu, Congo, January 22, 1915; female, Kamaniola, Congo, February 9, 1927; female, Mombasa, April 24, 1927 (J. Bequaert); 5 males, 5 females, Lourenco Marques, September, 1913 to July, 1914 (H. A. Junod); male, 3 females, Ricatla, Delagoa Bay, (Jansen); female, Matetsi, Southern Rhodesia, January 5, 1935 (H. R. H. Stevenson).

## Senaspis dibaphus Walker

Xylota dibaphus Walker, 1849, List Dipt. Brit. Mus., III, p. 560.

Male and female, Stanleyville, Congo; two females, Bamania, Congo, July 21, 1924; female, Lokutu, Congo, December 23, 1926; male, Djambi, Congo, Dec. 23, 1913; female, Ngomo, Congo, February 2, 1927; two females, Lubutu, Congo, January 22, 1915 (J. Bequaert); female, Gambari, Uele, Congo; female, Uele River, Congo, (Rodhain); female, Edea, Cameroon (J. A. Reis); two females, Du River Camp No. 3, Liberia (J. Bequaert).

#### SARNIA CURRAN

Only one species belonging to this genus is known.

#### Sarnia smaragdinus Macquart

Eristalis smaragdinus Macquart, 1842, Dipt. Exot., II, pt. 2, p. 56.

Two females, Irebu, Congo, October 16, 1913; two females, Kabare, Congo, August 21 and 31, 1914 (J. Bequaert).

## ERISTALIS RONDANI

I place here a few species distinguished by having the eyes hairy and holoptic and the marginal cell petiolate.

#### TABLE OF SPECIES

- 2.—Posterior tibiae with dense, erect pile above.

   plumipes Bezzi.

   Posterior tibiae without a broad great of

## Eristalis tenax Linnaeus

 $Musca\ tenax\ Linnaeus,\ 1758,\ Syst.\ Nat.,\ X,\ p.\ 591.$ 

Seven males from Johannesburg, 1896, 1901 and 1904 (J. P. Cregoe).

Four of these specimens are referable to the variety *campestris* Meigen, having the posterior femora reddish basally.

## Eristalis plumipes Bezzi

Bezzi, 1912, Ann. Mus. Genova, XLV, p. 433. I have seen specimens only from the Belgian Congo.

## Eristalis apis, new species

Blackish, with reddish markings and cinereous yellow pollen. Length, 13 to 15.5 mm.

MALE.—Frontal triangle moderately long, very gently convex in profile, cinereous yellow pollinose and yellow pilose, some scattered black hairs in the middle; vertical triangle black, pollinose in front of the ocelli, the pile black. Occiput cinereous to brownish yellow pollinose, the orbits whitish below; pile yellow, becoming white below and on the cheeks. Cheeks pale in ground color. Face usually brownish, rarely reddish, the tubercle and upper portion always dark; pollen cinereous or yellowish cinereous, the tubercle shining or at most very thinly pollinose; the cheeks shining in front; face rather deeply concave above, the tubercle large, broad but not very high. Antennae obscure reddish, the third segment brown, oval, the apex almost evenly rounded; arista bare, mostly reddish. clothed with short, thick brown pile that becomes yellowish below, touching for a moderately long distance.

Thorax blackish, cinereous yellow pollinose, the dorsum darker behind the suture; humeri, posterior calli, scutellum and parts of the pleura reddish. Pile short and abundant, brassy yellow dorsally, yellow to pale yellow on the pleura. Scutellum yellow, with short yellow pile, usually an incomplete band of appressed black hairs basally.

Coxae, trochanters and the very broad bases of all the femora reddish or reddish yellow, the femora and tibiae black or brown. The anterior and middle femora may be black or brown on the apical half or more, or wholly pale above, leaving the lower apical half brownish, or rarely they are almost all reddish; the tarsi are usually all redish but the posterior pair may be brownish red; posterior femora rather strongly swollen, the basal third to fourth pale, the pile yellow above and basally, black on the apex, sides and under surface; tibiae black pilose, the basal fifth with pale yellowish pile above, the under surface with

rather long, thick, black pile, the dorsal edge with short but conspicuous pile on the subapical half, the anterior legs with yellowish to almost whitish pile, the femora mostly black haired ventrally, the tibiae sometimes with some black pile apically.

Wings cinereous hyaline or with yellow tinge. Squamae obscure yellowish, sometimes with distinct brown tinge, the fringe and halteres yellow.

First abdominal segment yellow or reddish yellow; the second reddish with a narrow, incomplete basal fascia and a broad, preapical fascia that expands medianly, black; third black with a basal fascia that may be entire or broadly interrupted reddish, this band strongly widening laterally; fourth segment blackish, the apices of the third and fourth reddish. The abdomen is mostly subopaque or at most slightly shining. Pile short, black dorsally, yellow on the base and lateral margins. Venter black, the incisures broadly pale basally, the pile pale yellow. Genitalia blackish, black-haired.

Female.—Front rather thickly pale pollinose, an area above the antennae, and the vertex bare; usually a broad band of brown pollen in front of the ocelli; pile yellow, black on the upper third, the middle with scattered black hairs that become more numerous below. Pile of the eyes mostly whitish. Fourth abdominal segment often with basal reddish band. Hind legs with more extensive pale pile than in the male.

Types.—Holotype, male, and allotype, female, Stanleyville, Congo, March, 1915 (Lang and Chapin). Paratypes: three males and thirty-one females, Stanleyville, March and April; one female, Lubutu, Congo, January 21, 1915 (J. Bequaert).

#### LATHYROPHTHALMUS MIK

The species placed in this genus have the eyes more less hairy and bearing numerous brown spots.

#### TABLE OF SPECIES

- 1.—Abdomen wholly aeneous; face without evident lateral black stripes; mesonotum usually scarcely vittate.............2.
- 2.—Facial tubercle large; anterior femora almost wholly black pilose.....
- - Face obtuse below, not strongly produced; antennal tubercle but little prominent; third antennal segment reddish, sometimes narrowly blackish above; eyes al-

| more continuous usually basedly as and  |   |
|---|---|
| ways contiguous, usually broadly so, and<br>always pilose, at least above in both<br>sexes; mesonotum usually conspicuously   | 15.—Tarsi mostly black; smaller species  tabanoides Jaennicke.  Tarsi wholly reddish; large species   |
| vittate14.  | eclara, new species.  |
| 4.—Posterior femora with strong basal tubercle  | 16.—Second abdominal segment without a black  |
| posteriorly; eyes bare; posterior tarsi   | 10.—Second abdominal segment without a black  |
|   | anterior border, or if one is present it is   |
| yellow; femora wholly black   | linear and incomplete, the pale fascia on   |
| Species (female).   |   |
| Posterior femora without such tubercle5.  | the second segment always entire17.   |
|   | Second abdominal segment with a broad,  |
| 5.—Eyes wholly bare; third antennal segment   | basal black fascia which is usually con-  |
| rounded, wholly black; posterior tarsi  |   |
| 1) 1  | nected in the middle with the black pos-  |
| black6.   | terior border21.  |
| Eyes pilose above; third antennal segment   | terior border   |
|   | 17.—Abdomen with broad black fasciae which  |
| elongate, reddish below; posterior tarsi  |   |
| yellowish, with dark apices8.   | are broadly shining behind; posterior   |
| 6.—Eyes of male separated; fourth ventral   | tarsi yellow or but little darkened api-  |
|   | cally   |
| <ul> <li>abdominal segment of male with long ap-</li> </ul>   |   |
| pendage, the segment above with a single,   | Abdomen yellow with narrow opaque black   |
|   | fasciae on apices of segments two to  |
| whitish pollinose fascia  |   |
| modestus Wiedemann.   | four; all the femora broadly yellow   |
|   | basallyvicarians Bezzi.   |
| Eyes of male contiguous; fourth sternite  | •   |
| simple7.  | 18.—Mesonotum with a pair of slender yellowish  |
| 7.—Posterior femora broadly yellow basally;   | vittae on the posterior half, dull black  |
|   |   |
| mesonotum with broad, dark, presutural  | except laterally, with four bronze-black  |
| fascia; fourth abdominal segment with   | partly brownish pollinose vittae  |
|   |   |
| three transverse whitish fasciae; second  | monozonus Hervé-Bazin.  |
| abdominal segment of female with com-   | Mesonotum strongly vittate with grayish or  |
|   | yellowish and black19.  |
| plete yellowish fascia  | yenowish and black  |
|   | 19.—Third and fourth abdominal segments   |
| Posterior femora wholly black; mesonotum  | wholly black; posterior femora wholly   |
|   |   |
| with indistinct longitudinal black vittae;  | yellowxanthopus Bezzi.  |
| fourth abdominal segment of male with   | Third and fourth abdominal segments with  |
| only two whitish fasciae; second segment  |   |
|   | yellow fasciae; posterior femora black  |
| of female with broadly interrupted yel-   | with broad yellow bases20.  |
| lowish fasciagymnops Bezzi.   | OO Same and with hand become handen.  |
| 8.—Face with only the tubercle shining black 9.   | 20.—Squamae pale with broad brown border;   |
|   | posterior femora broadly yellow basally;  |
| Face with lateral black stripes present. 10.  | black thoracic vittae not broader than  |
| 9.—Mesonotum evenly ochraceous pollinose  |   |
| mirus, new species.   | the gray ones, the median stripe divided.   |
|   | trizonatus Bigot.   |
| Mesonotum aeneous, whitish vittate  | Squamae blackish; posterior femora nar-   |
| haplops Wiedemann.  |   |
| 10.—Face with five shining black vittae   | rowly yellow basally; black thoracic  |
|   |   |
| limaifaciae norre anociae   | vittae broad, the lateral ones twice as   |
| lineifacies, new species.   |   |
| Face with three shining black vittae, the   | broad as the gray ones flaveolus Bigot.   |
| Face with three shining black vittae, the   |   |
| Face with three shining black vittae, the outer ones sometimes very narrow11.   | broad as the gray ones flaveolus Bigot.   |
| Face with three shining black vittae, the outer ones sometimes very narrow. 11.  11.—Abdomen wholly black in ground color   | broad as the gray ones flaveolus Bigot.  21.—Mesonotum conspicuously shining posteriorly; face black in ground color  |
| Face with three shining black vittae, the outer ones sometimes very narrow. 11.  11.—Abdomen wholly black in ground color  pexalis, new species.  | broad as the gray ones flaveolus Bigot.  21.—Mesonotum conspicuously shining posteriorly; face black in ground color  dissimilis Adams.                           |
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## Lathryophthalmus vicarians Bezzi

Bezzi, 1915, Syrph. Ethiopian Reg., p. 86.

Male and female, Faradje, Congo, November, 1912 (Lang and Chapin).

## Lathyrophthalmus trizonatus Bigot

Eristalis trizonata BIGOT, 1858, in Thompson, Archiv. Entom., II, p. 364.

Female, Stanleyville, Congo (J. Bequaert).

## Lathyrophthalmus flaveolus Bigot

Eristalomyia flaveola Bigot, 1880, Ann. Soc. Ent. France, p. 220.

Female, Lukolela, Congo, November 19, 1930 (J. P. Chapin); male, Okondo, Uele, Congo (Rodhain); male, Lubutu, Congo, January 21, 1915; male, Walikale, Congo, January 7, 1915; male and female, Du River Camp No. 3, Liberia; male and female, Banga, Liberia, October, 1926; female, Gbanga, Liberia, September, 1926 (J. Bequaert); male, Lourenco Marques, April-July, 1914 (H. A. Junod); seven males, Ukaika-Mawambi, 1911 (Grauer).

## Lathyrophthalmus myiatropinus Speiser

Speiser, 1910, Kil.-Meru Exp., X, p. 125. Male, Kogona, Tanganyika Territory, January 24, 1927 (J. Bequaert).

## Lathyrophthalmus andersoni Bezzi

L. euzonus andersoni Bezzi, 1915, Syrph, Ethiopian Reg., p. 82.

Male, Walikale, Congo; male, Burunga, Congo (J. Bequaert).

## Lathyrophthalmus tabanoides Jaennicke

Eristalis tabanoides Jaennicke, 1867, Abhand. Senckenberg. Naturf. Ges., VI, p. 402 (f.).

Lathyrophthalmus quinquelineatus of authors, not Fabricius.

Male, Kasonsera, Congo, July 17, 1914 and female, Kabare, Congo, August 21, 1914 (J. Bequaert); two females, Johannesburg, 1899 (J. P. Cregoe).

The species described as Eristalis quinquelineatus by Fabricius belongs to the genus Eristalodes and is identical with the species later described as pleurivittatus by Macquart. The type of quinquelineatus is in the British Museum and Miss Daphne Aubertin has very kindly examined the

specimen in regard to several characters, so that there can be no doubt as to its identity. Fortunately there is a name available for the species identified by Bezzi and others as quinquelineatus.

## Lathyrophthalmus dulcis Karsch

Eristalis dulcis Karsch, 1887, Ent. Nachr., p. 102.

Female, Zambi, Congo, June 30, 1915; female, Bogoro, Congo, July, 1914 (J. Bequaert).

## Lathyrophthalmus mirus, new species

Scutellum reddish; mesonotum evenly ochraceous pollinose. Length, 11 mm.

MALE.—Head black in ground color, cinereous pollinose, an incomplete median facial stripe, the vertical triangle and cheeks shining black, the antennal prominence also shining above. Pile tawny above, whitish on lower occiput, face, cheeks and front, black on the vertical triangle, yellow on the eyes. Eyes touching for less than the length of the ocellar triangle, the brown spots small and isolated. Face gently concave above, the tubercle long and moderately prominent below, the face short conical below. Antennae brown; arista reddish.

Thorax evenly ochraceous pollinose above and clothed with rather short, thick tawny pile; pleura cinereous pollinose and white pilose. Scutellum reddish, with tawny pile.

Legs black or brown, the apices of the femora and basal half of the anterior four tibiae, yellow; tips of the hind femora, bases of their tibiae and the basal two or three tarsal segments reddish. Pile yellow, black only on the ventral surface of the hind tibiae.

Wings hyaline, sometimes with strong luteous tinge on basal two-thirds in front. Squamae and halteres yellow.

First abdominal segment blackish, the sides yellowish, the dorsum densely cinereous yellow pollinose. Second segment reddish, opaque with an incomplete, laterally tapering dark apical fascia that is more or less shining. Third segment reddish yellow, with almost the apical half black except for a short, apical fascia of yellowish pollen in the middle, the base with yellowish or cinereous pollen except on the sides and anterior angles. Fourth segment black, densely cinereous yellow pollinose, a rather narrow, gently arched shining black fascia behind the middle, the base narrowly shining toward the sides. Genitalia shining black. Pile tawny dorsally, yellow laterally, apically and on the venter. Venter reddish, the apical sternite black, densely brownish yellow pollinose except basally.

Types.—Holotype, male, Basutoland (Janson). Paratype, male, Lake Chrissie, S. E. Africa (Janson).

## Lathyrophthalmus lineifacies,

new species

Black; mesonotum not vittate; scutellum dull reddish; face with five shining black vittae. Length, 13.5 mm.

Female.—Head black in ground color, cinereous pollinose, the frontal pollen dull black on more than the upper half, bordered anteriorly by an anteriorly arched band of gray, the sides in front of the gray band very thinly pollinose, the anterior part of the front shining. Frontal pile black, with yellow hairs intermixed across the middle and on the lower orbits. Ocellar triangle Occiput with yellow pile wider than long. above, the lower two-thirds and cheeks white pilose. Cheeks mostly shining black, a triangle of pollen anteriorly. Facial pollen rather brownish vellow toward the middle and above, the median and lateral black vittae broad, the intervening black vittae much narrower and united below with the lateral ones. Antennae brown. the third segment rather broadly reddish below; arista reddish. Facial tubercle long and moderately prominent. Eyes with moderately long black hair.

Thorax black, the humeri brownish red; pleura and sides of mesonotum cinereous pollinose and very pale yellowish to almost white pilose. Mesonotum with yellowish brown pollen on about the median third which becomes more yellowish before the scutellum, the suture with brownish yellow pollen; pile brassy yellow, moderately long, with numerous black hairs intermixed between the bases of the wings. Scutellum reddish, with long pale pile, across the middle with a narrow band of black hair.

Coxae black, with cinereous pollen; femora shining black; tibiae brownish red, the basal third of the anterior four and the basal fifth of the hind pair yellow; tarsi reddish brown, the middle pair reddish basally, the hind pair dark reddish. Pile yellow, the posterior femora with coarse black hair ventrally on the apical third, their tibiae black haired beyond the basal third.

Wings hyaline, with slight brown tinge, the veins mostly brown. Squamae whitish, with yellow border. Halteres yellow.

Abdomen slightly shining black, the first segment cinereous pollinose, narrowly reddish laterally. Second segment with indications of a reddish brown fascia occupying about the basal half in the middle and basal two-thirds laterally. Third segment with a weak grayish basal fascia occupying the basal third but not nearly reaching the lateral margins, the fourth with trace of a similar but narrower basal fascia. Pile pale yellowish, the second segment with a few black hairs apically in the middle, the third with a small median triangle of black on the apical half, the fourth with a triangle extending almost to the base, the fifth wholly black haired. Venter blackish, with long, sparse pale yellow pile.

Holotype.—Female, Mukule, Congo, 1800 m., November, 1914 (J. Bequaert).

## Lathyrophthalmus pexalis, new species

Rather similar to *lineifacies* but the face lacks the sublateral black vittae. Length 13 mm.

Female.—Head aeneous, thickly cinereous yellow pollinose, the front brown pollinose with the vertex and supra-antennal area shining. Front moderately wide, black pilose, the sides below with yellow pile, across the middle with black and yellow pile intermixed. Posterior orbits rather whitish pollinose on the lower half; occipital pile pale yellow, becoming reddish yellow above. Cheeks pollinose, separated from the face by a broad black stripe. Face rather strongly produced, the tubercle long and low, the median black stripe tapering above, rather narrowly separated from the linear, shining stripes; pile yellow. Antennae black, the third segment reddish below; arista reddish.

Thorax black, mostly pale pollinose. Mesonotum with yellowish brown pollen that is very thin on a broad band behind the suture so that the aeneous ground color shows through, the prescutellar pollen paler than that in front. In some lights there are faint traces of three pale vittae. Pile reddish yellow, freely intermixed with black on the dark fascia. Pleura with yellowish pile. Scutellum dull reddish yellow with the base broadly black and with a transverse band of black pile across the middle.

Coxae and femora black, the former pale pollinose; tips of the femora, basal fourth of the anterior four and sixth of the posterior tibiae, yellow; tarsi reddish, becoming brown on the apical two or three segments; tibiae brownish. Pile yellowish, mostly black on the posterior tibiae.

Wings clear, tinged with brown, the veins brown, reddish basally. Squamae pale yellowish. Halteres yellow.

Abdomen blackish, the second and third segments each with a broad basal band of cinereous pollen that does not nearly reach the lateral margins. Pile obscure yellowish, the third segment with some black hair in the middle before the apex, the fourth with a short, medianly dilated preapical band of black, the fifth wholly black haired. Venter shining black, with slightly dulled preapical fasciae, the pile sparse, long, obscure yellowish.

HOLOTYPE.—Female, Addis Abbaba, Abyssinia, August 30, 1920 (Barnum Brown).

#### Lathyrophthalmus eclara, new species

A large robust species, the eyes bare, the legs reddish and vellow. Length, 15.5 mm.

Male.—Head black in ground color, a high, brownish yellow arch above each antenna. Frontal triangle small, black pilose, the sides very broadly brownish pollinose. Vertical triangle small, black pilose, brown pollinose in front of the ocelli. Occiput brownish pollinose, the orbits whitish on more than the lower half, the pile yellowish. Cheeks narrow, mostly shining. Face not produced downward, brownish yellow pollinose and yellow pilose, the tubercle large

and shining black, not much longer than wide. Antennae reddish, the third segment brown on the upper half; arista yellowish, with broadly brown apex. Eyes contiguous for a very long space, with an area of enlarged facets above, bare, the brown spots almost all isolated.

Thorax black, the humeri reddish. Mesonotum brownish ochraceous pollinose, with a broad, incomplete darker band behind the suture, the pile pale tawny. Pleura cinereous pollinose and whitish pilose. Scutellum reddish, with quite short black hair on the disc and longer, yellowish hair on the border.

Legs brownish red or dark reddish, the basal third of the anterior four tibiae and the base of the hind pair yellow. Pile black, yellow on the basal third of the front tibiae, on the middle legs except on the apical half of the femora posteriorly and on somewhat more than the basal half of the hind femora.

Wings hyaline, the veins reddish yellow. Squamae and halteres yellow.

First abdominal segment reddish yellow; second segment reddish with the apical fifth brown except at the sides; third reddish with the apical two-fifths brown, the fourth black with the base very narrowly reddish. Pile yellow, black on the dark fasciae on the second and third segments. Venter yellow, black apically, the pile wholly yellowish.

HOLOTYPE.—Male, Lourenco Marques, 1914

(H. A. Junod).

## ERISTALODES MIK

The representatives of this genus are separated from *Lathyrophthalmus* Mik by the presence of bands, instead of dark spots, on the eyes.

# Table of Species 1.—Scutellum partly or wholly reddish or yel-

| lowish   |
|--|
| Scutellum wholly black seychellarum Bezzi.       |
| 2.—Antennae mostly yellow, the third segment     |
| narrowly blackish above                          |
| Antennae black, the third segment broadly        |
| reddish below7.                                  |
| 3.—Facial tubercle yellowish and rounded         |
| barclayi Bezzi.                                  |
| Facial tubercle black or elongate 4.             |
| 4.—Males   |
| Females6.  |
| 5.—Facets on the upper third of the eyes greatly |
| enlarged quinquelineatus Fabricius.              |
| Facets but little enlarged                       |
| surcoufi Hervé-Bazin.                            |
| 6.—The yellow fascia on the second abdominal     |
| segment extends over the lateral margins.        |
| quinquelineatus Fabricius.                       |
| The vellow fascia is separated from the          |
| lateral marginssurcoufi Hervé-Bazin.             |
| 7.—Eyes with five or more dark bands8.           |
| Eyes with only three dark bands                  |
| fuscicornia Karach                               |

#### Eristalodes fuscicornis Karsch

Eristalis fuscicornis Karsch, 1887, Ent Nachr., XIII, p. 100.

Eristalodes marshalli Curran, 1927, Bull. Amer. Mus. Nat. Hist., LVII, p. 74.

Female, Boma, Congo, June 9, 1915 (J. Bequaert); three females, Sudan (H. H. King).

## Eristalodes quinquelineatus Fabricius

Syrphus quinquelineatus Fabricius, 1781, Spec. Ins., II, p. 425.

Syrphus quinquelineatus Fabricius, 1787, Mantissa Ins., II, p. 336.

Musca quinquelineatus Gmelin, 1790, Syst. Nat., V, p. 2870.

Syrphus quinquelineatus Fabricius, 1794 Ent. Syst., IV, p. 290.

Eristalis quinquelineatus Fabricius, 1805, Syst. Antl., p. 239.

Eristalis quinquelineatus Wiedemann, 1830, Ausser. Zweifl., II, p. 185.

Eristalis plurivittata Macquart, 1855, Dipt. Exot., Suppl. V, p. 86.

Eristalis plurivittata BIGOT, 1858, Thoms. Arch. Ent., II, p. 363.

Eristalis macrops Karsch, 1887, Ent. Nachr., XIII, p. 100.

Eristalodes plurivittatus Bezzi, 1915, Syrph. Ethiopian Reg., p. 88.

Eristalodes plurivittatus Curran, 1928, Bull. Amer. Mus. Nat. Hist., LVII, p. 74.

I am indebted to Miss Daphne Aubertin for notes on the type of Syrphus quinquelineatus Fabricius, in the British Museum of Natural History. Due to her kindness I have been able to definitely identify specimens of this species and to work out the above synonymy. Most of the other references to this species in the "Kertesz Catalogue" refer to a species of Lathyrophthalmus, but the correct synonymy in many cases cannot be determined without an examination of the specimens upon which the records are based. Bezzi's misidentification of this species has proved most unfortunate especially as he has been followed by others, and the catalogue has perpetuated the error. I have before me the following specimens belonging to this species.

Two males and four females, Stanleyville,

March, 1915; female, Stanleyville, April 27, 1915 (Lang and Chapin); female, Lisala, Congo, December 26, 1926 (J. Bequaert); male, Okokemeji, Ibidan, Nigeria; four males, Ricatla, Delagoa Bay (Janson); male and three females, Lourenco Marques, January-March, 1914 (H. A. Junod).

## Eristalodes surcoufi Hervé-Bazin

HERVÉ-BAZIN, 1914, Bull. Soc. Ent. France, p. 115.

Female, Ukaturaka, Congo, December 24, 1926; 2 females, Gbanga, Liberia, September, 1926; female, Du River Camp No. 3, Liberia; female, Kakatown, Liberia, August 18, 1926; female, Memeh Town, Liberia, August 29, 1926 (J. Bequaert); female, Uele River, Congo (Rodhain); three females, Ricatla, Delagoa Bay (Janson).

## Eristalodes taeniops Wiedemann

Eristalis taeniops Wiedemann, 1818, Zool. Mag., I, p. 42.

Two females, Lubutu, Congo, January 1 and February 6, 1915; female, Betala, Liberia, October 13, 1926; five females, Paiata, Liberia, October, 1926 (J. Bequaert); three females, Johannesburg, 1899 (J. P. Cregoe).

#### DOLICHOMERUS MACQUART

In my report on the Diptera of the American Museum Congo Expedition I included the species belonging to this genus under *Megaspis*, but later, in 1927, recognized the genus as distinct.

## TABLE OF SPECIES

| 1.—Face and cheeks reddish4                   |
|---|
| Head wholly black2.                           |
| 2.—Male with whitish patches or with sparse   |
| tomentum on the abdomen; front of fe-         |
| male without a yellow crossband3.             |
| Male with four large patches of golden to-    |
| mentum on the apical abdominal seg-           |
| ments; front of female with yellow pube-      |
| scent band across the middle                  |
| aurigera Bezzi.                               |
| 3.—Legs mostly reddish; posterior femora with |
| a strong triangular production apically       |
| (Asia)crassus Fabricius.                      |
| Legs black; posterior femora with only a      |
| strong swellingbullatus Loew.                 |
| 4.—Scutellum orange5.                         |
| Soutellum blackish or brown serena Curran.    |

| 5.—Legs partly black                       |
|--|
| Legs wholly reddishneavei Bezzi.           |
| 6.—Abdomen reddish except on the sides and |
| apexkroeberi Bezzi.                        |
| Abdomen wholly black                       |
| kroeberi abdominalis Curran.               |

## Dolichomerus aurigera Bezzi

Bezzi, 1915, Syrph. Ethiopian Reg., p. 68 (f.). Female, Uele River, Congo (Rodhain).

#### Dolichomerus bullatus Loew

LOEW, 1857, Ofvers. Kongl. Vet. Akad. For-handl., XIV, p. 381.

Female, Stanleyville, Congo, prey of bembex; female, Lesse, Congo, August 21, 1914 (J. Bequaert).

## Dolichomerus kroeberi abdominalis Curran

Curran, 1927, Rev. Zool. Afr., XV, p. 364. Female, Stanleyville, Congo, prey of bembex (J. Bequaert).

#### PHYTOMIA GUERIN

Robust species, with bare, holoptic eyes in the male. A few of the species resemble honey bees but most of them are shorter and more compact.

#### TABLE OF SPECIES

| 1.—Abdomen long and tapering, usually yel- |
|--|
| lowish or reddish fasciate; wings hyaline; |
| (superficially like Eristalis tenax L.) 2. |
| Abdomen shorter, more compact; at least    |
| some of the crossveins clouded or the ab-  |
| domen wholly black in ground color8.       |
|  |
| 2.—Front clothed with short, even hairs    |
| incisa Wiedemann.                          |
| Front clothed with long hairs which be-    |
| come shorter toward the face in the fe-    |
| males3.                                    |
| 3.—Face yellow laterally4.                 |
| Face wholly blackish in ground color5.     |
| 4.—Posterior femora wholly black           |
|  |
|  |
| Posterior femora broadly reddish basally.  |
| Simoides villipes femoralis Bezzi.         |
| 5.—Second abdominal segment normal in      |
| shape6.                                    |
| Second abdominal segment of peculiar       |
| shapeephippium Bezzi.                      |
| 6.—Abdomen with yellow fasciae basally     |
| fronto Loew.                               |
| Abdomen wholly blackish in ground color    |
| Tiputomen whony statement in ground solor. |
|  |

| 8.—Abdomen with well developed, rounded         |
|---|
| bullae9.  |
| Abdomen without distinct bullae14.              |
| 9.—Arista bare; bullae not very prominent       |
| erratica Bezzi.                                 |
| Arista plumose, bullae prominent10.             |
| 10.—Apical cell villous in female, not in males |
| 11,   |
| Apical cell not villous in female ( Q only).    |
| bulligera Austen.                               |
|   |
| 11.—Abdomen of male with the second segment     |
| white pilose basally bulligera Austen.          |
| Abdomen with yellowish pile on the second       |
| segment forming a broad band12.                 |
| 12.—Posterior tibiae with golden yellow pile on |
| dorsal surface13.                               |
| Posterior tibiae with black pile on the apical  |
|   |
| two-thirds of the upper surface; abdo-          |
| men with pale yellowish or cinereous pile       |
| bezzii Curran.                                  |
| 13.—Scutellum deep blackish, mostly clothed     |
| with short, black hairvarians Curran.           |
|   |
| Scutellum reddish or brownish red, wholly       |
| clothed with tawny pile                         |
| pubipennis Bezzi.                               |
| 14.—Posterior femora reddish on the basal half. |
|   |
|   |
| Posterior femora with at most the base red-     |
| dish16.   |
| 15.—Wings villous on the basal half; tibiae all |
| with black hair on apical half; posterior       |

## Phytomia incisa Wiedemann

Eristalis incisa Wiedemann, 1830, Ausser. Zweifl., II, p. 155.

16.—Slopes of the posterior calli above the

femora reddish basally ... fucoides Bezzi.

tibiae yellowish haired; femora sometimes wholly black; eyes of male broadly separ-

ated . . . . . . . . . . . . See Simoides.

squamae black-haired.....

squamae yellow-haired . . . . . curta Loew.

Wings wholly without villi; anterior four

Two males and one female, Johannesburg, January, March, 1899 (J. P. Cregoe); male and female, Basutoland (Janson); male, Kikuyu Escarpment, British East Africa; female, Malvern, 1900 and female, Howick, 1901 (J. P. Cregoe); male, Wagira, Gara Mulata, Abyssinia (G. Kristensen); female, Boswenda, Congo, October 22, 1914 (J. Bequaert).

## Phytomia fronto Loew

Megaspis fronto Loew, 1858, Ofvers. Kongl. Vet. Akad. Forh., XIV, p. 381.

Two males, Mt. Ruwenzori, Congo, April 15, 1914 (J. Bequaert).

## Phytomia erratica Bezzi

Megaspis erratica Bezzi, 1912, Ann. Mus. Civ. Genova, V, p. 424.

Two males and one female, Kasansera, Congo. July 17, 1914 (J. Bequaert).

### Phytomia bulligera Austen

Megaspis bulligera Austen, 1909, Trans. Zool. Soc. Lond., XIX, p. 91.

Male and female, Lubutu, Congo, January 21, 1915 and February 6, 1915; female, Walikale, Congo, January 7, 1915 (J. Bequaert).

## Phytomia pubipennis Bezzi

Bezzi, 1915, Syrph. Ethiopian Reg., p. 71.

Female, Banga, Liberia, October, 1926 (J. Bequaert).

## Phytomia natalensis Macquart

Eristalis natalensis Macquart, 1849, Dipt. Exot., Suppl. 4, p. 134.

Female, Uele River, Congo (Rodhain); female, Irumu to Penge, Congo, March 3, 1914; female, Mombasa, April 24, 1927 (J. Bequaert); five males and one female, Ricatla, Delagoa Bay (Janson); two males and three females, Lourenco Marques, 1913, 1914 (H. A. Junod).

Several females and all the males differ from the typical form in having a narrow yellow prescutellar fascia and the orange fascia on the second abdominal segment narrower. At first sight these would appear to belong to *curta* Loew but the hair on the posterior calli is wholly black.

The fact that the males of *natalensis* always have a prescutellar pale fascia indicates the probability that many of the records of *curta* Loew actually refer to this species. In *curta* the outer part of the posterior calli are yellow haired and the pale abdominal fasciae are much wider.

## SIMOIDES LOEW

This genus is similar to *Phytomia* Guerin but the eyes of the males are broadly separated, the front having almost parallel sides above.

#### TABLE OF SPECIES

1.—Posterior femora with very long, abundant pile in front; scutellum brown with yellow apex.......................villipes Loew.

Posterior femora with appressed pile in front; scutellum wholly yellowish......

pachymera Wiedemann.

### Simoides villipes Loew

LOEW, 1857, Ofvers. Kongl. Vet. Akad. Forhandl., XIV, p. 382.

Blackish, mostly pale pilose; thorax mostly pale pollinose. Length, 13 mm.

Male.—Front with parallel sides above, the upper and lower sections divided by a rather deep furrow; brown pollinose, a large, pitted, shining area above the antennae; pile black, yellowish on the anterior third. Occiput brownish yellow pollinose, the orbits white on the lower half, the pile yellow. Cheeks black, very thinly pollinose. Face thickly grayish pollinose the large, prominent tubercle black; pile yellowish. Antennae brown; arista reddish, short plumose.

Thorax black, the pleura and sides of the mesonotum grayish pollinose, the mesonotum with a broad band of brownish yellow pollen in front of the scutellum and with very thin brown pollen in front; between the bases of the wings a broad, darker fascia; pile thick, yellowish, somewhat darker on the dorsum. Scutellum brown, the apex broadly yellowish; pile black, yellow on the free border.

Legs black, basal half of the anterior four tibiae and the broad base of the hind pair yellowish, the tarsi reddish brown. Pile pale yellowish, very long on the hind femora; black on the posterior tibiae and tarsi, dense and forming a crest on the apical half of the upper surface of the tibiae.

Wings hyaline, with brownish tinge and a weak median brown cloud in front. Squamae pale yellowish, the halteres reddish yellow.

Abdomen black, with brownish yellow pile on the dorsum, yellowish pile laterally and almost white pile basally; apices of the second and third segments with black pile, although the tip bears yellowish hairs, the fourth segment with black pile on the apical half in the middle. Genitalia black pilose, rather dull. Venter clothed with very long, pale pile.

One male, Addis Abbaba, Abyssinia, August 31, 1920 (Barnum Brown).

The male of this species has been unknown up to the present time although a fair number of females have been recorded. Bezzi placed the species in *Phytomia* Guerin and described a variety, *femoralis*, with the base of the posterior femora broadly reddish. It probably represents a distinct species, or may prove to be a female of *Mallota extrema* Loew. In the male there is scarcely a trace of reddish ground color on the face but this is probably variable.

## Simoides pachymera Wiedemann

Eristalis pachymerus Wiedemann, 1819, Zool. Mag., I, p. 17.

Eristalis crassipes Fabricius, 1805, Syst. Antl., p. 237 (not crassipes Fabricius, 1805).

Eristalis crassipes Wiedemann, 1830, Ausser. Zweifl., II, p. 157.

Simoides crassipes BEZZI, 1916, Syrph. Ethiopian Reg., p. 76.

Two males and five females, Ricatla, Delagoa Bay, (Janson); male and two females, Lourenco Marques, January-July, 1914 (H. A. Junod); female, Magoye, N. Rhodesia, 3500 ft., August-October, 1926 (J. W. Moore).