second one, which I regard, however, as synonymous with the first.

1. Gonyacanthella lanceolata (I. Bolivar, 1890).

1890. Gonyacantha lanceolata I. Bolivar, Jorn. Sci. Acad. Lisboa 4890, p. 215, figs. 7, 7 a.

1907. Gonyacanthella lanceolata Giglio-Tos, Boll. Mus. Zool. Anat. Comp. Torino, xxii. no. 554, p. 13.

1923. Gongacanthella concolor Sjöstedt, Ark. Zool. xv. no. 22, p. 15, pl. ii. figs. 1, 2 (syn. nov.).

Angola. Moxico district: Villa Luso, 1-8 vi., 6 33, 6 99, 5 larvæ (last stage); Bihé district: Cohemba, 20-25 viii., 13; Huila district: Humbe, June (M. Burr).

According to Sjöstedt's description, G. concolor differs from G. lanceolata in nothing but the lack of a dark dorsal stripe, not a character of specific value in this group of genera. Only one or two of the Angolan specimens before me have the stripe faintly developed, while the majority have none. All other characters given in Sjöstedt's description, as well as his illustrations, are in agreement with the type of G. lanceolata which I have examined, and I do not hesitate in synonymizing Sjöstedt's species with that of Bolivar.

The species appears to be widely distributed in Angola and penetrates into Congo (records by Sjöstedt and

Giglio-Tos, ll. cc.).

I select as the single type of this species a male from Caconda in the Museu Bocage, Lisbon, studied by me.

VIII. Genus Acanthoxia I. Bolivar, 1906.

1873. Gonyacantha Stål, Rec. Orth. i. p. 43, footnote (preoccupied). 1906. Acanthoxia I. Bolivar, Bol. Soc. Esp. Hist. Nat. vi. p. 392.

Three species have been referred to this genus, as follows:—

- 1. A. gladiator (Westwood, 1842).—Sierra Leone.
- 2. A. ensator (Walker, 1870).—Natal.
- 3. A. cultrifer (Brancsik, 1895).—Zambesi.

The interrelations of these species require a thorough study, since notes by Karny (Sitzber. Akad. Wiss. Wien, mat.-nat. Kl. 1907, exvi. p. 302) and by Sjöstedt (Ark. Zool. 20 A, no. 15, 1929, p. 22) are based entirely on descriptions.

IX. Genus Mesopsera I. Bolivar, 1908.

I. Bolivar established this genus for his own species, described as *Mesops filum* I. Bolivar, 1890, but he regarded *Mesopsis* as a member of the subfamily Cantantopinæ, and differentiated *Mesopsera* from it only by a few characters of secondary importance. Actually, as I have shown (Eos, xix. 1943, p. 69), *Mesopsis* must be transferred to Acridinæ, but *Mesopsera* remains in Catantopinæ, where it comes into the same group as *Leptacris*, while it shows some resemblance also to *Spathosternum*.

111.—Some Flies of the Family Syrphidæ in the British Museum (Natural History). By Frank M. Hull, University of Mississippi.

Several years ago the author visited the British Museum (Natural History) with the purpose of studying the types of older dipterists. At that time considerable unidentified Syrphid material was placed in the hands of the writer for further study and determination. This paper presents the third report upon this material. I wish to thank Dr. John Smart, the late Dr. F. W. Edwards, and the Keeper of the Department of Entomology, Mr. N. D. Riley, for the many courtesies and facilities afforded me for the study and illustration of the types of older authors and of other material in the Museum.

Cerioides oceanica, sp. n.

Characterized by the shining black colour, with numerous yellow spots. Mesonotum sexpunctate, pleura tripunctate; scutellum yellow, divided by black centrally. Melated to williamsi Hull.

Female.—Length 15 mm. including antennæ; wing 10.6 mm.

Head: eyes rather narrowly separated above. The acciput behind the posterior corners of the eyes is tumid, but not much produced above the level of the eyes. Entire vertex, except within the ocellar, triangular, light yellow and shining; ocellar triangle black. The front, except for a black, elongate, marginal spot on the upper

part of the front, is widest posteriorly and connected there by a narrow brown band to the spot of the opposite side and, except for a narrow median brown line from base of style to ocelli, it is pale yellow. The face is black with rather wide median stripe from epistoma that is confluent in its full width with the black style; sides of face shining yellow and confluent with the yellow on the front, which reaches to the extreme base of the antenniferous process or style upon every side except below it. The style is short, stout, barely shorter than the first antennæ joint; antennæ wholly black; first and third joints about equal in length, the second joint almost as long. The antennæ are short, the second and third joints form a tolerably broad spear-shaped head; the tip of the third joint ends bluntly. The face in profile is nearly straight and is barely concave from tip of style below to the low facial bulge just above the epistoma. Cheeks shining black, the lower part of the occiput yellow, the middle and upper part black. Thorax: shining black, microsetate; the humeri, the mesopleura, the upper part of sternopleura and upper part of pteropleura are pale; these three pleural sclerites are separated by a brown line and further with an oval, bulging, convex, yellow spot just before the transverse suture of the mesonotum on each side and a longitudinal, prominent yellow stripe from just behind the suture on either side of the mesonotum to, and partly including, the posterior calli, pale shining waxy yellow. The scutellum is pale, shining yellow with a broad, median shining stripe. Squamæ white, whitefringed. Pleura black where not yellow. Abdomen: scarcely constricted, chiefly shining black with yellow markings. The second segment is short, narrowest anteriorly, very little wider posteriorly where it is almost as wide as the greatest width of the abdomen. which is at the end of the third segment. The first segment is short, extending, however, beyond the scutellum; it is broad, pale shining yellow with prominent disconnected, lateral, bluntly-rounded knobs scarcely visible from above and with a very broad, median black stripe occupying more than half of the width of the segment. The second segment is shining black except for a posterior band which is narrow and slender in the middle, becoming gradually wider towards the sides and

widest just before it reaches the sides. The third segment is shining black with a narrow, posterior, brownishyellow band widening to the sides as in the preceding segment. This band does not quite reach the sides and is widely confluent with a very large, lateral, oval, longitudinal, brownish-yellow spot on each side of the segment, the full width of which cannot be seen from above and which almost reaches the anterior margin of this segment; the anterior margin of the spot is broadly rounded. Fourth and fifth segments wholly shining black, the posterior corners of the fourth segment slightly produced. Pile of the black areas black except on the sides of the segment, yellow on the yellow areas. Legs: chiefly brown, the narrow base of the hind femora, the narrow apices of all of the femora, the basal two-fifths of hind tibiæ and the basal half of anterior fore tibiæ, are all brownish yellow. Hind femora not greatly thickened, equipped with strong, black, short spines on either side below, more numerous apically. Wings: hyaline with a strong, dark, uniform, anterior fore-border occupying almost the anterior half of the wing; it is a little lighter in the costal cell and in that part of the first basal cell below the spurious vein and basal to the small cross-vein. Third longitudinal vein for a short distance on the posterior side, including the whole of the unterior basal corner of the first posterior cell, dark brown. Third longitudinal vein with a well formed but shallow loop; stigmal cross-vein well developed.

Holotype: one female. New Hebrides, Pentecost Island, Lamalaga, 23. ix. 1922, T. T. Barnard.

Tenthredomyia brunnea, sp. n.

A blackish species. The mesonotum and abdominal segments are largely red-margined; scutellum reddish; face and cheeks yellow, each red bivittate; apparently not slessly related to known species.

Male.—Length 15 mm.

Head: eyes touching for a short distance. The periput behind ocelli and, for some distance behind eyes, is quite tunid and somewhat swollen and raised; it is deep yellow in colour, becoming reddish about the ocelli, its pile white. Front very small, together with the face bright, clear, pale yellow, faintly shining: Beginning in

the middle of the front there is a pair of red stripes with pointed ends that run diagonally down across the base of the process towards the eye-margin but fall short of reaching them. Beginning a short distance below the base of the style, almost but not quite touching the fronto-facial stripes, are a pair of slightly converging and then slightly diverging, slender, red, submedian vittæ that are confluent just above the epistoma. Cheeks and a broad vertical stripe from eye-margin to bottom of face and edge of oral margin red in colour, leaving a clear, yellow triangle with one side upon the margin of the eye. Antennal style light red, a little longer than the first joint of the antenna, the second and third antennal ø joints are subequal, barely longer than the first; second and third joints rather thick and club-shaped, the style short and pointed; first two joints black microsetose. Thorax: broadly dull black in the middle, micronodular, setose, the setæ both black and pale, but chiefly pale. Lateral margins of the mesonotum, the whole of the humeri, whole of the scutellum and all of the pleura except for the black, lower sternopleura and an obscure. narrow, yellow mesopleural stripe, everywhere light reddish brown. Squamæ brown, brown-fringed. Abdomen: not at all petiolate; widest at the end of the first segment, barely less wide at the end of the second segment; fourth segment somewhat more narrow at its apex because of its greater length. The first three segments are about equal in length; the fourth segment is half again as long as the third. The entire abdomen is very thick and subcylindrical, especially so on the last two segments. Hypopygium very large and prominent, visible from above. Abdomen almost wholly black, slightly obscured by pale yellow pollen; there is a large, obscure, reddish spot on each side of the first segment that continues narrowly onto the basal corner of the second; there is an obscure small triangle in the middle of the third segment a short distance from the apex. There is a yellow, almost complete, narrow, apical band on the third segment and a slightly wider one on the fourth segment and traces of a reddish band on the second segment. Entire abdomen flat, long setose, the setæ golden in colour and proceeding from raised spots with interruptions in the pollen. Legs: light red in colour:

the femora show slight indication of yellow about the apices. Hind femora slightly thickened on the basal half without any spines beneath. Pile of abdomen pale. Wings: the entire antero-basal half, including the anterior border of the fifth longitudinal vein before the small cross-vein, is light yellow. Beginning at the furcation of the second and third longitudinal vein, and including all of the area from that point above the spurious cross-vein, and including the anterior basal corner of the first posterior cell and all of the remainder of the subcostal, marginal and submarginal cells, together with a diffuse spot at and below the small cross-vein, all dark brown in colour. The stigmal cross-vein is well developed, with a strong but not acute kink in the third longitudinal vein and without spur.

Holotype: one male. S.W. Africa, Aus., Jan. 1930,

R. E. Turner, 1930: 117.

Cerioides minuta, sp. n.

General appearance similar to gambiana Saund., but smaller, with more globose apex to the abdomen, the colour-pattern and details are very different; not apparently closely related to any described species. Distinguished by the micronodulose mesonotum and seutellum, the pinkish-brown margins of mesonotum, upper pleura, and whole scutellum.

Male.—Length 9.5 mm., 12 mm. including antennæ;

wing 7 mm.

Head: eyes very narrowly separated; approximate for a very short distance. The upper occiput for a short distance on either side of the upper eye-corner is light yellow; the region about the ocelli is light reddish brown, quite convex and narrowly yellow just before the approximation of the eyes. The front and face are clear pale yellow marked with red and brown. There is a round reddish area just above the base of the antennæ that waches down the sides on either side of the antennæ where it becomes brown in colour; it narrowly misses the eye-margins and continues almost vertically downward but actually converges and forms an extensive, subquadrate, brown spot on the upper part of the face; in the middle of this spot, however, lies a pair of tiny, pale yellow spots; the brown continues below the middle

of the face as a narrow brown line, the two lines meeting at the epistoma, and within the area enclosed by these lines is a large, wide, pointed wedge of vellow. The cheeks are dark brown. The head is without style and the antennæ slender, first and third joints light reddish brown, the second joint dark brown, the style short. Thorax: the middle of the mesonotum is opaque. micronodulate, black in colour, with pale setæ. The black area is interrupted for a short distance at the suture. There are three yellow pollinose lines in the black area; only the outer ones continue to the anterior margin. The humeri are yellow; the broad sides of the mesonotum and the upper part of the mesopleura are reddish brown in colour; a narrow vertical vellow stripe runs through the middle of the upper part of the sternopleura and again through the metapleura, the former stripe continuing just in front of the wing and on for a short distance along the suture of the mesonotum. Scutellum reddish brown, the middle of the base blackish, the margin narrowly and obscurely yellowish in the middle. Abdomen: quite petiolate, narrowest in the middle of the second segment. The base of the first segment and apex of the second segment are both twice as wide as the middle of the second segment; beginning at the third segment the abdomen is expanded into a large, broad, cylindrical club, of which the large, rounded hypopygium forms a prominent part. Abdomen: dark, dull brown in colour, almost black in places; the first segment, except for an elongate, basal, median, black V. together with the second segment, except for a conspicuous, posterior, marginal, pale yellow annulus, are entirely brownish red. Third and fourth segments and hypopygium very dark, the last two segments with conspicuous, narrow, posterior, annulate cross-bands. Pile of abdomen microsetate and pale in colour, proceeding from raised places. On the fourth segment there are a pair of obscure, narrow, pollinose, crescent-shaped marks; and between them there are equally obscure, slender vitæ. Legs: chiefly light reddish brown; the apical third of all of the tibiæ and the basal fourth of the hind femora are light yellow; the greater part of the remainder of the hind femora is dark brown; the hind femora are slightly thickened dorsally just before the middle, and

equipped ventrally upon the outside with one or more rows of very short, black, inconspicuous setæ. Wings: the anterior border is light brown, barely darker near the apex; the brown colour is confined to the costal, subcostal, marginal and submarginal cells, to the basal cell above the spurious vein and for some distance along the lower side of the third longitudinal vein beyond the kink. Third longitudinal vein with a decided but rounded kink in the vein; the angle thus formed is almost a right angle; there is a very strong stigmal cross-vein present.

Holotype: a male. Cape Province, Somerset East, Nov. 1930, South Africa, R. E. Turner, 1930: 593.

Cerioides africana, sp. n.

A large fly ofthe type similar to bezzi Herve-Bazin, but much larger; whole margin of wing before the third vein dilutely yellow-brown, the cells clearer in their centres, the brown-black mesonotum has the transverse suture velvet-black, linearly marginate.

Female.—Length 17 mm.; wing 13 mm.

Head: occiput extremely tumid and highly raised above the margin of the eye; dark, shining red in colour, including the ocellar region. The front is black. The face is straight in profile and together with the cheeks is light red in colour, with a prominent, black, wedge-shaped stripe separating cheeks from face. There is no antennal process although there is a square, tubercular, raised base from which the antennæ proceed. The antennæ are fairly elongate; the first joint is quite long and slender, long or slightly longer than the remaining two joints; the third joint is barely longer than the second, black in colour; the other two joints are dark, reddish brown. Thorax: dull black, very broad with an opaque, velvetblack, narrow, transverse stripe along the margin of the niture; its inner ends are rounded, the whole stripe is Mender, and there is a similar, basal, marginal stripe on the scutellum. Scutellum black, its margin obscurely light brownish. The posterior calli are light brown, the planta black but obscurely reddish on the mesopleura. Abdomen: strongly petiolate; the second segment is broad, the remaining segments correspondingly large. The first segment is wholly black, the second segment is gather light reddish brown, the basal half subtranslucent

and obscurely blackish in the middle and obscurely yellow along the posterior margin. Third segment dark brown or black, becoming more reddish on the posterior half and with a narrow, linear, posterior, submarginal blackish stripe or line, which, however, does not reach the side-margins. Fourth segment black, fifth segment reddish brown and pointed. The third, fourth and fifth segments form a pointed club. Abdominal pile wholly pale. Legs: the basal halves, or more or less, of all of the femora are black; the remainder of the femora and the tibiæ very dark brown; tarsi dark brown to black. The hind femora are very slightly thickened and without ventral spines; the pile of the legs is setaceous, wholly pale brassy and appressed. Wings: the anterior border is widely yellowish in places and becomes obscurely brown over areas including the costal and subcostal cells, and the marginal cell except for an almost clear streak in its distal middle, also the whole of the submarginal cell except for one or two clear spots, also the whole of the first basal cell above the spurious vein and the narrow posterior margin of the third longitudinal vein are all light brownish yellow. Third longitudinal vein with a wide, shallow bend and no spur; stigmal cross-vein very faint.

Holotype: a female. Madagascar, Betsileo, Rev. D. Cowan, 82:30.

Cerioides globigaster, sp. n.

Related to maculipennis Herve-Bazin, the wings are hyaline, the front (of female) is bipunctate.

Female.—Length about 10 mm.; wing 9 mm.

Head: broadly reddish about the region of the ocelli and the upper occiput almost to the corner of the eyes. The reddish region of the vertex is produced forward to the antennal process over a median trench or double crease or concavity which is deepest just in front of the ocelli. The red colour runs sharply down on either side of the style until it is even with the middle of the sides and then is produced out towards the eyes; it fails by a considerable extent of reaching the eyes and ends sharply. Below the antennal process, confluent with the red of the process, there is a second prolongation that extends towards the eyes; it fails to reach it and ends

bluntly; the latter, and indeed all of the red of the face, except as hereafter noted, is confluent with a pair of submedian, slender, brown stripes that are rather widely separated in the middle and reach the epistoma. On either side of these brown stripes there are a second pair, reaching from the posterior corners of the oral margin at the lowest point of the face, upward a short distance above the bottom of the eyes. Remainder of face and front, except for a pair of dark brown, velvet, opaque spots on each eye-margin at the extreme upper part of the front, everywhere very pale yellow, rather brownish yellow or clay-coloured. The reddish areas of the face and front are covered with short, silvery pubescence which is more or less confined to these areas, but which is generally extensive on the lower half of the face. Cheeks and lower part of the occiput pale clay-coloured. Antennal process light brownish red, subtranslucent, a little longer than the first antennal joint; the antennæ are of only moderate length; the second and third joints are subequal, are barely longer than the first joint, are rather wide and compact in the middle, forming a twojointed club; the third joint has a short, stubby, very sharp arista; the first and second joints are black. Third joint on basal half brownish red, on outer half darker brown. Thorax: convex, dull, obscure, unicolourous light brown; the humeri have a trace of yellow; the dorsum is pale pubescent or pollinose and black micromodulate; their setæ are black and there is some additional, pale yellow, short pile mixed with this. The soutellum is similar to the dorsum; the base is broadly ameologrous and the rim narrowly yellow; it is short, small, and several times as wide as long. Pleura wholly middish except for an inconspicuous, narrow, vertical, illustricly yellowish stripe along the upper anterior margin of the pteropleura. Abdomen: somewhat conabilitied at the anterior end of the second segment; this assement is very small and shorter than the first segment; it is subtrapezoidal in shape; the second segment is almost half again wider posteriorly than anteriorly. The second segment has a yellow, vertical, posterior margin, in the sides that is angularly and anteriorly directed the mid-line. The third and fourth segments are developed into an exceedingly short, thick, rounded

club; the abdomen, viewed from the side near the anterior part of the fourth segment, is almost as high as that segment is long. The globose appearance of the abdomen is further increased by a constriction a short distance from the end of the fourth segment. Fifth segment very small and inconspicuous. First segment, except for the narrow lateral flare of the anterior margin, and the whole of the third, fourth and fifth segments, brown in colour and obscurely shining nodulate setose, the setæ golden in colour, sharp, slender and appressed. Legs: wholly s light brownish red: the basal three-fourths of the hind femur with almost the whole of its dorsal length, and considerable portions of the anterior femora and the whole of the tarsi covered with shimmering, whitish pubescence. Pile of the legs pale; there is a double row of black spines, stout and sharp, in the apical two-thirds of the hind femora. Hind femora moderately thickened, especially on the dorsal half. Wings: hyaline; there is a suggestion of pale yellow border along the anterior margin, actually slightly brownish towards the end of the second longitudinal vein. The brown colour is confined to the costal, subcostal, marginal and submarginal cells. There is no true stigmatic cross-vein. though there is a slight thickening. There is a welldeveloped, though not very deep kink in the third longitudinal vein.

Holotype: one female. Pretoria, 10. x. 1914, G. A. H. Bedford, presented by Imperial Bureau of Entomology,

1922:485.

Monoceromyia gloriosa, sp. n.

Related to *pulchra* Saunders and *hopei* Saunders, the pattern of the vittæ upon the pale yellow face is different; mesonotum black behind the notopleura; last segments of the pointed abdomen largely golden pollinose, the fourth divided by a black wedge from a basal fascia.

Female.—Length 20 mm. without antennæ or style.

Wing 14 mm.

Head: vertex and upper part of occiput, except for a brown transverse band across occili, bright opaque yellow. The whole of the front (except for a minute spot above the antennal style), the whole of the face (except for two slender, crescentic brown lines from base of style, and together with a pair of transverse, small, elongated spots some distance below the above marks which are confluent with a fine, vertical brown line on each side of the middle of the face), all very pale clear yellow. The cheeks are clear yellow with a brown, oblique band from eye-margin to epistoma that is confluent with a small, brown, vertical spot in the middle of the face just above the oral margin. This brown vertical spot is connected with a fine pair of brown lines in the middle of the face. Face with a fine, shimmering, white pubescence and very scant white pile on the upper part. Style well developed, not as long as the horizontal length of the eye, brown in colour, the first joint of the antennæ a little shorter than the style, reddish brown, the remaining joints missing. The upper occiput is very much tumid and produced, especially posteriorly. The middle of the occiput about the middle of the eye is black in colour; just above the black part where the margins begin to be well developed there is a patch of golden pubescence. The face in profile is quite straight, but quite puffed-out and swollen in appearance, that is best developed well forward from the eye-margins. Thorax: black, shining in the middle and microsetate; the humeri, a large subquadrate wide area from humeri to suture along the mesonotal margin, the whole of the meso- sterno- and upper pteropleura and the whole of the scutellum, pale clear yellow. Pile of scutellum microsetate and pale yellow. Abdomen: elongate, highly petiolate, the greatest constriction occurs at the and of basal third of second segment; the end of third regment is about as wide as the flared lobes of the first segment, the remaining segments are about as long or a little longer than the first and second segment and developed into a beautiful, convex, subcylindrical, pointed alabahaped body, which makes it a fine mimic of a Polistoid wasp. The first segment is wholly pale yellow groupt for a median, rather wide, brownish-black vittæ. Morand segment with the posterior margin rather widely jude yellow, the whole of the remainder light brownish Third segment black, the posterior border sharply to the margin with a transverse, pale yellow band that Is very short in the middle of the segment, reaches the sides but is expanded in the middle on each side, anteriorly,

33

to form a large yellow spot with rounded anterior margins. Fourth segment with a similar, posterior, shining yellow band that is less produced on either side anteriorly; the black of the anterior six-sevenths or more of this segment is widely obscured by a dense, black-punctate, golden mat or area of pubescence, which is restricted by the shining black ground-colour as follows:—a narrow, linear margin on the anterior edge of the yellow transverse band on the posterior part of this segment, a narrow transverse stripe on the base of this segment which narrowly reaches the sides of the segment at the anterior corners and becomes longer near the middle, and exactly in the middle it is produced posteriorly as far as the posterior black line to form a narrow, pointed wedge. The whole of the fifth segment, except for an almost unnoticed basal median spot, is golden pubescent. Pile over the golden pubescent area and over the vellow areas vellow; on the black areas black. Legs; first two pairs missing; the hind legs are light reddish brown, the hind tibiæ are a little darker in the middle but are still light red and their bases and the apex of the hind femora vellow; hind femora slender. Wings; hyaline; the subcostal cell is clear except its base, the first basal cell above the spurious vein, the whole of the marginal, the submarginal and the basal, anterior corner of the first posterior cell and a narrow region about the small crossvein and on either side of the last part of the fifth longitudinal vein and the anterior margin of the basal part of the fifth longitudinal vein are brown in colour. Third longitudinal vein with a slight, shallow bend and no spur. The brown at the tip of the wing, beginning at the anterior cross-vein, is darker in colour; the rest of the brown is more yellowish or reddish.

Mr. Frank M. Hull on

Holotype: a female. Uganda, Mt. Maroto, Maroto Stream, 3700 ft., 25. 1. 13, W. P. Lowe, 1913: 127.

Pseudovolucella ochracea, sp. n.

Related to apimima Hull, the anterior half of the abdomen is brownish yellow, the posterior half shining black.

Male,-Length 14 mm.; wing 12.5 mm.

Head: the eyes touch for a quite short distance; the upper facets are very little enlarged, the vertex is dark,

opaque brownish black. The front is separated by a narrow linear groove running to a small, vitreous, bare space above the antennæ; front, together with the broad sides of the face on the upper part, pale yellowish-brown pollinose. The yellow-brown pollinose sides of face descend as a narrow wedge to the epistoma, where it becomes pubescent, obscuring the ground-colour. The yellow pollen continues narrowly beneath the antennæ and the low facial knob. There is a broad middle dark brown to black stripe on the face slightly diverging above, fading away into the paler colours. Cheeks reddish brown, separated from the face by a wide, oblique stripe of dark brown, which is sparsely pubescent. The pile of the vertex is long, black, and erect, together with similar pile on the front; pile of the occiput, except narrowly above, pale yellow; pile of upper part of face, cheeks and the brown stripe on each side shining yellow; middle of face bare. The face descends rather deeply below the eyes and is barely concave between antennæ and tubercle. The tubercle is considerably further forward than the base of antennæ. The antennæ are black, the third joint dark brown, barely longer than wide, subquadrate. the arista long, very plumose with about thirty-two upper rays. Eyes bare. Thorax: wholly dark, obscurely whining brown, the ground-colour is evidently black. obscured by brown pollen; the whole dorsum has a faint greenish cast. The scutellum is wholly pale villowish brown. The pile of pleura, the dorsum and the time of the scutellum is thick, long, erect and pale shining vollow. The margin of the scutellum is without bristles and with hair twice as long as on the disc. Abdomen: wery broad, but little longer than wide, widest at the end of the second segment; the whole of first segment and the busul two-thirds of the second segment to a slightly greater extent on the sides of this segment, are wholly pale brownish yellow and faintly shining, covered with Tanse, rather long, erect, shining yellow pile. The second segment is almost orange in colour. Remainder of and allowen obscurely shining black, except for a narrow and manually divided, almost unnoticeable, subbasal, mahammy band which does not nearly reach the sides. the whole of the remainder of the second segment, and third and fourth is covered with black pile, shorter that on the anterior part of the abdomen and

35

appressed in the middle and erect on the sides. The hypopygium is very large and concealed by the end of the fourth segment with numerous, exceedingly long, slender, black hairs. Legs: the femora, except the narrow apices of the first and second pairs, are very dark brownish black. The hind tibiæ are dark brown basally, still darker on the remainder and ending in a ventral (extended position) short, rounded scoop; their pile on the outer lateral surface is wholly black and setaceous, on the inner lateral surface black basally, more dense, appressed and golden apically. Fore and mid-tibiæ dark brown along the greater middle portion and narrowly light brown apically. The first and second mid-tarsal joints are brownish vellow; remainder of tarsi dark brown to black. The hind femora are very greatly thickened, but all of the thickening lies on the dorsal half on the middle three-fifths. Ventrally the hind femora are slightly concave. The hind trochanters have an obtuse spur. Wings: almost hyaline, the third longitudinal vein straight; there is a prominent, subquadrate brown spot in the middle of the wing back of and including the stigmal region.

Mr. Frank M. Hull on

. Holotype: male. Burma, Lt.-Col. Bingham, 1896:

281. Paratype: a male, same data.

Criorhina pallipilosa, sp. n.

Mesonotum shining black anteriorly, pale brownishwhite pollinose posteriorly. Abdomen wholly yellow passe. Face deeply conical, shining and largely bare; related to imitator Brunetti.

Male.—Length 12.5 mm.; wings 12 mm.; vertex of

head to tip of epistoma 5 mm.

Head: eyes bare, pile of vertex long and black, the whole of the front and the entire middle part of the face is densely covered with pale, brownish-yellow, extremely minute pubescence. The face is very conical and deeply produced. The lower portion of the face, from bottom of eyes to epistoma, is almost as long as the height of the eye. The sides of the face are shining brown, darker in the middle and ventrally. The face is concave below the antennæ, very slightly bulging at a level equal to the bottom of the eyes; the proboscis is very elongate and

black. The antennæ are small, short, brown in colour, the third joint quite short and very broad, and directed extensively downward ventrally, but rounded. The arista is black or dark brown. Thorax: shining black on the posterior half, anteriorly from the suture it is covered with pale, brownish-white pollen. The scutellum is similarly pollinose but more metallic. The pile of the thorax, pleuræ and scutellum is everywhere long, exceedingly long on the scutellum and, except for a band in the middle of the thorax behind the suture, which is black pilose, it is everywhere pale yellow. Abdomen: short, pale greyish pollinose on the whole of the first segment and everywhere on the second segment except for an obscure, median stripe, which extends narrowly along the base in the middle, but not as far as the sides, and for a wider, pre-apical band almost to the sides; the third segment is similarly pollinose except for a median, transverse band, a median, large, basal V not quite reaching the posterior margin, but narrowly reaching along the base to connect through a basal corner-spot with the middle band. The fifth segment is wholly densely pollinose, except for a small, median basal V. Hypopygium quite large, broad and wholly shining black. The whole of the abdomen is light yellow, shining pilose, the pile on the extreme posterior margins of second. third and fourth segments is more thick and is like tufted fringes. Legs: all of the femora are feebly shining black, except at the extreme apical tips where they are brownish yellow. The hind femora are slightly thickened, but only on the dorsal middle to the basal two-thirds. All of the tibiæ are yellowish brown; their anterior fourth is narrowly and the hinder pair on the apical three-fourths brownish. All of the tarsi except the last one or two joints are light brown; the apical joints are dark brown. The pile of the legs is everywhere pale. Wings: quite pale brown, the veins light brownish yellow. Stigmal cell brownish yellow; there is a slight brown cloud at the furcation of the second longitudinal wein: vena spuria poorly developed.

Holotupe: a male. Kashmir; Gulmarg, 8500 ft., summer 1913, Lt. Col. F. W. Thomson, 1914: 182.

Paratypes: three males, same data.

Criorhina crioarctos, sp. n.

Thorax and abdomen black pilose, the latter with a tuft of golden-red pile on each side at base; face produced forward as a long, slanting cone. Not apparently related to the few described species from the Asiatic region.

Female.—Length 14 mm.; wing 11 mm.

Head: the eyes are bare, the vertex dully shining brownish black, the front shining black and merging into the vitreous, dark mahogany-red face; the margin of the epistoma and cheeks are more shining blackish. The antennæ are short, light brownish red, the third antennal joint is almost twice as wide as long and rounded and thickest at the bottom. The arista is long, slightly thickened basally and brownish in colour. The face is produced strongly forward as a long, diagonal, slanting cone; the profile of the face is almost straight and barely concave upon the lower half above the epistoma. The face is very little produced downward and the epistoma is somewhat more pointed than the face. The pile of the front, vertex, cheeks and the margin of face along the eyes is black. Thorax: rather slender and about as wide or scarcely as wide as the eyes; it is opaque, velvetyblack with suggestions of still blacker, linear stripes. The pleura, humeri, dorsum and scutellum are covered with very long, upon the scutellum exceedingly long, smoky, brownish-black pile. Abdomen: of the usual type; chiefly shining black and more dully shining on the basal segments with a strong tuft of shining, goldenreddish pile on either side of the second segment near the base and lateral margin; elsewhere the pile is the same colour as the thorax. Legs: light brownish orange in colour, the last two posterior tarsi and the last four anterior tarsi are blackish; the pile of the femora and tarsi and of the extreme apex of the hind femora is golden: elsewhere the colour of the femora is obscured by the sooty-purple or brownish black, very long pile. The hind femora are very slightly thickened. Wings: strongly tinged with yellow; the veins are yellow, except that the tip of the costa, the second longitudinal vein, the subapical and posterior cross-veins and a narrow area on either side of these veins are brownish.

Holotype: a female. Burma, Lt.-Col. Bingham, 1896: 281.

Criorhina bomboides, sp. n.

Abdomen black, black pilose; thorax black with purplish-brown pile, face moderately produced downward and a little forward; related to *cricarctos*, the epistoma is produced chiefly downward.

Male.-Length 14 mm.; wing 12.5 mm.

Head: the eyes are bare, approximate for short distance and almost touching; the very small vertical triangle. almost confined to the ocelli, is dark brownish black with long brown pile and flat-appressed yellow pubescence in front of the anterior ocellus. The front is bare, brown and shining in the middle and above the antennæ; however, at the junction of the eyes along the sides of the front, the front as well as a wide, lateral, frontally connected facial stripe, is light brassy-yellow pubescent: the pubescence is dense and hides the ground-colour. The middle of the face and conspicuous facial knob is dark, dully shining brown and faintly grooved on the tubercle. Cheeks shining dark brown, the face produced chiefly, but not extensively, downward; it is also produced forward at the tubercle a little farther than the base of the antennæ. The antennæ are short; the first, second and base of third joints are light brown; remainder dark brown; the basal third of arista is light brown and blackish apically. Pile of face and cheeks ion the former confined to the eye margins) brown in molour. Thorax: the scutellum, pleura and humeri are valvety black, and almost opaque with a slight brownish viewed from in front they have shining brownishvallow pollen; the whole is covered with very long (on the seutellum exceptionally long) purplish-brown pile. Abdomen: black, the first segment and the fourth segment, except in the middle and on the base, more or has shining. The posterior margin of the fourth segment m reddish. The pile of the abdomen is very dense, minimitaly long, brownish black; on the second and third argments it is very much flattened and appressed. There are a few reddish hairs near the apex of the fourth segment. Legs: chiefly light brownish red; the tarsi, was the hind tarsi, are dark brown and the basal half of the femora is dark brown and dark brown pilose. The hind femora on the apical, lateral two-thirds and

the whole of the lateral surface of the hind tibiæ, except narrowly at the base, are thickly, long, bushy, golden-red pilose. This gives a most remarkable impression of the appearance of certain bees. The inner lateral surface of the hind femora and tibiæ have dark sooty-brown pile. The middle tibia on both surfaces has only orange pile, longer on the outer lateral surface. Wings: strongly tinged with yellow; the apical fifth of the wing, together with the posterior cross-vein, is pale brown. There is a small, yellow stigmal spot but no stigmal cross-vein.

Holotype: a male. R. Turner col., Shillong, 4.03,

1907: 22.

Lejops rhinosa, sp. n.

Epistoma exceptionally long; thorax dull brown with pale ochreous vittæ; the black abdomen has black and ochreous fascia. Related to nasiitus Curran.

Female.—Length 11 mm. to end of snout; wing 8.5 mm.

Head: the eyes widely separated, the distance across the middle of face scarcely wider than the distance across the vertex from the eye-margin. The pile of the vertex and front, except just before the antennæ where the front is tolerably bare, is abundant, quite long, slender, black and erect. The occiput from upper eye-corners and behind the black pile of vertex, together with the cheeks and a small area on each eye-margin on each side of antennæ, is pale yellow pilose; there are a few pale hairs and a few shorter black hairs, the latter restricted to the tip along the sides of the snout. The vertex, the narrow sides of the front, the upper sides of the face and a transverse band below the antennæ, are brownishochreous pubescent. The entire lower half of the front forms a dark brownish square, bordered by the narrow light eye-margins. The snout is clongate, shining black, bare on the lower and ventral margins; the remainder is sparsely covered with light yellow almost golden pubescence; the snout is much longer than in other species of Lejops, in fact easily as long as in the genus Rhingia. The antennæ are dark brown, the third joint black, about as long as wide and rounded, the arista short, basally thickened and bare. Thorax: very dark brown pollinose, with a pair of slender, brownish-ochreous vittae

which are widely separated and run not quite back to the scutellum; each is expanded on the outer lateral edge at the extreme anterior end of the mesonotum so as to reach the humeri. The three resulting dark stripes are of about equal width. The two larger ochreous vittæ are bordered on each side obscurely by narrow lines of blackish brown. The scutellum is brown, shining, the basal margin almost metallic; its apical half is rather pale brownish yellow. Pleura blackish and shining with long, abundant, tufted, delicate, pale yellow or golden pile. The pile of mesonotum is excessively short, erect and everywhere pale; it is longer on the calli, very long on the humeri, short over the scutellum, with a marginal row of about twelve long, shining yellow bristles. Abdomen: not quite twice as long as wide and widest at the end of the second segment, gradually diminishing from there; the whole of the first segment is shining grey with slight yellowish tinge from pollen. The entire basal border of second segment, except at the extreme sides, is narrowly bordered with black. The posterior part of this segment has a transverse band of black produced forward as a very obtuse triangle until it almost touches the black of the anterior border; posteriorly, the band reaches the sides narrowly; the sides and middle of this segment are brownish yellow. The third segment is similarly coloured, the anterior black border absent except in the anterior corners and very narrowly in the middle. The fourth segment is wholly shining black except for an opaque rhomboid in the middle and a slightly oblique, narrow, yellowish-grey pollinose band from each side to the middle of the basal margin. The fills segment is wholly shining black. The pile of the abdomen along all of the sides, upon the transverse pale hands and over the black areas, except in the middle posterior part of each segment, is shining yellow. The pile on the middle and posterior part of the segments past the first segment is appressed and black. Fifth seement wholly pale pilose. Only the anterior half or more of the first and second posterior black bands on the second and third segments are opaque black; elsewhere They are shining black. Legs: the femora, except the marrow apex, is shining black. Tibiæ and tarsi light allowish brown, the middles of all of the tibiæ and the hind basitarsi dark brown. The hind femora are moderately thickened, the pile of the legs everywhere pale yellowish. The hind basitarsi is thickened and elongate, its outer lateral margin with a complete row of close-set, dark brown setæ; the hind tibiæ ends transversely. Wings: pale greyish brown with a strong, deep, but not acute bend in the third longitudinal vein; subcostal cell clear without stigmal spot but with a strong, thick, stigmal cross-vein.

Holotype: a female. Uganda Protectorate, Mpanga forest, Toro, 4800 ft. 13-23, Nov. 1911, S. A. Neave. Paratype: one female, same data.

Merodon apimima, sp. n.

Related to *multifasciatus* Curran in type of femoral armament and abdominal fascia; distinct in the black front, yellow pilose vertex, brown humeri, absence of red on second abdominal segment, besides other details of pattern.

Female.—Length 12 mm.; wing 10.5 mm.

Head: the very broad, tumid, rounded occiput is wholly pale greyish-white pollinose. There is a broad, median, shining black band down the long front. The pile of the occiput and of all of front and face is long bushy, shining and white; a few dark hairs lie in fron of the ocelli. The antennæ are very low set upon the head; the face in consequence is very short and deeply concave with the greatest depth below the middle of the face; the light reddish-brown antennæ almost reach the epistoma. The third joint of antennæ is nearly as long as the second and darker brown; the arista is vellowish. strongly thickened on the basal half. Eyes long, sparsely pilose. There is a short, slender groove, quite tiny, before the antennæ. Thorax: broad, rather flat, dully shining black in the middle; it is broadly shining greyish to greenish pollinose or submetallic along the lateral margins and along the anterior margins of the mesonotum. and again transversely before the scutellum. The scutellum is large and exceedingly broad, it's margin or rim is impressed, is yellowish brown and with a thick. marginal rim of bushy, yellowish pile directed towards the mid-line all along the margin. The pile of the scutellum is thick, yellow and erect. The pile of the dorsum is similarly coloured, a little shorter and a little bit more directed posteriorly; pile of the mesopleura and pteropleura long, thick, bristly and whitish. Abdomen: broader than the thorax, half again as long as wide, the sides of the second and third segments are almost parallel and scarcely beginning to narrow before the middle of the third segment. The ground-colour of the abdomen is shining blackish with many slender, transverse bands of greyish white to orange or deep yellow pollen. The second segment across the middle has a slender band of greyish pollen near each lateral margin, curving very slightly forward and at the same time a little widened so that the anterior margin of the band, before it reaches the sides, is convex. The entire posterior margin has a very slender, yellowish-grey band that is continuous laterally with the posterior corners of the middle band, which actually fails to reach the true margin of the segments. The third segment has a broader, middle band of brownish-yellow pollen and a posterior band of the same colour. The fourth segment has a similar middle band, wider, slightly diagonal on much side instead of transverse, and with a similar mosterior band. Pile of abdomen quite abundant and that appressed, grevish or whitish on the anterior half of the abdomen, becoming golden-orange on the third, fourth and fifth segments and a little more prominent on the transverse pollinose bands. In consequence, these transverse bands appear to be brilliant, golden-orange. Light entirely pale pilose, all of the femora are dark brownish black, shining, the anterior pair with full-length limushes of bushy, whitish, shining pile on the posterior influes. The hind femora are considerably thickened on the dorsal half throughout their length; their pile is that, long, thick and yellowish. There is a strong reddish agair or spine before the apex of the hind femora; hind illim much thickened and flattened, slightly curved, light willish brown with a dark brown area in the middle. The fore and mid-tibiæ are similarly coloured. All of the the light red. Wings: light brown in colour, the with light brown; there is a deep, somewhat oblique, milly directed, perfectly rounded loop into the third limitational vein; last section of the subapical crosswin strongly recurrent, except just before its end. The costa ends at the end of the third longitudinal vein; there is a strong stigmal cross-vein.

Males.—Eyes holoptic, touching for a distance almost as long as the vertical triangle. Face as deeply concave as in the female. Hind femora, tibiæ and wings the same as in the female.

Holotype: a male from Mlange, Nyasaland, 2–21. iv-vi. 1913, S. A. Neave, presented by the Imperial Bureau of Entomology, 1915: 165. Allotype: a female, and five male and five female paratypes, all of the same data.

Merodon bombiformis, sp. n.

Distinguished from other African species by the large size and the very small wings as well as by the barely projecting front; apparently not closely related to other species from this continent.

Male.—Length 17 mm.; wing 11.5 mm.

Head: the occiput is tumid, dark reddish brown, reddish pilose; the vertex is shining blackish and orangered pilose. The entire front and the very short face are light red in colour with thick, bushy, shining, reddish pile with a golden tinge. The antennæ are short, reddish in colour, the second joint blackish; arista orange, very slender and thickened at the extreme base. Eyes rather thickly pilose. The face retreats below the antennæ, is more or less straight in profile, the front part of the epistomal margin projects out a little way, leaving a slight facial concavity. Thorax: dark blackish in the centre, continued past the anterior margin more narrowly as a stripe of the same colour. The broad lateral margins and the humeri and the post-calli are light, orangereddish brown with similarly coloured pile. The scutellum is very broad, dully shining, dark brown, the rim emarginate, paler in colour, with bushy, orange pile that is directed inward; pleura blackish and shining with some greyish pollen. The pile of the entire thorax and pleura and scutellum is thick and orange. Abdomen: very broad and thick, wider than the thorax and curving downward somewhat posteriorly but quite flattened on the first two segments and the base of the third. The first segment, except its extreme corners and a broad basal band on the second segment, which occupies only

the middle half of the segment and is continued narrowly in the middle to the apex of the segment, is black in colour; elsewhere the first and second segments are light, brownish orange with thick shining pile of the same colour; the third segment has a broad, basal, continuous band, brownish black; the remainder of that segment orange-brown, golden-red pilose, except for a median subapical obscure brown spot. The fourth segment is similarly coloured and banded. The obscure median brown spot is larger, triangular, with equilateral edges, the apex forward. Legs: femora shining black, the anterior pair grey pollinose, the hind femora moderately thickened, with a very strong, sharp, black, subapical spine. All of the tibiæ are yellowish on a third or less, blackish apically; tarsi blackish brown. Wings: small and apparently very inadequate. The extreme base and costal and subcostal cells and the auxiliary and first longitudinal veins yellow; elsewhere wings grey with brown veins. There is a strong loop somewhat obliquely directed into the first posterior cell. It is without spur. Last section of the subapical cross-vein strongly recurrent. There is a strong stigmal cross-vein.

Holotype: a male. South Africa; Distant collection, 1011: 383, with additional illegible writing: 27-12-98.

Merodonoides minutus, sp. n.

Separated from *circularis* Curran by the absence of fascia upon the posterior portion of the third and fourth abdominal segments, the wholly reddish hind femora, the smaller size and different eye-pattern.

Male. Length 8 mm.; wing 6 mm.

Head: the eyes are almost touching and are thrust angularly toward the mid-line, about half-way between the antennæ and the ocelli; the upper part of the front and vertex is blackish with some grey-yellow pubescence in some lights; the pile of this area is thick, quite erect and black; pile of the occiput pale in colour with a rellow-grey pubescent ground-colour. The lower part of the front and face and cheeks is shining black in ground-solair, almost completely obscured on the front and apposite the antennæ, and to a less extent upon the solair tubercle is bare. The first and second joints of the

antennæ are blackish brown, the third joint grey-brown, slightly reddish beneath; arista light brown. The eyes have four conspicuous brown stripes which form a continuous and widening line towards the vertex, but the anterior three stripes of which are ventrally broken up in spots; the first stripe is about the middle of the eyes, and the second and third stripes near the cheeks. The first stripe is confluent with the anterior margin of the eyes, the fourth continuous with the posterior margin. The first and second stripes are confluent just above the antennæ; the third and fourth ones confluent opposite the ocelli. Thorax: with four conspicuous, rather wide, black stripes that are not quite confluent at their posterior apices, the outer pair are pointed posteriorly, the inner pair broadly truncate: the four are separated by three almost equal areas and the outer pair laterally margined by opaque, greyish-yellow pubescence. The scutellum is wholly, dully shining, orange-brown. Abdomen: broad and but little less narrow apically; the first segment is wholly pale grevish pubescent; the second segment is almost wholly a beautiful light orange, its base narrowly. almost to the extreme anterior corners, opaque black. The third segment is coloured as the second, a little darker or more brownish on the apical half; its extreme posterior margin is vellowish; the fourth segment is dark shining brown, its posterior border light yellow; the large and broad hypopygium is dark shining brown. The pile of the abdomen is everywhere pale shining yellowish, erect on the first three segments, appressed on the fourth. Legs: the fore and mid-femora except for narrow brown apices are black with grey pubescence and white pile. The posterior femora are considerably thickened, chiefly so on the basal half; they are light orange brown on the lateral outer surface, barely becoming darker at the apex but on the inner surface they have a brownish black, narrow annulus just past the middle and the apex is broadly similarly coloured. The hind tibiæ are thickened, definitely arcuate, dark brownish, with ventrally, a knife-edge on the basal half. The anterior tibiæ are reddish basally, blackish apically, its tarsi blackish, the middle tibiæ are pale vellow on the basal two-thirds, almost white and barely darker apically; the first two tarsal joints are pale vellow, the others brown or

black. Wings: hyaline, glassy, without villi; the stigma is three times as long as wide and dark brown; remainder of stigmal cell clear, marginal cell closed, its apex broadly and horizontally bulbous.

Holotype: a male. Central India, Jubblepore, Nov. 15, 1907, ex col. Brunetti. 1927: 184.

Eristalis stigmaticus, sp. n.

Related to langi Curran, the scutellum is narrowly black at the base; there is a prominent, acute, opaque black triangle upon the front in addition to the upper transverse band; the small elongate, stigmal spot is dark brown.

Female.—Length 9 mm.; wing 8 mm.

Head: hemispherical and but little wider than the thorax, the upper part of the occiput is opaque black except for a marginal line of white pubescence along the posterior eye-margin. The vertex across the ocelli and immediately in front is shining bluish-slate coloured black. The front is shining black and there is a broad, transverse, opaque black band across the upper part of the front connected with a similarly coloured, median, nonte triangle, whose base lies anteriorward and touches amall, convex, shining black spot above the antennæ. Immediately above the antennæ there are a pair of thining, brownish, connected, flattened areas. The intenne are light brown in colour. The pile of the first and second joints is black; arista missing. The face and tubercle are broadly shining black in the middle. The sides of the face, broadly to the margins of the eves and parrowly continued past and above the antennæ as within line reaching as far as the transverse black band at the front, are silver pubescent. The cheeks are shining black. The lower portion of the occiput is whitish with while pile. Thorax: opaque black with a complete. distinct, ash-grey or slate-blue band anterior to the dorsal which band at the extreme margins of the thorax brownish grey. On the posterior half of the there are four diagonal, slightly oval spots, the was pair have their anterior ends nearest the outer pair with the posterior ends nearer. The scutellum is pale, marrie yellow and very narrowly blackish along its base; its pile is long, sparse, chiefly pale, but

with several black hairs on the margin and a few towards the base. Abdomen: a little longer than wide, almost wholly black, the first segment is grey pollinose, the second opaque black, with on either side a rather small, widely separated, obscure reddish spot which is part of a more extensive bluish-grey or black triangle that reaches broadly to the lateral margins. The third segment is opaque black, with a narrow, metallic fascia or band across the middle of the segment that shows traces of interruption in the middle and is expanded slightly posteriorly and more anteriorward as it reaches the lateral margin. There is a similar metallic band before the middle of the fourth segment, expanded to cover the entire lateral margin and similarly with traces of interruption in the middle. The fifth segment has a similar metallic band across the middle, which bears some indication of having been broken up into three or four spots. Legs: femora, except for the narrow apices, shining black; the hinder pair is considerably thickened. the thickening greatest in the middle and evenly spread out. The fore and middle tibiæ are light brownish yellow on their basal third or more; the hind tibiæ are reddish brown basally. All of the tibiæ distally and the tarsi are dark brown. Hind tibiæ not produced at apex, definitely arcuate and without any special fringe or pile. Wings: lightly tinged with brown; the marginal cell is narrowly closed, the loop of the third vein is not especially deep, the stigma is four times as long as wide and very dark brown.

Holotype: a female. South America, Colombia, Atrato Valley, June 1914, Dr. A. Balfour, 1915: 298

Eristalis luciliomima, sp. n.

Distinguished by the blackish vittate mesonotum, bare arista and yellow face, yellow pubescent, from *smaragdi* Walker; the species is larger and the venter is metallic green.

Male.—Length 10 mm.; wing 9 mm.

Head: barely wider than the thorax and hemispherical, the eyes exceedingly large and touching for a very long distance; the facets upon the upper three-fifths of the eye are enormously enlarged and this area much flattened; the vertex is quite small and limited to the large and

bulging ocelli which almost touch the eye-margin, the pile of this region black. The front, face and cheeks are light, subtranslucent, brownish yellow, the tubercle, the area narrowly above it, the cheeks and the area below the tubercle to the mouth, and the whole of the oral margin are bare. The remainder of the face and broadly along the eye-margins beneath the antennæ is pale, golden pubescent. The front is bare with pale pile, among which are four or five black hairs intermixed. The antennæ are wholly light brownish orange, the arista is brownish, quite long and with some barely discernible, microscopic, basal pubescence. Thorax: dorsum of the thorax and the whole scutellum shining, brilliant green, with a bluish east along the sides and a slight golden tinge in the mid-line beginning at the anterior margin. In the mid-line, viewed in the right light, there is a conspicuous pair of pale brownish, pollinose vittæ, narrowly separated, and reaching only a short distance past the median dorsal inture. On either side of this in the region corresponding the golden cast one may see from the right position traces of a second pair of vittæ represented by an abscurely triangular, posteriorly-pointed spot before and behind the suture. The pleura are bright metallic green. The pile of the dorsum is chiefly black behind the suture and largely pale in front of it. The spiracles of the thorax are extremely large, two or three times the normal size. The anterior one is bright egg-yellow, the posterior one black. The squame are extremely large, with the fringe blackish on the greater part, narrowly pale on the base; halteres orange; the scutellum extremely large, without impressed rim. Abdomen: brander than long, almost wholly brilliant, shining, green, with a bluish cast in some lights and a golden one along the posterior margin. In the middle of the second segment, its apex reaching the anterior margin, there is an aguilateral triangle of opaque black. On the second and third segment on either side there are transverse, shallow. dispressed areas. The pile of the abdomen on the anterior half of the segment is chiefly pale; on the posterior half is more or less confined to the middle and is blackish. femora blackish with a dull, greenish cast, the against narrowly brown, the hind femora quite slender, although twice as thick basally as on the apical third, and

gradually tapering; their pile is entirely pale except for three or four scant, short, ventral, terminal black bristles. The tibiæ are quite slender, basally yellowish brown and darker apically, the pale area narrow upon the hind pair; tarsi dark brown. Wings: glassy hyaline, devoid of villæ, the stigma lengthened out to occupy the basal two-fifths of stigmal cell; a stigmal cross-vein present.

Holotype: a male. New Hebrides, Banks Island, Santa Maria, Id., Gaua Nombur, T. T. Barnard, 1922 (114) 1923: 371.

Eristalis muscomima, sp. n.

Related to resolutus Walker, but with clear wings; greenish-black flies with opaque black vittæ.

Male.—Length 11 mm.; wing 9 mm.

Head: hemispherical and barely wider than the thorax, the eyes are large, touching for considerable distance, the upper one-fourth of the facets considerably enlarged and this area flattened. The vertical triangle is small, the ocelli almost touch the eyes; this area is black and the convex front and face and cheeks are largely shining black. The face on the upper half has a strong golden tinge. The tubercle is quite small and the face in profile below the antennæ is barely concave. There is a downward-pointed wedge of silver pubescence that becomes bluntly pointed near the oral margin, which it almost reaches; it is expanded above to cover most of the evemargin along the face. The upper part of the face has very faint, transverse stria. The antennæ are light orange-brown, the arista basally of the same colour, vellowish distally, bare and rather long and slender. Thorax: shining greenish black, with a slight purplish cast in places. In sharp contrast, in some lights, there is a pair of median vittæ so close as to be practically touching; they continue past the suture, but end well before the scutellum; their outer posterior ends are bluntly pointed. On either side, well separated from the median pair of stripes, there is a pair of irregular, triangular spots before the suture and a longer, more vittate, acutely triangularly pair behind the suture which end in a sharper point and reach closer to the scutellum than the median pair of vittæ. The scutellum is very large and shining greenish black, without impressed rim

and thickly short black setate. Pleura metallic upon the meso- and upper sterno- and pteropleura. The spiracles are large and brownish black. Abdomen: widely shining reddish bronze or coppery, more golden on the sides, greenish on the basal corners of the second segment. The second segment is opaque black upon the basal margin and upon a wider, pre-apical, slightly arcuate, transverse fascia, which is connected in the middle to the posterior margin. The third segment has opaque black spots as follows: -an oval, median spot not quite reaching the base and still less reaching the apex, but pointed apleally, and on either side there is an oblique, slightly arouate spot or obtuse triangle, the apex of which almost reaches the apical margin but fails by a greater degree to reach the lateral corners. The fourth segment is similarly marked, but none of the spots are pointed; the outer diagonal pair is oval instead of triangular and subarcuate. The pile of the abdomen is chiefly black, appressed, setate. Legs: the femora are all black except the narrow apices; the hinder pair are but little thickened, but that thickening is spread out uniformly and only the apical fifth or sixth considerably tapering. All of the tibiæ are brownish and darker apically, paler is sally, the middle pair are more extensively pale, the pair narrowly pale. The hind tibiæ are barely arounte and sparse, golden pilose. Pile of hind femora golden, with numerous black setæ apico-ventrally. Tand dark brown. Wings: inconspicuously tinged with limwn, especially on the apical border. The stigma the basal two-thirds of the stigmal cell.

The front of the female has a median, black beginning some distance above the antennæ and a little wider on the upper part; upon the the lateral spots of the third segment are less that and pointed and are more arcuate. The median this segment is broader and is not pointed. The spot of the fourth segment is quite round and the base.

a male, and one paratype male, from New Hanks Island, Santa Maria, Id., Gaua Nombur, T. Barnard, 1923: 371, also same data but there is an allotype female from New Pontecost Island, Lamalanga, Sept. 27, 1922, 1923: 271.

251

Baccha vivida, sp. n.

Abdomen brilliant, shining blue; violaceous upon the second segment; legs light brown; wings anteriorly bordered with brown. Related to purpuricola Walker.

Female.—Length 13 mm.; wing 10.5 mm.

Head: the vertex, occiput, front, face and cheeks are everywhere brilliant, shining blue. The eyes are rather narrowly separated and three to four times as wide at base of antennæ as at vertex. The front is slightly depressed a short distance above the antennæ and the face at oral margin is barely narrower than across the antennæ. The prominent facial tubercle is blunt and not sharply descending either above or below. The pile of the vertex is extremely sparse, together with that of front and face white in colour. The upper occipital collar just behind the ocelli is black or brown. Remainder of occipital collar single-rowed and white and not scalv. The basal antennal joints are brown; the third joint is wholly orange, about as long as the other two. Thorax: very convex, together with the scutellum except at its extreme margin, the calli and the humeri, wholly brilliant, shining blue and short, sparse pilose. The anterior collar of pile, the pile of the very convex scutellum and of the posterior third of the mesonotum, is whitish; elsewhere it is black. The squamæ are white, whitefringed. Abdomen: wholly brilliant shining blue; only the middle and sides of the second segment are violet in colour. The second segment is quite narrow and very cylindrical; it is five or six times as long as wide, barely wider posteriorly in the middle, expanding, beginning at the third segment into a very broad, flattened, oval shape that is widest in the middle of the fourth segment, hence spatulate distally, and quite thin and much flattened. The pile of the abdomen on all of the third and fourth segments, and upon the middle of the second segment, except narrowly along the anterior corners, is appressed, black setaceous. On the sides of the first and second segment there is the usual long, pale, sparse pile. Legs: wholly light brown, the distal third of the hind tibiæ and the hind basitarsi alone are dark brown. Pile of legs, except on the dark brown area pale in colour. Wings: with a strong, dark brown anterior border. Basally it covers the first and second basal cells

THE WALL OF THE PARTY OF THE PA

and in the middle of the wing forms a large more or less rounded dark brown spot, reaching narrowly to the posterior margin of the wing.

Holotype: a female. Dutch East Indies, Timor, vi.

1929; purchased E. Le Moult, 1933: 189.

Syrphus flavigaster, sp. n.

Unlike any described species from this region. The species is characterized by the light yellow abdomen and the narrow, scanty, linear fascia of black upon the base and apex of the second to fourth abdominal segments.

Male.—Length 11.5 mm.; wing 8.5 mm.

Head: hemispherical, the eyes touching for considerable distance, the anterior facets enlarged, the vertical triangle black and small with a linear wedge of anteriorlydirected black pile. The front, except for a prominent, diffuse black spot above the antennæ is pale yellow and yellow pollinose with long black pile along each eye margin and along the upper part of the front; the black is therefore bare. The face has a well-developed, obtuse, large tubercle; it is barely concave between tubercle and antennæ and below the tubercle the face strongly retreats to the oral margin. The face and cheeks are everywhere pale yellow; the tubercle is slightly brownish; except for the tubercle and cheeks, the face is densely shining, vellow pubescent. The first and second joints of the antenna are pale, orange-yellow, black setate; third joint missing. The lower part of the occiput is golden scalose, pilose, with many rows of hair. Thorax: the mesonotum, except for a very broad, lateral margin is wholly greenish and shining; it is somewhat obscured by greenish to yellow pollen; there is a mid-mesonotal line, dark in colour like that found on Mesogramma. The pleura and the margins of the mesonotum are yellow in colour and densely golden pollinose with long, golden pile; humeri vellow and bare; squamæ and plumula pale yellow with golden fringe; posterior calli shining yellowish, yellow pilose. The scutellum is wholly pale, clear opaque vellow, its pile wholly black, longer on the margins and rather abundant. Abdomen: oval, twice as long as wide and very flat; it is light yellow in colour, with light to dark brown bands. In the middle of the second segment there is a slender transverse band, its posterior margin

slightly curved, and neither side reaches the lateral margin of the segment; the ends of the band are pointed and connected in the middle and front with the base of the segment by a median brown vittæ. There is a slender, posterior band on the second segment, narrowly separated from the hind margin; it barely reaches the sides of this segment; there are similar bands on the third and fourth segment; that upon the third segment is slightly oblique, leaving more yellow colour posteriorly and in the middle. On the anterior margin of the third and fourth segments, narrowly separated in the middle from the actual base and more widely separated at the sides of these segments, is a slender, brown, transverse band. which upon the fourth segment shows some tendency to be broken up into three brown spots, a median and two lateral ones. The fifth segment is vellow with a median wedge in the middle, a tiny basal median spot and two slender, sublateral brown wedges. The pile of the abdomen is everywhere delicate, black, sparse but long, thick yellow pilose on the sides and margins of first and basal half of second segment. There is a row of black bristles on the submedian posterior margins of the first segment. Legs: pale yellow to orange, the hind tibiæ and tarsi dark in colour. The pile of the hind femora, except the base, the hind tibiæ and four or five bristles at the tip of the middle femora are black; elsewhere pale. Wings: pale brown, barely darker along the outer anterior margin to the end of costa. Subcostal cell brown; third longitudinal vein very slightly curved.

Holotype: a male. Amazons, H. W. Bates, 66:53.

Xanthogramma nigripilosa, sp. n.

Related to *javanum* Wiedemann. Scutellum opaque yellow with a large, black semicircle; mid-front and mid-facial stripe black; abdomen black with bright yellow fascia.

Male.—Length 10 mm.; wing 8 mm.

Head: eyes touching for a distance less than the length of the front or almost equal to it; the eyes are bare, the vertical triangle is somewhat raised, metallic brassy with a narrow, longitudinal, compressed wedge of black pile forward directed. The occiput above is black pilose without upper margin because of the encroachment

of the eyes. The eyes are somewhat incised posteriorly in the middle; the lower two-thirds of the occiput is silvery, scalose pilose. The front, face, cheeks, the latter brownish next to the eyes and separated from the anterior part by a deep crease, are wholly light yellow and shining, with a large, prominent black spot above the antennæ, and beginning immediately below the antennæ there is a wide median black stripe, less wide at the oral margin. The facial tubercle is very prominent, forming a strong outward bulge. The face is concave below the antennæ; pile of face whitish, of the front along the margins long and black. The central black spot of the front is bare. Antennæ short, brownish, the third joint orange below and as long as the first two joints. The arista is short, barely longer than the antennæ, basally thickened and brown. Thorax: dorsum of thorax brilliant, shining brassy with a broad, continuous, lateral, yellow stripe govering the posterior calli and reaching the scutellum. Pleura shining brassy; humeri, the whole posterior, the upper part of the sternopleura, the middle part of the pteropleura, part of the mesopleura, the propleura, and the whole of the metapleura yellow. Scutellum wholly opaque with a broad basal band connecting with a still more broad margin, bright vellow. The central part is a large black semicircle. Pile of the dorsum of the thorax everywhere erect and wholly black except upon the pleure, on the anterior parts of the lateral yellow atripes, again very narrowly on the anterior part of the mosonotum; on the posterior calli, on the disc and the margin of the scutellum, the pile is rather dense, long and black, Abdomen: broad, widest on the third segment, larely narrower at the base of the second and the end of the fourth. The fifth segment is somewhat less that an equilateral triangle. Anterior corners of the first mount widely shining yellow. There is a central black and in the middle of the first segment and another on withor side black. The second segment has a widely apparated, opaque, light yellow, transverse spot, pointed modally, reaching the margin in full width; the remainter of the segment is wholly opaque black, except has a narrow apical band, narrow anterior basal corners and small basal spot in the middle. The third segment a similarly opaque black, except for lacking middle basal

spot, and has an anterior yellow transverse band that is not interrupted or incised, is slightly wider just before it reaches the lateral margin, is transverse across the middle of the segment, is slightly oblique on each side, and is directed posteriorly. Fourth segment with exactly similar bands, similarly opaque black; the metallic areas are as in the preceding segment, the posterior metallic band a little wider. Fifth segment similar but with a pair of widely-separated oblique spots narrowly reaching the lateral margins. The pile of the abdomen is everywhere black, except on the yellow portion of the first segment and the inner portion of the yellow spots of the second segment, which is yellow. Legs: the fore and middle tibiæ and femora and the basal half of the hind femur are wholly pale orange. The pile of the anterior tibiæ and a lateral row of long hairs on the apical twothirds of the anterior femora, together with a similar row on the apical half of the middle tibiæ are black; elsewhere it is pale. Fore and mid-tarsi light brown and hind tarsi dark brown; the apical half of the posterior femora and the whole of their tibiæ blackish and blackish pilose. Wings: pale brown throughout, the stigmal cell dark brown, the spurious vein well developed; squamæ blackish, black-fringed.

Holotype: a male. Paratypes: eight males. All are from the Society Islands, Tahiti, 29. v. 25 to 5. v. 25,

L. E. Cheesman, 1925: 464.

Chrysogaster africana, sp. n.

Near pæcilops Bezzi, the wings have a faint brown cloud in the middle; eyes unspotted.

Male.—Length 6.5 mm.; wing 4.5 mm.

Head: the eyes touch for a distance equal the length of the vertical triangle; the latter is shining black and faintly transversely striate and with perhaps a bluish cast. The front is large with a slightly inflated appearance and with well-developed median depression that runs almost the entire length; there is a short, distinct, transverse depression above the antennæ and in general the colour is shining black. The frontal pile is long, but of about equal length throughout and wholly white. The face is shining metallic black, the tubercle small, the epistoma a little more prominent than the tubercle,

and the concavity above and below the tubercle is about equal. On either side of the face, connected below the antennæ, is a micro-granulate, large, roughly pentagonal spot or area which is moreover diagonally grooved or striate. The antennæ are short, the first two joints are dark brown, the third reddish brown and but little longer than wide. The arista is strongly thickened basally and dark brown. The eyes are quite sparsely pilose on the. upper half. Thorax: convex, together with the scutellum wholly, bright, brassy or golden-brown in colour. There are a pair of median, well separated, very faint vittæ ending a short distance past the suture, and traces of somewhat longer, more lateral vittæ, which are the same colour and are very faintly discernible because they are more opaque. The thorax might almost be considered non-vittate. Margin of scutellum evenly rounded, with a very distinct though quite shallow marginal groove. The scutellum is somewhat more shining than the thorax, due possibly to golden pollen. Abdomen: elongate, longer than the thorax, quite flat and dull blackish except on the sides of the segments; there is a faint, milkybluish cast and many slender transverse lines, not striate, but visible because they are more shining. Sides of all of the segments, more extensively on the third and quite widely on the fourth, as well as the posterior margin of the fourth, bright brassy or golden-brown. Pile of abdomen pale with some dark, very short hair in the middle of the segments. Legs: wholly dark, the femora and tibiæ more or less æneous, the tarsi blackish. The hand femora is but little thickened, is without ventroappeal pines, the basitarsi are not noticeably enlarged. Wings: brownish tinged with a faint brown cloud near the middle; the stigma is pale brown; the vena spuria is a much abbreviated brown fold not in the least chitimissid; the subapical cross-vein ends rectangularly, with a strong outward curve about its middle and a welldaysloped spur.

Mololype: a male. East Cape Province, Katherg, Oct. 1932, South Africa, R. E. Turner, 1932: 521.

Chrysogaster pilocapita, sp. n.

Wings unspotted. Mesonotum and scutellum shining states brown; legs black, antennæ short, the last joints

brownish orange; related to pæcilops Bezzi, but the eyes are unspotted, mesonotum not pilose vittate.

Male.—Length 7.5; wing 5.3 mm.

Head: the eyes touch for a distance rather greater than the length of the vertical triangle; vertical triangle shining blackish with some pale and some dark hairs. The front is quite large with a prominent, median groove extending more than half of its length and with a lunate depression above the antennæ, its pile long, abundant, wholly whitish and twice as long on the upper part of the front as upon the lower half; the general colour of the front as well as of the face is shining metallic black with perhaps a faint bluish cast. The face has the tubercle almost absent and the epistoma scarcely evident and barely more prominent than the very shallow tubercle. On either side of the face, connected below the antennæ, is a large, triangular, microstriate area with transverse instead of diagonal ripple marks; pile of face pale. The antennæ are short, the first joint is very dark, the second and third are light brownish orange; the third joint is barely longer than wide, the arista darker, basally thickened. Thorax: together with the scutellum bright shining æneous or golden-brown with, in the middle and before the scutellum, a ruddy cast, and along the extreme anterior side of the mesonotum the metallic colour is more whitish and less vellowish. In the middle there are very faint traces of less shining vittæ paler in colour against a ruddy background. This is confined to the anterior half of the thorax, which might be considered non-vittate. Scutellum evenly rounded, without any trace of marginal groove. Pile of scutellum and thorax erect, rather long, and pale whitish. The squame are whitish, the fringe whitish and the margin narrowly brown; halteres blackish. Abdomen: elongate, a little longer than the thorax, dull black to brownish black on the disk, the sides of the segments are shining æneousbrown, which is more extensive on the fourth segment. Legs: wholly dark, the tibiæ and femora are shining black, but without pronounced metallic cast. Tarsi black. Hind femora but little thickened, with no spinous setæ apically. Wings: faintly brownish; the vena spuria is short and brownish. The stigmal cell is brownish yellow, the subapical cross-vein ends rectangularly, but its basal or posterior two-thirds is strongly turned backward so that this section almost parallels the wing margin; it is without spur.

Holotype: a male. Ceres, Cape Province, Nov. 1920,

South Africa, R. E. Turner, 1920: 497.

Chrysogaster proserpina, sp. n.

Related to *pilocapita*, the face is bluish black; there is definite impressed margin upon the scutellum, etc.

Male.—Length 6.3 mm.; wing 4.6 mm.

Head: vertex shining blackish with pale pile; the eyes touch for a considerable distance greater than the length of the vertex; the front is moderately large, but little swollen and together with the face shining bluish black, almost steel-blue. The pile of both face and front pale. Face with a large, subquadrate area on either aide, microstriate, transversely grooved or rippled and connected beneath the antennæ. The facial tubercle is practically absent. The epistoma is barely more promiment than the tubercle. There is a mere trace of conpavity above and below the tubercle and in this respect the species is close to pilocapita, differing chiefly in the more bluish face and the presence of a definite, impressed margin upon the scutellum and the presence of a welldeveloped spur from the lower corner of the subapical Antennæ, first joint brown, second and third that brownish orange, the third joint is a little longer than wide and apparently definitely longer than pilo-Arista basally thickened, light brown. Thorax: allining aeneous or metallic brassy, becoming more whitish along the sides. There are only very faint traces of The thorax may be described as being practically mm vittate. Scutellum concolourous, evenly rounded, with a white, definite, broad, but shallow impressed some before the margin on the apical third. Squamæ male brownish white, the halteres blackish brown. Abdoelongate, not greatly longer than thorax and together, dull blackish brown upon the disc, at a steel-bluish cast on the terminal half except where metallic brassy. The opaque portion has faint, The sides of the abdomen, more satisfied on the fourth segment, together with the The pile of the abdomen is chiefly pale with some microscopic black hairs on the opaque middles of the segments. Legs: entirely black or blackish brown; the femora and tibiæ are somewhat metallic; the hind femora are very little thickened and without subapical setæ, the basitarsi not noticeably enlarged. Wings: pale brownish, the stigmal cell brownish yellow, the vena spuria a mere abbreviated brownish fold. The subapical cross-vein joins the quite straight third longitudinal vein at right angles; its basal three-fifths is strongly oblique with a well-developed spur.

Female.—These specimens, which I assume to be females of this species, seem to be similar, their eyes are similarly pilose, the pile being very sparse and whitish, the antennæ are a little darker brown, narrowly blackish brown along the dorsal edge of the third joint. The principal difference is the total absence, as is expected, of the tubercle, the face being shallowly concave in consequence. The front is very broad and the eyes are widely separated and there are a series of distinct but shallow and transverse, slightly arcuate grooves, that are quite punctate, across the middle of the front. The two females are slightly different in regard to the rugosity of the front and of the face.

Holotype: a male. Ceres, Cape Province, Nov. 1920, R. E. Turner, 1920: 1497. Allotype: a female, and a paratype female with the same data and a second paratype female East Cape Province, Katherg, 4000 ft., Oct. 1932, South Africa, R. E. Turner, 1932: 521.

Sphærophoria retrocurva, sp. n.

Unrelated to known African species, the quite slender, the centrally attenuated, cylindrical abdomen is black with small obscure spots.

Male.—Length 9 mm.; wings 6 mm.

Head: the vertex, the upper occiput and front below the ocelli and above the contiguity of the eye are shining black, somewhat convex and black pilose. The front above the antennæ and the whole of the face and cheeks are pale shining yellow, pale pilose. The facial tubercle is small and the face barely concave beneath antennæ. The first two joints of the antennæ are pale yellow, the third orange and conspicuously greyish brown on the

dorsal half; the joints are slightly flattened dorsally; the short arista brownish and strongly thickened basally; the apical, dorsal pile of the first and second joints is black. Eyes bare; upper facets barely enlarged. Thorax: shining bronze in colour with a definite reddish or coppery tint. The humeri, a stripe along the sides of the mesonotum only as far as the transverse suture, but confluent with a spot on the mesopleura and together with the metapleura, are pale lemon vellow. Halteres orange. The scutellum is reddish brown, shining, obtusely triangular in shape, with faint transverse striæ. Abdomen: elongate, quite slender and remarkably curved into a rounded, pipe-like structure; the tergites actually meeting ventro-basally on the third segment and almost meeting throughout the length of the second segment. The abdomen is shining vitreous and blackish; there is a diagonal, lateral, widely-separated, obscure, reddish alongate spot anterior to the middle of the third segment, and a similar, smaller, slenderer, more obscure spot on the second segment. The fourth segment is wholly shining brownish black, lighter on the sides. The pile of the abdomen is largely pale on the sides, blackish bristly and short along the middle of the segments; the pulls everywhere is sparse. The segment terminates to the right in a slightly produced and curved flap; the hypopygium is rounded but inconspicuous and tolerably In The abdomen is narrowest near the base of the third segment and at most half again wider at the apex of the abdomen; the apex is no wider than the base of the first segment. Legs: the coxe and trochanters are pale yellow, the femora, tibiæ and tarsi light brown, the Illian paler, the hind tibiæ with an obscure subapical hand of brown; the tarsi barely darker. Wings: quite hyallon, irridescent and villose; the entire stigmal cell the region of the stigma is dark brown; the adapted cross-vein is sinuous.

and specimens the femora are chiefly yellow on half and brown dorsally; the hind tibiæ are brown on the basal and apical thirds but yellow in the middle.

a male, from South Africa, R. E. Turner, Mossel Bay, Cape Province, March 1–13, 1922; two males from same locality in October 1921,

Turner, 1921:450; and Turner, 1920:497, Ceres, Cape Province, Nov. 1920.

Syritta maritima, sp. n.

Distinguished from oceanica Macquart by the quite anteriorly-produced epistoma.

Female.—Length 10 mm.; wings 7 mm.

Head: hemispherical and but little wider than the thorax; the vertex and occiput behind the ocelli are shining black, the black area is sharply delimited from the pale yellow pollinose area of the front. The front is pale yellow pollinose with a brownish area on either side near the top, and with a fine median line that is wider on the upper part of the front. The pollinose area of the front is broken by tiny black specks where the long pale shining pile is situated. Viewed from in front the entire upper part of the front appears to be brown pollinose; it is bare and shining on a triangle just above the antennæ. The cheeks are shining black, the face wholly whitish pubescent with shining white pile along the eyemargins; the face is narrowly shining black on a stripe just above the epistoma in the mid-line of the face; it is very strongly produced forward, somewhat truncate carinate about the epistoma, and the profile is strongly curved from epistoma to antennæ. The antennæ are light yellowish brown and the arista similarly coloured. The occiput is pale yellowish pubescent with sparse, short black setæ, and its ventral and vertical pile is pale yellowish white. There are a few black hairs about the ocelli. Thorax: the dorsum of the thorax is shining, brownish black, with the humeri and a broad, lateral stripe as far as the transverse suture, and a narrow diagonal stripe margining the posterior calli but not quite meeting in the middle, and an obscure, anterior, very narrowly-separated vitta that becomes obsolescent after a short distance, all thickly brownish yellow pollinose. The scutellum is wholly shining black and black pilose with a prominent. impressed rim or margin. The whole of the mesopleura, sternopleura and upper pteropleura are grevish white pollinose; their pile pale and sparse. Abdomen: the second segment is basally and posteriorly black and feebly shining, broadly connected in the middle; the sides of this segment have a broad, light brownish-yellow spot which includes the anterior corners and the extreme

posterior marginal corners. The first segment is grey pollinose on the sides and broadly blackish through the middle. The third segment has a conspicuous, obtuse, transverse triangle of shining black just before the apical margin of the segment, not quite reaching the sides but expanded in the middle into a broad, anteriorly-produced area that almost reaches the anterior margin. The whole of the fourth segment, except for a very narrow posterior margin, is shining black. The sides of the abdomen are omarginate. Legs: the basal half or more of the anterior femora are brownish black; their apices and the basal third of the tibiæ are brownish yellow; the distal portion of the tibiæ is somewhat lighter in the middle; tarsi brownish. The hind femora are only moderately thickaned, without prominent basal spines, and with about five short, ventral spines distributed along the middle, exclusive of the apical, lateral, overlapping spinuous plate. The whole of the femora and the apically-produced the are shining black. The base of the latter very marrowly rounded. The hind tarsi are blackish. Wings: grayish and almost smoky; strongly villose except along the basal cell; the spurious vein is heavily chitinized, the stigmal cell is light brownish on the basal third and without stigmal cross-vein.

Holotype: a female, from Christmas Island, Indian Oman, April 1, 1933, Dr. Harms, 1934–32. Paratypes:

two females, same data.

Names of the Elephants of Ceylon. By P. Deraniyagala, M.A. (Cantab.), A.M. (Harvard) F.L.S., F.Z.S., Director of Museums, Ceylon.

dephant was separable into two races as by Deraniyagala (1939), (1941) has attempted that the rarer one is the "forma typica." In named the Ceylon elephant Elephas indicus; tenth edition of 'Systema Nature' (1758) he the Elephas maximus. The animal is described Habitat in Zeylonæ Paludis ad amnes. Dentes