

NEW CYCLORHAPHOUS DIPTERA FROM MEXICO AND
NEW MEXICO.

BY D. W. COQUILLET, WASHINGTON, D. C.

In the course of identifying a series of Diptera received by Dr. L. O. Howard, and collected in Mexico and New Mexico by Mr. C. H. T. Townsend, a number of new forms were encountered, and as manuscript names of these will soon be sent out it is desirable that these forms should be duly characterized; accordingly, the descriptions are presented for publication herewith.

Family SYRPHIDÆ.

Spilomyia obscura, new species.

Head black, the face, frontal triangle of male and lower part of front of female, prolonged upward along the eyes to a point nearly opposite the lowest ocellus, yellow; antennæ yellowish brown, the joints subequal in length, arista yellow, mouth-parts black; thorax black, a yellow spot on each humerus and a smaller one above it, a vitta extends from each postalar callosity obliquely to the suture, where it is prolonged inward as a silvery white streak; a pair of oblique yellow spots in front of scutellum, a yellow spot on posterior part of mesopleura, one on the sternopleura, one above front coxa and a small prominence beneath insertion of wing; scutellum wholly black; abdomen black, a yellow spot on each side of the first segment, an interrupted yellow fascia on anterior part of the second, broadly dilated at the sides, a yellow streak in each hind angle of this segment, third and fourth segments with a yellow fascia on the front part and another on the hind margin, the former interrupted on the third segment, sixth segment of female, except the front margin, yellow; coxæ black, a yellow spot on outer side of the hind ones; femora yellow, the posterior side, except at the ends, black, least extended on the middle ones; tibiæ yellow, their apices and the tarsi yellowish brown; wings hyaline, costal margin to the spurious vein brown; length, 15 to 17 mm. A specimen of each sex collected August 27th and September 11th.

Habitat.—Sierra Madre, Chihuahua, Mexico (head of Rio Piedras Verdes, altitude about 7,300 feet).

Type.—Cat. No. 6290, U. S. National Museum.

Ocyptamus notatus, new species.

Head black, the face and broad sides of frontal triangle yellow, antennæ and proboscis black; body black, the prealar and postalar callosities, sides of scutellum, except at base, and a pair of circular or

oval spots on abdominal segments two to four, yellow, the spots on the second segment located between the centre and the lateral margin, those on the other two segments situated slightly in front of the middle; abdomen widest at base, subopaque, becoming somewhat polished posteriorly; front legs yellowish brown, ends of tibiæ and first two joints of the tarsi yellow, middle and hind legs black, base of middle tibiæ, first two joints of their tarsi and first three joints of the hind ones, yellow; wings hyaline, tinged with brown along the costa, the base and stigma dark brown, the costal cell dark gray; length, 12 mm. Four males collected February 24th and March 3rd to 9th.

Habitat.—Frontera, Tabasco, Mexico.

Type.—Cat. No. 6291, U. S. N. M.

Lycastirrhyncha Willistoni, new species.

Head black, with a slight bluish tinge, front thinly gray pruinose, crossed at middle by a velvet black fascia prolonged backward in the middle and at each end, a transverse row of four velvet black spots on vertex; face on upper part and the sides yellowish-gray pruinose, prolonged on sides of snout almost to its middle; antennæ reddish yellow; eyes sparsely long haired on the upper part; body black, slightly tinged with bronze, thinly gray pruinose; mesonotum marked with three velvet black vittæ, the median one complex, the lateral ones interrupted at the suture, behind which they are double; scutellum velvet black on basal half, second and third segments of abdomen with a pair of large yellow spots narrowly separated from the lateral margin, remainder of these segments, except their narrow yellow hind margins, velvet black, narrow hind margin of fourth segment also yellow, this segment with three velvet black spots in the form of a triangle, two along the hind border and the other in the middle in front; legs black, the front and middle knees yellow, hind knees and first two joints of middle tarsi sometimes also yellow; wings hyaline; length, 7 to 8 mm. Three males collected February 12th to 14th.

Habitat.—Frontera, Tabasco, Mexico.

Type.—Cat. No. 6292, U. S. N. M.

Sphiximorpha ancoralis, new species.

Head black, upper edge of occiput, lower part of front, except a median line dilated at base of antennæ and prolonged laterally on the face, and the face, except a median vitta, yellow; antennal process slender, dark brown; antennæ brown, the joints subequal in length, the

first two-thirds as long as the antennal process; proboscis dark brown; body black, the humeri, antalar callosity, a short vitta above base of wing, large spot on posterior side of mesopleura, smaller one on upper part of sternopleura, small one on lower part of pteropleura, sometimes very indistinct, the scutellum, sides of first abdominal segment and posterior borders of the following three, yellow, that on the fourth only slightly and very gradually dilated in the middle; fourth segment marked with an interrupted gray pruinose fascia which is produced forward at the point of interruption, second segment as long as the third; legs reddish yellow, bases of the tibiae broadly pale yellow; middle and hind femora, except their ends, sometimes dark brown, one or more of the joints of the tarsi sometimes also dark brown; wings hyaline, the costal border to the third vein pale brown, lightest in costal cell and in front of last section of third vein; length, 10 mm. Six males and five females, collected March 26th and August 24th to September 4th.

Habitat.—Las Cruces, New Mexico.

Type.—Cat. No. 6293, U. S. N. M.

Family CONOPIDÆ.

Myopa fenestrata, new species.

Head yellow, the front and occiput, except the sides and lower portion, orange yellow, sides of face each marked with two to four brown spots, the upper one contiguous to the eye, all rarely wanting, a brown stripe at each lower corner of front and five brown spots, two of which are near each eye on upper half of front, the fifth near centre of front, two or more of these spots sometimes coalesced; two brown spots near middle of each side of occiput, hairs of front and upper part of occiput black, on remainder of occiput, face and cheeks yellowish white, those on lower part of cheeks rather long and abundant; antennæ reddish yellow; palpi and first segment of proboscis black, remainder of proboscis reddish brown; body black, the inner part of the humeri, a streak behind each, a spot on each postalar callosity, several spots on pleura and the genitalia, reddish brown, a yellow stripe on either side of the metanotum; mesonotum thinly whitish pruinose, a distinct white spot near each corner and indications of a pair of whitish vittæ on the anterior portion, abdomen, except front angles of the segments, gray pruinose and with dark reflecting spots; legs black, coxæ marked with reddish, apices of femora, broad bases of middle and hind femora, bases and a median band on tibiae, and whole of tarsi, yellow; base of wings to root of second

vein, extending along fifth vein to base of discal cell, bright yellow, remainder of wing from costa to fifth vein dark brown, a streak in outer half of discal cell, a fascia across middle of first posterior cell, sometimes interrupted, and nearly whole of second posterior cell, hyaline; wings behind fifth vein smoky gray; apex of first vein and the costa from apex of auxiliary to midway between apices of second and third veins, bright yellow; halteres yellow; length, 7 to 9 mm. Fifty-six specimens, of both sexes, collected August 11th to 27th.

Habitat.—Sierra Madre, Chihuahua, Mexico (head of Rio Piedras Verdes, about 7,300 feet altitude).

Type.—Cat. No. 6294, U. S. N. M.

Myopa pulchra, new species.

Differs from *fenestrata* as follows: Sides of face with only the uppermost brown spot, sides and hind margin of mesonotum, entire scutellum, broad sides of first two abdominal segments, front corners of the third and middle of the last segment, yellow; mesonotum marked with four velvet black vittæ; yellow on bases of wings more extended, including the fourth vein to base of discal cell, hyaline fascia of first posterior cell reduced to a subtriangular spot next to the fourth vein, wings behind fifth vein nearly pure hyaline; length, 8 mm. Five specimens, of both sexes, collected August 26th to September 2nd.

Habitat.—Same as the preceding species.

Type.—Cat. No. 6295, U. S. N. M.

Sicus brevisrostris, new species.

Face and cheeks pale yellow, front reddish yellow, the upper corners and occiput black, antennæ reddish yellow, inserted nearly length of last two joints from the adjacent eye, first and third joints slightly longer than broad, the second as wide as long, slightly shorter than the third, mouth-parts black, last section of proboscis less than one-third as long as the preceding section; body black, grayish pruinose, apex in male and whole of genitalia of female polished, second and third abdominal segments in the male in ground colour largely yellow; legs black, the knees yellow; wings hyaline, tinged with gray at the base and in the costal cell, first posterior cell closed and petiolate; halteres yellow; length, 4 mm. Four males and three females collected August 29th to September 7th.

Habitat.—Same as the preceding species.

Type.—Cat. No. 6296, U. S. N. M.

This European genus has not previously been recorded from this continent.

Zodion perlongum, new species.

Front and middle of upper part of occiput reddish yellow, remainder of occiput black, changing to yellow below, gray pruinose, face and cheeks light yellow, antennæ reddish yellow, first joint wider than long, the others slightly longer than wide, the second a trifle longer than the third, arista black, the apical half whitish, proboscis black; thorax and scutellum black, gray pruinose, mesonotum marked with two velvet black vittæ and with three dark vittæ between them and an interrupted one outside of each of the two black ones; abdomen narrower than, but fully twice as long as, the thorax, black, the second segment largely yellow, dorsum of abdomen yellowish-gray pruinose, the under side and last segment of genitalia polished; abdomen widest at base of second segment, tapering posteriorly to about half this width, segments two to four noticeably longer than wide, the third one and one-half times as long as wide; legs reddish yellow, upper sides of femora largely black, last tarsal joint dark brown; wings hyaline, tinged with gray at the base, halteres yellow; length, 8 mm. Four females.

Habitat.—White Mts., New Mexico (Rio Ruidoso, about 6,700 feet altitude, July 27th); Sierra Madre, Chihuahua, Mexico (head of Rio Piedras Verdas, about 7,300 feet altitude, August 26th); and Colorado (H. K. Morrison).

Type.—Cat. No. 6297, U. S. N. M.

Family TACHINIDÆ.

Comatacta, new genus.

Near *Siphosturmia*, but the antennæ reaching only slightly more than two-thirds of distance to the oral margin and the thorax densely covered with rather long yellowish and white hairs; head at vibrissæ longer than at base of antennæ, vibrissæ on a level with anterior edge of oral margin, one or two bristles above each, sides of face bare, each nearly half as wide as the facial depression, frontal bristles descending nearly to apex of second antennal joint, no ocellar bristles, two pairs of orbital bristles in the female, wanting in the male, third joint of antennæ slightly over twice as long as the second, arista pubescent toward base, the longest slightly longer than greatest diameter of arista, penultimate joint of arista broader than long, cheeks about one-sixth as wide as the eye-height, eyes bare, proboscis slender, the portion beyond the basal

articulation shorter than height of head, labella small, palpi short, clavate; hind tibiæ evenly ciliate with rather short bristles on the anterior-outer side; first posterior cell open, ending noticeably before the wing-tip, bend of fourth vein without an appendage, hind crossvein nearer to the bend than to the small crossvein, base of third vein bearing a single bristle, other veins bare.

Type.—*Brachycoma pallidula*, v. d. Wulp (Biol. Cent.-Am., II., p. 95), from Yucatan, Mexico. Five males and eight females are before me from San Rafael, Vera Cruz, Mexico.

Microphthalma pruinosa, new species.

Head yellow, occiput and sides of front black, the latter yellowish pruinose, frontal vitta brownish black; vertex one-third as wide as either eye, sides of face sparsely covered with black bristly hairs, antennæ nearly half as long as the face, yellow, the third joint, except at base, black, nearly twice as long as the second, vibrissæ near one-third of distance from anterior oral margin to base of antennæ, cheeks posteriorly about as wide as the eye-height, palpi yellow, proboscis dark brown; body wholly grayish pruinose, black, the broad sides of abdomen and the genitalia yellow, mesonotum marked with four black vittæ, three post-sutural dorsocentral bristles, three sternopleurals, second and third abdominal segments bearing marginal bristles, the fourth covered on the apical half; legs black, tibiæ largely yellow, pulvilli greatly elongate; wings hyaline, tinged with yellowish brown at base and along the veins, costal spine very long, a long stump at bend of fourth vein, calypteres whitish; length, 9 to 12 mm. Four males.

Habitat.—White Mts., New Mexico (South Fork Eagle Creek, altitude about 8,000 feet, August 13th); and Sierra Madre, Chihuahua, Mexico (head of Rio Piedras Verdes, altitude about 7,300 feet, July 19th).

Type.—Cat. No. 6298, U. S. N. M.

Araba nebulosa, new species.

Black, including the palpi; front golden-yellow pruinose, greatly narrowed anteriorly, vertex three-fourths as wide as either eye, uppermost frontal bristle in each row over twice as far from the one in the opposite row as from the adjacent eye, a reclinate bristle between it and the eye, two pairs of orbital bristles, sides of face bearing a row of short black hairs near the eye, ridges bristly on the lower three-fifths, frontals descending to middle of second antennal joint, antennæ slightly shorter than the face, the third joint four times as long as the second, arista

thickened nearly to the middle; thorax gray pruinose, marked with five black vittæ, the three median ones reaching slightly beyond the suture and appearing confluent when viewed from behind, three pairs of post-sutural dorsocentral bristles, two sternopleurals, scutellum gray pruinose, the sides broadly velvet black, abdomen gray pruinose, the first three segments with a transverse row of five velvet black spots, broad apex of the fourth segment polished, second and third segments with a marginal pair, the fourth with a marginal row of bristles; first joint of front tarsi shorter than the second and greatly thickened, the lower outer angle bearing a cluster of rather long yellow bristly hairs, pulvilli one-third as long as the last tarsal joint, hind tibiæ outwardly somewhat ciliate with bristles of an unequal length; wings hyaline, a small brown spot at apex of first vein, a larger one at small crossvein, prolonged toward apex of discal cell, a narrow one in outer lower corner of this cell, a large spot at apex of second vein and on bend of fourth vein, the latter furnished with a rather long appendage, the vein beyond it nearly straight, terminating a short distance before the extreme tip of wing; length, 5 mm. Four specimens collected May 31st.

Habitat.—Sierra Madre, Chihuahua, Mexico (head of Rio Piedras Verdes, altitude about 7,300 feet).

Type.—Cat. No. 6299, U. S. N. M.

Family DEXIDÆ.

Trixodes, new genus.

Head in profile nearly hemispherical, front rather prominent, face strongly retreating below, facial depression nearly elliptical in outline, a rather low, broad median carina, vibrissæ absent, vibrissal angles widely separated, situated the length of the antennæ above the anterior oral margin, ridges bare, antennæ less than one-fourth length of face, the second and third joints of nearly an equal length, arista bearing a few hairs, the longest of which are nearly twice as long as greatest diameter of arista, penultimate joint of the latter as broad as long, frontal bristles descending nearly to middle of second antennal joint, ocellar and post-ocellar bristles small or wanting, only one pair of verticals, sides of face on upper half bare, the remainder and the cheeks sparsely covered with short bristly hairs, cheeks four-fifths as wide as the eye-height, eyes bare, proboscis one-fourth as long as height of head, rather robust, labelia small, palpi short clavate; bristles of tibiæ very short, hind tibiæ not ciliate with bristles; third vein bristly on the basal fourth of first section,

other veins bare, first posterior cell open, ending far before the wing-tip, hind crossvein much nearer bend of fourth vein than to small crossvein, this bend angular and without an appendage, costa bare, no costal spine. Type, the following species:

Trixodes obesa, new species.

Dark brown, apex of palpi yellow; vertex of male as wide as either eye, in the female one and one-fourth times as wide, no orbital bristles; head, except the frontal vitta, thinly grayish pruinose, mesonotum thinly gray pruinose, marked with four black vittæ, bristles very short, five pairs of postsutural dorsocentral bristles, abdomen very thinly grayish pruinose, the bristles very short, marginal ones on the third and sometimes on the second segment; front pulvilli of male rather elongate, but much shorter than the last tarsal joint; wings hyaline, the base as far as base of discal cell pale brown, crossveins faintly clouded with brown; calypteres brown; length, 16 to 19 mm. Two males and two females.

Habitat.—Sierra Madre, Chihuahua, Mexico (head of Rio Piedras Verdes, September 9th); and West Fork Gila River, New Mexico (July 13th).

Type.—Cat. No. 6300, U. S. N. M.

Mochlosoma rufipes, new species.

Black, the antennæ, face, cheeks, palpi, humeri, scutellum, femora and tibiæ reddish yellow, frontal vitta deep brown, with a tinge of yellow; vertex as broad as either eye, two pairs of orbital bristles, sides of front and face, except the lower part, densely gray pruinose, upper-inner fourth of face sparsely covered with short bristly hairs, antennæ two-fifths as long as the face, the second joint as long as the third, arista long plumose, cheeks three-fourths as broad as the eye-height, proboscis setaceous, the portion beyond the articulation twice as long as height of head; mesonotum gray pruinose and with five blackish vittæ, scutellum thinly, abdomen densely, gray pruinose, the latter with dark olivaceous reflecting spots, second and third segments with discal and marginal bristles, the fourth sparsely covered, except on the extreme base; wings hyaline, the base whitish, bend of fourth vein arcuate, calypteres white; length, 13 mm. Eight females.

Habitat.—Sierra Madre, Chihuahua, Mexico (head of Rio Piedras Verdes, about 7,300 feet altitude, September 5th to 18th).

Type.—Cat. No. 6301, U. S. N. M.