

the capture of this species by the late Hugo Soltau is recorded "on the sandy banks of a small stream near Covington." The Bogue Falaya seemed to be the stream intended, though it is of considerable size, and steamboats from New Orleans cross Lake Ponchartrain and ascend it twice a week. Mr. Coverdale first tried the left bank, but was turned back by barbed-wire fences and trespass signs and finally tried the right bank. The banks at this point are mostly steep, composed of pure white sand, and about every half mile there is a sandbar below the banks. The chief growth on the banks is birch, willow, cypress, sweet gum, tupelo, magnolia, sweet bay, laurel, pine, pecan, ash and various smaller bushes, and in places passage through the tangled vines and shrubs becomes almost impossible. At last, after three hours' search up the stream, he found a sandbar white as the driven snow, on which they were running everywhere, sometimes two or three being caught in the net at one sweep. They are hard to see, the white-haired ventral surface and white side markings making little contrast with the white sand. About two or three o'clock in the heat of the day, *C. Wapleri* gets in the shade under little bushes.

The specimens collected vary in size and in the extent of the white markings but not sufficiently to suggest any modification of the published descriptions.

Cicindela abdominalis.

This species occurs plentifully on the banks of the Bogue Falaya River above the water's edge and in the shade of the trees and bushes.

The following species, though not taken by Mr. Coverdale, have been reported from Louisiana, viz: *Pilatei*, *obsoleta*, *cursitans*, *severa*, *hamata* and *pamphila*.

NEW ORTHORRHAPHOUS DIPTERA FROM MEXICO AND TEXAS.

By D. W. COUILLETT.

In the early part of the present year arrangements were made by Dr. L. O. Howard for identifying a large series of Diptera collected in Mexico and the southwestern portion of this country by Mr. C. H. T. Townsend, and the task of identifying this rich material was assigned to the writer. A comparatively small number of the species proved to be new to science, and as manuscript names of these will

soon be sent out it is deemed desirable to publish the descriptions at as early a day as possible. The present paper deals with the new forms belonging to the section Orthorhapha.

Family CULICIDÆ.

Culex cyanescens, sp. nov.

Black, the stems of the halteres and the femora except their apices, yellow; occiput rather densely covered with broad, appressed, yellow scales and narrow, upright, yellow ones changing to black at the sides and posterior edge, a spot of violet blue appressed scales near middle of each outer edge of the occiput; palpi covered with broad, appressed, violet blue scales; mesonotum and scutellum rather densely covered with broad, appressed, brassy yellow scales, the pleura with whitish ones; abdomen densely covered with deep blue scales, the posterior angles of each segment, whole of the first and of the venter covered with brassy yellow scales, the spots at the posterior angles of the segments considerably produced forward at their inner ends; scales at apices of femora, on hind tibiæ and front side of the others, also on tarsi, violet blue; tarsal claws large, one-toothed; wings grayish hyaline, veins chiefly blue, lateral scales narrow and elongate, petiole of first submarginal cell four-fifths as long as the cell, posterior cross-vein about its own length from the small; length, 4 to 5.5 mm.

Habitat: Brownsville, Texas.

Type: Cat. No. 6308, U. S. N. M.

Six females collected in May and on June 4.

Family PSYCHODIDÆ.

Trichomyia cirrata, sp. nov.

Brown, the antennæ, pleura and legs except the tarsi yellow; antennæ nearly as long as the body, the joints beyond the second over three times as long as wide; occiput, body and legs rather densely covered with appressed yellow scales, sides of mesonotum densely long yellow pilose, nearly extending to the middle of the anterior end, several rather long yellow hairs near apex of abdomen; wings narrow and pointed, sublanceolate, covered with pale yellow and dark gray hairs, fringe on the posterior margin almost half as long as greatest width of wing, petiole of first submarginal cell less than half as long as that cell, petiole of the second posterior cell less than one fourth the length of the cell; length, 1 mm.

Habitat: Frontera, Tabasco, Mexico.

Type: Cat. No. 6309, U. S. N. M.

Four female specimens collected March 26.

Family TABANIDÆ.

Pangonia seminuda, sp. nov.

Black, the antennæ and palpi reddish-yellow, halteres and knees dull yellow, abdomen varying from reddish-yellow to black; head yellowish-gray pruinose, ocelli present, third antennal joint near base much wider than the second, the apical annulus

as long as the four preceding, palpi slender, sublanceolate, falcate, proboscis as long as thorax, face receding below, eyes bare, hairs of occiput and cheeks yellowish-white; thorax, scutellum and first abdominal segment opaque, densely gray pruinose, covered with short, pale yellow hairs, remainder of abdomen polished, its hairs black; wings grayish hyaline, strongly tinged with yellowish at base and along the costa, first posterior cell closed, upper branch of third vein bearing a long appendage near the base, calypteres white; length 18 to 22 mm.

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

Type: Cat. No. 6310, U. S. N. M.

Seventy-two males and forty females collected August 18 to 27.

Tabanus maculosus, sp. nov.

Near *aurantiacus* but the dorsal dark vitta of abdomen interrupted, the whitish median triangles confined to the first four segments, wings apically of a purer hyaline, etc. Head black, front of female distinctly narrowing anteriorly, the callosity polished, nearly square and with a linear or sublanceolate prolongation above, remainder of head gray pruinose and whitish haired except a spot on vertex and another near middle of front of female which are blackish and with many black hairs; proboscis and antennæ black, the first segment of the third joint of the latter with a low, blunt process; palpi slender, gradually tapering toward the apex, brown, its hairs yellowish-white intermixed with a few black ones; eyes sparse pubescent, purplish-brown and marked near the middle with two transverse oblique greenish stripes, no ocellar tubercle; thorax black, mesonotum polished, its hairs black except five stripes and those on the anterior end which are yellowish, the outer two stripes on each side united at the suture; pleura gray pruinose, its hairs yellowish-white except a large spot of black ones behind center of mesopleura; scutellum black, its hairs concolorous; abdomen on sides of first four segments broadly yellow, polished, with chiefly yellow hairs, the middle of each segment with a whitish pruinose, whitish haired triangle surrounded in front and at the sides with a brown, black-haired, somewhat A-shaped spot, the whitish triangles smallest on the first segment; last three segments black, somewhat polished, with black hairs, the sides narrowly yellow and with many yellow hairs; venter yellow, the last two segments largely brown; legs black, bases of tibiae yellow; wings hyaline, costal cell yellowish-brown, base of wing to discal cell and along the costa tinged with smoky brown, a large brown spot on veins at base of second submarginal cell and of each posterior cell, first posterior cell strongly narrowed at apex, upper branch of third vein without an appendage, calypteres yellowish-brown, knobs of halteres yellow; length, 15 mm.

Habitat: Same as the preceding species.

Type: Cat. No. 6311, U. S. N. M.

One male and six females collected May 31 to June 3.

Family BOMBYLIDÆ.

Anthrax extremitis, sp. nov.

Black, the knobs of the halteres yellow; face greatly produced below, third antennal joint elongate conical at the base, hairs of the two preceding joints of the front

and face black, tomentum of the two latter black mixed with yellowish, proboscis not projecting beyond the oral margin; mesonotum thinly grayish pruinose, its hairs chiefly black, those at the ends and sides, also on upper edge of pleura pale yellow, on remainder of pleura and on breast black; hairs of abdomen pale yellowish mixed with black ones on the sides and dorsum of the last two segments; tomentum of abdomen black, that on the last segment white, hairs and tomentum of venter black; front tibiæ bearing a few bristles, front tarsal claws well developed, pulvilli wanting; wings hyaline, the base brown, the outline of this color extending from apex of auxiliary vein obliquely to first submarginal cell near its base, then transversely to discal cell, then obliquely nearly to base of this cell, then curving through base of fourth posterior cell and obliquely through anal cell and upper basal angle of the axillary cell; cross-veins within the brown area not bordered with subhyaline; length, 9 to 11 mm.

Habitat: Sierra Madre, Chihuahua, Mexico (head of Rio Pedras Verdas, altitude about 7,300 feet).

Type: Cat. No. 6312, U. S. N. M.

Fourteen specimens collected August 11 to 29.

Family ASILIDÆ.

Saropogon dispar, sp. nov.

Male.—Black, the halteres yellow, femora with a reddish-yellow vitta on the front side connected at the apex with a shorter one on the posterior side, hairs and bristles whitish or pale yellow, the short bristly hairs of mesonotum largely black, the hairs of abdomen and of last two pairs of tibiæ largely black; head, thorax and upper side of scutellum densely yellowish-gray pruinose, mesonotum marked with three blackish vittæ, the median one divided by a gray line; abdomen tinged with blue, the sides of the first segment and hind angles of the following three gray pruinose; wings brown, darkest along the costa and at the apex.

Female.—Antennæ and legs reddish-yellow, a black vitta on upper side of all femora and also on under side of the middle and hind ones, short bristly hairs of mesonotum and hairs of tibiæ yellow, wings smoky, the costal cell brownish-yellow, apex of wings blackish, otherwise as in the male; length, 20–23 mm.

Habitat: Cuero (June 6), and Columbus (E. A. Schwarz), Texas.

Type: Cat. No. 6313, U. S. N. M.

Seven males and seven females.

Pycnopogon divisus, sp. nov.

Male.—Black, the knob of the halteres yellow; hairs of occiput pale yellowish, a transverse row of black bristles on the upper part, hairs of front pale yellow, those next the eyes black, hairs of middle of face sparse, pale yellow, those on the sides and the very dense fringe above the mouth black; thorax somewhat polished, its hairs and those of the scutellum pale yellow; abdomen polished, the broad bases of segments two to six opaque, hairs of dorsum very short, sparse, depressed, black, those of the sides and venter very long, dense, yellow; hairs of femora yellow, many black ones at apices of the front and hind ones and a fringe of black ones on the upper and under sides of the apical third of the middle femora; hairs and bristles of

front and hind tibiæ chiefly black, of the middle tibiæ chiefly white and with a fringe of black ones on the outer and inner sides near the base; hairs and bristles of tarsi sparse, black, a dense patch of long white hairs on upper side of first joint of the front ones; wings hyaline.

Female.—Differs from the male as follows: Black hairs on sides of front and of face few in number, sixth abdominal segment wholly polished, hairs of middle femora colored like those on the other femora, hairs and bristles of middle tibiæ chiefly yellow, those on the outer side mostly black, no patch of white hairs on the front tarsi; length, 12 mm.

Habitat: Sierra Madre, Chihuahua, Mexico (head of Rio Piedras Verdás, about 7,300 feet elevation).

Type: Cat. No. 6314, U. S. N. M.

Seven males and three females collected September 17 and 18.

Family EMPIDÆ.

Sciodromia palliata, sp. nov.

Head blue-black, eyes narrowly separated on the front, contiguous on the face—antennæ brown, proboscis yellow, rigid, nearly as long as height of head, thorax blue-black, mesonotum polished except a shield-shaped, silvery white spot on the posterior end, lower portion of pleura and upper side of scutellum whitish pruinose, hairs and bristles of thorax black, scutellum bearing four bristles; abdomen steel, blue, polished, its hairs whitish, genitalia black and with black hairs; legs yellow, including the coxæ, tarsi becoming brownish toward the apices, outer side of hind tibiæ bearing many long hairs; wings hyaline, stigma pale grayish, the upper two veins that issue from the discal cell very faint; halteres yellow; length, 2 mm.

Habitat: Frontera, Tabasco, Mexico.

Type: Cat. No. 6315, U. S. N. M.

Four males collected February 19.

Family DOLICHOPODIDÆ.

Sciapus breviseta*, sp. nov.

Head green, the hairs white, the bristles above anterior oral margin and on the front black; front deeply excavated, polished, the lower edge and face rather densely white pruinose, face slightly impressed below the middle, destitute of hairs, antennæ black, the third joint dark brown, transversely elliptical, bristles on under side of second joint shorter than greatest diameter of this joint, arista slender, less than half

* *Sciapus* Zeller, 1842 (= *Leptopus* Fallen, 1823, preoccupied; = *Psilopus* Meigen 1824, preoccupied; = *Gnamptopsilopus* Aldrich, 1893). In the Mon. N. Am. Diptera, II, page 230, Dr. Loew states that all of the European species of *Psilopus* have the hairs of the calypteres whitish, and the specimens in the U. S. National Museum agree with this statement. It is probable that one of the many names proposed by Bigot will be available for those species in which these hairs are black, but unfortunately he makes no mention of this character and specimens belonging to the type species are not at present accessible to the writer.

as long as the body, proboscis yellow, palpi black; body greenish, base of first abdominal segment, a rounded spot at base of third extended across the second, also bases of fourth and fifth black, segments six and seven steel blue, hypopygium brown, without bristles, claspers rather robust, each bearing a large lobe on the inner side before the tip, many white hairs on sides of first three abdominal segments, pleura rather densely white pruinose, hairs of calypteres black, scutellum bearing four large bristles; coxæ greenish, apices of front ones yellow, femora blue black, the apices yellow, tibiæ yellow, narrow apices of the hind ones brown, tarsi brown, bases of the front and middle ones yellow; under side of femora fringed with rather long white hairs and toward the apex with several black bristles; front tibiæ bearing about five rather long black bristles on the inner-posterior side and with three short ones on the outer side, middle tibiæ bearing four rows of from two to four bristles which are rather short except those on the outer-anterior and the lower ones on the inner-anterior side, hind tibiæ bearing about three rather short bristles on the outer-anterior side; tarsi simple, first joint of front ones bearing about five rather long bristles on the posterior-under side; wings hyaline, a brown cross-band passing over the hind cross-vein and a second over the forking of the fourth vein, both bands united at their costal ends as far as the third vein; halteres yellow; length, 6 mm.

Habitat: San Rafael, Vera Cruz, Mexico.

Type: Cat. No. 6316, U. S. N. M.

Twenty-four males collected March 6 to April 4.

Sciapus longiseta, sp. nov.

Differs from *breviseta* as follows: Longest bristles on under side of second antennal joint over twice as long as greatest diameter of this joint, base of third abdominal segment with a narrow transverse spot, the sixth and seventh green, their bases black, claspers not lobed, femora almost pure black, front tibiæ with only three bristles on the inner-posterior side, none on the outer side, hind tibiæ bearing a single bristle, first joint of front tarsi bearing about two bristles, last two joints of hind tarsi dilated; length, 4 mm.

Habitat: San Rafael, Vera Cruz, Mexico.

Type: Cat. No. 6317, U. S. N. M.

Thirty-one males collected March 13 to April 4.

Sciapus clunalis, sp. nov.

Differs from *breviseta* as follows: Longest bristles on under side of second antennal joint over twice as long as greatest diameter of this joint, arista about two thirds as long as the body, base of third abdominal segment narrowly black, the sixth and seventh greenish with black bases, first segment of hypopygium bearing several rather long bristles, the last segment considerably swollen, the claspers unusually broad, each composed of two flattened oval plates, the outer one of which is attached to the inner near its base, femora greenish, front tibiæ bearing two rather long bristles on the inner-posterior, three short ones on the outer-posterior and two on the outer-anterior side, first joint of front tarsi bearing three bristles; length, 5 mm.

Habitat: San Rafael, Vera Cruz, Mexico.

Type: Cat. No. 6318, U. S. N. M.

A male specimen collected April 1.