

UNDESCRIBED SPECIES OF TIPULIDAE FROM THE
WESTERN UNITED STATES
(Diptera)

PART III

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The preceding part under this title was published in the *Pan-Pacific Entomologist*, 21:91-97; 1945. At this time I am describing three new species of the genus *Tipula* from the San Bernardino Mountains, California. In July, 1946, Mrs. Alexander and I spent three days camping at East Barton Flats, on the East Fork of the Santa Ana River, at a general altitude of about 6250-6300 feet. This was close to the mountain cabins of the Melander and Sperry families, of Riverside, California, and we enjoyed and profited greatly by this visit with our good friends. On one occasion, Noël Crickmer, Melander, Sperry and I collected up the slopes of Sugarloaf Mountain, to the Little Cienaga, altitude about 7400 feet. During the remainder of the summer and fall, to the first snows about mid-October, the Sperrys continued to collect Tipulidae, chiefly at the lanterns operated at the Sperry Cabin. I am vastly indebted to all my friends above indicated for their many kindnesses, including the large series of Tipulidae that has been presented to me.

***Tipula* (*Trichotipula*) *subapache* Alexander, new species**

Allied to *apache*; general coloration of thorax gray, the praescutum with a central paler gray stripe, the posterior sclerites of the notum with a yellow central line; antennae black, the scape chiefly yellow; femora brownish yellow, the tips narrowly blackened; wings with a strong blackish tinge, cell *Sc* and the stigma darker brown; obliterative areas conspicuous; macrotrichia in outer ends of cells *R*₅ and *M*₁; abdomen brownish black, the basal tergal rings narrowly yellow; male hypopygium with the notch of the tergite V-shaped, provided with long cylindrical blackened spines; outer dististyle nearly twice as long as broad, with long black setae; inner dististyle with its main body nearly parallel-sided, the beak short and stout, slightly upturned; outer basal lobe

large and conspicuous, flattened, exceeding one-half the length of main body of style.

Male. Length about 12.5-13 mm.; wing 11-11.5 mm.; antenna about 4 mm.

Female. Length about 14-15 mm.; wing 14-15 mm.

Frontal prolongation of head black, more chestnut brown basally above; nasus elongate, black; palpi black. Antenna with scape obscure yellow, narrowly darkened at apex; pedicel brownish black, flagellum black; flagellar segments very gently incised. Head above yellow, the sides of the posterior vertex and the genae infuscated, pruinose.

Pronotum yellow, with a dark spot on either side of the midline. Mesonotal praescutum with a broad light gray central stripe that is more or less divided by a capillary darkened median vitta; lateral stripes narrow, more brownish gray, remainder of praescutum brownish black; posterior sclerites of notum black, more or less pruinose, with a continuous yellow stripe, broader and more testaceous yellow on scutellum, very narrow on the mediotergite; scutal lobes with the gray areas more or less distinctly ringed with black. Pleura with the propleura and mesepisternum more blackened, pruinose, the mesepimeron, meron and pleurotergite paler. Halteres with the stem blackened, its base and the apex of knob yellow. Legs with the coxae blackened, pruinose; trochanters brownish yellow; femora obscure brownish yellow, the tips narrowly blackened; tibiae and tarsi obscure brownish yellow, the outer tarsal segments passing into black. Wings with a strong blackish tinge, cell *Sc* and the stigma darker brown; pale areas before and beyond stigma and as a disconnected band at cord, the latter crossing the base of cell 1st *M*₂; further pale longitudinal streaks in several of the cells, especially on either side of vein *M* and as a V-shaped area in cell 1st *A*; less evident pale streaks in some of the outer cells; veins brown. Macrotrichia in outer ends of cells *R*₅ and *M*₁. Venation: *Sc*₁ persistent; *Rs* arcuated, shorter than *m-cu*; *m* longer than petiole of cell *M*₁.

Abdominal tergites brownish black, at least on sides, in cases paler brown medially, the basal rings narrowly but conspicuously light yellow; basal sternites more uniformly brownish yellow, the outer segments, with the hypopygium, more infuscated. Ovipositor with both cerci and hypovalvae compressed-flattened, their tips obtusely rounded. Male hypopygium having the posterior border of the ninth tergite with a deep V-shaped notch that is provided with several long cylindrical blackened spines with blunt tips; at ends of the obtuse lobes with a small group of more conical spines. Outer dististyle moderately broad, the length nearly twice the breadth, provided with long black setae, the longest on outer margin fully as long as the width of the style. Inner dististyle with the main body nearly parallel-sided, the beak short and stout, slightly upturned; outer basal lobe large and conspicuous, flat-

tened, exceeding one-half the length of main body of style. Phallosome more or less rolled into an open tube.

Habitat. CALIFORNIA (SAN BERNARDINO COUNTY).

Holotype, ♂, EAST BARTON FLATS, San Bernardino Mountains, altitude 6300 feet, September 22, 1946 (John and Grace Sperry). *Allotopotype*, ♀, with the type. *Paratopotypes*, 11 ♂ ♀, August 19, September 27, 1946.

This fly is closest to *Tipula* (*Trichotipula*) *apache* Alexander, of northern New Mexico, differing in details of coloration and in the structure of the male hypopygium, especially the tergite and both dististyles, particularly the large outer basal lobe of the inner style. The rather numerous California species of *Trichotipula* have been revised recently by the writer (Bull. So. California Acad. Sci., 45:1-16; 1946).

Tipula (*Oreomyza*) *graciae* Alexander, new species

Belongs to the *marmorata* (*fragilis*) group; general coloration gray, the praescutum with four brownish gray stripes; femora brownish yellow, the tips broadly and conspicuously blackened; wings whitish subhyaline, with a pale grayish brown marbled pattern, especially pale in the costal and apical portions heavier in the medial and anal cells; abdomen brown the lateral and caudal borders of segments yellow; male hypopygium with the tergite having a low V-shaped notch, the outer angles only slightly produced; outer dististyle with the upper margin at base blackened but very obtuse; inner dististyle with the apex blackened, relatively stout, simple; eighth sternite with the caudal border produced into a low median lobe that bears about a score of long black setae.

Male. Length about 12-13 mm.; wing 13-15.5 mm.; antenna about 2.5-2.7 mm.

Frontal prolongation of head dark brown, heavily pruinose, especially above; nasus distinct; palpi black. Antennae short, scape and pedicel yellow, flagellum black; flagellar segments simple, a little longer than the verticils. Head gray, with indications of a delicate darker line on the low vertical tubercle.

Pronotum gray, the scutellum light yellow. Mesonotum gray, the praescutum with four brownish gray stripes, the intermediate pair more pruinose on anterior portions; lateral margin below the humeri blackened; posterior sclerites of notum light gray, each scutal lobe with two separate brownish gray areas; a delicate broken central dark vitta on scutellum and mediotergite. Pleura gray, with darker gray areas, most evident on the ventral sternopleurite and meron; dorsopleural region yellow. Halteres yellow,

knobs dark brown. Legs with the coxae gray pruinose; trochanters brownish yellow; femora obscure yellow basally, more darkened outwardly, the tips broadly and conspicuously blackened; tibiae brownish yellow, the tips more narrowly infuscated; tarsi brownish yellow, passing into black; claws (male) toothed. Wings whitish subhyaline, with a pale grayish brown marbled pattern, distributed about as in other members of the group, especially pale in the costal and apical portions of wing, heavier in the medial and anal cells, especially 1st A; stigma paler brown; veins brown. Venation: R_s about one-half to three-fourths longer than $m-cu$; basal section of R_{4+5} short to very short; M_{3+4} very short to punctiform.

Abdomen brown, the lateral and caudal borders of the tergites yellow, the latter more distinct and becoming more extensive on the outer segments; sternites generally similar, the bases of the eighth and ninth sternites extensively blackened. Male hypopygium having the ninth tergite with a low V-shaped notch on caudal margin, the outer angles only slightly produced, not spinous; margin of notch with a few small spinous points and setae. Outer dististyle flattened, the upper margin at base blackened but very obtuse, not at all toothed; surface of style with coarse black setae. Inner dististyle heavily blackened at apex and along margins; apex relatively stout, simple; outer basal lobe a low cushion, set with several erect stout black setae, the basal portion with a small blackened lobule that is provided with microscopic blackened setulae. Eighth sternite moderately sheathing, the caudal border produced into a low inconspicuous median lobe that bears about a score of long black setae, the marginal setae of the remainder of sternite similarly long but yellow; center of disk glabrous.

Habitat. CALIFORNIA (SAN BERNARDINO COUNTY).

Holotype, ♂, 1000 SPRINGS MEADOWS, San Gorgonio Trail, San Bernardino Mountains, altitude 7700 feet, September 21, 1946 (John L. Sperry). *Paratopotypes*, 10 ♂♂, altitude 7500-7700 feet, September 20-21, 1946 (John and Grace Sperry and Noël Crickmer).

This very distinct fly is named for Mrs. John L. Sperry (Grace Herreshoff Sperry), of Riverside, California, who specializes on a study of the Lepidoptera. The Sperrys have camped and collected in hundreds of places in the West and many entomologists are greatly indebted to them for invaluable insect materials in many orders. The discovery of a member of this group of *Tipula* so far to the south was very surprising. The only other species at present known from Western North America are *Tipula* (*Oreomyza*) *fragilina* Alexander, Alaska to Colorado, along the

Rocky Mountains, and *T. (O.) phoroctenia* Alexander, from British Columbia, eastward to Maine, in the Canadian Zone. All three species are on the wing in the autumn. The species are well distinguished among themselves by hypopygial characters, particularly the dististyles and eighth sternite.

***Tipula (Lunatipula) dido* Alexander, new species**

Mesonotum chiefly gray, the praescutum with four entire reddish brown stripes, the intermediate pair narrow; antennae relatively short, basal three segments yellow, remainder of flagellum black; flagellar segments only moderately incised; femora yellow, weakly darkened at tips; wings with a weak brownish tinge, the oblitative area before cord conspicuous; abdomen, including hypopygium, dull yellow, scarcely patterned; ninth tergite almost divided medially by pale membrane, the lower outer angle of each lobe produced into a stout blackened spine; inner dististyle with beak long and slender, widely separated from the small lower beak; posterior crest of style produced into a triangular point; phallosome consisting of four rods in pairs of two each; eighth sternite sheathing, each outer angle with a strong fasciculate bristle; a broad median plate that suddenly narrows into a stout fingerlike lobe, the whole outer portion with a fringe of unusually long setae.

Male. Length about 15-17 mm.; wing 15-15.5 mm.; antenna about 3.5-4 mm.

Female. Length about 18 mm.; wing 17 mm.

Frontal prolongation of head yellow; nasus stout; palpi obscure brownish yellow, the outer half of terminal segment blackened. Antennae relatively short; basal three segments yellow, remainder of flagellum black; flagellar segments only moderately incised, a trifle shorter than the longest verticils. Head yellow, sparsely pruinose, especially on the scarcely developed vertical tubercle and the posterior orbits.

Pronotum brownish yellow. Mesonotum chiefly gray, the praescutum with four entire reddish brown stripes, the intermediate pair narrow; posterior sclerites of notum more heavily pruinose. Pleura yellow, sparsely pruinose; dorsopleural membrane clear yellow. Halteres with stem dusky, pale at base, knob more darkened. Legs with the coxae and trochanters yellow; femora brownish yellow, narrowly and weakly darkened at tips; tibiae and basitarsi yellowish brown, the remainder of tarsi passing into black; claws (male) toothed. Wings with a weak brownish tinge, heavier in the prearcular and costal fields; stigma small, darker brown; a diffuse brown cloud over *m-cu*; oblitative area before cord conspicuous, extending to the basal third of cell *M*₃; no post-stigmal brightening; veins brown. Venation: *Rs* arcuated to weakly angulated at origin, nearly twice *m-cu*; *R*₁₊₂ preserved; *m* and petiole

of cell M_1 subequal in length; M_{3+4} subequal to or a trifle longer than the basal section of M_{1+2} .

Abdomen dull yellow, scarcely patterned. Ovipositor with the cerci long and relatively slender, only gently upcurved to the subacute tips. Male hypopygium with the ninth tergite relatively small, divided medially by pale membrane; lower outer angles produced caudad and ventrad into stout blackened spines; posterior border mesad of these spines less heavily blackened. Ninth sternite with its appendage long and curved, more or less flattened. Basistyle entire, unarmed. Outer dististyle with outer half dilated into a weak spatula. Inner dististyle with the beak long and slender, widely separated from the small more blackened lower beak by a large oval notch; dorsal crest low, slightly corrugated, setae small; posterior crest produced into a triangular point, the entire region with numerous coarse reddish setae; outer basal lobe elongate-triangular in outline, the posterior portion fringed with long coarse reddish setae. Phallosome conspicuous, consisting of four sclerotized toothed rods, arranged in pairs of two each. Eighth sternite distinctive, sheathing, with a semi-detached lobe at each outer angle, this tipped with a single strong fasciculate bristle; a broad median plate that suddenly narrows at apex into a stout fingerlike lobe, the whole outer portion, including the lobe, with a fringe of unusually long setae that appear as a flattened brush directed caudad.

Habitat. CALIFORNIA (SAN BERNARDINO COUNTY).

Holotype, ♂, EAST BARTON FLATS, San Bernardino Mountains, altitude 6300 feet, August 17, 1946 (John and Grace Sperry). *Allotopotype*, ♀, at light, July 16, 1946. (Sperry and Alexander). *Paratopotypes*, 2 ♂♂, with the allotype.

This fly appears to belong to the *unicincta* group but is not typical and its exact relationships are in doubt. Some points of similarity with species such as *Tipula* (*Lunatipula*) *mormon* Alexander seem to be indicated.

A EUROPEAN WEEVIL NEWLY INTRODUCED INTO THE SAN FRANCISCO BAY REGION

While collecting in the outskirts of Mill Valley, Marin County, on April 4, 1947, D. Giuliani, one of our younger entomologists, noticed numerous specimens of *Barypithes pallucida* Boh., crawling up the curbing along the roadside.

This European weevil has long been established in the Eastern part of our country but this is, I believe, the first time that it has been noticed on the Pacific Coast.—EDWIN C. VAN DYKE.