

**Undescribed Species of Crane-flies from the Eastern United States and Canada (Dipt.: Tipulidae).
Part VII.**

By CHARLES P. ALEXANDER, Massachusetts State College,
Amherst, Massachusetts.

The Tipulidae discussed herewith have been received from various sources that are indicated in connection with each species. The preceding part under this general title was published in ENTOMOLOGICAL NEWS, vol. 51: 83-85, 99-103; 1940.

Dolichopeza (Oropeza) pratti n. sp.

Belongs to the *obscura* group; general coloration of mesonotum opaque brown, without clearly defined stripes; legs dark; wings with a brownish tinge, the oval stigma a little darker brown; vein Sc_1 preserved; abdominal segments bicolorated; male hypopygium with median area of tergite narrowly produced into a tridentate lobe; lateral tergal arms appearing as narrow spatulate blades; outer dististyle a little dilated on basal portion, the apex a short spinous point; inner dististyle deep, its rostral prolongation long; aedeagus simple, unarmed.

♂. Length about 8-9 mm.; wing 10-10.5 mm.; antenna about 2.8 mm.

Frontal prolongation of head brownish black; palpi dark brown. Antennae with scape brownish yellow; pedicel light yellow; flagellum black; verticils of flagellar segments coarse. Head dark gray.

Mesonotum brown, the surface of praescutum opaque, the posterior sclerites more nitidous; in some cases, praescutum with faint indications of lighter stripes. Pleura paler brown. Halteres dusky.

Legs with the coxae pale brown; trochanters obscure yellow; remainder of legs brown, including the tarsi.

Wings with a brownish tinge, the oval stigma a little darker brown; prearcular field a very little brightened; veins brown. Venation: Sc_1 preserved, Sc_2 ending opposite or just beyond the origin of Rs ; petiole of cell M_1 exceeding m .

Abdominal tergites obscure brownish yellow to testaceous yellow, the lateral margins and incisures darkened, on the outer segments and hypopygium the dark color including all of the segments; basal sternites yellow, the incisures narrowly darkened, the outer segments more generally suffused. Male hypopygium with the median area of tergite produced into a

narrow lobe, the apex of which is further toothed, usually tridentate, with the central point longest; lateral tergal arms with outer blades expanded into weak spatulae, in some cases these only a little wider than the arms. Outer dististyle a little dilated on basal portion, the apex a short spinous point. Inner dististyle with the blade deep, the rostrum long-produced, its apex weakly bidentate. Aedeagus simple, unarmed.

Habitat.—MINNESOTA. *Holotype*: ♂, St. Paul, September 14, 1940 (H. D. Pratt). *Paratopotypes*, 5 ♂♂. Types in author's collection.

I take great pleasure in naming this interesting crane-fly in honor of the collector, my former student, Dr. Harry Davis Pratt. From the other described species of the *obscura* group, the present fly is closest to *obscura* (Johnson), *tridenticulata* Alexander, and *polita* (Johnson), especially the last. The shape of the median tergal lobe is much the same in the two flies but the other details of structure of the hypopygium of *polita* are quite distinct, especially the more expanded lateral tergal arms, the bulbous basal enlargement of the long blackened outer dististyle, the tuft of longer setae on outer face of the inner dististyle, and the differently constructed gonapophyses with more abundant armature. All of these species differ further in the length and structure of the antennae.

***Limonia (Dicranomyia) broweriana* n. sp.**

Allied to *magnicauda*; general coloration of thorax brownish yellow, the praescutum with a very conspicuous blackened median stripe; antennae black throughout; wings with a faint yellow tinge, the stigma only slightly indicated; male hypopygium very large and complicated in structure; ninth tergite subcordate in outline, the caudal margin truncate; both the basistyle and ventral dististyle greatly complicated by lobes and outgrowths.

♂. Length about 8 mm.; wing 7.4 mm. ♀. Length about 8 mm.; wing 7.5 mm.

Rostrum brownish black; palpi black. Antennae black throughout; flagellar segments oval, the outer segments a little more elongate; terminal segment (male) a trifle longer than the penultimate; verticils short. Head dark brown.

Pronotum brownish black medially, paler on sides. Mesonotal praescutum brownish yellow pollinose, with a very con-

spicuous blackened median stripe and inconspicuous brownish lateral areas, all of these in some cases more or less confluent on the posterior portion of sclerite; posterior sclerites of notum chiefly pale, the scutellum and median area of scutum faintly pruinose; scutal lobes weakly darkened. Pleura brownish yellow pollinose, the ventral sternopleurite a trifle darkened. Halteres relatively short, stem yellow, knob dark brown.

Legs with the coxae and trochanters yellow; remainder of legs dark brown, the femoral bases yellow.

Wings with a faint yellow tinge, the stigma only slightly differentiated; prearcular field clearer yellow; veins brown, flavous in the basal area. Venation: *Sc* variable in length, *Sc*₁ ending shortly before to just beyond the origin of *Rs*, *Sc*₂ slightly removed from its tip, *Sc*₁ alone subequal to *m-cu*; vein *2nd A* gently sinuous.

Abdominal tergites dark brown, the extreme caudal margins pale; sternites obscure brownish yellow to pale brown, with the pale caudal borders somewhat wider and more conspicuous. Male hypopygium very large and conspicuous, the most so of any of the described Nearctic species of the subgenus. Ninth tergite very large, subcordate in outline, narrowed behind, the length and greatest width subequal; caudal margin of tergite truncate, with numerous setae. Basistyle of moderate size, the ventromesal lobe large and very complicated by lobules and outgrowths, including one arm that is conspicuously but unequally bifid, the lower branch being only about one-half as long as the more clavate upper branch; besides this arm, the lobe is produced into an even larger and longer blade that gradually narrows to the pale obtuse apex. Dorsal dististyle a small, sickle-shaped rod. Ventral dististyle with the main body small and pale, the base and rostral prolongation more sclerotized and very complex; from base of style extends a long, gently curved blackened arm, the tip expanded and further produced at apex into a small digitiform lobule; rostral prolongation very complex, beyond the two subequal spines widened and bilobed, the upper lobe longer and terminating in a recurved spinous point; lower lobe broader and more obtuse. Gonapophyses with mesal-apical lobe small but slender, gently curved.

Habitat.—MAINE. *Holotype*: ♂, Richardson Lake, near Oquassoc, Oxford County, August 24, 1940 (A. E. Brower).

Allotopotype: ♀.

This striking crane-fly is named in honor of Dr. A. E.

Brower, to whom I am very greatly indebted for many interesting Tipulidae from Maine and from interior Gaspé. The nearest ally is *Limonia* (*Dicranomyia*) *magnicauda* (Lundström) of northern Europe. While both species agree in the great size of the male hypopygium and in the general structures of the same, yet all details of the tergite and the various lobes of the basistyle and ventral dististyle are distinct in the two flies.

***Dicranoptycha tennesa* n. sp.**

General coloration brownish gray, the praescutum with a slightly darker median stripe; antennae with scape brownish black; pleura light gray, the anepisternum and ventral sternopleurite darkened; legs obscure yellow, the femora with the tips rather narrowly infuscated; wings with costal fringe (male) unusually long and conspicuous; abdominal tergites brown, sternites yellow, a black subterminal ring; hypopygium yellow; male hypopygium with the outer dististyle unusually broad and flattened, terminating in a short blackened point; surface of style before apex weakly roughened; aedeagus unusually broad and flattened.

♂. Length about 9 mm.; wing 8.5 mm. ♀. Length about 10 mm.; wing 9.5 mm.

Rostrum black, sparsely pruinose; palpi black. Antennae with scape brownish black, pedicel brownish yellow, flagellum brownish black. Head gray, provided with long conspicuous black setae.

Pronotum brownish gray. Mesonotal praescutum brownish gray, with a more or less distinct, darker brown, median stripe, the lateral stripes less evident; posterior sclerites of notum grayish pruinose. Pleura light gray, more darkened on the anepisternum and ventral sternopleurite. Halteres relatively elongate, yellow.

Legs with the coxae testaceous yellow; trochanters yellow; femora obscure yellow, the tips rather narrowly but evidently infuscated, the amount subequal on all legs; tibiae and basitarsi obscure yellow; outer tarsal segments blackened.

Wings with a yellowish tinge; veins brown. Costal fringe of male unusually long and conspicuous. Venation: *Rs* relatively short, only about one-fifth longer than the basal section of *R*₄₊₅ and much shorter than cell *1st M*₂, the latter relatively small; *m-cu* nearly its own length beyond the fork of *M*.

Abdominal tergites brown; sternites yellow, the subterminal

segments black; hypopygium yellow. Male hypopygium with the tergal arms relatively short, expanded into broad blades, their apices obtuse. Outer dististyle unusually broad and flattened, terminating in a short blackened point; surface of style before apex weakly roughened; base of style with abundant short pale setulae. Inner dististyle relatively short, not or scarcely constricted before apex. Aedeagus unusually broad and flattened, more so than in *megaphallus* or *sobrina*.

Habitat.—TENNESSEE. *Holotype*: ♂, Knoxville, June 10, 1939 (Arthur C. Cole). *Allotopotype*, ♀, pinned with type.

This interesting fly was included in extensive series of Tipulidae from the Great Smoky Mountains, received from my friend, Dr. Arthur C. Cole, to whom I am greatly indebted for many favors. The species is allied to *Dicranoptycha sobrina* Osten Sacken and probably has been confused with this in collections. Both species have the costal fringe of the male long and very conspicuous. The present fly has the darkened apices of all femora subequal in amount and has a very different male hypopygium, with both the outer dististyle and aedeagus unusually broad and flattened.