NEW OR LITTLE-KNOWN SPECIES OF WEST INDIAN "TIPULIDAE" (DIPTTRA) L. I.

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A few interesting new species of crane-flies have been included in various lots of specimens sent to me for identification. The following sources are included: Puerto Rico, through Dr. William A. Hoffman; Cuba, through Professor Stephen C. Bruner and Mr. A. R. Otero; and the Bahamas, through Dr. John G. Myers. Through the friendly interest of the above-mentioned entomologists, I have been privileged to retain the types of the species in my private collection of these flies.

Shannonomyia hoffmani sp. n.

General coloration gray, the praescutum and scutum dark brown; pleura brownish black, sparsely pruinose; wings creamyellow, sparsely variegated by dark brown areas; cell R3 small, vein R2+3 being ionger than R2+3+4; cell 1st M2 elongate, closed; abdomen black.

Male. - Length about 5.3 - 5.5 mm.; wing 5 - 5.2 mm.

Rostrum and palpi dark brown. Antennae short; scape, pedicel and basal one or two flagellar segments light yellow, the remaining segments brownish black; verticils exceeding the segments in length. Head gray, the front and anterior vertex clearer and lighter gray.

Pronotum and lateral pretergites clear gray, the latter extending to the wing-root. Mesonotal praescutum and scutum almost uniformly dark brown, the median area of the former darker, the lateral portions more pruinose; scutellum uniformly blackened, sparsely pruinose; mediotergite gray pruinose. Pleura brownish black, sparsely pruinose. Halteres chiefly pale. Legs with the coxae brownish testaceous; trochanters obscure yellow; femora obscure brownish yellow, the tips weakly darkened; tibiae brown, the tips narrowly more darkened; tarsi black. Wings (Fig. 1) with the ground-color cream-yellow,

sparsely variegated by dark brown areas, including spots at arculus; a virtually common area at origin of Rs, Sc2 and tip of Sc1; series of spots along cord and outer end of cell 1st M2; small marginal darkenings at tips of all longitudinal veins excepting R5, the largest at 2nd A; veins yellow, darker in the infuscated areas. No macrotrichia on Rs or its anterior branch; R5 with abundant trichia over its entire length. Venation: Sc short, Sc1 ending about opposite one-third to one-fourth length of Rs, Sc2 about mid-distance between Rs and the tip of Sc1; R2 about one-half shorter than R2+3+4; R2+3 longer than R2+3+4; cell 1st M2 elongate, closed; m-cu close to fork of M.

Abdomen black, the hypopygium a trifle paler.

Habitat.— Puerto Rico.

Holotype, male, Luquillo National Forest, at light, September 8, 1935 (W. A. Hoffman). Paratopotype, male.

Associated at light with Shannonomyia leonardi Alex. and Erioptera (Mesocyphona) portoricensis Alex.

I take great pleasure in naming this distinct crane-fly in honor of my long time friend, Dr. William A. Hoffman. The only close ally in the West Indian fauna is *Shannonomyia leonardi*, likewise from the Luquillo National Forest. The latter is readily told by the uniform pale yellow coloration of the thorax, together with the brownish yellow abdomen. By my key to the Puerto Rican species of the genus (Journ. Dept. Agr. Puerto Rico, 26: 368; 1932), the species runs directly to *leonardi*.

Teucholabis (Teucholabis) oteroi sp. n.

General coloration yellow, variegated with black; lateral praescutal stripes bent laterad to margin; knobs of halteres infuscated; femora yellow, each with a single, narrow, pale brown ring immediately before midlength; tibiae uniformly yellow; wings whitish subhyaline, with three pale brown fasciae, the last being the narrow wing-tip; cell 1st M2 closed; abdomen yellow, the basal/tergite black, the outer segments restrictedly variegated by brown/areas; the basal areas; male hypopygium with the margin of the basistyle produced into a thin, slightly blackened plate or flange; basistyle not produced at apex.

Male.— Length about 8.5 - 9 mm.; wing 7 - 7.5 mm.

Rostrum, brown, obscure yellow above, slightly shorter than the remainder of head; palpi black. Antennal flagellum black, the scape yellow; pedicel brownish yellow; flagellar segments oval, with conspicuous verticils. Front and anterior vertex blackened, the posterior vertex and occiput yellow, the latter with an inconspicuous darkened triangle.

Pronotum obscure yellow, darker anteriorly above. Mesonotal praescutum yellow, with three black stripes, the median one paling to brown on anterior end, its posterior portion ending abruptly some distance before the suture, leaving a conspicuous yellow area behind it; lateral stripes with anterior ends continued outward to margin of sclerite, isolating a yellow area between them and the suture; median area of scutum pale yellow, the lobes extensively darkened; scutellum weakly darkened; mediotergite obscure brownish yellow. Pleura chiefly darkened, heavily light gray pruinose. Halteres with the stem yellow, the knob infuscated. Legs with the coxae and trochanters obscure yellow; femora yellow, unmarked except for a single, narrow, pale brown ring just before midlength of the segment; tibiae and basitarsi yellow, the outer tarsal segments black. Wings (Fig. 1. 2) whitish subhyaline, with three pale brown fasciae, the first lying before level of origin of Rs, extending from vein R to the posterior margin; second band chiefly beyond level of cord, extending from the darker brown stigma to the posterior margin, including all of cell 1st M2; third band including the narrow wing-tip; veins yellow, the costal field more brightly so; veins darkened where traversing brown areas. Venation: Sc1 ending opposite midlength of Rs, the latter moderately arcuated; R2+ 3+4 a little shorter than the slightly oblique R2; branches of Rs lying approximately parallel to one another to margin, cell R2 being nearly three times as extensive at border as is cell R4; cell 1st M2 closed: m-cu shortly beyond fork of M.

First abdominal tergite black; outer segments yellow, very vaguely and restrictedly marked with darker, more extensively so on the sternites; hypopygium pale. Male hypopygium with the mesal edge of basistyle thin and weakly blackened, spine of basistyle long, slender, gently curved, the basal half pale and dilated; basistyle not or scarcely produced caudad at outer end. Outer dististyle a gently curved rod that terminates in a simple spinous point.

Habitat.— Cuba (Pinar del Rio).

Holotype, male, Las Animas, Sierra Rangel, altitude 1,500 feet, September 4, 1934 (S. C. Bruner and A. R. Otero). Paratopotype, male.

I take great pleasure in dedicating this interesting species to Mr. A. R. Otero, to whom I am indebted for several interesting species of Cuban Tipulidae. The species is very different from the remaining regional species of the genus in the diagnostic features listed. The nearest ally is the Jamaican Teucholabis (Teucholabis) gowdeyi Alexander, which differs conspicuously in the open cell M2 of the wings, the leg-pattern, and the structure of the male hypopygium.

Teucholabis (Teucholabis) portoricana sp. n.

Closely allied to T. (T.) myersi Alexander, of Cuba and southern Florida (Journ, N. Y. Ent. Soc., 34:228-229;1926), differing chiefly in the structure of the male hypopygium.

Male. Length about 5 mm.; wing 5.5 mm.

Female. Length about 5 mm.; wing 5 mm.

Male hypopygium with the apical spine of basistyle a straight pale rod, terminating in a short acute spine that lies in the same axis as the remainder of the rod. Outer dististyle pale throughout, slender, the spine on mesal margin small, suberect. Inner dististyle with the outer emargination shallow and much shorter than the basal one, the denticle separating them low and obtuse. Aedeagus with the apical point straight, pale throughout.

The male hypopygium of *myersi* has the apical spine of the basistyle large and conspicuous, the basal half dilated, the distal half abruptly narrowed into a long sinuous spine. Outer dististyle darkened throughout, the spine on mesal margin acute, subappressed. Outer dististyle elongate, the two emarginations subequal in size or the outer a trifle more extensive, the median denticle acute. Aedeagus with the apical point curved, blackened.

Habitat .- Puerto Rico.

Holotype, male, El Semille, Villalba, altitude 1,600 feet, at

lighat, January 26, 1935 (W. A. Hoffman). Allotype, female, Paratopotype, sex?

The wing-venation is shown in Figure 3.

Toxorhina (Toxorhina) distalis sp. n.

General coloration gray, the praescutum with three brown stripes; femora brownish yellow, the tips weakly darkened; tibiae brownish yellow, the tips narrowly brownish black; wings with macrotrichia of veins very sparse; Rs unusually long, exceeding in length vein R5, due to the position of r-m close to outer end of the long cell 1st M2; m-cu about two-thirds its length beyond the fork of M.

Female.— Length, excluding rostrum, 8 mm.; wing 5.5 mm.

Rostrum broken beyond the base, which is dark brown. Antennae with basal segments dark brown; outer flagellar segments broken. Head gray.

Cervical region dark brown. Mesonotum light gray, the praescutum with three brown stripes, the laterals somewhat less distinct; posterior interspaces weakly infuscated; centers of scutal lobes darkened; scutellum and mediotergite clear light gray. Pleura and extreme lateral margin of praescutum light gray, the ventral sternopleurite somewhat darkened. Halteres pale. Legs with the coxae weakly infuscated; trochanters yellowish testaceous; femora brownish yellow, the tips weakly darkened; tibiae obscure brownish black; tarsi brown. Wings (Fig. 4) with a grayish tinge, the pearcular region light yellow; veins brown. Macrotrichia of veins very sparse, in type with a single trichium near outer fourth of Rs; four or five scattered along R5; an equal number near outer end of cell 1st M2 Venation: Rs unusually long, exceeding R5, due to the position of r-m far distad, close to outer end of cell 1st M2; cell 1st M2 present, elongate, exceeding cell 2nd M2; r-m lying immediately before m; m-cu about two-thirds its length beyond the fork of M.

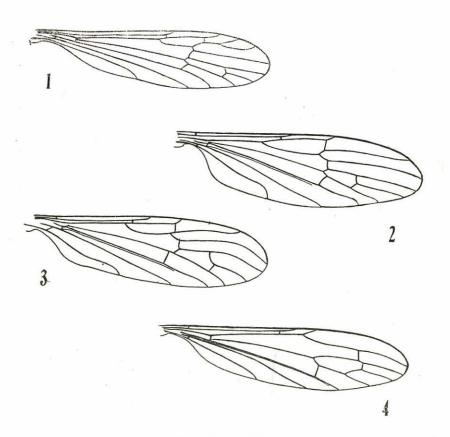
Abdominal tergites brown, the caudal and lateral borders, together with a more or less distinct crossband at midlength of the segments restrictedly darker.

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Habitat.— Bahamas.

Holotype, female, New Providence, May 1932 (J. G. Myers); Colector's No. 2557.

Toxorhina (Toxorhina) distalis is very different from all other regional species in the distal position of crossveins r-m and m-cu, together with the unusually long cell 1st M2.



Explanation of figures.

- 1-Shannonnomyia hoffmani sp. n.; venation.
- 2-Teucholabis (Teucholobis) oteroi sp. n.; venation.
- 3-Teucholabis (Teucholobis) portoricana sp. n.; venation.
- 4—Toxorhina (Toxorhina) distalis sp. n.; venation.