

UNDESCRIBED SPECIES OF CRANE-FLIES FROM
THE UNITED STATES AND CANADA

(*Diptera, Tipulidae*)

BY CHARLES P. ALEXANDER

The new species described at this time were contained in collections belonging to the United States Biological Survey, submitted for determination by Mr. McAtee; in the Canadian National Collection, through Mr. Curran; and in the collection of the Museum of Zoology of the University of Michigan, through Professor Rogers. The writer expresses his sincere thanks to the above gentlemen and to the collectors of the material for the privilege of studying these flies.

Ormosia garretti, new species.

Related to *O. paradisea* Alexander; median praescutal stripe bifid; legs black with dark setae; wings with cells *1st M*₂ and *2nd M*₂ subequal in length.

Male: Length, 4.5-5 mm.; wing, 6.5-6.8 mm.

Female: Length, 5.5 mm.; wing, 7-7.3 mm.

Rostrum gray; palpi black. Antennae black throughout, relatively short, the flagellar segments oval. Head gray, the center of the vertex infuscated.

Pronotum gray. Mesonotal praescutum grayish laterally, with four brown stripes, the intermediate pair more distinct, more or less confluent behind; tuberculate pits lying on the mesal edge of intermediate stripes; remainder of mesonotum more or less infuscated. Pleura light gray. Halteres pale. Legs with the coxae and trochanters gray; remainder of legs black. Wings tinged with brown, the oval stigma darker brown; faint brown seams along vein *Cu*₁, the cord and most of the veins beyond the cord; center of cell *1st M*₂ and part of *M*₃ subhyaline; veins black, those in the costal region more yellowish. Venation: *r* close to fork of *R*₂₊₃; cell *1st M*₂ large, approximately as long as cell *2nd M*₂; *m* only about two-fifths the outer deflection of *M*₃; *m-cu* about one-half its length beyond the fork of *M*; vein *2nd A* sinuous.

Abdomen dark brown, including the hypopygium. Male hypopygium with the basistyles stout, the large dististyle triangular in outline, the extensive outer margin densely set with microscopic black setulae. Gonapophyses with a long curved mesal spine, this directed caudad and slightly laterad, the lateral ends of the gonapophyses extending laterad as a stout curved spine. Tips of aedeagus strongly divergent.

Habitat: Alberta.

Holotype, ♂, Banff, July 18, 1922 (C. B. D. Garrett).

Allotopotype, ♀, July 19, 1922.

Paratopotypes, 5 ♂♀, July 13-19, 1922.

This interesting fly is named in honor of the collector, Mr. Garrett, who has added greatly to our knowledge of the Diptera of Western Canada. The type is in the Canadian National Collection.

***Ormosia hubbelli*, new species.**

General coloration brown, the praescutum with two dark brown longitudinal stripes; wings strongly tinged with brown; cell 1st M_2 closed, very small, the veins beyond it elongate; male hypopygium with two apical dististyles.

Male: Length about 5 mm.; wing, 5 mm.

Rostrum and palpi dark brown. Antennae with the scape dark brown, the flagellum a little paler brown; antennae of moderate length, the flagellar segments oval. Head brownish gray, the vertex indistinctly variegated with brown.

Pronotum brown. Mesonotal praescutum pale grayish brown, the humeral region brighter, the disk with two conspicuous brown longitudinal stripes separated from one another by a narrower median grayish line, the brown stripes continued across the suture onto the scutal lobes; pseudosutural foveae conspicuous, the mesal ends encroaching on the brown praescutal stripes; scutellum and postnotum ochreous, the former with a capillary brown median line. Pleura dark brown, the anepisternum somewhat paler. Halteres brownish yellow, passing into dark brown, this color including the knobs. Legs with the coxae obscure brownish yellow, the fore coxae clearer;

trochanters obscure yellow; femora brown, the tips darker brown; tibiae pale brown, the tips and the tarsi darker brown; legs long and slender without conspicuous erect trichiae. Wings strongly tinged with brown, the stigma scarcely darker; a vague darker clouding along the cord; veins dark brown. All cells of wing with sparse but conspicuous macrotrichiae. Venation: Sc_1 ending just before r , Sc_2 opposite one-third the length of Rs ; r about its length beyond the fork of R_{2+3} ; cell 1st M_2 closed, very small, elongate-rectangular, gently widened distally; m about one-half the other deflection of M_3 ; veins beyond cell 1st M_2 very long; $m-cu$ just before the fork of M .

Abdomen dark brown, the genital segment and hypopygium paler. Male hypopygium with the basistyles slender, with two terminal dististyles, the outer slender, blackened apically, the tip feebly expanded and with the outer margin feebly serrulate; inner dististyle a little shorter, blade-like, pale. Gonapophyses and aedeagus forming a rather compact phallosome, the small apophyses obtuse at tips, the aedeagus split into two points.

Habitat: Manitoba, North Dakota.

Holotype, ♂, Devil's Lake, North Dakota, August 8, 1920 (T. H. Hubbell).

Paratype, ♂, Aweme, Manitoba, August 15, 1920 (N. Criddle).

Type in the Collection of the Museum of Zoology, University of Michigan; paratype in the Canadian National Collection. This peculiar fly is named in honor of the collector of the type. The structure of the male hypopygium is unlike that of typical *Ormosia*, suggesting certain Hexatomine types. The strict generic position of the fly must be held in doubt.

***Limnophila mc-dunnoughi*, new species.**

General coloration gray, the praescutum with four dark brown stripes; pseudosutural foveae large and conspicuous, black; femora pale brown, the tips blackened; wings tinged with yellow, with a sparse brown pattern; Rs long, cell 1st M_2 very small.

Female: Length about 11 mm.; wing, 12 mm.

Rostrum black, pruinose; palpi black. Antennae black, the scapal segments pruinose; four basal flagellar segments enlarged, especially the first, the remainder passing through cylindrical to linear; verticils of moderate length. Head black, heavily pruinose; vertical tubercle small but distinct.

Pronotum black, pruinose. Mesonotal praescutum gray with four conspicuous dark brown stripes, the intermediate pair separated only by a capillary vitta, more or less confluent in front, the posterior ends of the stripes somewhat pointed and ending some distance before the suture; lateral stripes crossing the suture; pseudosutural foveae very large, broadly triangular, black; tuberculate pits not evident; scutal lobes gray, marked with brown; remainder of mesonotum light gray. Pleura light gray, the dorso-pleural membrane restricted, buffy. Halteres pale throughout. Legs with the coxae dark, heavily light gray pruinose, the apices paler; trochanters obscure brownish yellow; femora pale brown, the tips narrowly but conspicuously blackened; tibiae and basitarsi pale brown, the tips narrowly darker brown; remainder of tarsi passing into black. Wings faintly tinged with yellow, the base and cells *C* and *Sc* more yellowish; stigma oval, dark brown; small dark brown spots distributed as follows: in cell *R* at mid-distance between arculus and origin of *Rs*; at origin of *Rs*; along the cord and outer end of cell 1st *M*₂; veins at apex of wing narrowly seamed with brown; a paler dash in cell 1st *A* adjoining the vein at two-thirds its length; veins dark brown, paler in the costal region. No macrotrichiae on veins *Rs*, *R*₂₊₃, *R*₂ or the petiole of cell *M*₁. Venation: *Sc*₁ ending just beyond the fork of *Rs*, *Sc*₂ at its tip and subequal to it; *Rs* elongate, longer than *R*₂, strongly arcuated at origin; *R*₂₊₃ and basal deflection of *R*₄₊₅ subequal; *r* at tip of *R*₁ and near midlength of *R*₂; cell 1st *M*₂ very small, rectangularly hexagonal; cell *M*₁ a little longer than its petiole; *m-cu* near midlength of cell 1st *M*₂; anterior arculus weakly present.

Abdomen dark brown, the tergites with transverse and obliquely longitudinal impressed lines; sternites reddish brown,

the caudal and lateral margins darker, the impressed areas lying transversely and longitudinally. Ovipositor with elongate valves.

Habitat: Alberta.

Holotype, ♀, Nordegg, July 14, 1921 (*J. McDunnough*).

This interesting *Limnophila* is named in honor of Dr. McDunnough who collected the type. The type is in the Canadian National Collection.

***Limnophila harperi*, new species.**

Belongs to the *unica* group; related to *L. subunica* Alexander; macrotrichiae of veins very sparse, almost lacking on vein *M*; *R*₂ shorter than cell 1st *M*₂ and nearly straight.

Sex?: Wing, 7.6 mm.

Rostrum and palpi dark brown. Antennal scape dark brown; flagellum broken. Head dark brown.

Pronotum dark brown, sparsely pruinose. Mesonotum almost black, sparsely pruinose, the median line of the praescutum and less distinct lateral stripes of the ground color; scutellum and postnotum heavily light gray pruinose. Pleura dark, heavily pruinose, the dorso-pleural region more buffy. Halteres dark brown, the base of the stem yellowish. Legs with the coxae obscure yellow, the bases infuscated, more extensively on the fore coxae; trochanters yellow; femora and tibiae brown, the tips narrowly and rather indistinctly darkened; tarsi broken. Wings with a faint brownish tinge, the stigma and clouds at origin of *Rs* and on anterior cord darker brown; veins dark brown. Macrotrichiae of veins relatively sparse, on vein *M* there being two immediately before the fork, nine on the distal half of *Rs*. Venation: *Sc*₁ opposite fork of *Rs*, *Sc*₂ at its tip; *Rs* short, not as long as cell 1st *M*₂, nearly straight so cell 2nd *R*₁ is irregularly trapezoidal in outline; *m-cu* beyond midlength of cell 1st *M*₂.

Abdominal tergites dark brown, the sternites obscure yellow, on the subterminal segments passing into brown; apex of abdomen broken.

Habitat: Alberta.

Holotype, Sex ?, Athabasca Delta, June 18, 1920 (*Francis Harper*).

The species is named in honor of the collector. The type has been returned to the U. S. Biological Survey.