NEW OR INSUFFICIENTLY-KNOWN CRANE-FLIES FROM THE NEARCTIC REGION (DIPTERA, TIPULIDAE). PART VIII.¹

By CHARLES P. ALEXANDER, Amherst, Mass.

The preceding part under this title was published in 1941 (Bull. Brooklyn Ent. Soc., 36: 12–17). Most of the species described herewith were taken in California by the writer, one further species of unusual interest being from Oregon where it was taken by my good friend Mr. Kenneth M. Fender. The types of all the novelties are preserved in my personal collection of these flies.

Dicranoptycha laevis n. sp.

Size small (wing, male, 8 mm. or less); general coloration of thorax light gray, the praescutum with four very poorly indicated darker gray stripes; wings with a weak grayish tinge; costal fringe short; abdomen pale brownish gray, with a black subterminal ring; male hypopygium with the outer dististyle relatively slender, entirely smooth; phallosome produced into two flattened reniform plates that lie side by side, produced beyond the other phallosomic elements.

Male.—Length about 7–8 mm.; wing 7–8 mm. Female.—Length about 9 mm.; wing 9 mm.

Rostrum gray; palpi black. Antennae with the scape darkened, heavily pruinose; pedicel yellow; flagellum chiefly brownish black, the proximal two or three segments paler. Head clear light gray.

Thorax almost entirely light gray, the praescutum with four very poorly indicated darker gray stripes. Pleura a little paler gray, appearing yellow with a relatively light gray bloom. Halteres with the stem pale, knob infuscated. Legs with the coxae and trochanters pale yellow; femora obscure yellow, the tips narrowly and inconspicuously darkened; tibiae and tarsi yellow, the outer tarsal segments brownish black. Wings with a weak grayish tinge, the prearcular field narrowly pale; veins pale brown. Costal fringe short. Venation: Rs short, only a little longer than the basal section of R_5 and approximately two-thirds cell $1st\ M_2$; m-cu from about one-half to nearly its own length beyond the fork of M.

¹ Contribution from the Entomological Laboratory, University of Massachusetts.

Abdomen pale brownish gray, with a conspicuous black subterminal ring; hypopygium obscure yellow. Male hypopygium with the outer dististyle relatively slender, blackened but smooth, lacking the conspicuous denticles of other regional species. Inner dististyle slightly broadest at the very obtuse tip. Lateral tergal arms pale, expanded into broad obtuse blades. Phallosome massive, with two flattened reniform plates that project beyond the other elements.

Habitat: California (San Diego County).

Holotype: J., Palomar Mountain, altitude 4700 feet, July 12, 1946 (C. P. Alexander). Allotopotype: Q. Paratopotypes: 3 JJ.

The present fly is readily told from other regional species by the structure of the male hypopygium, particularly the smooth outer dististyles and the phallosome. It is very different from certain Eastern Nearctic species, as *Dicranoptycha minima* Alexander and *D. pallida* Alexander that likewise have the outer style smooth, at least on its outer face.

Pedicia (Tricyphona) actaeon n. sp.

Allied to *macrophallus*; antennae 17-segmented; mediotergite dark brown with a broad central gray area; pleura variegated with brown; femora yellow, the tips conspicuously brownish black; wings pale yellow, sparsely but conspicuously patterned with dark brown; male hypopygium with the caudal border of tergite with a deep U-shaped notch; interbase narrowly obtuse at apex, with a conspicuous subapical flange; no spines on mesal face of basistyle; aedeagus elongate, with a conspicuous lobe beyond the base.

Male.—Length about 17 mm.; wing 15.5 mm.

Rostrum and palpi black. Antennae 17-segmented; scape black, pedicel yellow, basal flagellar segments obscure yellow, the outer ones passing into brown; flagellar segments cylindrical, the outer ones more elongate. Head dark gray; tubercle on anterior vertex conspicuous.

Pronotum above fulvous, more darkened medially, especially on the scutellum; pretergites whitened. Mesonotal praescutum pale yellow with three fulvous stripes, the cephalic end of the median one narrowly darker; scutellum dark brown in front, the posterior half gray, the lateral callosities paling to yellow; scutellum gray, parascutella brown and yellow; mediotergite dark brown, the broad central area light gray, pleurotergite yellow. Propleura light yellow; mesepisternum infuscated,

more heavily so on the sternopleurite; pteropleurite less evidently darkened. Halteres yellow, the knobs weakly darkened. Legs with the fore coxae clear light yellow, the remaining pairs slightly infuscated, especially the cephalic face of the middle pair; trochanters yellow; femora yellow, the tips conspicuously brownish black; tibiae yellow, the tips more narrowly darkened; tarsi yellow, the terminal segments brownish black. Wings with the ground pale yellow, sparsely but conspicuously patterned with dark brown; cells C and Sc medium brown, the proximal half of Sc darker; dark brown spots at origin of Rs, along cord, including the tip of Sc_1 , R_2 and m; a yellow suffusion behind vein Cu; veins brown. Venation: R_{2+3+4} subequal to or longer than r-m; R_{1+2} about twice R_2 ; r-m just beyond the fork of Rs, the basal section of R_5 thus very short: cell 1st M_2 elongate, subequal to cell M_1 ; m connecting veins M_2 and M_3 ; m-cu from one-third to one-fourth its length beyond the fork of M.

Abdomen elongate; first tergite dark brownish gray; succeeding tergites yellow, the broad margins dark brown, more or less pruinose; sternites more uniformly yellow; sixth and succeeding segments, including the hypopygium, dark brown to brownish black. Male hypopygium generally as in macrophallus but differing in important details. Ninth tergite narrowed outwardly, the caudal border with a deep U-shaped notch, the narrower lateral lobes truncated. Basistyle with the interbase narrowly obtuse at tip, with a conspicuous subapical flange; no spines on mesal face of style above the origin of the interbase. Conformation of the apical lobe of basistyle and the dististyle distinctive in the two species. Aedeagus elongate, as in macrophallus, with a conspicuous ventral lobe or flange beyond the base.

Habitat: California (Humboldt County).

Holotype: &, Prairie Creek State Park, in coastal redwood forest, July 31, 1946 (C. P. Alexander).

Although it is very different in its general appearance from *Pedicia* (*Tricyphona*) macrophallus Alexander, the structure of the male hypopygium indicates that the two flies are allied. Both have the elongate aedeagus and the dististyle of characteristic form. The present fly differs in the coloration of the body and wings and in important details of the hypopygium, particularly the tergite and interbase.

Dicranota (Rhaphidolabis) nuptialis n. sp.

Size small (wing, female, 5.5 mm.); general coloration dark brown, the praescutum unpatterned; legs black; wings with a strong blackish tinge, the stigma only a little darker than the ground; R_{2+3+4} and r-m subequal in length.

Female.—Length about 5 mm.; wing 5.5 mm.

Rostrum and palpi brownish black. Antennae black throughout; flagellar segments oval to long-oval. Head brown.

Thoracic notum almost uniformly dark brown, the praescutum unpatterned; lateral praescutal border and the postnotum slightly more pruinose. Pleura dark brown, sparsely pruinose. Halteres with stem pale, knob dark brown. Legs with the coxae brown, paling to yellow at tips; trochanters obscure yellow; remainder of legs black. Wings with a strong blackish tinge, the stigma only a little darker than the ground; veins brown. Venation: Rs relatively short, gently arcuated; R_{1+2} shorter than R_2 , the latter transverse; R_{2+3+4} and r-m subequal in length; m-cu nearly its own length beyond the fork of M.

Abdomen brownish black, the cerci brown, paling to yellow at tips.

Habitat: California (Yosemite National Park).

Holotype: Q, Bridalveil Creek, above the Falls, altitude 7075 feet, July 22, 1946 (C. P. Alexander).

A very distinct species, readily recognized by the unpatterned praescutum and the strongly darkened wings. The most similar species include *Dicranota* (*Rhaphidolabis*) stigma Alexander and *D*. (*R*.) vanduzeei Alexander.

Tasiocera (Dasymolophilus) squiresi n. sp.

Size medium (wing, male, 3.3 mm.); general coloration of body black; wings with a strong dusky tinge; macrotrichia of wing cells relatively numerous; male hypopygium with the dististyle terminal in position, the base broad, the inner angle abruptly narrowed into a long curved spine, the corresponding outer angle bearing a small fingerlike lobe that is tipped with small spiculose points; aedeagus terminating in a long slender spine; gonapophyses paired, symmetrical, each a blackened rod, the outer margin with a few appressed teeth.

Male.—Length about 2.5 mm.; wing 3.3 mm.

Rostrum, palpi and antennae uniformly black, the last short. Head black.

Thorax uniformly black. Halteres blackened, the base of

stem abruptly pale. Legs with the coxae testaceous yellow; trochanters yellow; remainder of legs brownish yellow, clothed with long dark colored setae; pretarsal armature complex, as in the genus. Wings with a strong dusky tinge, even darker along the costal border; pale streaks along vein M and behind the outer half of 1st A; veins pale brown. Macrotrichia of cells relatively numerous and well-distributed, especially in the centers of the cells, especially numerous in the outer ends of cells R and M. Venation: R_{2+3} perpendicular at end of Rs, R_2 in direct transverse alignment with R_{2+3} or virtually so; a long backward spur at point of forking of R_{2+3} , jutting into cell R_1 ; R_{4+5} subequal in length to basal section of R_5 , in direct longitudinal alignment with Rs and R_4 ; cell M_2 open by the atrophy of m; m-cu about one-third to one-fifth its length beyond the fork of M; cell 2nd A relatively broad.

Abdomen, including hypopygium, black. Male hypopygium with the dististyle terminal in position, of distinctive shape; basal portion broad, slightly widened outwardly, the inner angle abruptly narrowed into a long curved spine; outer angle at point of narrowing with a small fingerlike lobe that is tipped with small blackened spiculose points. Aedeagus with the base dilated, the outer half a strongly curved acute spine. Gonapophyses paired, each a small blackened curved rod that narrows to the acute tip, the outer margin with a few appressed teeth.

Habitat: Oregon (Yamhill County).

Holotype: 3, Peavine Ridge, Station 3, May 16, 1946 (K. M. Fender). Paratopotypes: Stations 3, 3 A, May 15-16, 1946; May 20-30, 1947 (K. M. Fender).

I take great pleasure in naming this interesting fly for Mr. Vernon Squires, of McMinnville, Oregon, owner of Station 3 on Peavine Ridge, to whom Mr. Fender and others are very indebted for much appreciated co-operation in Fender's detailed survey of the Insect Fauna of Peavine Ridge, in the Oregon Coast Range. The fly is entirely different from the three other Nearctic species so far made known, including the western Nearctic Tasiocera (Dasymolophilus) subnuda (Alexander). The latter has all details of the male hypopygium quite distinct, as described in the original description (Pan-Pacific Entomologist, 3: 77; 1926).