

# New or Little-known Diptera.

BY S. W. WILLISTON.

## *Platyura pulchra*, n. sp.

Male. Antennae about as long as the thorax; black, on the under side, toward the base, red; first two joints yellow. Front and face black, the latter with whitish pubescence; palpi and proboscis yellow; occiput black; epistoma moderately projecting. Mesonotum shining reddish yellow, with light-yellow hair; three dark brown stripes, separated by slender lines, the lateral ones abbreviated in front. Scutellum black. Pleurae black, with reddish spots; the projecting metapleurae yellowish. First two segments of the abdomen black; third segment reddish yellow, with a black hind border; fourth segment and the anterior part of the fifth reddish yellow; remaining segments black; the hypopygium reddish, with whitish pubescence; abdomen shining. Coxae and legs (the hind pair is wanting) light yellow; tibiae infuscated by the minute black hair; tarsi blackish; middle and front tibiae with short spinules. Wings hyaline, the tip and posterior border infuscated; a narrow brown cloud covers the tip of the first vein and reaches into the base of the first posterior cell; subcostal cross-vein only a little distance beyond the humeral cross-vein; tip of auxiliary vein beyond the origin of the third vein; the anterior branch of the third vein terminates in the first vein near its tip; prefurca of fourth vein very short; seventh vein complete.

Length, 8-9 mm.

One specimen, Washington, University of Kansas.

## *Platyura notabilis*, n. sp.

Male. Antennae black, not compressed, a half longer than the thorax; first two joints yellow. Face and lower part of the front reddish yellow; epistoma projecting, beak-like; palpi and proboscis yellowish; front, except the lowermost portion, black. Thorax yellow, the mesonotum somewhat reddish; a blackish spot on the proximal part of the hind coxae and the adjacent portion of the pleurae; a fringe of black hairs just above the root of the wings. Abdomen reddish yellow, with short, black hair. Legs yellow, the tibiae and tarsi infuscated or blackish; front tibiae bare, the middle and hind pairs with short spinules. Wings yellowish, the tip infuscated; a feebly marked brownish band before the tip; the auxiliary vein terminates at



the origin of the third vein; the anterior branch of the third vein joins the costa just beyond the insertion of the first vein; seventh vein complete.

Length, 8 mm.

One specimen, Washington, University of Kansas.

***Platyura gracilis*, n. sp.**

Male. Antennae black, much shorter than the thorax; first two joints yellowish. Head yellow, the vertex blackish. Thorax, coxae and femora yellow; the mesonotum more reddish, with a fringe of black hairs above the root of the wings. Abdomen slender, not shining; yellow, the anterior portion of each segment brown or blackish. Tibiae somewhat infuscated by the minute black hairs; tarsi blackish. Wings with a strong yellow or brownish tinge, the extremity with a blackish cloud; auxiliary vein very short, terminating before the origin of the third, the subcostal vein at about its middle; anterior branch of the third vein at some distance before the tip of the first; seventh vein wholly wanting.

Length, 6 mm.

One specimen, Washington, University of Kansas.

***Neoglyphyoptera striata*, n. sp.**

Male. Head yellow, the occiput somewhat brownish; antennae brown, the basal joints yellow. Thorax yellow; mesonotum with four brown stripes, the median ones narrower, narrowed posteriorly and separated by a slender line, the lateral ones abbreviated in front; metanotum brown; bristles of the mesonotum well developed, as are also those of the trichostical row. Abdomen black, the anterior part of the segments yellow or brown. Legs yellow; tip of the hind femora and tibiae and all the tarsi brown; front metatarsi as long as the tibiae; middle and hind tibiae with bristles on the outer side. Wings yellowish hyaline; an irregular brown band across the outer part, and brown spots on the cross-veins and on the sixth vein; seventh vein incomplete; the auxiliary vein terminates about opposite the furcation of the fifth and sixth veins, and the subcostal cross-vein is situated beyond its middle; anterior cross-vein longer than the last section of the first vein.

Length, 5 mm.

One specimen, Washington, University of Kansas.

***Limnobia concinna*, n. sp.**

Male. Head and palpi deep brown or blackish, the rostrum more reddish; occiput and vertex grayish dusted. Antennae deep brown, the basal joints scarcely at all reddish. Thorax deep brown, gray



pollinose, leaving on the mesonotum two median stripes, separated by a line, and, on either side, oval spots of a dark coffee-brown. Abdomen deep brown, lightly pruinose; genitals reddish. Legs brown, the base of the femora yellowish; all the femora with a narrow, light-yellow band before the tip. Wings whitish hyaline, with numerous, dark brown, rounded spots, and with clouds on the cross-veins; along the costa, four elongated brown spots, with narrow, hyaline intervals between them; tip of the auxiliary vein a little before the middle of the prefurca; marginal cross-vein at the tip of the first vein.

Length, 9-10 mm.

Three specimens, Washington, University of Kansas.

***Limnobia cinctipes* Say.**

Two specimens from Washington agree with the description of this species.

***Eriocera obscura*, n. sp.**

Female. Black or deep brown, gray pollinose. First joint of the palpi short, the second nearly as long as the two following together, third and fourth a little thickened, the fourth incurved. Antennae brown, sometimes yellowish, scarcely twice the length of the head; first joint thickened; second joint globular; third joint slender, cylindrical, as long as the next three joints together; fifth, sixth and seventh joints slender, of nearly equal length; the antennae are clothed with short, black hairs. Halteres light yellow; under process of the short ovipositor light yellow at the tip. Legs obscure yellowish; tip of femora, tibiae, and the tarsal joints brown. Wings sub-hyaline, with distinct blackish clouds on all the cross-veins and on the outer end of the posterior veins; the auxiliary vein terminates in the costa a short distance before the origin of the second vein; the second vein arises before the middle of the wing, rectangularly, and has a considerable stump of a vein; the marginal cross-vein unites with the second vein at its furcation, a short distance before the tip of the second vein; prefurca of the second vein as long as the posterior side of the discal cell.

Length, 9-10 mm.

Five specimens, Washington and California. In two of the specimens, the mesonotum is clothed with light yellowish hair; in the others, with short, black, more bristly hairs. In two or three there is a marked tendency to irregular cross-veins.

***Eriocera eriophora*, n. sp.**

Male. Head brownish red, the occiput gray pollinose; pile long, light yellow. Palpi longer than the head; first, second and fourth



joints elongate. Antennae longer than the head and thorax together, brown; fourth joint a little shorter than the third, the fifth and sixth together as long as the preceding joints; the four distal joints with bristles on the under surface. Thorax opaque, light bluish gray, the mesonotum with four brown stripes, of which the lateral ones are abbreviated; pile of the mesonotum like that of the head, abundant. Halteres reddish, the knob brown. Abdomen brownish black, but little shining, with light-colored pile. Legs dark brown; the tibiae, for the greater part, reddish. Wings nearly hyaline; stigma dark brown; first posterior cell a little longer than the first submarginal; five posterior cells; petiole of the second posterior cell twice as long as the cell itself, the cell wanting in one wing of the single specimen.

Female. Antennae about as long as the mesonotum, the bristles of the under side inconspicuous; fourth joint about one-third of the length of the third, the following joints successively shorter; not less than ten-jointed. Color of the pleurae and legs more reddish. Second posterior cell as long as its petiole.

Length, male, 12 mm; with antennae, 20 mm. Length, female, 20 mm.

Two specimens, Washington, University of Kansas. This species is nearest related to *E. spinosa* and *E. californica* of Osten Sacken, but will at once be distinguished by the much shorter antennae.

***Rhaphidolabis debilis*, n. sp.**

Female. Head blackish fuscous, the occiput somewhat grayish; the frontal tubercle small. Antennae and palpi nearly black, the first two joints of the former reddish. Thorax yellow, the pleurae in the middle brownish; mesonotum dark brown with its margins yellowish, the brown separated by two slender, yellowish lines. Halteres brown, yellowish on the proximal part. Abdomen brownish yellow. Legs brownish yellow, the femora yellow on the proximal portion; distal joints of the tarsi blackish; tarsi shorter than the tibiae, the first joint longer than the succeeding four together. Wings with a light brownish tinge; the auxiliary vein terminates a little beyond the great cross-vein; the origin of the second vein is opposite the termination of the seventh vein; marginal cross-vein at some distance from the tip of the first vein; the third vein is branched, not the second, and the petiole of the submarginal cell is as long as the discal cell; petiole of the second posterior cell equal to a half of the length of the discal cell; base of the fourth posterior cell a little beyond the middle of the discal cell. Tibial spurs and the pulvilli distinct.

Length. 9-10 mm.

California. University of Kansas collection.



**Pachyrrhina erythrophrys, n. sp.**

Male. Black, shining, the posterior orbits and the second, third and fourth abdominal segments, except their margins, orange red. Antennae black, somewhat longer than the thorax, the second and following joints of the flagellum with a distinct enlargement at the base, from which the short verticils arise. A ridge, contiguous with the eyes posteriorly, meeting in the middle just back of the antennae and extending to about the middle of the sides of the head, orange red. Thorax shining black throughout; halteres black. Abdomen shining black; the second, third and fourth segments, except the narrow lateral and posterior margins, orange red; on the venter, the anterior portion of these segments is of the same color. Legs black, with the base of the femora yellow. Wings blackish; second posterior cell sessile.

Length, 13 mm.

One specimen, Manitou Park, Colorado, Prof. F. H. Snow.

**Ctenophora angustipennis Loew.**

Male. Head and antennae black, the palpi and second and third antennal joints yellow. Antennae about as long as the mesonotum, the pectinations scarcely exceeding the antennal joints in length, of equal length on the inner and outer sides, the twelfth joint with two pairs as in the preceding joints; the first pair on the third joint short and obtuse. Mesonotum yellowish red; the lateral margins and a spot in the middle behind black; the humeral callosity, the pronotum, and a stripe on the upper part of the pleurae, running through the root of the wings, yellow. Scutellum on the sides, the upper part of the metanotum, and the metapleurae in front of the halteres, yellow; scutellum and pleurae, otherwise, black. Abdomen yellowish red, with a continuous black stripe, expanded on the posterior part of each segment. Legs yellow; the extremity of the femora and tibiae, and the distal three or four joints of the tarsi, dark brown. Wings light amber-colored.

Length, 17-20 mm.

Two specimens, Washington, University of Kansas.

**Ctenophora similis, n. sp.**

Male. Resembles *C. angustipennis*, but differs in the mesonotum being shining black, except the small humeral callosities; in the black of the abdomen being more extensive, and in the greater infuscation of the legs.

Length, 19-21 mm.

Two specimens, Washington, University of Kansas. The black of the abdominal segments extends outwardly on the posterior part, so



that the abdomen may be described as black, with a more or less elongated yellowish red spot in each side of the segments, toward the front. The first segment is black, with a light yellow anterior margin.

***Stygeropsis bergrothi*, n. sp.**

Male. Black, grayish dusted, with light colored pile. Antennae about as long as the mesonotum, the basal joints slightly reddish. Rostrum one-half the length of the head; occiput thickly gray dusted. Thorax and abdomen uniform in color, and wholly opaque; a slender dorsopleural line, the minute humeral callosities and the sides of the scutellum, yellow or yellowish; forceps of hypopygium yellow; stem of halteres yellowish, the knob black. The slightly thickened distal end of the femora, the tibiae in large part, and all of the tarsi dark brown; femora elsewhere reddish yellow; the basal portion of the tibiae brown; tarsi longer than the tibiae, the metatarsi nearly twice the length of the remaining joints together. Wings uniformly subinfuscated.

Length, 12 mm.

One specimen, Alaska, University of Kansas.

***Lordotus pulchrissimus*, n. sp.**

Female. Black, almost wholly concealed beneath dense and long, bright yellow pile, that of the pectus and base of femora white. Face and front in ground-color opaque, grayish white, the pile more whitish below. Antennae black, the second joint yellow; third joint shorter than the first two together, the second a little shorter than the first. Proboscis nearly as long as the front femora and tibiae together. Thorax and scutellum opaque, the latter convex, without groove or impression. No stripes visible on the mesonotum. Abdomen shining, the covering composed wholly of long and dense pile, uniform in color. Legs light yellow, the tarsi black or blackish; bristles of the tibiae black; pile and tomentum of the femora white. Wings pure hyaline.

Length, 13-15 mm.

Two specimens, Reno, Nevada (Hillman).

***Lordotus puella*, n. sp.**

Male. Black, clothed throughout with grayish yellow pile. Legs black. First two joints of the antennae together a little shorter than the third, the second joint but little longer than broad. Abdomen a little shining beneath the pile; without tomentum. Tibiae slightly reddish. Wings nearly hyaline, the costal and subcostal cells yellow.

Length, 11-12 mm.

One specimen, California (Baron).



**Eclimus muricatus.**

?*Epibatus muricates* Osten Sacken, Western Diptera, 272.

Female. Wholly deep black throughout, with black pile and deep brown wings. Face and front wholly shining. First joint of the antennae a little shorter than the third. Anterior part of the dorsum of the thorax subopaque; the posterior part, the scutellum and the abdomen very much shining. Wings deep brown; the interior of the outer cells a little lighter colored.

Length, 14 mm.

Two specimens California, Washington; University of Kansas collection.

It is seen that I do not accept the genus *Epibates* Osten Sacken. The sole differences now known to separate it from *Eclimus* are the murication of the mesonotum and the denticulate costa, characters found only in the male, as specimens of *E. magnus* O. S. and *E. Sackeni* Burgess prove. Furthermore, if the characters distinguishing *Epibates* are accepted the name must give way to *Thevenemyia* Bigot, a species of which Bigot has recently described from Washington, without showing wherein it differs from *E. Sackeni*.

**Eclimus sodalis, n. sp.**

Female. Front but little shining, clothed with long, black pile; on the lower part, somewhat pollinose. First joint of the antennae nearly as long as the third, clothed with black pile. Face moderately shining, with black pile. Occiput with abundant, nearly yellow pile. Thorax but little shining, clothed throughout with nearly white pile; scutellum shining, with white pile; first four segments of the abdomen with rather abundant white pile; that at the extremity black. Femora with sparse black pile. Wings brown in the costal, subcostal and first basal cells; a deep cloud on the anterior cross-vein; less distinct clouds on the outer cross-veins, and at the proximal end of the second submarginal cell.

Length, 11-12 mm.

One specimen, Washington, University of Kansas collection.

**Eclimus melanosus, n. sp.**

Female. Front, face and basal joint of the antennae with black pile; occiput and the underside of the head with white pile. Third joint of the antennae broad, scarcely longer than the first joint. Mesonotum opaque, with loose, nearly white, or yellowish white pile; scutellum shining. Pleurae white pollinose. Abdomen opaque black, the last segment shining; pile loose, white; on the hind margin of the first five segments more recumbent and showing as narrow bands;



pile of the terminal segments longer, black. Wings nearly uniformly dark brown, the cells posteriorly a little lighter colored.

Length, 7-8 mm.

Four specimens, California.

***Eclimus lotus*, n. sp.**

Male. Vertical triangle, face and basal joints of the antennae with black pile; occiput with yellowish white, the mentum with white pile. First joint of the antennae a little shorter than the third. Mesonotum opaque, with erect, dusky white hair and more recumbent, bright yellow, somewhat curly tomentum or pile. Scutellum with long blackish hair and shorter yellow tomentum. Pleurae and pectus densely white pollinose and with white pile. Halteres yellow, the knob brown. Abdomen deep opaque velvety black, with longer white and blackish hair, and short, curly, bright yellow pile. Wings brownish, deeper along the costa; costa finely denticulate. Dorsum of thorax muricate.

Length, 12 mm.

One specimen, California.

***Eclimus auratus*, n. sp.**

Female. Front shining, clothed with black hair and shorter, bright yellow pile; on the lower part, and the sides of the narrow face, when seen from the side, silvery. The rather broad third joint of the antennae as long as the first two together. Occiput with bright yellow, the mentum with white pile. Mesonotum and scutellum shining, clothed with bright yellow hair and pile. Pleurae and coxae densely white pollinose, and with white hair. Abdomen moderately shining, clothed with recumbent, bright yellow pile, intermixed with black on the distal segments. Wings nearly uniformly brown.

Length, 9-10 mm.

Two specimens, Washington.

***Cyrtopogon dasyllis*, n. sp.**

Male. Black, thickly pilose; pile of face wholly black. Abdomen, except the tip, with long, dense, erect, yellow pile. Tarsi red. Wings hyaline; just before the tip a large, deep brown spot. Face and front with long and dense, deep black pile; beard black. First two joints of the antennae black, the third red; style short and thick. Thorax black, thickly black-pilose; dorsum deep opaque brown, on the sides narrowly, and behind, shining. Scutellum thickly black pilose, sub-shining, convex. Abdomen nearly parallel on the sides, shining, but its shape and color largely concealed by the long, erect, yellow pile; the first segment sparingly black pilose on the



sides; the last three segments and the hypopygium with abundant black pile. Legs black, black pilose, the coxae with some whitish pile; the tarsi red, the hind tibiae more deeply so. Wings hyaline, with a large black or deep brown spot before the apex, extending across the wing; a narrow cloud along the last section of the fifth vein.

Length, 16-18 mm.

One specimen, Estes Park, Col., August (Prof. F. H. Snow).

This species is strikingly like *C. dasylloides* Will., but differs in the color of the antennae and facial pile, and in the wing-markings.

**Orthoneuromyia**, gen. nov. (Asilidae).

Front and face narrow, the former not widened above. Ocellar tubercle without bristles. Face only a little convex on the lower part, but little protuberant; thinly clothed, the mystax thin. First two joints of the antennae of nearly equal length, third joint about twice the length of the first two together, rather stout; style small or rudimentary. Scutellum with four bristles, the median, broadly separated pair, erect; the outer ones shorter. Abdomen elongate, of nearly equal width throughout, the segments longitudinally convex; finely punctulate; hypopygium not hidden, with a lateral, slender, curved process, and a median, stouter, likewise curved, organ. Legs stout, the hind metatarsi somewhat thickened; hind tibiae without cilia on the inner side. Dorsum of thorax with three small bristles on each side, one in front of the suture, one just behind it, and the third on the post-alar callus. Marginal cells of the wings widely open; the second vein terminates in the costa a considerable distance beyond the confluence of the first vein by a well-marked curve; veins at the outer ends of the discal and fourth posterior cells parallel, but not in the same straight line, the two veins closing the cells separated by a short section.

The genus has the venation of *Atomosia*, except that the first longitudinal vein runs gradually into the costa, and is not separated from it as in *Atomosia*. In my synopsis of the genera of the Asilidae, as also in the Trans. Amer. Ent. Soc., vol. xi., p. 9, I located our species of *Laphystia* and *Triclis* among the Dasypogoninae, because the marginal cell is not closed, the second vein terminating in the costa at the tip of the first vein. The peculiar course of the two veins, in these genera, as in the present, is not of the Dasypogonid type, but rather of the Laphrid, and, notwithstanding the open cell, they both find their most natural position near *Atomosia*. The present genus differs from both *Triclis* and *Laphystia* in the narrower front, the presence of scutellar bristles, the structure of the hypopygium, etc., as well as in the venation.



***Orthoncuromyia modesta*, n. sp.**

Male. Black throughout, the pulvilli and halteres alone yellow. Front a little shining in the middle, thinly grayish-brownish dusted. Face rather thickly gray dusted, somewhat shining in the middle; pile and mystax white. Dorsum of thorax shining, but mostly concealed beneath golden pubescence. Pleurae densely white pollinose, with two shining spots, the one on the mesopleuræ, the other in front of the metapleuræ. First five segments of the abdomen with a small silvery spot on the hind angles; elsewhere shining; sixth segment a little longer than the fifth, gradually tapering.

Length, 7-8 mm.

One specimen, Smithville, South Dakota (J. M. Aldrich).

***Asilus Novae Scotiae*.**

*Asilus Novae Scotiae* Macquart, Dipt. Exot., 2 Suppl., 46.

Male, female. Face thickly covered with silvery pollen, on the gibbosity with sparse black and white bristles; in profile the gibbosity not strongly projecting, extending not quite to the middle of the face. Antennae black, the third joint about as long as the first two together, or a little shorter, the bristle as long as the joint. Front more ochraceous pollinose, and, as also the first two joints of the antennae, with black hair. Beard silky white. Thorax densely gray pollinose, the dorsum ochraceous, leaving two median, narrowly separated, dark brown stripes, and two spots on each side, one in front, the other behind the suture; hair of the dorsum short, sparse, black, the bristles long and moderately strong, also black; on the border of the scutellum with two approximated bristles. Abdomen light ochraceous pollinose on the sides and posterior margins, apparent when seen from above, elsewhere more brownish pollinose, but variable in different lights; when seen from behind more shining blackish brown; hair short, sparse, light colored on the sides of the segments; in front of the hind borders, with short white bristles. Legs black, with close-lying, white hair and long black bristles; all the tibiae and metatarsi, except their immediate tip, and the immediate base of the other tarsal joints light yellow; front tibiae, on the outer side, with several conspicuously long bristles; on the inner side with a brownish or blackish stripe, not reaching the base. Wings hyaline; the outer end and the posterior side, reaching as far as the anal cell, but only including its hind border, lightly tinged with blackish.

Length, 15-19 mm.

Twelve specimens, Connecticut.

***Asilus sericeus*.**

*Asilus sericeus* Say, J., Acad. Phil, iii, 48, 2; Compl. Wr., ii, 63; Wiedemann,



Auss. Zw. Ins., i, 429, 8; Williston, Trans. Amer. Ent. Soc. xi., pl. ii, fig. 10.

*Asilus herminius* Walker, List. etc., ii, 410 (type compared by Osten Sacken).

Male, female. Face nearly straight in profile, in the male very gently concave below the antennae and thence more gently convex to the oral margin; nearly bare, but in the middle on the lower half and along the oral margin with not abundant light yellow hair; thickly covered with light golden yellow dust. First two joints of the antennae yellow with sparse yellow and black hair, second joint at the tip blackish, third joint black, narrowly yellow at the base; first joint nearly a half longer than the second, third joint slender, a half longer than the first two joints together, bristle short, styliform, not longer than the second joint of the antenna. Front narrowed above, thickly ochraceous pollinose. Occipito-orbital bristles and the beard short, not abundant, light yellow; occiput light golden yellow, the orbits narrowly whitish. Dorsum of thorax and the coxae, especially the front ones in front, golden pollinose; pleurae and posterior coxae reddish brown; dorsum when seen from above with a broad opaque blackish stripe, when seen from behind with two slender black stripes and the intermediate portion brown; bristles short, sparse, black (usually); scutellum with only two on its border. Abdomen slender, reddish brown, light golden pollinose, but variable in different reflections; when seen from behind there is only a posterior cross-band, narrowed in the middle; on the sides of the second segment with a few bristles and hairs, elsewhere the hair is very short, very sparse and all light yellow; hypopygium and ovipositor small. Wings yellow with the veins of the same color, the interior of the cells on the outer and posterior part of the wings blackish, narrowly separated from the veins by a light yellow border. Legs light yellow, with extremely short black hair on the femora and front tibiae in front, giving them a dark tinge; front side of the front and middle femora with a black or blackish spot; the short hair of the tibiae and tarsi yellow, the bristles mostly black.

Length, 22-25 mm.

Numerous specimens, New England States, Pennsylvania, Indiana, Kansas.

### ***Asilus midas*.**

*Asilus midas* Brauer, Sitzb. d. k. Acad. d. Wissensch. p. 387, pl. ii, 1885.—Mexico.

“Ganz schwarz, nur die Flügel sind feurig rothgelb, an der Basis dunkler und an der Spitze rauchgrau gesaumt.”

A single specimen of this striking species is in the Kansas University collection, captured by Prof. Snow in New Mexico.



***Asilus astutus*, n. sp.**

Male, female. Face broad; in profile very gently convex on the lower half and as gently concave above; densely covered with light yellow pollen; the mystax does not extend one-half of the distance to the antennae; on its upper part composed of sparse black, along the oral margin of light yellow, bristles, sometimes wholly light colored. Antennae black, the first two joints with short light yellow and black hair, the third joint distinctly longer than the first two together; bristle short, style-like, not longer than the first joint. Front pollinose like the face, and with light colored hair, except a few black hairs on the ocelli. Occiput and occipito-orbital bristles light yellow; beard more nearly white, abundant. Ground-color of the thorax black, but densely covered with light ochraceous pollen, the median stripes and usual spots apparent; dorsum clothed in front with very short, sparse, black hair; behind with not very abundant nor long, but moderately stout, chiefly black bristles; about four on the border of the scutellum; the sparse vestiture of the pleurae wholly light colored. Abdomen not slender nor much elongated; densely covered uniformly with light ochraceous pollen and moderately abundant, recumbent, light yellow hair; on each side and in the middle, toward the front of each segment, with a small, oval, brown spot; hypopygium and ovipositor small, red; there are no bristles on the abdomen, except a few short ones on the sides of the second segment. Legs stout, red, but the color obscured beneath abundant, close-lying, whitish hair; the femora, except broadly on the posterior side, the tibiae broadly in front, but not reaching the base, and the tip of all the tarsal joints black; bristles black. Wings distinctly clouded with a blackish tinge, along the veins in the central portion pure hyaline.

Length, 15 mm.

California.

***Asilus annulatus*, n. sp.**

Face in profile with a well-marked gibbosity below the antennae, on the lower part strongly gibbose, thickly covered with yellowish white pollen and on the gibbosity with thin black bristles above, and light yellow ones below. Antennae black, the first two joints with black hair; first joint but little longer than the second, third scarcely longer than the first two together; arista but little more than half the length of the third joint. Front scarcely narrowed above, ochraceous pollinose, with black hair. Occipito-orbital bristles black above; beard white. Occiput thickly yellowish white pollinose. Thorax grayish yellowish pollinose; dorsum with two dark brown stripes, separated by a linear interval and narrowed and coalescent behind; on each side,



when seen from behind, with a large oval spot, narrowly interrupted by the suture, and a small spot behind; bristles moderately long, two on the border of the scutellum; the fan-like row of thin bristles in front of the halteres white. Abdomen rather broad, thickly light ochraceous pollinose, but very variable in different reflections, showing a darker brownish color; before the middle of the second segment and near the front of the two following segments with a transverse row of finely punctulate spots; on the sides of the second segment with a number of white bristles, on the following segments, just in front of the smooth, bare, hind marginal band, with a row of white bristles on each side, becoming successively shorter and extending further inward; hypopygium and ovipositor small, black or yellow. Legs black with fine, close-lying, white hair; a preapical ring on all the femora, the front and middle tibiae, except the tip and a more or less complete ring or spot on the basal third, and the base of the hind tibiae, yellow; the metatarsi, except the tip, and the base of all the joints also yellow. Wings hyaline, veins black; the large part of the marginal and submarginal, all the posterior, discal and anal cells densely microscopically pubescent, giving them, especially at the tip of the wing, a distinct tinge; distal end of first posterior cell not as wide as the end of the second submarginal cell, both branches of the third vein sinuous.

Length, 16-18 mm.

New Hampshire, Massachusetts, Connecticut, South Dakota, and Kansas.

***Asilus angustifrons*. n. sp.**

Male. Face narrow, with a well-marked gibbosity on the lower part, the concavity on the upper part being distinctly one-half of the length of the face; thickly covered with light golden yellow pollen, on the middle of the gibbosity with black, below and along the oral margin with white hair. Antennae black, the first two joints with black hair, the second more than half as long as the first, the third about as long as the first two together; bristle as long as the third joint. Front narrow, clothed with black hair and yellow pollen. Occipito-orbital bristles chiefly white; beard rather abundant, silky white. Thorax covered with dense silvery gray pollen; on the dorsum ochraceous, leaving two dark brown stripes separated by a linear interval and coalescent and narrowed before reaching the scutellum; on each side with two spots separated, by the suture, and behind them a small one; hair of the dorsum short, sparse, black, the bristles moderately long but not stout; scutellum with two approximated bristles; pleurae with white hair and pile. Abdomen black, not densely



clothed with grayish brownish pollen, but variable in different reflections; when seen from behind, the ground-color is apparent, except on the smooth hind border of each segment; pile of the front segments on the sides white, not abundant; in front of the smooth hind borders of the segments on each side there is a row of white bristles, becoming successively shorter and extending more inwards posteriorly; hypopygium shining black. Legs reddish yellow; the femora in front, the tip of the tibiae and all the tarsal joints black. Wings hyaline on the basal portion, with a distinct brownish tinge beyond the basal cells; at the tip tinged with blackish; the submarginal cell from its base and the marginal cell opposite with a distinct brown cloud; the costal and first longitudinal veins distinctly thickened near the tip of the auxiliary vein.

Length, 15-16 mm.

Twelve specimens, Washington. A single rubbed female among them has the black on the femora less extensive, and the wings pure hyaline, except the faint blackish tinge at the tip.

***Asilus flavipes*, n. sp.**

Male. Face narrow, thickly covered with white pollen, on the gibbosity above with white black, below with white hair; in profile not very protuberant below, the gibbosity rather more than half of the length of the face, but receding below so that its border is nearly parallel with the outline of the eyes. Antennae black, the second joint at the tip and the base, and some times nearly the whole of the third joint brownish yellow; the first two joints with black hair, the second joint much shorter than the first, the third as long as the first two, narrowed on its outer part, bristle about as long as the joint. Front with black hair, hardly as narrow above as at the base of the antennae. Occipito-orbital bristles black; beard not abundant, white. Thorax densely covered with grayish white pollen; the two median stripes on the dorsum distinctly separated by a gray stripe, on each side the two usual spots and a smaller one behind; clothed in front with moderately long black hair, behind with rather thin but not stout, black, often intermixed with white, bristles; on the margin of the scutellum with four long bristles; vestiture of the pleurae wholly white. Abdomen black, with white hair; rather thinly pollinose, except on the sides and posterior margins which are rather broadly gray pollinose. Legs: front femora with a broad black stripe above, not quite reaching the tip, middle femora with a similar stripe reaching the whole length; hind femora wholly black; front tibiae at the immediate tip brown, middle tibiae at the tip distinctly black, hind tibiae for about the distal fourth black; tarsi black, except the base of the metatarsi; elsewhere the



legs are light yellow; bristles chiefly black, not conspicuous, several long ones on the outer side of the front tibiae. Wings pure hyaline, the distal end only slightly tinged with blackish.

Length, 15-16 mm.

Pennsylvania.

A single male from Connecticut is apparently the same. It is smaller (12 mm.); the pollen of the face is yellow and the hair wholly black; the abdomen is slender, shining black, except the sides and posterior margins; and the hypopygium is rather more slender than usual and directed upward.

***Asilus (Neoitamus) distinctus*, n. sp.**

Male, female. Face narrow, in profile with a short concavity below the antennae, thence gently convex to the oral margin, but receding so that the border is nearly parallel to the border of the eye, the concavity less than half the length of the convexity; covered with light yellow pollen, the black ground-color of the gibbosity showing through somewhat; in the middle of the gibbosity, save a few black hairs at the top, with moderately long, abundant, light yellow hair. Antennae black, the first two joints with black hair; second joint considerably shorter than the first; third joint hardly as long as the first two together, gradually narrowed to the tip, the bristle thickened, shorter than the third joint. Front black, lightly grayish pollinose and with black hair; occipito-orbital bristles fine, hair-like, black; beard not long nor abundant, light yellow; occiput gray pollinose. Thorax black, gray pollinose; dorsum with two moderately broad, black stripes, narrowly separated, and, on each side, a large oval spot in front and behind the suture; on the front side with moderately long, but not abundant, black hair; on the posterior with longer black hair and thin black bristles. Scutellum with hair on its dorsum and a row of thin black bristles on its border; trichostical bristles hair-like, light colored. Abdomen shining bluish black, the narrow posterior border of the segments gray pollinose; on the sides of the segments with long white pile, and, in front of the posterior gray margin, with white bristles; hypopygium with short black pile; ovipositor rather long. Legs rather slender; black, with black bristles; all the tibiae and metatarsi, except the tip, yellow. Wings hyaline, the outer end only lightly clouded.

Length, 13-16 mm.

Numerous specimens, New Hampshire, Connecticut.

***Asilus (Neoitamus) affinis*, n. sp.**

A single specimen from Washington agrees in most respects closely with *distinctus*, and I would be tempted to call it the same, were it



not for the very striking difference in the coloration of the legs. The front legs are wholly pure light yellow with the same colored hair and bristles, except a small black spot on the base of the femora above; the middle legs are of the same color, but the black stripe on the upper part of the femora extends two-thirds of the way to the tip, at the extreme tip there is also a very narrow blackish ring; some of the bristles are black and the short bristly hairs on the under side of the tarsi are black; the hind legs have the femora wholly black, the tip of the tibiae and the last joint of the tarsi also black; except the long pile on the inner and under side of the femora and the short pile on the inner side of the tibiae and metatarsi, the vestiture is wholly black. The convexity of the face also reaches a little further up and is covered wholly with yellow and abundant hair.

Length, 15 mm.

A female from California, may belong here. The yellow hair of the gibbosity has some black intermixed with it at the top and the femora are wholly black. The hair on the thorax is longer and more abundant in the middle in front.

***Asilus (Tolmerus) notatus.***

*Asilus notatus* Wiedemann, Auss. Zweifl. Insekten, i, 451.

Male, female. Face light grayish yellowish pollinose, the gibbosity clothed on the upper part with black bristles, on the lower part with thin, light yellow bristles; in profile the gibbosity is strong, and occupies a little more than half of the length of the face. Antennae black, the first two joints with black hair, the third about equal to the first two together, the bristle about as long as the joint. Front narrowed above, clothed with black hair. Occipito-orbital bristles black; beard silky white. Dorsum of thorax light yellowish gray pollinose, opaque; the median stripes, separated by a distinct interval, and the usual lateral spots, dark brown; in front with short black hair, behind with strong black bristles; scutellum usually with four bristles, two of them, especially the inner ones, sometimes small or obsolete; pleurae gray pollinose, the sparse vestiture wholly light-colored. Abdomen black, brown pollinose; when seen from behind more shining, except broadly on the sides, especially behind, and on the posterior margin of each segment, where it is light gray, or yellowish gray, pollinose, near the hind margin of each segment on the sides with two or three bristles. Legs black, with close, light colored hair and black bristles; base of all the tibiae, and the metatarsi except their tip, yellowish red; the front tibiae with several conspicuous bristles on the outer side, the inner side of the front tibiae and metatarsi with short, dense, orange red pile; hind femora noticeably less



thickened than the others. Wings hyaline, the outer end and the posterior cells lightly infuscated; both branches of the third vein sinuous, the first posterior cell not wider at the distal end than is the second submarginal cell.

Length, 15-17 mm.

Numerous specimens, Georgia, North Carolina, Michigan, South Dakota, New England.

***Asilus* (*Tolmerus*) *callidus*, n. sp.**

Male, female. Four specimens from Mt. Hood, and six from Washington show a very great resemblance to *A. notatus*, but with the following differences: the gibbosity of the face extends further up, the legs are distinctly stouter, and all the femora have a conspicuous preapical red ring; the tibiae and tarsi in some are wholly deep red, with the base of the former lighter colored; in others, the tarsi are pitchy black or black, and the tibiae on their inner side colored in the same way.

In one female from Washington, the gibbosity does not seem to extend as high, the pollen of the thorax and of the sides of the face is yellowish, and the legs are black, with a broad preapical ring on the femora, and the base of the femora and of the metatarsi yellow.

***Asilus* (*Rhadiurgus*) *leucopogon*, n. sp.**

Male, female. Face and front broad, densely covered with nearly white pollen; hair and bristles of the head everywhere white; face, in profile, nearly vertical and straight, a slight concavity on the upper part, only; the hair reaches to above the middle. Antennae black, the first two joints together rather longer than the third; arista rather stout, shorter than the third joint; beard abundant, silky. Dorsum of thorax densely light yellowish or brownish pollinose, the narrow brown stripes not conspicuous; clothed in front with short black and white bristles; behind with light-colored, not stout bristles. Scutellum with numerous, erect, white bristles and hairs. Pleurae and pectus densely white pollinose, with white hair and bristles. Abdomen elongate, slender, light grayish pollinose; when seen from behind brownish before the smooth, gray hind borders; oviduct cylindrical, shining, with a circlet of small bristles at the extremity. Legs with abundant, recumbent, white hair, and with white bristles; black, the base and more or less of the inner sides of the femora, the inner part of the tibiae, and the base of the tarsal joints, more or less yellow. Wings nearly pure hyaline; anterior branch of the third vein nearly straight, the posterior branch somewhat curved forward, but not reaching the tip of the wing.

Length, 15-17 mm.



Twenty-four specimens, South Dakota and Nebraska (J. M. Aldrich).

***Asilus (Stenoprosopus) arizonensis, n. sp.***

Female. Face and front rather narrow, wholly densely light yellow pollinose, the bristles of the face (which are mostly confined to the oral border) all white; face in profile vertical, without gibbosity, straight, or gently concave in the middle. Antennae black, the second joint yellowish; the first two joints with short black hair, together about as long as the third; second joint a little shorter than the first; arista about as long as the third joint. Beard not long, pure white. Thorax in ground-color largely reddish yellow; mesonotum opaque yellowish, with three broad, brown stripes, nearly bare in front, behind with stout bristles. Scutellum with a distinct groove before its apex, its border with two approximated bristles. Abdomen in ground-color black, with yellow hind borders; in life, apparently grayish-yellowish pollinose, with more distinctly yellow hind borders. Legs yellow; a spot on the upper side of the hind and front femora, the tip of all the tibiae, and the tip of the tarsal joints brownish; femora slender. Wings grayish hyaline, pure hyaline on the basal middle portion. Tip of the oviduct with small bristles.

Length, 17-18 mm.

One specimen, Arizona, (J. H. Comstock) No. 175.

***Empis sociabilis, n. sp.***

Male. Eyes closely contiguous. Frontal triangle and face bare, gray pollinose. Antennae black. Palpi slender; proboscis longer than the vertical diameter of the head. Thorax brownish gray, opaque, the mesonotum with three, narrow, inconspicuous, brown stripes. Abdomen brownish black, subshining; pile on the sides in front light-colored, rather long. Hypopygium small, black; the inferior lamellae small, ovate. Legs black. Wings hyaline; stigma narrow, brown.

Length, 5-6 mm.

Six specimens, Washington (Prof. C. V. Piper).

***Chilosia chalybescens, n. sp.***

Male. Eyes densely and long pilose; pile of dorsum of thorax yellow in front and behind, black across the middle; abdomen steel-blue. Frontal triangle with light-colored, vertical triangle with black, pile. Antennae black, the third joint rounded. Front and face shining black; face in profile with a long shallow concavity; lateral grooves well marked. Dorsum of thorax shining greenish black,



across the middle bluish black; pile in front and behind and on the scutellum light yellow; across the middle of the dorsum black; pile of pleurae black. Abdomen shining steel-blue, with light purplish reflections; first and second segments broadly opaque in the middle; pile abundant and moderately long, on the first and second segments light yellow, on the remainder of the abdomen black. Legs black, the hind tibiae and the tarsi in large part reddish. Wings somewhat brownish in front.

Length, 12 mm.

One specimen, California. This species is nearest allied to *C. occidentalis* Will.

### ***Hystrichodexia Roederi*, n. sp.**

Male. Head pale golden yellow; thorax yellowish dusted; abdomen black, with the third, fourth and fifth segments opaque golden yellow. Front much narrowed behind, at the vertex scarcely one-fifth of the width of the head; frontal stripe reddish; sides of the front, the face and the cheeks light golden yellow. Antennae reddish yellow; second joint a little prominent; third joint four or five times the length of the second, slender; arista brown, thickened at the base. Proboscis black, longer than the head, slender, labella very small; palpi slender, slightly thickened near the end, yellow, with small black bristles. Dorsum of thorax, when seen from behind, opaque golden yellow, with four slender stripes, the lateral ones composed of two elongated spots; when seen from in front the golden color is not conspicuous. Scutellum more shining, the tip a little yellowish. Tegulae blackish. First and second segments of the abdomen deep reddish black, shining, clothed with short, recumbent bristles; second segment posteriorly with six approximated, stout, erect macrochaetae; the hind margin of the second segment, the third segment, save a lateral marginal spot, and the remaining segments almost wholly, opaque light golden yellow; third segment with a posterior girdle of macrochaetae, the fourth with a similar girdle beyond the middle; the third segment in front has recumbent black bristles; from the bristles of this segment nearly to those of the fourth the surface is entirely smooth. Venter piceous black, the second segment, at least, with a silvery white pollinose spot on each side. Legs black; front femora with a comb-like row of long bristles above and below; hind tibiae short, ciliate without; pulvilli and claws small, the former yellow. Wings brown on the basal costal portion, nearly hyaline elsewhere; antepenultimate section of the fourth vein longer than the penultimate section; ultimate section gently sinuous.

Length, 14 mm.



One specimen, Arizona. Although the abdomen of this species shows a much fewer number of the stout macrochaetae than in the other species of the genus, there can be no question of its congenericness.





Williston, Samuel W. 1893. "New or little-known Diptera." *The Kansas University quarterly* 2, 59–78. <https://doi.org/10.5962/bhl.part.25908>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/43709>

**DOI:** <https://doi.org/10.5962/bhl.part.25908>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/25908>

**Holding Institution**

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

**Sponsored by**

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

**Copyright & Reuse**

Copyright Status: NOT\_IN\_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.