

Frequent and gregarious, November to April, about Dunedin, beneath the bark of dead water oak and dead white bay; also taken beneath cow dung and by sifting in damp mucky places. Much less convex than any of our other described species.

(To be Continued.)

NEW SPECIES OF CANADIAN SYRPHIDAE, (DIPTERA) Pt. II.

BY C. HOWARD CURRAN,

Orillia, Ont.

Cynorhina robusta, new species

Thorax and scutellum moderately long, pale yellow pilose; abdomen black pilose except the immediate basal corners which bear yellow pile; head brown and black pilose; face chiefly piceous, but yellow above.

Length 11 mm. ♀. Face piceous, immediately below the antennae, more so at the sides, yellow, the cheeks black; face thinly silvery pollinose, the side margins sparsely whitish pilose; in profile the sub-keel-shaped face is slightly produced below the middle indicating a long tubercle. Antennae black, third joint circular and reddish brown in color, the base below reddish; arista black. Front shining black, somewhat narrowed above; antennal process narrowly reddish apically. Pile of the front black; under the eyes yellowish, on the lower half of the occiput brown, black on the upper half, moderately long below. Posterior orbits narrowly grayish white pollinose.

Thorax shining deep blue-black; mesopleurae margined with reddish except below. Dorsum brassy, and clothed with rather long pale yellow pile; pleurae bare except on the meso and sternopleurae; scutellum similar in color and pile to dorsum.

Abdomen wholly shining black, with a strong purplish reflection, wholly short black pilose except the basal angles which bear longer yellowish pile. First two ventral segments yellow apically at the sides.

Legs blackish, short black pilose, longer on the femora; femora tipped with yellow; bases and ends of the tibiae yellow or yellowish; first three joints of the anterior four and second and third of the hind tarsi, yellow.

Wings moderately brownish, less so outwardly, their bases very conspicuously yellow; stigma brownish, but not readily discerned. Squamae whitish yellow, with similar colored fringe. Halteres yellow.

Holotype, ♀, British Columbia, in the Canadian National Collection, Ottawa.

A robust, conspicuous species resembling *Criorhina*, best characterized by the color of the face and the pile, which is longer and denser than usual.

Cynorhinella, new genus

Face considerably produced downwards, tuberculate; side margins distinct; eyes contiguous; antennae short, third joint roundish; thorax longer than broad, without bristles; abdomen slender, twice as long as the thorax, tapering in the male; femora all somewhat swollen, the hind ones considerably so and arcuate, at the end below with an angular projection exteriorly, as in

Tropidea, a smaller one anteriorly; hind tibiae a little arcuate, not ending in a spur. Wings as in *Cynorhina*.

Genotype, *C. canadensis*, new species.

I am unable to place the following specimen in any genus known to me, and it traces out to *Cynorhina* in Williston's manual, and apparently comes closest to this genus but the thickened, arcuate hind femora with the projection apically, and the more distinct facial side margins separate it. It is related to *Chilosia* and *Chrysochlamys* by the last mentioned character, but there is no semblance of bristles and the shape of the abdomen is distinctive. Superficially it moderately resembles a *Brachypalpus* but the facial shape and tubercle at once preclude it from that genus.

***Cynorhinella canadensis*, new species**

Length 10 mm. *Male*. Face chestnut brown, concave below the antennae with a prominent rounded tubercle about the middle, below which it is slightly produced to the not prominent oral margin; side margins well defined, as in *Chilosia*, the facial slopes with fine whitish pollen, the side margins with sparse whitish pile; cheeks and frontal triangle shining, concolorous with the face; vertical triangle brown, the sides of the triangle about equal, with brown pile; occiput shining chestnut, with whitish pile below and brownish above. Thorax shining blueblack, the dorsum with yellow pile, which is intermixed with black on the middle, and black pile on the borders; pleurae yellowish brown, with yellowish pile, the pile black above. Scutellum concolorous with dorsum, with slightly longer black pile. Abdomen narrow, and gradually narrowing after the second segment, in color shining blue-black, the posterior margins of the second and third segments a little more blackish on the median two-thirds; hypopygium black. Pile of abdomen yellowish on basal angles, becoming white on the hypopygium, and black on the ends of the second and third segments. Legs chestnut brown. Wings distinctly luteous; stigma yellowish. Squamae and halteres white.

Holotype, ♂, Inverness, B.C., July, 1910, (J. H. Keen), in the Canadian National Collection, Ottawa.

***Mallota columbiae*, new species**

Eyes bare; abdomen wholly black pilose; wings with a brown spot; thorax densely yellowish pilose. Distinguished from *cimbiciformis* by the shape of the angulation of the third vein, from *sackeni* by the open marginal cell.

Length 14 mm. *Female*. Face shining black, the sides covered with grayish yellow pollen, forming a complete band below the antennae. Front shining black, the sides with yellow pollen; pile of the head black, except a few whitish hairs on the cheeks; below the eyes there is a very distinct, triangular rust-colored spot. Antennae brown, third joint more reddish, large, broader than long; arista reddish. Thorax shining greenish black; anteriorly, except two narrow sub-median stripes, yellowish pollinose, in some lights a broader interrupted more shining stripe laterally. Scutellum light yellow. Pile of thorax and scutellum light yellow, the humeri and pleurae below with blackish hairs. Abdomen shining black, black pilose, but the sides of the second segment narrowly, with yellow hairs. Femora black, with black pile, tibiae more brownish,

tarsi reddish; tips of the femora, narrow base of the hind and broad bases of the anterior four tibiae, yellowish red; pile of the tibiae very short, brownish. Wings almost hyaline, with a brown cloud at the middle. Third vein with the angulation more V-shaped than U-shaped.

Holotype, ♀, Penticton, B.C., June 5, 1919, (R. C. Treherne), in the Canadian National Collection, Ottawa.

This species comes close to *cimbiciformis*, but is at once distinguished by the clouded wings, wing venation and facial profile. *M. sackeni* has the marginal cell closed. No other species with the abdomen practically entirely black pilose have been described; there are very few yellow hairs on the sides of the second abdominal segment.

***Mallota diversipennis*, new species**

Eyes bare; antennae luteous-reddish; third longitudinal vein with the loop V-shaped; wings clouded; marginal cell open; pile of abdomen rather sparse, mixed black and fulvous.

Length, 15 mm. ♀. Face black, shining, covered, except a broad median stripe and the cheeks, with yellowish gray pollen, and sparse, long reddish yellow pile; front broad, the sides, more widely at the middle, with golden pollen, the pile rather sparse, reddish yellow, up the middle with black hairs, and chiefly black hairs across the ocellar triangle. Antennae luteous-reddish, shining, (third joint missing). Posterior orbits with brownish pile, but more fulvous below and at the vertex.

Thorax black, a little shining, with reddish pile; humeri reddish, sections of pleurae bordered with reddish and very slightly whitish pollinose; dorsum with slight indications of pollen before the suture. Scutellum yellow with moderately long, fairly abundant pale yellow pile.

Abdomen shining bluish black, with a purplish tint in some reflections; pile on first and second segments rather long, whitish, on the triangular median posterior half of second segment short, stiff, brown, elsewhere on the abdomen shorter, fulvous, sparsely intermixed with brown, on the third segment with a broad posterior band of short brown pile.

Femora brownish, hind ones more reddish; tibiae and tarsi yellowish red, the tibiae darker apically; pile of the anterior femora entirely black, rather long posteriorly, on the middle ones brown, but longer reddish yellow posteriorly, on the hind ones wholly reddish yellow; tibiae and tarsi with yellow pile; hind femora much thickened, the tibiae a little arcuate.

Wings with a distinct brownish cloud across the middle beyond which the color is somewhat luteous, the base hyaline. Angulation of third longitudinal very acute and V-shaped.

Holotype, ♀, in the Canadian National Collection, Ottawa, bearing no label. It is probably a Canadian specimen.

I cannot associate this species with any described. It comes nearest *palmerae* Jones but is distinct in the reddish antennae and color of the pile, that on the legs being especially distinctive. There is a short stump of vein into the first posterior cell from the tip of the V-shaped angulation.

Chilosia hunteri, new species

Eyes pilose; antennae reddish yellow; arista bare; facial slopes without pile; thorax whitish or yellow pilose, without spines, except a weak one on the mesopleura; abdomen light pilose.

Length 8 to 9 mm. *Male*. Face shining black, a little pubescent opposite the tubercle; side margins and below the antennae thinly silvery pollinose; face almost straight from base of antennal prominence to the oral margin which is on a plane with the antennal base, the tubercle fairly prominent, on a plane with the tip of antennal prominence, a little concave between the antennal prominence and tubercle, and shortly, deeply concave below the tubercle; the lower edge of the short nose-shaped tubercle is on a plane with the lower eye margins; side margins and cheeks short yellowish pilose. Frontal triangle shining black; finely moderately punctured, usually with a narrow sulca in the middle; the polished broad W on the antennal prominence reddish or obscurely so; pile of the frontal triangle black, rarely mixed with yellow; posterior orbits narrowly silvery pollinose, with white pile; remainder of occiput thinly grayish pollinose. Antennae with the first two joints polished brownish red, the third bright reddish yellow, not large, sub-quadrate, a little rounded apically. Eyes short brownish yellow pilose.

Thorax and scutellum shining metallic greenish black, with moderately short pale yellowish to yellow pile, a little deeper colored at the corners and usually with some black hairs intermixed here; there may be one to three weak bristles on the top of the mesopleura.

Abdomen of the same metallic greenish black color, but not quite so shining, and a little more sparsely finely punctured; second segment with a goblet-shaped opaque spot widest posteriorly and poorly outlined; an abbreviated, interrupted, basal opaque fascia on the third segment. Pile usually all pale yellowish or yellow but there may be some black hairs towards the end of the second segment.

Legs shining black, the trochanters obscurely reddish apically; femora tipped with reddish; tibiae with the basal quarter and a little less than the apical quarter reddish, the anterior ones a little more extensively reddish; tarsi all black, except that the base of the anterior four basitarsi may be reddish. The long hairs on the legs are yellow, the short ones black, except on the anterior of the front tibiae and the tarsal pads. Wings a little luteous, less so postero-apically; stigma and base of the wings brownish; 8 to 10 short bristles on R_{4+5} ; tip of first posterior cell almost truncate, the last section of the fourth vein sinuous. Squamae slightly tinged with yellow, with white fringe of pile. Halteres reddish yellow, the end of the knob brown.

Holotype, ♂, Teulon, Manitoba, May 17, 1920 (A. J. Hunter) in the Canadian National Collection, Ottawa.

Paratypes, ♂, Teulon, Man., May 14, 1920, (A. J. Hunter) in the collector's collection; ♂, Teulon, May 17; ♂, Winnipeg, Man., May 7, 1910, (J. B. Wallis); in the writer's collection; ♂, Winnipeg, May 7, 1910, (J. B. Wallis) in the collector's collection.

This species is evidently close to *petulca* Will. but may be known by the bare arista, absence of scutellar bristles and the color of the vestiture. From

baroni it is distinguished by its reddish antennae, absence of spines and the color of the vestiture.

I take great pleasure in naming this species in honor of Dr. A. J. Hunter, who has sent me many fine specimens of Syrphidae, and whose efforts have added largely to our knowledge of the Syrphid fauna of Manitoba.

I place a female collected by Dr. Hunter at Teulon on May 14, 1920, here with some doubt as it appears rather darker.

Female. Face shining black, a little more prominent than in the male, as the oral tip is as prominent as the antennal base, the tubercle more prominent; third antennal joint larger, twice as broad as the second joint. Front brassy in the middle, the sides smoother, black; a slender longitudinal median shining darker stripe which is more or less impressed, and a transverse depression above the antennae; pile blackish above the antennae and at the ocelli, elsewhere fulvous; occiput dull, thinly grayish yellow pollinose, the pile whitish below, cinereous above. Eyes short fulvous pilose.

Thorax shining slightly brassy black, with a median rather broad vitta and a broad one submedianly on each side, less shining and darker. The pile on the thorax and scutellum is very short fulvous, but appears to be darker on the darker vittae, and on the immediate sides of the dorsum there are a few longer bristle-like black hairs and the pile on the end of the scutellum is partly black and subappressed.

Abdomen shining black with a brassy reflection, the disc of the second segment deep black. The pile is very short subappressed fulvous, appearing darker on the third and base of the fourth segment on the disc in some lights; on the base of the abdomen and anterior angles of the segments it is longer, on the fifth segment with some black hairs apically.

Legs as in the male but the tarsi brownish, the first joint of the anterior four tarsi reddish. Squamae white with a yellow fringe and pale yellow pile. Halteres yellowish red.

***Myiolepta lunulata* Bigot.**

Bigot, (Ann Soc. Ent. France, 1884, page 537) described a specimen of *Myiolepta* from Oregon, giving it the specific name *lunulata*. As is the case with most of Bigot's descriptions the insect is not recognizable, and as a result Williston, (Syn. N. Am. Syrph., 1886) placed *lunulatus* as a synonym of *varipes* Loew. In the Museum of the California Academy of Sciences is a specimen of *Myiolepta* which is moderately like *varipes*, but there are certain differences which I can only regard as specific, and hence give a description of the specimen using Bigot's name *lunulatus* rather than a new one.

The specimen was collected at Huntington Lake, Fresno Co., California, at an altitude of 7,000 ft. by Mrs. E. P. Van Duzee and is a male.

Abdominal coloration in the male very much like the female of *M. varipes*; pile of abdomen depressed, mostly black; antennae dirty brownish yellow; wings clouded *only across the middle*; arista blackish.

Male. Length 7 mm. Swollen antennal base, cheeks and face from just above the tubercle to the mouth edge scarcely wider than the tubercle, deep shining black, the face elsewhere obscured by grayish yellow pollen. In pro-

file the face is very deeply concave; from the antennal prominence to the deepest part of the cavity it is almost straight, thence it is straight to the anterior oral margin, which does not project quite as much as the antennal prominence; the tubercle, situated in the middle of the lower straight portion, is moderately large, more rounded above, sub-pointed on its lower portion and almost at a right angle to the lower facial plane. Frontal triangle shining black, the sides narrowly grayish yellow pollinose. Vertical triangle black. Pile sparse, whitish, on the face restricted to the side margins.

Thorax and scutellum shining deep black; in front with an arch of grayish pollen extending between the humeri; pile short, yellow, subappressed; on the pleurae more erect, lighter. Scutellum margined with sparsely placed short black hairs.

Abdomen shining black; second segment except the sides and the base of the third segment medially, more opaque. First segment grayish pollinose. Second segment with a half-crescent-shaped yellow spot, extending along the latero-frontal margin a short distance, then curving back; behind and laterally to lunule the ground color is inclined to be lighter fading to black. Abdominal pile short, subappressed, on the abdominal basal angles, on the lighter areas and the basal triangles of the third segment, longer, whitish, more erect.

Legs black; bases of the tibiae piceous; hind tarsi and middle tarsi yellowish basally. All the femora thickened and bearing spines below. Hind tibiae without a triangular protuberance below. Wings subhyaline, darkened on the middle anteriorly. Stigma luteous, occupying the basal two-thirds of the cell.

Differs from *varipes* in that the wings are not clouded beyond the middle; pile mostly black on the abdomen; in the male of *varipes* the sides of the second abdominal segment are yellow; the face in *lunulata* is more produced and below the tubercle it is not receding to the oral margin as in *varipes*, but is continued forward.

NEW SPECIES OF THE SYRPHID GENUS CHILOSIA FROM
CANADA (DIPTERA)

BY C. HOWARD CURRAN,
Orillia, Ont.

***Chilosia sensua*, new species.**

Eyes bare; arista bare; wings strongly tinged with brownish yellow; scutellum without bristles; abdomen partly opaque.

Male. Length 7 mm. Face and front shining black, the former thinly grayish pollinose across below the antennae, pile of the side margins short, sparse, whitish, of the frontal and vertical triangles, black, of the posterior orbits, whitish below, yellow above. Eyes bare. Vertical triangle short, eyes touching for about the length of the vertical triangle. Frontal triangle large, a little prominent, with a metallic blue reflection in the middle, densely finely punctured; in the middle, when viewed from in front with an elongate triangular depression, its narrow base resting upon the antennal arch, its upper point almost reaching the juncture of the eyes. First antennal joint shining black, second piceous or brownish, third reddish, its end and upper portion more or less blackish, but