NEW AND LITTLE-KNOWN CANADIAN OSCINIDÆ.*

BY J. M. ALDRICH, BUREAU OF ENTOMOLOGY,
U. S. DEPT. OF AGRICULTURE.

In 1915 and 1916 the writer received for study many lots of small flies swept by Mr. Norman Criddle at Aweme and Treesbank, Manitoba, on grains and grasses. In a few cases he added material from other points. These accumulations came to represent the Oscinid fauna of the region quite fully, and to contain several undescribed species in some numbers. It is the purpose of the present paper to describe a few of the most abundant species and to clear up some obscurities about several genera and species; it does not by any means exhaust the material which Mr. Criddle furnished with infinite industry, persistence and patience.

Type material in all the species will be deposited in the Canadian National Collection, and also in the United States National Museum.

LASIOSINA Beck.

This genus, described by Becker in 1910 in the first part of his *Monographie der Chloropiden* (Archivum Zoologicum, 1, 73), has for its type *Chlorops cinctipes* Meig. (*Diplotoxa inconstans* Lw.), and originally included two other European species. Two of the three had been described in *Diplotoxa* by Loew, the other being new.

The genus, therefore, represents a subdivision of *Diplotoxa*, from which as restricted it differs in having longer thoracic and frontal bristles, and the cross veins less approximated, separated by about twice the length of the hind one.

Becker did not see any North American material. The first species to be found on this continent was a single female from Springer, N.M., in the National Museum, which Malloch described (Proc. U. S. N. M., XLVI, 140, 1913) as *Euchlorops similis*, placing it in the Milichinæ. From *Euchlorops vittata*, the type species of the genus, *similis* differs in having but one dorsocentral bristle, the former having a row of four. I have examined both types and also the European *L. albipila* Lw., the last in Professor Melander's collection. We have a common northern species which has come into my possession only since I saw the type of *similis*;

I am indebted to Mr. Chas. T. Greene for making comparisons with the latter, from which I conclude that it is a distinct species.

***Lasiosina canadensis*, n. sp.** (Figs. 17, 18, 19).

Front more than half the head-width, flat, somewhat projecting over antennæ, pale yellow in colour, with the following pairs of bristles, large for the family: 3 and sometimes 4 fronto-orbitals; 1 divergent ocellar; 1 convergent post-vertical or post-ocellar; 1 inner vertical, strongly convergent, just outside the hind angle of triangle; 1 outer vertical, strongly divergent, on a slight swelling farther back than preceding; there are also 40 or 50 small black hairs, mostly on the anterior half of front, of which one or two pairs near the median line may be a little larger. Triangle distinct, of moderate size, its sides convex, the apex drawn out in a slender point which almost reaches the extreme anterior edge of the front; ocellar dot black, connecting with black of occiput, rest of triangle dark yellow to brown, subshining, often with darker margin. Face and bucca light yellow, the latter over half the eye-height; eye strikingly elongated lengthwise of the head; antennæ of moderate size, yellow, in the female the third joint wholly infuscated, in the male it is largely or wholly yellow, the infuscation usually confined to a spot at base of arista; the latter black, bare, Palpi yellow in male, distinctly brown in female. A pair of small, pale vibrissal hairs. Back of head yellow except centrally and directly behind the posterior curve of eye.

Fig. 17.—*Lasiosina canadensis*, head of male, side view

Fig. 18.—Same from above.

Thorax opaque yellow to reddish, the notum with three broad opaque black stripes, the middle one narrowed or abbreviated behind, lateral ones distinctly shortened in front, not connected with the dark of humeri; scutellum yellow, its sides blackish; post-notum dull black; pleuræ with a shining black spot on lower edge

of mesopleura and a larger on the sternopleura, the latter, however, opaque below; an opaque black spot on pteropleura and one above hind coxa. Halteres white. The bristles of the thorax are as follows: humeral 2-3; notopleural 3; postalar 1; posterior dorsocentral 1; scutellum 2 pairs, the outer small.

Abdomen rather uniform subshining brown above, the last segment more or less yellow; the hairs are pale except along the sides apically and on last segment, the male showing more dark than the female; male hypopygium black, shining.

Legs dark yellow including tarsi, but there is some tendency to a dark ring on hind tibiae and to a vague darkening of the front tarsi and the basal half of hind femora.

Fig. 19.—Same species, wing.

Wing subhyaline, venation as in *Chlorops*; the distance between cross veins is from $1\frac{1}{2}$ to 2 times the hind one.

Length 2-2.6 mm.

Eleven males and twenty-two females. The male is from Ogema, Sask.,

June 16, 1916;. Paratypes are from Ogema (6) and Estevan (2), Sask.; Treesbank and Aweme, Man., (18); Sheridan, Wyo., (1, Metz); Pullman, Wash., (1, Melander); Bovill, Ida., (1, Melander); Powell Co., Mont., (1, Mann); and Saranac Lake, N.Y., (1, Johannsen).

The type of *similis* Mall. is in general very similar, but although a female it has the antennæ and palpi coloured as in the male of *canadensis*, and "tibiae darkened from near base, becoming black at apices; tarsi black."

The European *cinctipes*, type of the genus, has the same sexual distinctions in the colour of antennæ and palpi as in *canadensis*, or essentially the same.

DICRAEUS Loew.

This genus was established in Berl. Ent. Zeitsch. in 1873 (XVII, 51) for the single species *obscurus*; Becker (Mon. Chlor. I, 111, 1910) regards this as synonymous with *raptus*, Haliday

(Ann. Nat. Hist., XXII, 187, 1838, as *Oscinis*). Thus the type species becomes *Dicræus raptus* Hal. Loew gives as generic characters that the costa ends before reaching the fourth vein, the hind cross vein is absent, and the second vein is straight, unusually long, and parallel with the third. He placed it in *Chloropinæ* on the costal character. Becker (op. cit., 109) finds five species of the genus in Europe, of which only one lacks the hind cross vein, while three have the costa fully reaching the fourth vein. Thus he makes absence of the cross vein only specific (Strobl, in Tief's Nachlass, 64, 1901, had argued that it is merely varietal); and what is more surprising, he reduces to specific value in this little group the costal character also, which elsewhere in the family is decidedly of subfamily importance, and has been so considered by Becker himself (the first dipterist to make use of the character was Fallén, *Oscinides*, 1820, p.3; he separates two groups of his genus *Oscinis* by it). In Becker's use of *Dicræus*, the chief generic character is the unusually long second vein; he places the genus, I think correctly, in *Oscininæ* close to *Oscinis*.

In his treatment of the nearctic *Oscinids* (Mon., IV, 103, 1912), Becker mentions the European *Dicræus ingratus* Loew (Zeitsch. f. Ent. Breslau, XX, 26, 1866, as *Eutropha*) as occurring in Idaho and Washington, but says the specimens have a little shorter second vein than the European. However, on examining my two Idaho specimens returned by him, I find that they have the costa evidently reaching the fourth vein, so they would not go to *ingratus* in Becker's own table of the European species. The same is true of all but one of about 70 specimens that I have since accumulated. The character is possibly not of specific value, though so taken by Becker. I have not seen European material, and the case is not free from doubt; but in view of the discrepancies and the geographical separation I believe myself justified in describing ours as a distinct species. The figure of the wing shows the course of the second vein, which is the main generic character; the rest is included in the description.

***Dicræus incongruus*, n. sp.** (Fig. 20).

Shining or subshining black robust species. Frontal triangle subshining, not very distinctly bounded, ending acutely at about

the second third of the front; anterior third or more of front broadly yellow; antennæ dark yellow, third joint small, round, with darker upper edge or more; arista short, bare; face, epistoma and bucca yellow, the last with narrow shining black lower edge, the dark line continuing up nearly to the antenna, between the parafacial and central part of face; bucca from one-fourth to one-third the eye-height; palpi brown; edge of mouth black; proboscis small, blackish; eyes round, bare; back of head black. Front with four or five minute orbitals; ocellars minute, erect, convergent.

Fig. 20.—*Dicraeus incongruus*, wing of female.

Mesonotum shining black, yet with very thin, delicate pruinosity, the abundant minute hairs not arranged in rows, and no noticeable punctures. Chaetotaxy: dc. 1, hum. 1, stpl. 3, postal. 2, sc. 2 pairs nearly equal, erect. Pleuræ shining

black except upper hind part of mesopleura and the region behind and just below the wing. Halteres lemon yellow with brown stem. Scutellum concolorous with mesonotum.

Abdomen black, not very shining, with only a few hairs, which are black; the male has a polished, knob-like black genital segment, from which project forward a pair of long, stout, nearly straight black forceps, reaching almost to the hind coxæ, very characteristic.

Coxæ, trochanters, and femora black, the knees narrowly yellow; hind tibiæ black to tip, a little widened, not with "sense organ;" fore and mid tibiæ yellow to brownish, tarsi wholly yellow.

Wings distinctly milky, veins black, the fifth paler, especially its last segment; the first vein is merely a light streak in the wing, invisible except in favourable light, at its apex the costa is broken more distinctly and widely than in any other Oscinid that I know. As this wide break is shown in Becker's figure of the type species, it is probably of generic importance. Venation as figured. In order to determine the trustworthiness of the costal character, I measured with eye-piece micrometer the distance between the tips of the first and second veins, and between the second and third,

dividing the former by the latter. This I did with five specimens of each sex: the males gave 2.63; 2.70; 2.75; 2.81; and 2.20,—average 2.62;—while the females gave 2.75; 3.50; 3.50; 3.00; and 4.00,—average 3.35.

Length 1.5 to 1.7 mm.

Seventy-five specimens, both sexes: 68 from Treesbank, Man., (Criddle); 2 Moscow, Idaho, determined by Becker as *Dicræus ingratus*; 1 Potlatch, Idaho; 1 Emigration Canyon, Utah, back of Salt Lake City, about 7,000 feet; 3 Powderville, Mont., (R. R. Parker). The Potlatch specimen is dated June 20, the rest all in July.

ELACHIPTERA PLANICOLLIS, Beck.

Becker, Mon. Chlorop., IV, 114, 1912 (*Oscinella*).—Collins, Ida. (By mistake Collins, Texas).

The type is in Professor Melander's collection, and until I saw it in 1916 I failed to identify the species, having it in my collection as *Elachiptera n. sp.* It is in reality very closely allied to the abundant *Elachiptera longula*, having the same elongated shape, diagonal eye, flattened thorax and scutellum; but differing in having the arista not thickened and all the femora black. The colour as in *longula* is opaque, but inclines more to plumbeous. As far as the arisal character is concerned, there is a little variation in the thickening in both species, so I have specimens running together in this respect. Becker placed *longula* in *Melanochæta*, in which he also placed *aliena*, a species having a plain arista like that of *planicollis*; but at the same time he admitted that there was no natural line of division between *Elachiptera* and *Melanochæta*, either in the European or North American fauna.

My specimens of *planicollis* are the following: 26 from Treesbank and Aweme, Manitoba, collected by Mr. Criddle from June to September; 4 from Chatcolet, Idaho, August 15, collected by Professor Melander; and 1 from Waubamic, Ont., near Parry Sound, collected by H. A. Parish.

Oscinis criddlei, n. sp. (Fig. 21.)

• A black species with the fore and middle tibiæ and all the tarsi wholly yellow, and the third antennal joint subangulated above at apex.

Eyes hairy; frontal triangle shining black, short, ending in an acute angle about the middle of the front; rest of front opaque, blackish, the lower part sometimes indistinctly paler; antennæ black, third joint reddish on inner side, rather large and of very characteristic shape, almost angulated above apically; arista bare; epistoma and bucca varying from dark yellow to brown, the latter about one-fourth the eye-height; palpi black; proboscis small, short, dark; occiput black. Thorax and scutellum above subpollinose, gray, the black ground colour very evident, shining through; the pollen of dorsum extends down over the hind part of the mesopleura, and also behind the wing to the halter, which is yellow; rest of pleura shining black; scutellum with a pair of good-sized bristles at apex, and a much smaller pair outside and

Fig. 21.—*Oscinis criddlei*, antenna, inner side.

higher. The mesonotum has short, stout, brown hairs, rather scattered; in strong light they look pale. Abdomen black above, generally more brownish basally, with scattered pale hairs. Coxæ, femora and middle of hind tibiæ black; trochanters, tips of femora, front and middle tibiæ, all but middle of hind tibiæ, and all tarsi to their tips, yellow; claws black. Wings hyaline, veins rather pale, venation ordinary; tip of second vein at

$\frac{3}{5}$ the distance from the first to the third.

Length $1\frac{1}{2}$ mm.

Fifty-eight specimens, both sexes, all taken in July and August at Treesbank and Aweme, Manitoba, by Norman Criddle, in whose honour I name the species in appreciation of his active and continued assistance in my work on flies of this family.

***Oscinis scabra*, n. sp.**

An opaque gray, short, broad species allied to *trigramma*, but not vittate. Front almost one-half the head-width, square, the short, opaque triangle blending with the rest, lower half of front yellow, slightly prominent above antennæ, the whole surface punctured except close about ocelli, the setæ very short, hardly visible; antennæ yellow, third joint orbicular, infuscated on apical half, arista short, bare; palpi yellow, proboscis small, retracted; bucca yellow, one-third the eye-height; back of head opaque gray.

Thorax short and broad, square, flat, densely gray pollinose on black ground, with distinct, close punctures which are not arranged in rows and bear only minute hairs, giving the mesonotum a bare appearance; the lateral setæ very short but stout; scutellum a little elongated, flat, punctured and concolorous with dorsum, with only one pair of apical setæ of noticeable size; pleuræ black, gray-pollinose except in the depressions above the front and hind coxæ; postnotum shining black; halteres yellow.

Abdomen subshining black above, indistinctly paler basally, opaque black below.

Legs including coxæ opaque black, the knees vaguely, the tibiæ except a broad, median ring on middle and hind ones, and all the tarsi yellow.

Wings subhyaline, veins blackish, the costal segment before the tip of second vein less than double the one beyond it.

Length 1.3 to 1.5 mm.

Thirteen specimens, both sexes: ten from Treesbank, Manitoba, May 6, 1916, including the type, a female; two Aweme, Manitoba, Sept. 12 and Oct. 13, 1916; one Estevan, Saskatchewan, May 20, 1916. All collected by Norman Criddle.

NEW HALICTINE BEES FROM CHILE.

BY T. D. A. COCKERELL, BOULDER, COLORADO.

The Chilean bee-fauna is one of the most remarkable in the world, many of the species having a facies quite distinct from those of other parts of South America. Many species were long ago described by Spinola; others have been made known at intervals since, but there can be no doubt that very many remain to be discovered.

Agapostemon (Pseudagapostemon) xanthorhinus, sp. n.

♂.—Length about 7.5 mm.; anterior wing 5.5; bluish-green; clypeus (except two dots and narrow lateral margins), labrum and mandibles (except black basal spot and ferruginous apex) yellow; a yellow stripe across tubercles; legs bright yellow, with the coxæ, trochanters, anterior femora basally, middle and hind femora

October, 1918

1918. "New and little-known Canadian Oscinidae." *The Canadian entomologist* 50, 336–343. <https://doi.org/10.4039/Ent50336-10>.

View This Item Online: <https://www.biodiversitylibrary.org/item/22125>

DOI: <https://doi.org/10.4039/Ent50336-10>

Permalink: <https://www.biodiversitylibrary.org/partpdf/22098>

Holding Institution

MBLWHOI Library

Sponsored by

MBLWHOI 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>.