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A SYNOPSIS OF THE SYRPHIDAE OF NEBRASKA
WITH DESCRIPTIONS OF NEW SPECIES FROM
NEBRASKA AND COLORADO

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In June, 1907, Mr. Paul R. Jones published in the Journal of the New York Entomological Society "A Preliminary List of Nebraska Syrphidae with Descriptions of New Species." At that time there was available only a comparatively small collection of Syrphid flies, but apparently it contained a fairly good representation of the species found in the state. Subsequent collectors have contributed a considerable amount of new material from the state in which there are twelve additional species, two of which are new. With these additions, the Nebraska list is increased to ninety species.

At the present time the classification of the family Syrphidae seems to be undergoing a course of complete revision. Many of the old generic names that had been suppressed for a number of years have been brought into use again, and many of the genera subdivided. Such a course of revision has simplified the synoptic keys and facilitated the determination of doubtful species. It is sincerely hoped that this good work will continue to completion. The author believes that insufficient work on the group as a whole has resulted in the erection of many specific names which are probably not valid.

As a guide to the division of the family *Syrphidae* into subfamilies and genera, the writer has followed the classification recently proposed by Shannon.* This work on the family is the most recent and complete now published. Mention should also be made of Metcalf's paper on "Syrphidae of Ohio" and Williston's "Synopsis of North American Syrphidae," as these

* Bulletin Brooklyn Entomological Society, XVI, Nos. 3 and 4; XVII, No. 1, (1921-22).

works have aided materially in making identifications and in preparing the synoptic tables.

To Professors Myron H. Swenk and R. W. Dawson the writer wishes to express his gratitude for the many valuable criticisms and suggestions offered during the preparation of this paper, and also for a critical reading of the manuscript.

CHARACTERS OF THE FAMILY SYRPHIDAE

Antennae three-jointed; usually with a dorsal arista, rarely with a terminal style; third vein of the wings without an anterior branch; anal cell acute and prolonged nearly to the wing margin; either a spurious vein present between the third and fourth veins, or a subsquamal plumose filament (the plumula) present, usually both present; empodium bristle-like; hypopygium asymmetrical, an elongated mesocoxal projection present on middle coxae.

TABLE OF SUBFAMILIES OF SYRPHIDAE

1. Chitinous parts of body thickly punctate; prostigma placed on cephalic aspect of thorax, thorax being foreshortened; abdomen of both sexes consisting of four visible segments; arista as short as the width of third antennal joint; spurious vein of anal cell (elsewhere called the anal furrow) very short, not extending as far as anal lobe incision; eyes faintly pubescent. Medium sized flies *Nausigasterinae*
 Body not punctate and otherwise not as above..... 2
2. Antennae very elongate and with a terminal style; anterior cross-vein joining discal cell at or beyond the middle; usually an adventitious branch extending into first posterior cell (discal cell, Shannon) from third vein; face produced downwards, bare; plumula absent; males holoptic, with only four visible abdominal segments; females with five abdominal segments.... *Ceriodinae*
 Antennae without a terminal style, excepting in *Callicera* and *Pelecocera*, but these genera have the anterior cross-vein joining the discal cell well before the middle..... 3
3. Antennae very elongate, with a bare dorsal arista; face evenly

and gently arched, never produced forward at oral margin and entirely clothed with pile; a stigmatal cross-vein present; third vein usually (absent only in *Mixogaster*) with an adventitious and free branch projecting into the first posterior cell (discal cell, Shannon); apical cross-vein upright or recurrent; both sexes with three to four visible abdominal segments exclusive of genitalia; males dichoptic.....*Microdontinae*

Antennae not elongate and possessing dorsal arista, excepting in a few genera, which are without a stigmatal cross-vein, and the apical cross-vein is parallel with the wing margin (*Chrysotoxum* and *Sphecomyia*); or, if the apical cross-vein is upright or recurrent (*Chrysogaster*), then the mouth is produced forward

4

4. The humeral calli and region between them distinctly destitute of pile, the head being "cupped" over the anterior end of thorax, causing the pile to end abruptly behind the posterior margin of humeral region (the head may have to be removed to permit examination); antennae placed well above middle of head; arista usually a little shorter than length of antennae; abdomen of both sexes with five visible segments exclusive of genitalia; anterior cross-vein placed well before middle of discal cell

Syrphinae

Pile extending upon the humeral region, abdomen of males with only four visible segments exclusive of hypopygium, females with five

5

5. Apical cross-vein recurrent at distal end; marginal cell closed; arista with either long or very dense plumosity; face protruding downwards; wings broad; alula very broad; squamae usually very broad; thorax frequently bearing bristles..*Volucellinae*

Apical cross-vein parallel with wing margin, or, if recurrent (*Chrysogaster*, *Eumerus* and *Merodon*), the arista is bare.....

6

6. Arista long plumose for at least the greater two-thirds of its length; marginal cell open; anterior cross-vein placed near or beyond middle of discal cell; either yellow markings present on abdomen, or with dense pile more or less yellow, except *Pyritis*, which has long dense brownish pile; face protruding downwards, or swollen, or tuberculate; the right prong (or style, Metcalf), of the forceps of the genitalia is longer than the left one and tapers to a sharp point, the left prong developed as an obtuse lobe

Sericomyiinae

Arista rarely long plumose for one-half its length or more, in such cases some (certain species of *Eristalis*) may be excluded by the closed marginal cell; others (certain *Chilosia*) can be excluded by the absence of yellow body markings or yellow pile, and by having the anterior cross-vein placed well before middle of discal cell; finally, the prongs of the genitalia are similar..... 7

7. Very large yellow and black species; the post stigma very elongate, being very nearly twice as long as broad; marginal cell closed; third vein with a downward loop into first posterior cell (discal cell, Shannon); sixth vein recurrent beyond anal cell; shape of head, position of antennae and length of arista similar to the *Xylota* type, but the face is broadly covered with loose pile (*Milesia* only) *Milesinae*

Length of post stigma one and one-half times or less that of width, and otherwise without above combination of characters.... 8

8. Third longitudinal vein with a deep downward loop into first posterior cell (discal cell, Shannon); face except for a medium stripe, clothed with long pile; sixth vein entering margin of wing or short distance beyond anal cell, *i. e.*, usual distance; thorax never bearing bristles; marginal cell closed in *Eristalis* and *Meromacrus*..... *Eristalinae*

Third longitudinal vein usually straight, but in such cases where it is looped downwards (*Pterallastes* and *Teuchocnemis*) the face is bare, except for a few hairs along eye margins, and sixth vein is prolonged well forward beyond anal cell. (The bare face also excludes *Tropidia* and *Syrretta* from *Eristalinae*, while the bristles on the thorax and the brassy color excludes *Chrysochlamys* 9

9. Anterior cross-vein placed well before middle of discal cell; third vein always straight; antennae sometimes with terminal style (*Callicera* and *Pelecocera*)..... *Chilosinae*

Anterior cross-vein joining discal cell at or beyond middle; face rarely covered with pile and in such cases third vein is always straight *Xylotinae*

SYPHINAE

KEY TO THE TRIBES

1. Face black, scutellum entirely aeneous or black..... *Melanostomini*

2. Face partly or wholly yellow, scutellum yellow, partly yellow or black (certain species of *Paragus*).....*Syrphini*

MELANOSTOMINI

KEY TO THE GENERA

1. Wings shorter than abdomen; abdomen depressed, long-elliptical; front and middle tarsi elaborately developed; vertical triangle large and prominent.....*Pyrophaena*
Wings longer than the abdomen..... 2
2. Front tibiae slender in both sexes.....*Melanostoma*
Front tibiae and tarsi of male dilated; those of female slightly widened*Platychirus*

Pyrophaena Schiner

Only one Nebraska species of this genus.

Pyrophaena ocymi (Fabricius). Syst. Ent., iv, 309 (1775); Schiner, Fauna Austr., i, 297 (1862).

A ♂ from Halsey, Thomas County, June 19, 1912 (J. T. Zimmer).

Melanostoma Schiner

KEY TO THE SPECIES

1. Tubercle of face not at all prominent, indistinct; spots on abdomen quadrate (♂), oval (♀) and yellow.....*mellinum*
Tubercle of face prominent, distinct; abdomen bluish green, metallic with inverted wine glass velvety-black opaque areas on third and fourth segments, the handle of the glass reaching the anterior margin of the segment.....*concinnum*

Melanostoma melinum (Linnaeus). Syst. Nat., 10th ed., 594 (1758). 1858. *scalaris* Osten Sacken, Cat. Dipt., 121.

Two ♀♀ are represented in the University collection, and both were taken at Glen, Sioux County, on August 8 and 9, 1905, respectively.

Melanostoma concinnum Snow. Kans. Univ. Quart., iii, 229 (1895).

One ♂ taken at Monroe Canyon, Sioux County, on August 9, 1908 (L. Bruner). Prior to this the species had been recorded only from New Mexico and Colorado.

Platychirus St. Fargeau and Serville

KEY TO THE SPECIES

1. Front tibiae of the male, on the inner side toward the end, somewhat concave, the outer angle produced into a lappet-like process, yellow spots on abdomen in both sexes very large, leaving only a median stripe and cross-bands; hind femora and tibiae yellow*quadratus*

Front tibiae of the male gently and evenly convex on the inner side, the top on the outer side less produced, more angular; spots of abdomen smaller; hind legs chiefly black..... 2

2. Front femora in the male with a row of five to seven long bristly hairs; second abdominal segment with large, the fifth with small, yellow spots.....*chaetopodus*

Front femora without such bristles; second segment of the abdomen in both sexes with a small rounded spot on each side, fifth segment in the male without yellow.....*hyperboreus*

Platychirus quadratus (Say.) Jr. Acad. Nat. Sci. Phil., iii, 90 (1823); Osten Sacken, Cat. Dipt., 122 (1858).

This species has a wide distribution in the state. Thirty-one ♂♂ and thirty-four ♀♀ have been collected from the following localities: Glen, Sioux County; Mitchell, Scottsbluff County; Neligh, Antelope County; Maskell, Dixon County; Lincoln, Lancaster County, and Omaha, Douglas County, between May 9th and September 3rd.

Platychirus chaetopodus Williston. Synop. N. A. Syrph., 59 (1886); Snow, Kans. Univ. Quart., iii, 23 (1895).

Five ♂♂ and one ♀ from Lincoln, Lancaster County, and Sioux County.

Platychirus hyperboreus. (Staeger.) Groenl. Antl., 362 (1845); Willis-

ton, Synop. N. A. Syrph., 29 (1886); Snow, Kans. Univ. Quart., iii, 231 (1895).

A ♂ and ♀ from Lincoln, Lancaster County, April 20th and 25th, 1908 (C. H. Gable).

SYRPHINI

Key to the Genera

1. Abdomen elongate-slender and contracted beyond the base....*Baccha*
 Abdomen not narrowed on basal portion..... 2
2. Dorsum of thorax with yellow lateral stripes..... 3
 Dorsum of thorax without yellow lateral stripes..... 8
3. Antennae very elongate, about six times as long as broad.....
 *Chrysotoxum*
 Antennae less than three times as long as broad..... 4
4. Dorsum of thorax with a median cinereous line..... 5
 Dorsum of thorax without such line..... 6
5. Hind femora of male thickened and arcuate, tibiae arcuate and dilated at tip, hind femora of female posteriorly with blackened ring*Toxomerus*
 Hind femora and tibiae of male normal, hind tibiae of female entirely yellow, rarely (var. *boscii*) with blackened ring posteriorly *Mesogramma*
6. Eyes of male with an area of enlarged facets above; fourth segment of abdomen with two median yellow stripes and an oblique side spot*Allograpta*
 Eyes of male not with an area of enlarged facets above; fourth abdominal segment not so marked..... 7
7. Face projecting below; slender species.....*Sphaerophoria*
 Face receding below; abdomen broadly oval.....*Xanthogramma*
8. Third longitudinal vein deeply constricted into first posterior cell*Didea*
 Third longitudinal vein straight or with a gentle downward curve 9

9. Sixth abdominal segment (hypopygium) of male as long as the two preceding ones together, cylindrical; fifth segment of female one-half as long as preceding.....*Eupeodes*
 Sixth segment not peculiar; the fifth segment in the female not over one-half as long as the preceding..... 10
10. Small, robust species; abdomen without yellow stripes.....*Paragus*
 Large species; abdomen with yellow stripes..... 11
11. Front very convex, eyes of male with an area of enlarged facets above (*Lasiophthicus*, *Catabomba*).....*Scaeva*
 Front normal, eyes of male not with an area of enlarged facets above*Syrphus*

Baccha Fabricius

KEY TO THE SPECIES

1. Third joint of the antennae elongate oval, obtusely pointed; face very prominent; abdomen more spatula-like.....*clavata*
 Third joint oval, obtusely rounded; face not prominent..... 2
2. Wings almost entirely black, a triangular hyaline spot behind the outer end of the third vein, the auxillary portion more or less subhyaline*fuscipennis*
 Wings almost entirely hyaline, a quadrangular fuscous area extending across the middle of the wing from the costa to the fifth longitudinal vein*lemur*

Baccha clavata (Fabricius). Ent. Syst., iv, 298 (1775); Williston, Trans. Amer. Ent. Soc., xv, 270 (1888).

1886. *Babista* Walker, List., iii, 549 (1849); Williston, Synop. N. A. Syrph., 117.

A ♂ from Lincoln, Lancaster County, in September.

Baccha fuscipennis Say. Jr. Acad. Nat. Sci. Phil., iii, 100 (1823); Williston, Synop. N. A. Syrph., 119 (1886).

Four ♂♂ and three ♀♀ taken at Omaha, Douglas County, between August 15 and September 2, 1913 (L. T. Williams).

Baccha lemur Osten Sacken. West. Dipt., 331 (1877); Williston, Synop. N. A. Syrph., 121 (1886); Hunter, Canad. Ent., xxix, 131 (1897).

A ♂ from Monroe Canyon, Sioux County, in August (C. H. Gable).

Chrysotoxum Meigen

KEY TO THE SPECIES

1. Lateral margin of third abdominal segment yellow; second and third abdominal bands narrowly interrupted.....*laterale*
Lateral margin of third abdominal segment not entirely yellow 2
2. Anterior coxae with a yellow spot above..... 3
Anterior coxae without a yellow spot above.....*pubescens*
3. Black spot of the fifth abdominal segment wine-glass shaped *currani*
Black spot of the fifth abdominal segment andiron-shaped *cuneatum*

Chrysotoxum laterale Loew. Cent., v, 42 (1864); Williston, Synop. N. A. Syrph., 14 (1886); Townsend, Trans. Amer. Ent. Soc., xxii, 35 (1895).

Six ♂♂ from Lincoln, Lancaster County, and West Point, Cuming County, June 2nd to June 20th.

Chrysotoxum pubescens Loew. Wien. Ent. Monatsch., iv, 84 (1869); Williston, Synop. N. A. Syrph., 15 (1886); Townsend, Trans. Amer. Ent. Soc., xxii, 35 (1895); Hunter, Canad. Ent., xxviii, 91 (1896).

Two ♂♂ taken at Lincoln, June 1st.

Chrysotoxum currani n. sp.

♀. Length 13 mm. Eyes pilose. Face yellow with a rather broad, fusiform, black stripe extending from the oral margin to the base of the antennae, light pilose. Cheeks yellow, separated from the face by a brownish black stripe extending from the rim of the compound eyes to the oral margin. Front shining black, with a large yellow pollinose

spot on each side. Vertex shining black, black pilose. (Antennae missing.)

Thorax shining metallic black, with yellow lateral stripes. Dorsum with two cinerous stripes, evanescent on the posterior two-fifths. Pleura colored like the dorsum with yellow spots as follows: One above the anterior coxa, one each on the mesopleura, sternopleura, and hypopleura. Scutellum yellow, the disk black fasciolate.

Abdomen shining black, with maize yellow bands. The bands are moderately wide, arcuate and interrupted medially. Segments with apical margins banded buff-yellow, the band on the second segment slightly dilated medially, that on the third segment more strongly so and that on the fourth segment considerably dilated, the yellow of the posterior margin of the fifth segment produced into a triangular spot, so that between this spot and the broad maize yellow fasciae the black forms an inverted wine-glass shaped spot. Venter of the first segment maize yellow, second with postero-lateral spots maize yellow, third and fourth with antero-lateral and postero-lateral spots maize yellow, fifth black.

Coxae and trochanters piceous, femora maize yellow except for an apical reddish yellow band, tibiae maize yellowish, tarsi reddish yellow.

Wings smoky hyaline; base, costal and subcostal cells, proximal parts of first basal and marginal cells lutescent.

Type. Lincoln, Lancaster County, Nebraska, June 26, 1908 (C. H. Gable). One ♀. University of Nebraska collection. This species was determined as new by Mr. C. Howard Curran of the Canadian Department of Agriculture, Division of Entomology, who returned it undescribed. In recognition of Mr. Curran's courtesy and valuable contributions on the *Syrphidae*, this species has been named in his honor.

***Chrysotoxum cuneatum* n. sp.**

♀. Length 12.5 mm. Antennae black, 2 mm. in length, the lengths of the joints in the ratio of 9:12:15, numbering from the first. Face yellow with a rather broad, fusiform, black stripe, extending from the oral margin to the base of the antennae, light pilose; cheeks luteous, separated from the face by a brownish black stripe. Front shining black, with a yellow pollinose spot on each side, light pilose. Vertex black. Eyes pilose. Occiput covered with ash-gray pollen and with pale yellow pubescence.

Thorax shining bluish black, with lateral yellow stripes. Dorsum with two yellowish pollinose stripes evanescent on the posterior two-fifths. Pleura colored like the dorsum with light buff spots as follows:

One above the anterior coxa, one in front of wing, one each on the mesopleura, sternopleura, and hypopleura. Halteres reddish-yellow. Scutellum yellow, the disk black fasciolate.

Abdomen shining black with faint metallic iridescence, maize yellow banded, the fasciae moderately wide, arcuate, and interrupted medially. The fasciae on the third, fourth and fifth segments wider than the corresponding ones on *curranii*. Segments with apical margins banded buff, the bands somewhat narrowed and interrupted in the mid-lateral region on the second and third segments, the anterior margin of the band of the second segment notched at the middle, the buff-yellow posterior margin of the fifth segment produced into a triangular spot, so that between this spot and the broad maize-colored fasciae the black forms an andiron-shaped spot. The shape of this spot is very similar to that of *luteopilosa* Curran, except that the arms are slightly more sinuate. Venter with the first segment maize yellow, the second with the postero-lateral margins maize yellow, the third and fourth each with an anterior oblique spot and the postero-lateral margins maize yellow, the fifth with an anterior spot only maize yellow, the spots largest on the third segment and smallest on the fifth.

Coxae and trochanters piceous, femora auburn, tibiae maize yellowish, tarsi slightly darker, claws black apically.

Wings smoky hyaline; base, costal and subcostal-cells, proximal parts of first basal and marginal cells lutescent.

Type. West Point, Cuming County, Nebraska, June. One ♀. University of Nebraska collection. This species was determined as new by Mr. C. Howard Curran of the Canadian Department of Agriculture, Division of Entomology, who returned it undescribed.

Toxomerus Macquart

Toxomerus geminatus. (Say). Jr. Acad. Nat. Sci. Phil., iii, 92, 7; Compl. Writ., ii, 80 (1883); Williston, Proc. Amer. Phil. Soc., xx, 310 (1882).

1886. *Mesograptia geminata* Williston, Synop. N. A. Syrph., 102.

West Point, Cuming County; Lincoln, Lancaster County, and Omaha, Douglas County, between June 25th and August 20th; five ♂♂ and two ♀♀.

Mesogramma Loew

KEY TO THE SPECIES

1. Scutellum yellow, legs yellow, except the hind tarsi..... 2
 Scutellum black or brown with a yellow border; front of female
 above only a little narrowed; hind femora wholly yellow.....
 *marginata* var.
2. Front of female only a little narrowed above; third to fifth ab-
 dominal segments with narrow lateral yellow margins.....*marginata*
 Front of female much narrowed above; third to fifth abdominal
 segments with no yellow on the margins.....*polita*

Mesogramma marginata (Say). Jr. Acad. Nat. Sci. Phil., ii, 92 (1823).

1886. *Mesograptia marginata* Williston, Synop. N. A. Syrph., 100.

The University collection contains a large series of this species, fifty-four ♂♂ and sixty-one ♀♀, from the following localities: Rulo, Richardson County; Omaha, Douglas County; Lincoln, Lancaster County; Beatrice, Gage County; Fairmont, Fillmore County; York, York County; South Bend, Cass County; West Point, Cuming County; Coburn, Dakota County; Concord, Dixon County; Maskell, Dixon County; South Sioux City, Dakota County; Neligh, Antelope County; Butte, Boyd County; Carns, Keyapaha County; Glen, Sioux County; Monroe Canyon, Sioux County, and Mitchell, Scottbluff County, between May 9th and September 13th.

Mesogramma polita (Say). Jr. Acad. Nat. Sci. Phil., iii, 68 (1823); Snow.

1886, *Mesograptia polita* Williston, Synop. N. A. Syrph., 98.
 Kans. Univ. Quart., iii, 239 (1895).

Three ♂♂ and one ♀ taken at Lincoln, Lancaster County, in the month of September.

Allograptia Osten Sacken

Allograptia obliqua (Say). Jr. Acad. Nat. Sci. Phil., iii, 89 (1823); Williston, Synop. N. A. Syrph., 96 (1886).

This species has a wide distribution over the state. Twenty-seven ♂♂ and twenty-three ♀♀ have been taken at Rulo, Richardson County; Omaha, Douglas County; Meadow, Sarpy County; Weeping Water, Cass County; South Bend, Cass County; Lincoln, Lancaster County; York, York County; South Sioux City, Dakota County; Concord, Dixon County; Broken Bow, Custer County; Glen, Sioux County; Monroe Canyon, Sioux County, and Mitchell, Scottsbluff County, between May 8th and August 25th.

Sphaerophoria St. Fargeaux and Serville

KEY TO THE SPECIES

1. Lateral thoracic stripe ending at the suture; face entirely yellow; abdominal bands beyond the second segment present in the female, usually obsolete or wanting in the male; length 8 mm. *cylindrica*
- Lateral thoracic stripes continuous..... *scripta*

Sphaerophoria cylindrica (Say.) Amer. Ent., 1 (1824); Williston, Synop. N. A. Syrph., 105 (1886).

Twenty-nine ♂♂ and twelve ♀♀ collected at the following localities: Omaha, Douglas County; Bellevue, Sarpy County; South Bend, Cass County; Lincoln, Lancaster County; Fairmont, Fillmore County; South Sioux City, Dakota County; Concord, Dixon County; West Point, Cuming County; Carns, Keyapaha County; Glen, Sioux County; Monroe Canyon, Sioux County; Harrison, Sioux County, and Mitchell, Scottsbluff County, between May 9th and August 31st.

Sphaerophoria scripta (Linnaeus). Fauna Suec., ended., 449 (1746); Williston, Synop. N. A. Syrph., 107 (1886).

Three ♂♂ and two ♀♀ taken at Brock, Nemaha County, and Lincoln, Lancaster County. The ♂ from Brock and two ♀♀ from Ute Creek, Colorado, have the coxae and the base of the femora black; this is probably only geographical variation.

Xanthogramma Schiner

KEY TO THE SPECIES

1. Scutellum with basal half black.....*flavipes*
 Scutellum yellow 2
2. The yellow band on the second abdominal segment does not attain the lateral margin.....*felix*
 The yellow band on the second abdominal segment attains the lateral margin..... 3
3. Second and third abdominal segments with the extreme anterior angles yellow.....*emarginata*
 Second and third abdominal segments with the extreme anterior angles not yellow.....*aenea*

Xanthogramma flavipes (Loew). Cent., iv, 83 (1863); Williston, Synop. N. A. Syrph., 94 (1886).

Two ♂♂ taken at Omaha, Douglas County, on July 17 and August 3, 1913, and one ♀ taken on August 17, 1914, by L. T. Williams.

Xanthogramma felix Osten Sacken. Bull. Buff. Soc. Nat. Sci., iii, 67 (1875); Williston, Proc. Amer. Phil. Soc., xx, 311, (1882).

A ♂ taken at Lincoln, Lancaster County, July 9, 1909 (C. H. Gable).

Xanthogramma emarginata (Say). Jr. Acad. Nat. Sci. Phil., iii, 91 (1823); Williston, Synop. N. A. Syrph., 93 (1886).

Three ♂♂ and two ♀♀ collected at the following localities: Omaha, Douglas County; West Point, Cuming County, and Neligh, Antelope County, between June 18th and August 30th.

Xanthogramma aenea Jones. Jr. N. Y. Ent. Soc., xv, 93 (1907).

The type was a ♀ from West Point, Cuming County, Nebraska, taken in June, 1906, by P. R. Jones. A ♂ collected

at Omaha, Douglas County, August 26th, by L. T. Williams, is in the collection.

Didea Macquart

Didea fasciata var. **fuscipes** Loew. Cent., iv, 82 (1863); Osten Sacken, Cat. Dipt., 245, note 212 (1858); Williston, Synop. N. A. Syrph., 89 (1886).

One ♂ and three ♀ ♀ taken at Harrison, Sioux County; Monroe Cayon, Sioux County, and Omaha, Douglas County, between June 1st and August 15th.

Eupoedes Osten Sacken

Eupoedes volucris Osten Sacken. West. Dipt., 329 (1877); Williston, Synop. N. A. Syrph., 65 (1886); Snow, Kans. Univ. Quart., iii, 232 (1895).

This species is a very common one in the state. Specimens have been collected at Monroe Canyon, Sioux County; Harrison, Sioux County; Glen, Sioux County; Crawford, Dawes County; Mitchell, Scottsbluff County; Sidney, Cheyenne County; Loup City, Sherman County, and Lincoln, Lancaster County, between May 12th and September 1st.

Paragus Latrielle

KEY TO THE SPECIES

1. Scutellum with a yellow border; face of male without a black median stripe; front of female narrow above.....*bicolor*
 Scutellum without a yellow border; face in both sexes with a black median stripe; front in female of nearly equal width..... 2
2. Abdomen with more or less red on the dorsum..... 3
 Abdomen wholly greenish black.....*angustifrons*
3. Vertical triangle in male large.....*tibialis*
 Vertical triangle in male not unusually large.....*dimidiatus*

Paragus bicolor (Fabricius). Ent. Syst., iv, 297 (1794), Williston, Synop. N. A. Syrph., 18 (1886).

Ten ♂♂ and five ♀♀ taken at Omaha, Douglas County; Cedar Bluffs, Saunders County; Lincoln, Lancaster County; West Point, Cuming County; Carns, Keyapaha County; Halsey, Thomas County; Crawford, Dawes County; Glen, Sioux County, and Monroe Canyon, Sioux County, between April 31st and September 12th.

Paragus angustifrons Loew. Cent., iv, 64 (1863); Williston, Synop. N. A. Syrph., 17 (1886).

Two ♀♀ from Roca, Lancaster County and Omaha, Douglas County on April 29, 1905 and August 16, 1913, respectively.

Paragus tibialis (Fallen). Dipt. Suec. Syrph., 60, 5 (1814-17); Williston, Synop. N. A. Syrph., 19 (1886).

Sixteen ♂♂ and three ♀♀ collected at the following localities: Omaha, Douglas County; South Bend, Cass County; Lincoln, Lancaster County; Cedar Bluffs, Saunders County; Carns, Keyapaha County; Halsey, Thomas County; Mitchell, Scottsbluff County, and Harrison, Sioux County, between April 31st and September 1st.

Paragus dimidiatus Loew. Cent., iv, 63 (1863); Williston, Synop. N. A. Syrph., 20 (1886).

A ♂ taken at Lincoln, Lancaster County, on August 2, 1910 (F. A. Burnham).

Scaeva Fabricius

Scaeva pyrastris (Linnaeus). Syst. Nat., 10th ed., 594 (1758).

1886. *Catabomba pyrastris* Williston, Synop. N. A. Syrph., 63.

1905. *Lasiophthicus pyrastris* Aldrich, Cat. N. A. Diptera, 363.

Two ♂♂ and one ♀ taken in Sioux County, and at Lincoln, Lancaster County, in May, July and August.

Syrphus Fabricus.

KEY TO THE SPECIES

1. The three principal bands entire; the second and third ones not reaching the lateral margin, face with a brown stripe.....*americanus*
 The three principal bands interrupted..... 2
 First cross band interrupted; the others entire..... 5
2. Abdominal spots of the third and fourth segments distinctly arcuated 3
 Abdominal spots straight and transverse..... 4
3. Abdominal spots of second and third segments truncate near anterior margin; eyes pilose.....*creper*
 Abdominal spots of second and third segments rounded near anterior margin; eyes bare.....*arcuatus*
4. Fifth abdominal segment, at least, entirely red.....*snowi*
 Fifth abdominal segment not red.....*mentalis*
5. Eyes pilose, not pubescent.....*creper*
 Eyes bare 6
6. Abdominal spots of the second segment reaching the lateral margin 7
 Abdominal spots of the second segment not reaching the lateral margin 10
7. Eyes pubescent.....*torvus*
 Eyes bare 8
8. The cross-bands of the third and fourth segments reach the lateral margin*ribesii*
 The cross-bands of the third and fourth segments do not reach the lateral margin..... 9
9. Fifth abdominal segment, at least, red.....*snowi*
 Fifth abdominal segment not red.....*opinator*
10. Face with a brown stripe.....*americanus*
 Face without brown stripe.....*snowi*

Syrphus americanus Wiedemann. Auss. Zweifl. Ins., ii, 129 (1830); Osten Sacken, Proc. Bost. Soc. Nat. Hist., xvii, 145 (1875); Williston, Synop. N. A. Syrph., 82 (1886).

This species has quite a wide distribution over the state. Fourteen ♂♂ and twenty-six ♀♀ have been taken at Falls City, Richardson County; Omaha, Douglas County; Bellevue, Sarpy County; South Bend, Cass County; Lincoln, Lancaster County; South Sioux City, Dakota County; West Point, Cumming County; Neligh, Antelope County, and Monroe Canyon, Sioux County, between April 18th and August 30th.

Syrphus arcuatus (Fallen) Dipt Suec. Syrph., 42, 11 (1816); Osten Sacken, Proc. Bost. Soc. Nat. Hist., xviii, 149 (1875). 1877. *lapponicus* Osten Sacken, West Dipt., 326.

Four ♂♂ and four ♀♀ collected from Monroe Canyon, Sioux County; Glen, Sioux County; Crawford, Dawes County, and Mitchell, Scottsbluff County, between June 10th and August 20th.

Syrphus mentalis Williston. Synop. N. A. Syrph., 72 (1886); Hunter, Canad. Ent., xxix, 130 (1897).

One ♂ taken at Glen, Sioux County, on August 10, 1905.

Syrphus creper Snow. Kans. Univ. Quart., iii, 234 (1895).

One ♂ taken in May in Sioux County. The second and third abdominal crossbands are narrowly interrupted in this specimen, but in three ♂♂ from Colorado (Estes Park, Russell, Ute Creek) they are entire.

Syrphus torvus Osten Sacken. Proc. Bost. Soc. Nat. Hist., xviii, 139 (1875); Williston, Synop. N. A. Syrph., 79 (1886).

One ♀ taken at Monroe Canyon, Sioux County, August 16, 1912 (E. J. Taylor).

Syrphus ribesii (Linnaeus). Syst. Nat., 10th ed., 593 (1758); Williston, Synop. N. A. Syrph., 77 (1886).

This is an abundant species in the state. There are in the University collection eighteen ♂♂ and twenty-one ♂♂ from the following localities: Omaha, Douglas County; Child's Point, Sarpy County; Bellevue, Sarpy County; Meadow, Sarpy County; Roca, Lancaster County; Lincoln, Lancaster County; Beatrice, Gage County; Gordon, Sheridan County; Bridgeport, Morrill County; Glen, Sioux County; Harrison, Sioux County; Monroe Canyon, Sioux County, and Bad Lands, Sioux County, between April 10th and September 2nd.

Syrphus opinator Osten Sacken. West. Dipt., 327 (1877); Williston, Synop. N. A. Syrph., 83 (1886); Snow, Kans. Univ. Quart., iii, 236 (1895).

Two ♂♂ and four ♀♀ taken at Monroe Canyon, Sioux County; Glen, Sioux County, and Omaha, Douglas County, between August 7th and 20th.

Syrphus snowi Curran. (= **ruficauda** Snow).

1892. *ruficauda* Snow, Kans. Univ. Quart., i, 36.

A ♀ from Monroe Canyon, Sioux County, August 16, 1912 (E. J. Taylor).

MICRODONTINAE

Microdon Meigen

KEY TO THE SPECIES

1. Slender, elongate species; antennae short, third joint a little longer than the first two together, wings indistinctly fasciate *coarctatus*
Short, thick-set species..... 2
2. Scutellum not emarginate; large black species; first joint a trifle longer than the second and third together, third joint when viewed from the side lanceolate..... *lanceolatus*
Scutellum emarginate 3
3. Hind metatarsi extraordinarily thickened and dilated..... *fuscipennis*

Hind metatarsi not extraordinarily thickened or dilated.....*tristis*

Microdon coarctatus Loew. Cent., v, 47 (1864); Williston, Synop. N. A. Syrph., 6 (1886).

Three ♂♂ and one ♀ from Sioux County, the latter specimen collected July 1, 1911 (R. W. Dawson).

Microdon lanceolatus Adams. Kans. Univ. Sci. Bull., ii, 212 (1903).

A ♀ taken at Warbonnet Canyon, Sioux County, in 1901 (M. A. Carriker).

Microdon fuscipennis (Macquart). Hist. Nat. Dipt., i, 488 (1834); Williston, Synop. N. A. Syrph., 4 (1886).

A ♀ taken at Neligh (Antelope County, June 22, 1909 (W. Thompson).

Microdon tristis Loew. Cent., v, 45 (1864); Williston, Synop. N. A. Syrph., 6 (1886).

One ♂ and one ♀ from West Point, Cuming County, June 27, 1906 (P. R. Jones) and Halsey, Thomas County, June 1, 1906 (L Bruner).

CHILOSINAE

KEY TO THE GENERA

1. Face entirely black..... 2
 - Face more or less yellow..... 10
2. Oral opening broadly oval and without indentations; face very gently and evenly convexed, completely covered with rather long, loose pile..... 3
 - Oral opening irregular in outline, having a dorsal directed indentation at the front margin..... 6
3. Face considerably broader at the oral margin than at the antennae (if doubtful, compare *Heringia*).....*Pipiza*
 - Face but little or not at all broader at the oral margin than at

- the antennae 4
4. Arista microscopically bare; eyes often with a horizontal bare stripe *Pipizella*
- Arista microscopically pilose to the end; eyes always evenly pilose 5
5. Venter of fourth segment in the male only half as long as its dorsum; middle tibiae in female slender; third antennal joint in female elongate..... *Heringia*
- Venter of fourth segment three-fourths as long as its dorsum; middle tibiae in female rounded in front, in male produced anteriorly; trochanters in male usually with long process *Cnemodon*
6. Face and front usually with transverse wrinkles; smaller species *Chrysogaster*
- Face and front not with transverse wrinkles; larger species..... 7
7. Petiole beyond union of third and fourth longitudinal veins much longer than anterior cross-vein..... 8
- Petiole shorter..... 9
8. Eyes hairy; antennal pits separated..... *Chilosia*
- Eyes bare; antennal pits confluent..... *Cartosyrphus*
9. Scutellum unusually large, nearly quadrate; males dichoptic; face concave *Chalcomyia*
- Scutellum normal; males holoptic; face concave in the females, tuberculate in males..... *Myiolepta*
10. Epistoma produced into a long porrect snout; costal vein continued well beyond apex of wing; the usual hairs on the base of the costa reduced to minute spines..... *Rhingia*
- Epistoma not produced snout-like..... 11
11. Arista shorter than antennae; epistoma produced downwards; face in profile gently concave..... *Neoascia*
- Arista longer than antennae; epistoma produced anteriorly; face in profile deeply concave..... *Sphegina*

Cnemonodon Egger

KEY TO THE SPECIES

1. Wings purely hyaline, last section of fourth vein sinuous....*sinuosa*
 Wings cinereous or brownish hyaline, last section of fifth vein
 bent at its middle; third antennal joint black above; male with
 middle and hind coxae with processes.....*calcarata*

Cnemonodon sinuosa Curran. Proc. Cal. Acad. Sci., xi, No. 16, p. 368 (1921).

A ♀ from Glen, Sioux County, 9,000 feet, August 18, 1906 (P. R. Jones). This specimen agrees pretty closely with *sinuosa* but has been given that name tentatively only, because males are necessary for the certain determination of it.

Cnemonodon calcarata (Loew). Cent., vi, 42 (1865).

1886. *Pipiza calcarata* Williston, Synop. N. A. Syrph., 24.

One ♂ from Lincoln, Lancaster County, in April.

Pipiza Fallen

Pipiza femoralis Loew. Cent., vi, 38 (1865); Williston, Synop. N. A. Syrph., 26 (1886).

Two ♂♂ and three ♀♀ from Roca and Lincoln, both in Lancaster County, May and June.

Pipizella Rondani

Pipizella pulchella (Williston). Synop. N. A. Syrph., 29 (1886); Curran, Proc. Cal. Acad. Sci., xi, No. 16, p. 349 (1921).

A ♂ from Glen, Sioux County, August 20, 1906 (H. S. Smith). The third joint of the antenna is not as long as that of specimens from Colorado, but the last section of the fourth vein is bent near its middle.

Heringia Rondani

Heringia salax (Loew). Cent., vi, No. 39 (1865).

1886. *Pipiza pistica* Williston, Synop. N. A. Syrph., 29.

A ♀ from Monroe Canyon, Sioux County, August 9, 1908
(L. Bruner).

Chrysogaster Meigen

KEY TO THE SPECIES

1. Base and tip of tibiae, or at least first two joints of tarsus,
yellow or yellowish red; last section of fourth longitudinal vein
rectangular; antennae elongate..... 2
Legs wholly black; last section of fourth vein curved or bent..... 3
2. The last section of the fourth vein joins the third beyond the
tip of second vein, rectangular, with a stump of a vein in the
middle; second joint of antennae nearly as long as the third; eyes
with linear markings.....*nitida*
The last section of the fourth vein joins the third before the tip
of the second; eyes unicolorous.....*pictipennis*
3. Epistoma produced forwards.....*robusta*
Epistoma not produced forwards.....*nigripes*

Chrysogaster nitida Wiedemann. Auss. Zweifl. Ins., ii, 116 (1830);
Williston, Synop. N. A. Syrph., 35 (1886); Townsend, Trans.
Amer. Ent. Soc., xxii, 36 (1895).

Five ♂♂ and eight ♀♀ from Lincoln, Lancaster County;
West Point, Cuming County, and Omaha, Douglas County, be-
tween April 22nd and September 11th.

Chrysogaster pictipennis (Loew). Cent., iv, 58 (1863); Williston,
Synop. N. A. Syrph., 37 (1886); Hunter, Canad. Ent., xxix, 124
(1897).

Nine ♂♂ and six ♀♀ taken at Lincoln, Lancaster
County; Roca, Lancaster County; Ashland, Saunders County;
Cedar Bluffs, Saunders County; West Point, Cuming County;
Broken Bow, Custer County; Mitchell, Scottsbluff County,
and Glen, Sioux County, between April 30th and August 28th.

Chrysogaster robusta Shannon. Proc. Ent. Soc. Wash., xviii, 101 (1916).

A ♀ collected in the Bad Lands at the mouth of Monroe Canyon, Sioux County, May 28th, 1901 (L. Bruner).

Chrysogaster nigripes Loew. Cent., iv, 60 (1863); Williston, Synop. N. A. Syrph., 33 (1886).

A ♂ taken at Cedar Bluffs, Saunders County, in April.

Chilosia Meigen

KEY TO THE SPECIES

Face bare; pile on mesonotum short; everywhere profoundly punctured*punctulata*
 (Face hairy; pile on mesonotum long; not profoundly punctured*livida*)

Chilosia punctulata Hunter. Canad. Ent., xxix, 128 (1897).

This species is not represented in the University collection, altho it is recorded by Hunter as having been collected at West Point, Cuming County, on September 9th.

I take this opportunity to present the description of a new *Chilosa* from Colorado, as follows:

Chilosia livida n. sp.

♂. Length 9-11 mm. Eyes hairy. Face and cheeks a bright blue-green black, the ocular depression with a faint pinkish tinge, white pilose except the oral margin and tubercle, face deeply concave just below the base of the antennae where it is whitish pollinose. Front a dull blue-green black, with a longitudinal depression and covered with moderately long pale yellow pile.

Dorsum of thorax bright greenish black, covered with moderately long pale yellow pile; pleura colored like the dorsum of the thorax with long whitish pile. Scutellum bluish black.

Abdomen bluish black with a very faint greenish tinge, the first three tergites darker than those following due to a covering of short black hairs. Lateral margins of abdomen with long white pile. Venter whitish pilose.

Apices of femora and bases and apices of tibiae reddish brown.
Wings brownish on the basal portion becoming lighter apically.

Type. Ute Creek, Costilla County, Colorado, 9,000 feet, June 29, 1907 (R. W. Dawson). ♂. University of Nebraska collection.

Paratypes. Ute Creek, Costilla County, Colorado, 9,000 feet June 24, 1907 (L. Bruner). Two ♂♂ University of Nebraska collection.

Cartosyrphus Bigot

KEY TO THE SPECIES

1. Body entirely shining.....*comosa*
Body not entirely shining..... 2
2. Front nearly bare.....*laevifrons*
(Front with long black pile.....*longipilosa*)

Cartosyrphus comosa (Loew). Cent., iv, 66 (1863); Williston, Synop. N. A. Syrph., p. 44 (1886).

Two ♀♀ taken at Sioux County, and Bellevue, Sarpy County, both in May.

Cartosyrphus laevifrons (Jones). Jr. N. Y. Ent. Soc., xv, 90 (1907). 1907. *Chilosia laevifrons* Jones, Jr. N. Y. Ent. Soc., xv, 90.

The ♂ type is from Roca, Lancaster County, Nebraska, May 12th, 1906, on *Fragaria virginiana* (P. R. Jones).

I append here the description of a new *Cartosyrphus* from Colorado:

Cartosyrphus longipilosa n. sp.

♂. Length 8-9 mm. Face shining black, front and vertex black with long black pile. Antennae reddish brown, arista black and pubescent.

Thorax metallic, but feebly shining, clothed with dusky yellow and black pile. Pleura with black pile. Scutellum black with bristles on the margin. Wings hyaline with the stigma brown, the last section of the fourth vein much longer than the posterior cross-vein.

Abdomen opaque black except the anterior angles of the second segment, a triangular spot on each side of the third segment, the fourth segment and the hypopygium which are metallic. Legs black with the apices of the femora and bases of the tibiae reddish.

Type. Ute Creek, Costella County, Colorado, 9,000 feet, July 6, 1907 (L. Bruner). ♂. University of Nebraska collection.

Paratypes. Ute Creek, Costilla County, Colorado, 9,000 feet, July 6, 1907 (L. Bruner). 6 ♂♂. University of Nebraska collection.

Chalcomyia Williston

Chalcomyia aerea (Loew). Cent., x, 53 (1872); Williston, Synop. N. A. Syrph., 126 (1886).

A ♀ collected at Cedar Bluffs, Saunders County, in April.

Myiolepta Newman

KEY TO THE SPECIES

1. Abdomen black*nigra*
 Abdomen with luteous or yellow spots at the base.....*varipes*

Myiolepta nigra Loew. Cent., x, 54 (1872); Williston, Synop. N. A. Syrph., 129 (1886).

A ♀ from South Sioux City, Dakota County, July 22, 1912 (L. T. Williams).

Myiolepta varipes Loew. Cent., ix, 79 (1869); Williston, Proc. Amer. Phil. Soc., xx, 308 (1882); Synop. N. A. Syrph., 128 (1886).

Two ♂♂ from Lincoln, Lancaster County, and Fairmont, Fillmore County, on May 8, 1906 (L. Bruner) and June 16, 1915 (C. E. Mickel), respectively.

Rhingia Scopoli

Rhingia nasica Say. Jr. Acad. Nat. Sci. Phil., iii, 94 (1823); Williston, Synop. N. A. Syrph., 130 (1886).

Five ♂♂ and eleven ♀♀ taken at Lincoln and Roca, Lancaster County, and South Bend, Cass County, between April 29th and May 29th.

Neoascia Williston

Neoascia globosa (Walker). List., iii, 546 (1849); Williston, Synop. N. A. Syrph., 111 (1886).

1882. *metallica* Williston, Proc. Amer. Phil. Soc., xx, 515.

One ♀ from Bellevue, Sarpy County, May 9, 1908 (L. Bruner). This specimen is the variety *metallica* of Williston.

Sphegina Meigen

Sphegina lobata Loew. Cent., iii, 21 (1863); Williston, Synop. N. A. Syrph., 115 (1886).

A ♀ from Monroe Cayon, Sioux County, June 18, 1911 (R. W. Dawson).

SERICOMYINAE

Condidea Coquillett.

Condidea lata Coquillett. Canad. Ent., xxxix, 75 (1907).

Two ♀♀ from Jim Creek and Warbonnet Canyon, Sioux County, in June, 1901.

VOLUCELLINAE

KEY TO THE GENERA

1. Arista feathery plumose.....*Volucella*
Arista very densely pulmose, appearing like a solid mass....*Copestylum*

Volucella Geoffroy

KEY TO THE SPECIES

1. Wings cloudy only on cross-veins; larger species; in front of scutellum a yellowish, rather obscure parallelogram, emarginate anteriorly; abdomen yellow with narrow black posterior margins; face yellow.....*satur*

Wings with cloudiness other than on cross-veins; smaller species; in front of scutellum two yellowish oval spots; abdomen with three rather broad yellow bands.....*fasciata*

Volucella satur Osten Sacken. West. Dipt., 333 (1877); Williston, Synop. N. A. Syrph., 142 (1886).

Two ♂♂ and five ♀♀ collected in the western part of the state at Glen, Sioux County; Monroe Canyon, Sioux County, and Bad Lands, Sioux County, in August (12-19).

Volucella fasciata Macquart. Dipt. Exot., ii, 2, 22 (1842); Osten Sacken, West. Dipt., 334 (1877); Williston, Synop. N. A. Syrph., 145 (1886).

Eight ♂♂ and ten ♀♀ collected from the following localities: Warbonnet Canyon, Sioux County; Monroe Canyon, Sioux County; Glen, Sioux County; Imperial, Chase County; Haigler, Dundy County; Hitchcock County; Curtis, Frontier County; Gordon, Sheridan County; Mouth of Gordon Creek, Sheridan County; Halsey, Thomas County; Springview, Keyapaha County, and Lincoln, Lancaster County, between April 18th and September 30th.

Copestylum Macquart

Copestylum marginatum (Say). Jr. Acad. Nat. Sci. Phil., vi, 167 (1829); Williston, Synop. N. A. Syrph., 151 (1886).

Three ♂♂ and two ♀♀ taken at Crawford, Dawes County; Haigler, Dundy County, and Halsey, Thomas County, between May 25th and August 12th.

ERISTALINAE

KEY TO THE GENERA

1. Marginal cell closed.....*Eristalis*
 Marginal cell open..... 2
2. No stigmal cross-vein; epaulet at base of costa broad and clothed with mostly yellowish hairs; squamae broad, bordered

by dense, straight (*H. similis*, *latifrons*) or branched (*H. conostomus*, *laetus*, *chrysostomus*, *integer*) cilia.....*Helophilus*

Stigmatical cross-vein present..... 3

3. Less pilose; eyes of male broadly separated; in the male hind coxae, hind femora, and tip of hind tibiae provided with spurs or protuberances; abdomen of male narrowed posteriorly (*Triodontia*)*Polydontomyia*

More pilose; eyes of male contiguous; in the male hind coxae, hind femora, and tip of hind tibiae not provided with spurs or protuberances; abdomen of male not narrowed posteriorly....*Mallota*

Eristalis Latreille

KEY TO THE SPECIES

1. Eyes bare with small round dark spots; dorsum of thorax in female distinctly vittate; abdomen without light markings.....*aeneus*
Eyes pilose..... 2
2. Thorax with transverse bands; front in female narrowed above *transversus*
Thorax without such bands..... 3
3. Mesonotum with four opaque black stripes, the median pair in the shape of a tuning fork.....*furcatus*
Mesonotum not so marked..... 4
4. Third segment of abdomen wholly shining, without opaque spots or bands (opaque spots in ♂ *latifrons*, opaque bands in ♂ *nitidus*) 5
Third abdominal segment with opaque markings..... 7
5. Pile of eyes not confined to a vertical stripe; the black of second abdominal segment, at least in part, opaque (except ♀ *latifrons*) 11
Pile of eyes mostly confined to a vertical stripe; the abdomen wholly shining; large species..... 6
6. Honey-bee like in appearance; moderately pilose; base of tibiae yellowish, posterior tarsi blackish; arista nearly bare.....*tenax*

Humble-bee like in appearance; thorax and abdomen with thick, long pile (on the dorsum of thorax sometimes blackish pilose (var. *melanostomus*); arista plumose; hind tarsi red.....*flavipes*

7. Third abdominal segment with a posterior, velvety black cross-band not interrupted in the middle..... 8

Third segment with three opaque spots; an elongated one on each side behind, and an oval median one in front; the opaque of second segment with a triangular shining spot behind; fourth segment with an oval opaque spot in front.....*dimidiatus*

8. Third segment of the abdomen broadly and conspicuously yellow on the sides (not so in ♀), joining the yellow of the second segment, the black of the second segment wholly opaque, not extending outwards on the sides behind; third segment with an opaque spot in front; fourth segment metallic, usually with a small opaque spot in front.....*meigenii*

The third segment not conspicuously yellow on the sides; the posterior opaque fascia of the second segment behind reaching toward the lateral margin (*meigenii* ♀)..... 9

9. Male with anterior velvety-black cross-band not interrupted in the middle on the third and fourth segments; female with no velvety black cross-bands on third and fourth segments.....*nitidus*

Male with only an anterior opaque spot on the third and fourth segments (not sure of *inornatus* ♂); female with or without anterior opaque spot on the third and fourth segments..... 10

10. Lighter markings of abdomen usually quite distinct; third and fourth segments with a small elongate, opaque black spot in front*temporalis*

Lighter markings obsolete, third and fourth segments without opaque anterior spot.....*inornatus*

11. Second, third and fourth segments of abdomen broadly reddish on sides, leaving a narrow black stripe, which is wholly opaque on the segment, and in front, at least, on the third segment; eyes narrowly separated (♂).....*montanus*

Second segment of abdomen only yellow on sides, with a posterior, interrupted or subinterrupted velvety cross-band; posterior margin of segments 2-4 yellowish white with a fringe of pale golden yellow hairs.....*latifrons*

Eristalis aeneus (Fabricius). Ent. Syst., iv, 302 (1772-94); Williston, Synop. N. A. Syrph., 161 (1886).

Thirty-two ♂♂ and twenty-six ♀♀ collected in the eastern part of the state at the following places: Lincoln, Lancaster County; West Point, Cuming County, and Omaha, Douglas County, between April 10th and November 1st.

Eristalis transversus Wiedemann. Auss. Zweifl. Ins., ii, 188 (1828); Williston, Synop. N. A. Syrph., 170 (1886).

Three ♂♂ and five ♀♀ taken at Brock, Nemaha County; South Bend, Cass County, and Lincoln, Lancaster County, in May and July.

Eristalis furcatus Wiedemann. Auss. Zweifl. Ins., ii, 176 (1828); Williston, Trans. Amer. Ent. Soc., xv, 279 (1888).

A ♀ is at hand labeled "Lincoln, Lancaster County, June." Heretofore at least, to the knowledge of the writer, this species has never been collected farther north than Brownsville, Texas, and in no great numbers north of Central America. I am unable to account for its occurrence in this state. With only one specimen in the collection there is a chance of it having been wrongly labeled.

Eristalis tenax (Linnaeus). Syst. Nat., 10th ed., 591 (1758); Osten Sacken, Ent. Mo. Mag., xxiii, 97 (1883); Williston, Synop. N. A. Syrph., 160 (1886).

Twelve ♂♂ and twenty ♀♀ taken at Monroe Canyon, Sioux County; Glen, Sioux County; Gordon, Sheridan County; West Point, Cuming County; Coburn, Dakota County; Lincoln, Lancaster County; Malcolm, Lancaster County; Louisville, Cass County, and Omaha, Douglas County, between June 3rd and November 14th.

Eristalis flavipes Walker. List., iii, 633 (1849); Williston, Synop. N. A. Syrph., 168 (1886); Hunter, Canad. Ent., xxviii, 99 (1896).

Five ♂♂ and seven ♀♀ taken at Omaha, Douglas County;

Lincoln, Lancaster County; Roca, Lancaster County, and Scottsbluff County, between March 31st and October 11th.

Eristalis dimidiatus Wiedemann. Auss. Zweifl. Ins., ii, 180 (1828); Williston, Synop. N. A. Syrph., 162 (1886).

Fourteen ♂♂ and three ♀♀ from Omaha, Douglas County; Lincoln, Lancaster County; Roca, Lancaster County; Fremont, Dodge County; South Bend, Cass County; Concord, Dixon County, and West Point, Cuming County, between March 31st and July 13th.

Eristalis meigenii Wiedemann. Auss. Zweifl. Ins., ii, 177 (1828).

1877. *androclus* Osten Sacken, West. Dipt., 337.

1886. *brousi* Williston, Synop. N. A. Syrph., 165.

Five ♂♂ taken at Omaha, Douglas County, and Mitchell, Scottsbluff County, between June 17th and August 22nd.

Eristalis temporalis Thomson. Eugen. Resa., 490 (1868).

1865. *hirtus* Loew, Cent., vi, 66, Osten Sacken, West. Dipt., 335 (1877); Williston, Synop. N. A. Syrph., 162 (1886).

Three ♂♂ and eight ♀♀ taken at Warbonnet Canyon, Sioux County; Mouth of Monroe Canyon, Sioux County; Harrison, Sioux County; Glen, Sioux County; Mitchell, Scottsbluff County, and Omaha, Douglas County, between May 29th and August 20th.

Eristalis inornatus Loew. Cent., vi, 68 (1865); Williston, Synop. N. A. Syrph., 175 (1886).

A ♀ taken in the Bad Lands, mouth of Monroe Canyon, Sioux County, May 28, 1911 (L. Bruner).

Eristalis montanus Williston. Proc. Amer. Phil. Soc., xx, 322 (1882); Synop. N. A. Syrph., 166 (1886); Hunter, Canad. Ent., xxviii, 98 (1896).

One ♀ and two ♂♂ taken at Lincoln, Lancaster County, April 6, 1918 (L. Bruner) and in Sioux County.

Eristalis latifrons Loew. Cent., vi, 65 (1865); Williston, Synop. N. A. Syrph., 164 (1886).

1877. *stipator* Osten Sacken, West. Dipt., 336.

Fifty-eight ♂♂ and ninety-nine ♀♀ taken at the following localities: Monroe Canyon, Sioux County; Glen, Sioux County; Mitchell, Scottsbluff County; Bridgeport, Morrill County; Haigler, Dundy County; Hitchcock County; McCook, Redwillow County; Curtis, Frontier County; Halsey, Thomas County; Gordon, Sheridan County; Carns, Keyapaha County; Concord, Dixon County; Maskell, Dixon County; Coburn, Dakota County; West Point, Cuming County; Lincoln, Lancaster County; South Bend, Cass County; Louisville, Cass County; Fairmont, Filmore County; Omaha, Douglas County, and Rulo, Richardson County, between May and October.

The description of a new *Eristalis* from Colorado is here appended:

Eristalis nitidus n. sp.

♀. Length 10-12.5 mm. Face shining black covered with a dense white pollen except the tubercle and nearly all the front. Front wide with white and black pile, the white pile being just above the base of the antennae. Occiput with long pale hairs. Eyes dark pilose. Antennal pits yellowish. First and second joints of antennae black, the third brownish-black and nearly quadrate.

Thorax bluish-black, little shining, densely covered with moderately long pale yellowish pile. Pleura bluish-black, clothed in long whitish pile. Scutellum with a reddish yellow cast and clothed with pale yellowish pile.

Abdomen shining bluish-black with the posterior margin of each segment, except the first, reddish yellow. First segment covered with white pollen, clothed with white pile, the remaining segments with black pile on the dorsum and white pile on the margins.

Femora except the apices, basal half of all the tibiae, and the tarsus except the first two joints of the middle and hind pairs, blackish, the remaining portion of the legs yellowish.

Wings hyaline except a brown spot at the base and another across the center of the wing.

♂. Length 10-11 mm. Similar to the female. The second segment of the abdomen has a triangular yellow spot on each side, the third segment has an anterior and posterior uninterrupted opaque band, and

the fourth segment has an anterior opaque band. The lighter hairs of the body are yellowish. The brown spots on the wings are distinctly marked. The yellow of the legs is less extended, especially on the tibiae.

This species was determined by Jones* as *saxorum*. It may be distinguished from *saxorum* by the broader front and the absence of velvety-black cross-bands on the abdomen in the female, the absence of a velvety cross-band on the posterior margin of the fourth segment in the male, and the less distinctly shining steel blue color of the entire body.

Type. Pike's Peak, Colorado, July 20, 1906 (L. Bruner).
♀. University of Nebraska collection.

Allotype. Pike's Peak, Colorado, July 20, 1906 (L. Bruner). ♂. University of Nebraska collection.

Paratypes. Pike's Peak, Colorado, July 20, 1906 (L. Bruner). 4 ♀ ♀, 3 ♂ ♂. University of Nebraska collection.

Helophilus Meigen

KEY TO THE SPECIES

1. Face jutting forward into a cone.....*conostomus*
Face not conically produced forwards..... 2
2. Sixth longitudinal vein distinctly sinuous..... 3
Sixth longitudinal vein nearly straight or only gently curved.... 4
3. Front of female black pilose; front of male narrowed above....*similis*
Front of female black pilose only near the ocelli; front of male broad*latifrons*
4. Abdomen elongate, cylindrical in the male..... 5
Abdomen oval; face yellow..... 6
5. Hind coxae of the male with a stout process below.....*chrysostomus*
(Hind coxae of the male not with a stout process
.....*distinctus* Willst).
6. Luteous fasciae of the abdomen broad, the first narrowly interrupted, the remainder entire.....*integer*
Fascia on the third segment narrowly interrupted.....*laetus*

*Ent. News, xviii, p. 241.

Helophilus conostomus Williston. Synop. N. A. Syrph., 193 (1886).

Two ♀ ♀ taken at South Sioux City, Dakota County, and West Point, Cuming County, in June and July.

Helophilus similis Macquart. Dipt. Exot., ii, 2, 64 (1842); Williston, Synop. N. A. Syrph., 189 (1886).

Five ♂ ♂ and six ♀ ♀ collected at Lincoln, Lancaster County; Cedar Bluffs, Saunders County, and Hardy, Nuckolls County, in April and August.

Helophilus latifrons Loew. Cent., iv, 73 (1863); Williston, Synop. N. A. Syrph., 188 (1886); Hunter, Canad. Ent., xxix, 138 (1897).

Thirty-six ♂ ♂ and thirty-nine ♀ ♀ taken at Omaha, Douglas County; Louisville, Cass County; South Bend, Cass County; Wabash, Cass County; Lincoln, Lancaster County; Cedar Bluffs, Saunders County; Ashland, Saunders County; Hardy, Nuckolls County; West Point, Cuming County; Neligh, Antelope County; Niobrara, Knox County; Concord, Dixon County; Carns, Keyapaha County; Halsey, Thomas County; Valentine, Cherry County; Haigler, Dundy County; Bridgeport, Morrill County; Mitchell, Scottsbluff County; Gering, Scottsbluff County; Gordon, Sheridan County; Crawford, Dawson County; Glen, Sioux County, and Bad Lands, mouth of Monroe Canyon, Sioux County, between May 8th and October 6th.

Helophilus chrysostomus (Wiedemann). Auss. Zweifl. Ins., ii, 174 (1828); Williston, Synop. N. A. Syrph., 190 (1886).

Five ♂ ♂ taken at Lincoln, Lancaster County, and Mitchell, Scottsbluff County in July and September.

Helophilus integer Loew. Cent., iv, 76 (1863); Williston, Synop. N. A. Syrph., 195 (1886); Hunter, Canad. Ent., xxiv, 139 (1897).

Two ♂ ♂ and twelve ♀ ♀ taken at Omaha, Douglas County; Lincoln, Lancaster County; West Point, Cuming County, and Mitchell, Scottsbluff County, between June 13th and August 12th.

Helophilus laetus Loew. Cent., iv, 77 (1863); Williston, Synop. N. A. Syrph., 189 (1886); Hunter, Canad. Ent., xxix, 139 (1897).
1895. *aureopilis* Townsend, Trans. Amer. Ent. Soc., xxii, 51.

Five ♂♂ and one ♀ from Omaha, Douglas County; Lincoln, Lancaster County; Sandhills, and Mitchell, Scottsbluff County, June 13th to September 10th.

Polydontomyia Williston

Polydontomyia curvipes (Wiedemann). Auss. Zweifl. Ins., ii, 149 (1828).

1886. *Triodonta curvipes* Williston, Synop. N. A. Syrph., 206.

1877. *Polydonta curvipes* Osten Sacken, West. Dipt., 338.

Three ♂♂ and six ♀♀ taken at Lincoln, Lancaster County; Haigler, Dundy County, and Mitchell, Scottsbluff County between June 23rd and August 24th.

Mallota Meigen

KEY TO THE SPECIES

1. Eyes pilose; more or less of the base of the abdomen with yellow pile.....*posticata*
Eyes bare..... 2
2. Eyes contiguous in the male; abdomen almost wholly black pilose; hind tibiae of the male with a stout spur in the middle (form *bautias*) or wholly without such spur.....*cimbiciformis*
Eyes separated in the male..... 3
3. Larger species; black facial stripe broad; abdomen black with yellow hair on the base and apex; legs mostly blackish in color*fascialis*
Smaller species; black facial stripe narrow; abdomen black clothed with light colored pile; legs mostly reddish.....*illinoisensis*

Mallota posticata (Fabricius). Syst. Antl., 237 (1805); Williston, Synop. N. A. Syrph., 201 (1886).

Three ♂♂ and three ♀♀ taken at Rulo, Richardson

County; Omaha, Douglas County, and Nebraska City, Otoe County, from July 2nd to September 14th.

Mallota cimbiciformis (Fallen). Syrphici., 27; Williston, Synop. N. A. Syrph., 202 (1886); Hunter, Canad. Ent., xxviii, 99 (1896).

A ♀ collected at Milford, Seward County, in June.

Mallota fascialis Hunter. Canad. Ent., xxviii, 100 (1896).

Six ♂♂ and six ♀♀ taken at Warbonnet Canyon, Sioux County; Bad Lands, mouth of Monroe Canyon, Sioux County; Pine Ridge, Dawes County, and Lincoln, Lancaster County, between June 8th and July 8th, including the type specimen of the species.

Mallota illinoisensis Robertson. Canad. Ent., xxxiii, 284 (1901).

A ♂ from West Point, Cuming County, June 22nd (P. R. Jones).

Milesinae

***Milesia* Latreille**

Milesia virginiensis (Drury). Illust. Exot. Ent., App., 11 (1770-82). 1886. *ornata* Williston, Synop. N. A. Syrph., 255.

A ♂ and three ♀♀ taken at Rulo, Richardson County; Omaha, Douglas County; Meadow, Sarpy County, and Lincoln, Lancaster County, from June 27th to July 31st.

Xylotinae

KEY TO THE GENERA

1. Thorax with distinct yellow markings besides those on humeri and a single spot on the pleurae. "Wasp flies"..... 7
 Thorax without distinct yellow markings of the ground color except (certain species of *Cynorrhina* and *Somula*) rarely on the humeri and a single spot on the pleurae..... 2
2. Apical cross-vein sinuate, forming a sprawling "W"; anal furrow less than one-third the length of anal cell; all basal cells desti-

tute of the usual clothing of villi, causing the wings to have a glassy appearance; hind femora a little shorter than two and one-half times their width, and are held in longitudinal groove-like impressions of the abdomen during flight; chitinous parts of sternites only one-third the entire width of the abdomen; head subhemispherical, the eyes composing the greater part of the head; face subcarinate.....*Syritta*

Without the above conglomeration of characters..... 3

3. Hind femora with an apical saw-tooth prominence; face subcarinate to carinate.....*Tropidia*

Hind femora without a saw-tooth prominence; face not carinate 4

4. Third vein with a downward loop into first posterior cell; mesonotum ochraceous, very densely pollinose above.....*Pterallastes*

Third vein straight or with a very gentle downward curve..... 5

5. Epistoma abruptly truncate, face in profile deeply and evenly concave; first posterior cell closed, petiolate.....*Xylota*

Epistoma produced either well forward or protruding downward 6

6. Antennae inserted on prominence slightly higher than vertex of head; lateral margins of abdomen yellow.....*Somula*

Antennae inserted below vertex of head; lateral margins of abdomen not entirely yellow.....*Cynorrhina*

7. Antennae inserted near middle of head; face not longer than front*Temnostoma*

Antennae long or short and inserted above middle of head on a conical process; face much produced downwards; sixth vein entering wing margin shortly beyond anal cell.....*Sphecomyia*

Antennae inserted above middle of head; face not produced downwards; sixth vein prolonged obliquely outward from anal cell; hind femora with conical, tooth-like projection below near distal end.....*Spilomyia*

Syritta St. Fargeau and Serville

Syritta pipiens (Linnaeus). Syst. Nat., 10th ed., 594 (1758); Williston, Synop. N. A. Syrph., 240 (1886).

Seventy ♂♂ and eighty-four ♀♀ taken at Rulo, Richardson County; Omaha, Douglas County; Child's Point, Sarpy County; Louisville, Cass County; South Bend, Cass County; Beatrice, Gage County; Lincoln, Lancaster County; Cedar Bluffs, Saunders County; Fairmont, Fillmore County; Concord, Dixon County; Curtis, Frontier County; Mitchell, Scottsbluff County; Glen, Sioux County; Harrison, Sioux County, and Monroe Canyon, between April 25th and September 27th.

Tropidia Meigen

KEY TO THE SPECIES

1. Femora black, at the tip testaceous; the hind femora below, near the base, with a strong mammiform process (♂).....*mammillata*
 Front and middle femora yellow on distal end; hind femora without such process near the base.....*quadrata*

Tropidia mammillata Loew. Cent., i, 68 (1861); Williston, Synop. N. A. Syrph., 208 (1886); Hunter, Canad. Ent., xxix, 144 (1897).

Three ♂♂ and one ♀ taken at Cedar Bluffs, Saunders County, in April.

Tropidia quadrata (Say). Amer. Ent., 1, (1824); Williston, Synop. N. A. Syrph., 207 (1886).

Twenty-five ♂♂ and seven ♀♀ taken at Lincoln, Lancaster County; Hickman, Lancaster County; West Point, Cuming County, and Mitchell, Scottsbluff County, between May 1st and September 16th.

Pterallastes Loew

Pterallastes thoracicus Loew. Cent., iv, 80 (1863); Williston, Synop. N. A. Syrph., 198 (1886).

Two ♂♂ taken at Omaha, Douglas County, July 22, 1913 (L. T. Williams) and Fairmont, Fillmore County, June 16, 1915 (C. E. Mickel).

Xylota Meigen

KEY TO THE SPECIES

1. Legs wholly black; hind femora much thickened..... 2
 Legs not wholly black..... 3
2. Wholly black; wings black.....*chalybea*
 Abdomen chiefly red; the second segment with a basal black
 triangle; wings nearly hyaline.....*pigra*
3. Second and third abdominal segments (at least) red..... 4
 Second and third segments wholly black, or with yellow spots.... 5
4. Abdomen wholly red except the first segment; hind coxae of the
 male without a tooth below.....*bicolor*
 Abdomen except the first segment not wholly red; hind coxae
 of male with a spur below.....*flavitibia*
5. Abdomen long and slender, with two yellow spots on the second
 segment*angustiventris*
 Abdomen not unusually slender..... 6
6. Abdomen with two pairs of yellow spots..... 8
 Abdomen wholly black..... 7
7. Arista luteous at base.....*anthreas*
 Arista wholly black.....*obscura*
8. Hind femora much thickened, small species; arista yellow at the
 base*fraudulosa*
 Hind femora moderately thickened..... 9
9. Fourth abdominal segment brilliant bronze; third longitudinal
 vein gently curved.....*nalis*
 Fourth abdominal segment black; third vein quite straight *ejuncida*

Xylota chalybea Wiedemann. Auss. Zweifl. Ins., ii, 98 (1828); Williston, Synop. N. A. Syrph., 233 (1886); Townsend, Trans. Amer. Ent. Soc., xxii, 53 (1895).

A ♂ taken at Omaha, Douglas County, June 11, 1913 (L. L. Williams).

Xylota pigra (Fabricius). Ent. Syst., iv, 295 (1772); Williston, Synop. N. A. Syrph., 227 (1886).

Six ♂♂ and four ♀♀ taken at Monroe Canyon and Warbonnet Canyon, Sioux County, from June 19th to August 24th.

Xylota bicolor Loew. Cent., v, 39 (1864); Williston, Synop. N. A. Syrph., 229 (1886).

A ♀ collected at Glen, Sioux County, July 12, 1910 (L. Bruner).

Xylota flavitibia Bigot. Annales, 546 (1884); Williston, Synop. N. A. Syrph., 228 (1886); Hunter, Canad. Ent., xxviii, 101 (1896).

Seven ♂♂ taken at Monroe Canyon, Sioux County; Bad Lands, mouth of Monroe Canyon, Sioux County; Warbonnet Canyon, Sioux County, and Glen, Sioux County, from May 28th to July 18th.

Xylota angustiventris Loew. Cent., vi, 58 (1865); Williston, Synop. N. A. Syrph., 231 (1886).
1886. *elongata* Williston, Synop. N. A. Syrph., 234.

Two ♂♂ have been taken at West Point, Cuming County, and Warbonnet Canyon, Sioux County, in June.

Xylota anthreas Walker. List., iii, 556 (1849); Williston, Synop. N. A. Syrph., 235 (1886).

A ♀ taken at Milford, Seward County.

Xylota obscura Loew. Cent., vi, 55 (1865); Williston, Synop. N. A. Syrph., 233 (1886).

A ♀ taken at Warbonnet Canyon in Sioux County.

Xylota fraudulosa Loew. Cent., v, 41 (1864); Williston, Synop. N. A. Syrph., 230 (1886); Hunter, Canad. Ent., xxviii, 101 (1896).

Five ♂♂ and two ♀♀ have been taken at Omaha, Douglas County; Milford, Seward County, and West Point, Cuming County, between June 21st and August 17th.

Xylota analis Williston. Synop. N. A. Syrph., 226 (1886); Hunter, Canad. Ent., xxviii, 100 (1896).

A ♂ from Warbonnet Canyon, Sioux County.

Xylota ejuncida Say. Amer. Ent., 1, (1824); Williston, Synop. N. A. Syrph., 229 (1886); Hunter, Canad. Ent., xxix, 143 (1897).

One ♂ and three ♀ ♀ from Monroe Canyon, Sioux County; Sowbelly Canyon, Sioux County, and West Point, Cuming County, taken from June 21st to August 20th.

Somula Macquart

Somula decora Macquart. Dipt. Exot., Suppl., iii, 57 (1847).
1886. *Criorhina decora* Williston, Synop. N. A. Syrph., 216.

A ♂ and ♀ taken at Dunbar, Otoe County, respectively on May 5 and 6, 1905 (M. H. Swenk).

Cynorrhina Williston

Cynorrhina umbratilis (Williston). Synop. N. A. Syrph., 212 (1886).

A ♀ taken at South Bend, Cass County, May 17, 1905 (P. R. Jones).

Temnostoma St. Fargeau and Serville.

Temnostoma bombylans (Fabricius). Syst. Antl., 189 (1895); Williston, Synop. N. A. Syrph., 250 (1886).

A ♀ taken at Neligh, Antelope County, June 22, 1909 (W. Thompson).

Sphecomyia Latreille

Sphecomyia vittata (Wiedemann). Auss. Zweifl. Ins., ii, 87 (1828); Williston, Synop. N. A. Syrph., 257 (1886); Hunter, Canad. Ent., xxviii, 101 (1896).

Two ♂ ♂ and two ♀ ♀ collected at Lincoln, Lancaster

County; South Bend, Cass County, and Sioux County, all in May.

Spilomyia Meigen

KEY TO THE SPECIES

1. Second joint of antennae much longer than first; second segment of abdomen with a broad arcuate yellow band, the third and fourth with a slender median interrupted one.....*quadrifasciata*
 Second joint of antennae not much longer than the first, third with an entire yellow band.....*longicornis*

Spilomyia quadrifasciata (Say). Long's Exped., App., 377 (1824); Williston, Synop. N. A. Syrph., 248 (1886); Hunter, Canad. Ent., xxviii, 101 (1896).

Five ♂♂ and seventeen ♀♀ have been collected at the following localities: Omaha, Douglas County; Lincoln, Lancaster County; Hardy, Nuckolls County; Mouth of Gordon Creek, Sheridan County; Glen, Sioux County, and Monroe Canyon, between August 14th and September 22nd.

Spilomyia longicornis Loew. Cent., x, 49 (1872); Williston, Synop. N. A. Syrph., 245 (1886); Townsend, Trans. Amer. Ent. Soc., xxii, 54 (1895).

A ♂ taken at Omaha, Douglas County, September 8, 1913 (L. T. Williams).

Cerioides

Cerioides Rondani

KEY TO THE SPECIES

1. Antennal process of front not more than half as long as the first joint of antennae, almost wholly wanting, first joint of antennae very slender, nearly as long as the two following together; face vertical, not at all excavated in profile; second segment of the abdomen much constricted, third and fourth segments each with two arcuate spots.....*willistoni*

2. Antennal process slender, longer than first joint of antennae;
second segment of abdomen not constricted.....*abbreviata*

Cerioides willistoni (Kahl). Kans. Univ. Quart., vi, 141 (1897).

1853. *Ceria signifera* Loew, Neue Beitr., i, 18; Williston, Synop.
N. A. Syrph., 262 (1886).

Three ♀ ♀ collected at Lincoln, Lancaster County, in March
and May.

Cerioides abbreviata (Loew). Cent. v, 48 (1865).

1886. *Ceria abbreviata* Williston, Synop. N. A. Syrph., 261.

Two ♂ ♂ and one ♂ collected at Lincoln, Lancaster County,
and Bridgeport, Morrill County, from May 17th to July 11th.