# BULLETIN

— OF THE —

## British Columbia Entomological Society

EDITED BY R. V. HARVEY, M. A.

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#### OBITUARY.

We have to record with the deepest regret the loss which our branch has sustained by the death in December last of Mr. Clermont Livingstone, of Duncans, an entomologist whose work was well-known and appreciated before ever our Society came into existence. We desire to extend our hearty sympathy to his family.

### PROSPECTS AND PLANS FOR 1908.

The Hon. Secretary of the branch wishes to notify the members and his friends elsewhere that his address in future is The Queen's School, 1157 Belcher Street, Victoria, B. C.

Professor Raymond Osburn of the Columbia University, New York, has prepared a supplementary list of the Syrphidae of British Columbia. It is to Professor Osburn that we owe our knowledge of this interesting family of Diptera, in which our province is so rich. In 1904 he published in the Canadian Entomologist a list of 78 species of Syrphidae from B. C., and to this his forthcoming paper will add another fifty names. Six of these will be new species; two Syrphus, two Sphecomyia, an Arctophila and a Xanthogramma. He also intends to read a paper on the Syrphidae of British Columbia at an important entomological meeting.

lumbia at an important entomological meeting.

Professor Herbert Smith, of New York, has in hand a collection of British Columbian Ichneumonidae, among which he expects to find some interesting forms. We hope that some of our collectors will take up the study of the Hymenoptera systematically this season, for it has too long been neglected, and other orders are making a much better showing in our lists.

#### THE SYRPHIDAE OF BRITISH COLUMBIA.

#### By Professor R. C. Osburn, Columbia University, New York.

The following is a list of all the species known to British Columbia, together with the localities in which each species has been taken, and the seasonal distribution as far as known. In the case of most of the species such a record is merely an expression of our ignorance in regard to the distribution, but it will at least serve as a point of attack for future workers, and especially for the local entomologists of British Columbia, for whom this report is intended. It is hoped that many of the gaps in our knowledge of the distribution of this family of flies may be filled in ere long by careful and systematic collecting.

The fauna of British Columbia is very rich in this group, which is easily distinguished from all other Diptera by the presence of the so-called "bastard" or false vein. This is a thickening of the membrane of the wing simulating a vein, and running lengthwise between the third and fourth veins of the wing; it is usually well marked and easily recognized.

Most of the species of this family are bright-colored and many of them cross-banded or otherwise marked with yellow or metallic; they are to be found around flowers or resting on leaves in the sunshine. Some of them are fine examples of protective mimicry and are easily mistaken for bees of various sorts. In size they range from nearly an inch in length to less than one-fifth of an inch; some are smooth and others are densely hairy, but all agree in the character of the venation mentioned.

#### List of British Columbian Syrphidae.

Microdon tristic Loew-Kaslo, June 5.

form cothurnatus Big—Victoria (?)

viridis Towns-Ainsworth, Vancouver, June 11 to July --

memoratus Big-Vernon, Aug. 14.

Chrysotoxum derivatum Walk—Glacier, Cheam, July 20 to Aug. 10. ypsilon Will—Kaslo, June 5.

Paragus bicolor Fabr.—Vernon, Victoria (?), April 27 to July 13. tibialis Fall—Agassiz, Similkameen, July 18 to 21.

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Pipiza pisticoides Will-Kaslo, June 12 to July 30.
     nigripilosa Will-Vancouver, June 21.
     quadrimaculata Panz-Vancouver, July 2.
Chilosia lasiophthalma Will—Vancouver, Wellington, April 1 to 30. chalybescens Will—Grouse Mountain, July 1.
     occidentalis Will-Hope Mountains, Vancouver, June 22 to July 24.
     hoodiana Big-Similkameen, July 20.
     willistoni Snow-Port Renfrew, Bear Lake, Glacier, July 5 to 20.
     alaskensis Hunter-Port Renfrew, Vancouver, Glacier, May 8 to July 20.
    pallipes Loew—Glacier, Similkameen, Goldstream, July 19 to Aug. 20. tristis Loew—Port Renfrew, Goldstream, Vancouver, Similkameen, Field, Kaslo,
          June 10 to Sept. 24.
     pulchripes Loew-Field, July 19.
     plutonia Hunt-Port Renfrew, July 5.
     nigripennis Will-Port Renfrew, Vancouver, May 27 to July 29.
     plumosa Coq-Glacier, Aug. 20.
     cyanea Hunter-Port Renfrew, July 5.
     sp-Hope Mountains and Similkameen, July 20.
     sp—Field, July 18.
Melanostoma mellinum Linn-Renfrew, Victoria, Agassiz, Kaslo, Vernon, Ainsworth,
    Wellington, April 15 to Aug. 19.

angustatum Will—Renfrew, Victoria, Vancouver, Grouse Mt., Wellington, Agassiz,
Hope Mts., Glacier and Field, Apr. 10 to Aug. 16.

stegnum Say—Vernon, Vancouver, April 22 to May 1.
     caerulescens Will—Kaslo, July 2.
     trichopus Thomson-Vancouver, Hope, July 7 to 14.
Pyrophaena ocymi Fabr.—Port Renfrew, July 6.
Platychirus quadratus Say—Vancouver, June 2.
    hyperboreus Staeg—Vancouver, Vernon, Kaslo, Wellington, April 15 to Aug. 15. chaetopodus Will—Victoria, July 7.
     peltatus Meig—Glacier, Mt. Cheam, Vernon, Vancouver, May 9 to Aug. 18. tenebrosus Coq—Port Renfrew, July 5 to Aug. 16.
     albimanus Fabr.-Port Renfrew, Bear Lake, Field, June 29 to July 18.
Leucozona lucorum Linn-Mt. Cheam, Aug. 5.
Scaeva (Catabomba) pyrastri Linn-Renfrew, Vancouver, Kaslo, Bear Lake, Glacier,
          Goldstream, April 7 to Aug. 20.
Eupeodes volucris O. S .- Victoria, Goldstream, Vancouver, Kaslo, Agassiz, May 6 to
         July 20.
Syrphus arcuatus Fall-Renfrew, Victoria, Wellington, Cheam, Kaslo, Field, April 15
          to Aug. 18.
     amalopis O. S.—Victoria (?), Kaslo, June 15. intrudens O. S.—Renfrew, Victoria, Vancouver, Hope, Cheam, April 30 to Aug. 9.
     contumax O. S.—Grouse Mt., Bear Lake, S. Fork Creek, Kaslo, July 19 to Aug. 29. mentalis Will—Renfrew, Vancouver, Wellington, Glacier, March 9 to July 20.
     disjectus Will-Vancouver, Hope Mountains, July 18 to 20.
    velutinus Will—Mount Cheam, Aug. 9.
pauxillus Will—Victoria (?), Vancouver, Grouse Mt., April 15 to July 19.
umbellatarum Schiner—Victoria, Glacier, Hope Mts., July 19 to Aug. 18.
glacialis Johnson—Vancouver, Mission, Hope Mts., March 9 to July 19.
    macularis Zett—Port Renfrew, Victoria, June 22 to July 20. conjunctus Osburn—Hope, July 14. geniculatus Macq—Vancouver, Grouse Mt., June 16 to July 3.
     insolitus Osburn-Vancouver, April 13.
     quinquelimbatus Big—Mt. Cheam, Aug. 6. diversipes Macq—Renfrew, Vancouver, Mt. Cheam, June 29 to Sept. 10.
     protritus O. S.-Glacier, Vancouver, Mt. Cheam, May 4 to Aug. 5.
     ribesii Linn-Port Renfrew, Vancouver, Mt. Cheam, Kaslo, Bear Lake, Glacier,
          April 30 to Aug. 20.
     torvus O. S .- Glacier Vancouver, Wellington, Kaslo, Mt. Cheam, Crown Mt., April
          2 to Sept. 10.
     grossularae Meig (lesueurii) Macq-Victoria, Vancouver, Kaslo, Hope Mts., July
          14 to Aug. 25.
     americanus Wied-Renfrew, Vancouver, Cheam, Wellington, Kaslo, April 10 to
          Aug. 18.
     opinator O. S.—Port Renfrew, Victoria, Vancouver, Kaslo, Wellington, Field, April
          28 to Oct. 22.
     genualis Will-Glacier, Kaslo, June 4 to Aug. 20.
     sp—Glacier, Aug. 20.
Didea laxa O. S.—Victoria, Vancouver, Hope Mts., Cheam, April 24 to Aug. 14.
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Xanthogramma divisa Will—Vernon, Aug. 14.
tenuis Osburn—Hope Mountains, July 27.

Toxomerus (Mesogramma) geminata Say-Renfrew, Goldstream, Victoria, Vancouver, May 6 to Aug. 17.

Mesogramma marginata Say-Port Renfrew, Kaslo, July 7 to Aug. 16. boscii Macq-Kaslo, June 11.

Sphaerophoria cylindrica Say—Renfrew, Vancouver, Victoria, Vernon, Agassiz, Hope, Field, Glacier, April 28 to Aug. 16.
micrura O. S.—Port Renfrew, Vancouver, May 7 to Aug. 17.

sulphuripes Thom—Glacier, Kaslo, Ainsworth, June 4 to Aug. 7. melanosa Will—Vancouver, May 30.

Sphegina infuscata Loew-Port Renfrew, Kaslo, Wellington, Vancouver, March 24 to Aug. 23.

lobata Loew-Renfrew, Vancouver, Glacier, June 23 to Aug. 20.

Baccha obscuricornis Loew-Port Renfrew, Vancouver, May 4 to July 6.

Myiolepta bella Will-Port Renfrew, June 30.

Hammerschmidtia ferruginea Fall-Kaslo, June 14 and 15.

Brachyopa notata O. S.—Vancouver, April 13 to 28.

Volucella evecta, form facialis Will-Vancouver, April 23 to May 30.

Sericomyia chalcopyga Loew—Renfrew, Vancouver, Wellington, Kaslo, April 12 to Oct. 3.

Pyritis montigena Hunter-Victoria, Vancouver, Vernon, Feb. 25 to May 2. kincadii Coq-Vancouver, Vernon, Feb. 14 to May 12.

Arctophila flagrans O. S.—Renfrew, Kaslo, Bear Lake, Glacier, July 29 to Aug. 20. harveyi Osburn—Mt. Cheam, Hope, July 12 to Aug. 11.

Eristalis tenax Linn-Abundant everywhere the whole season.

latifrons Loew—Victoria, July 17. montanus Will—Vernon, September.

occidentalis Will-Renfrew, Victoria, Vancouver, Kaslo, April 13 to Aug. 16.

meigenii Wied-Vernon, Aug. 15 to Sept. 9.

flavipes Walk—New Westminster, Vancouver, May 12 to 19.

obscurus Loew—Renfrew, Vancouver, Agassiz, July 18 to Aug. 10. temporalis Thom (hiritus Loew)—Vancouver, Vernon, Kaslo, Cheam, June 17 to Aug. 31.

Helophilus latifrons Loew—Vernon, Aug. 15. similis Macq—Kaslo, Vernon, June 3 to Aug. 15.

conostomus Will-Vernon, Aug. 12.

porcus Walk—Kaslo. pilosus Hunter—

bilinearis Will-Port Renfrew, July 16.

Pterallastes perfidiosus Hunt-

Tridonta curvipes Wied-Victoria, Vernon, July 20 to Aug. 30.

Merodon equestris Fabr.—Vancouver, Victoria, May 6 to June 8.

Syritta pipiens Linn—Renfrew, Victoria, Vancouver, Agassiz, Vernon, Shawnigan, Glacier, April 28 to Aug. 24.

Xylota fraudulosa Loew—Renfrew, Hope, Kaslo, June 15 to July 15. barbata Loew—Renfrew, Hope, Kaslo, Vancouver, Glacier, June 1 to Aug. 21. marginalis Will-Duncans, April 19.

Ferdinandea croesus O. S.-Victoria, June 8.

Brachypalpus pulcher Will-Renfrew, Goldstream, Vancouver, Cheam, Hope Mts., April 28 to Sept. 10. sorosis Will—Kaslo, June 12.

parvus Will—Quamichan Lake, Kaslo.

Pocota grandis Will-Vancouver, Mt. Cheam, Aug. 7 to Oct. 3.

Crioprora alopex O. S.-Victoria, Vancouver, March 24 to April 16. femorata Will-Wellington, April 15.

Criorhina kincaidii Coq—Vancouver, Kaslo, Wellington, March 25 to July 12. tricolor Coq—Vancouver, Grouse Mt., Cheam, April 30 to Aug. 11.

nigripes Will-Vancouver, Mission, Kaslo, Wellington, Feb. 25 to May 4.

coquilletti Will—Kaslo, April 30. armillata O. S.—Vancouver, Kaslo, Bear Lake, April 13 to July 21.

scitula Will-Renfrew, Vancouver, Similkameen, Cheam, Bear Lake, Crown Mtn., June 1 to Aug. 10. nigra Will—Kaslo, May 29.

Temnostoma aequalis Loew-Kaslo, June 11 to July 17.

alternans Loew-Kaslo, July 23.

Sphecomyia brevicornis O. S.-Kaslo, May 6 to 26.

occidentalis Osburn-Glacier, Vancouver, Grouse Mt., Mission, April 13 to Aug. 21. nasica Osburn-Hope Mts., July 27.

#### SOME OF OUR NOCTUIDAE.

By R. V. Harvey.

No. 2-Autographa-continued from last issue.

- ampla Walker. Much larger than the last, which it somewhat resembles, and 12. even more uniform grey in color. Median space below the Y-mark rich brown, well-defined, and extending to the inner margin. Generally distributed and common.
- corrusca Strecker. A very beautiful species. Ground color a delicate brownish pink, suffused and mottled with olive-green. Outer line much indented, shaded interiorly with olive-green. Y-mark distinct, not silvered, broken; upper part heavily lobed; median space below deep olive-green.
  Vancouver Island and Mission.
- speciosa Ottolengui. Described from B. C. Some of our specimens going under this name may be A. omicron Afz. 14 Vancouver Island.
- diasema Boisduval. Much like ampla on a smaller scale, but the hind wings are yellow, showing an affinity with the next genus, Syngrapha. Glacier.
- falcigera Kby, var. simplex Grote. A smallish species with pointed wings. General design like ampla, but there is a decided tinge of pink in the ground 16 color; the median space is red-brown, and the Y-mark is very conspicuous, silvery unbroken and oblique.

Recorded only from Vernon as yet, but it is very common in the East.

## OUR LIBRARY.

The Society is indebted to Mr. E. Baynes-Reed of Victoria for the following important additions to our entomological papers and reports.

#### OFFICIAL REPORTS

Bulletin of the New York State Museum; 3 numbers, 1893, '97, '98. Report of the New York State Entomologist on injurious insects, 5 vols.: 1891 to 1897.

Reports of Agricultural Experiment Stations:

University of California; 1 vol., 1893.

State of Connecticut; 3 vols., 1901, '04, '05. State of New Jersey; 9 vols., 1896 to 1905.

#### SPECIAL ECONOMIC REPORTS.

Insects injurious to Cotton Plant; 11 papers.

Insects injurious to Shade Trees; 8 papers. Insects injurious to Fruit Trees; 4 papers.

Insects injurious to the Cacao (Manila); 1 paper. Insects injurious to the Grape Vine; 2 papers.

The Perodical Cicada; 3 papers.

The Hessian Fly; 1 paper.

Gypsy and Browntail Moths; 3 papers.

San Jose Scale; 2 papers. Chinch Bug; 2 papers.

Grasshoppers; 2 papers. Miscellaneous; 13 papers.

## CLASSIFIED MONOGRAPHS.

Lepidoptera; Butterflies, 1 paper; Noctuidae, 3 papers; Tineidae, 3 papers; Cochlidiidae 1; general 3, including Dr. Dyar's paper on Kootenay. Arachnida, 3 papers; Acarina 1; Chilopoda 3; Myriapoda-Diplopoda 8; Lithobiidae 1.

Thysanoptera, 1 paper; Odonata 6; Mallophaga 1.
Orthoptera; Acridiidae, 4 papers; Mantidae 1; Phasmidae 1; general 1.
Hemiptera Homoptera; Aleurodidae, 2 papers; Coccidae 2; Fulgoridae 1.
Neuroptera; Sialididae, 1 paper.

Mecoptera; Bittacus, 1 paper. Diptera; Tabanidae, 1 paper, Tachinidae 1; general 5.

Siphonaptera, 1 paper.

Plecoptera, 1 paper.

Coleoptera; Chrysomelidae, 1 paper; Scolytidae 1; general 5. Hymenoptera; Chalcididae, 2 papers; Ichneumonidae 1; Galls 1; general 1.

NOTE—Two papers by members of this society are unavoidably held over to the next issue.