

MR. CUNNINGHAM—How is the Carbolic Emulsion made?

MR. WILSON—One pound of soft or hard soap in a gallon of water to which is added one pint of crude carbolic acid. This is boiled together for a few minutes and held as stock solution. When required for use this mixture is diluted at the rate of one part to twenty and poured around the plants. Weekly applications increase the percentage of good results.

MR. CUNNINGHAM—Does the liquid not harm the plants?

MR. WILSON—The liquid does no harm to the plants and for that matter can be poured over the plants themselves. I have seen plants dipped right into the mixture before planting.

REPORT FROM VICTORIA DISTRICT.

Nineteen hundred and twelve from a collector's standpoint was without doubt the most disappointing season for many years past. This was due to frequent cold and wet weather which prevailed throughout the spring and summer months, therefore making systematic collecting an impossibility; furthermore, in the field it was most discouraging, for at times nothing could be seen, save an occasional *rapae*, *antiopa*, *grapta*, or some other common insect unworthy of note; however, during the year in spite of weather conditions I succeeded in securing a number of good captures.

The Tent Caterpillar, as usual, did considerable damage to the apple trees. It is gratifying to state that over 60% of a large number of Tent Caterpillars examined, were infested with ova of the small ichneumon fly; this fact alone will greatly reduce the numbers next season.

The disappearance of "*Neophasia menapia*," the Pine White Butterfly, was most noticeable in the outskirts of Victoria, for in places on previous years, where thousands occurred, hardly a single specimen could be seen. During the months of September and October this insect usually occurs in numbers about Metchosin and Goldstream districts amongst the valleys of the conifers.

Therina (Ellopia) somnaria, Hulst., commonly known as the Oak Tree Pest, did no great damage as in previous years, for the only spot I noticed any devastation whatsoever was on three or four scrub oaks near Cadborra Bay.

LIST OF CAPTURES.

Pontia occidentalis (Reak) May 29th, one male, Goldstream.

Oenigmas gigas (Butler) July 7th, Mount Finlayson, near Goldstream. While collecting birds and eggs for the Provincial Museum I found this fine insect fairly common near the top of the ridge of the western slope.

I saw at least thirty of these beauties, and managed to capture two specimens without the use of a net.

Lepisesia ulalume (Strk.) May 19th, Saanich, (one female).

Lepisesia clarkiae (Bdv.) June 22, Victoria.

Samia rubra, (Behr.) July 6th and 11th, Victoria.

Telea polyphemus, several taken at light, June and July, Victoria.

Pseudohazis eglanterina, (Bdv.) (Sheep Moth), Goldstream.
June 2nd.

Apantesis ornata (Pack.) var, *Achaia* (G. & R.), May 28th,
June 7th.

Apatela perdita (Grote), May 24th.

Hadena claudens (Walker) May and June.

Hadena cinefacta (Grote) May 20th.

Hadena cerviana (Smith) June 4th and 8th.

Polia epichysis (Grote) May 17th.

Feralia columbiana (Smith) May 2nd.

Rhynchagrotis costata (Grote) June 19th, 27th, 28th.

Noctua inopinatus (Smith) Aug. 3rd, 6th.

Noctua plebia (Smith) August 4th, 7th, 11th, 18th, 19th, Sept. 1st.

Paragrotis vetusta (Walker) July 29th.

Xylomiges pulchella (Smith) May 14th, 18th.

Xylina holocinerea (Smith) May 5th, 8th.

Eucharveya carbonaria (Harbey) May 23rd.

Xanthia pulchella (Guenne) May 26th.

Autographa ampla June and July.

Catocala aholibah (Strk.) August 7th, two taken at sugar.

Gluphisia danbyi (Neum.) April 16th, one male.

Bombycia improvisa (Hy. Edw.) October 6th, on fence.

Hepialus hyperboreus (M.) Ghost Moth, June 4th, Goldstream.

Erebus odora (Linn.) one specimen of male, Victoria, October 8th. This is the second specimen I have taken in Victoria. It is a straggler, belonging to Florida and Central America.

In addition to the above captures I have gathered considerable *Coleoptera*, *Neuroptera*, *Diptera*, *Hymenoptera*, and other orders. Possibly there are some good species amongst them, and if so, will report them at the next meeting.

ERNEST M. ANDERSON,
Provincial Museum,
Victoria.

MR. BUSH—*Erebus odora* has been taken all along the Canadian boundary line.

MR. BLACKMORE—I can concur with Mr. Anderson in the matter of the apparent disappearance of *Neophasia menapia*. I never took one during the past summer.

MR. WILSON—And I can remember a few years ago how the dead bodies of this moth covered the waters of Esquimalt harbour they were so numerous.

MR. CHAIRMAN—I will now ask Mr. Brittain to read Mr. Venables' report on the Okanagan District.

REPORT FROM OKANAGAN DISTRICT.

During the past summer there has been a freedom from any important insect pest in the Vernon District. The summer was fairly moist and heavy crops were for the most part the rule.

H. textor, the Fall Web Worm, was more abundant than for many years. It is always present to a greater or lesser extent upon its natural food plant, the choke cherry, which is occasionally entirely defoliated by the larvae. Burning out the webs with a torch is the most simple method of extermination.

The Cherry Slug was not very numerous during 1912 and the second brood appeared very late in the season and larvae were found feeding after several sharp frosts had occurred. The larvae of this Saw Fly also feeds upon the wild thorn and are to be commonly seen upon this tree during the summer.

The Apple Aphis (*A mali*) appeared in some numbers during July and spraying had to be done in the young orchards where the new growth was in many cases covered with a mass of insects. The Black Leaf 40 Mixture was used with great success in fighting this insect as well as other species of plant lice.

Some of their natural enemies were present in large numbers. A species of *Chrysopa* the Lace Wing Fly, being numerous with their eggs, each one of which is laid at the extremity of a fine thread of silk about half an inch in length often in clusters of twenty or thirty together, resembling somewhat a cluster of delicate moss sporangiophores. They were remarked by several persons engaged in orchard work.

The *Coccinellidae* were not so abundant as in other years when Aphids were common, *Hippodamia 5 signata* being most numerous. Besides this species *Hippodamia convergens* and *Coccinella transversogutta* were noted as doing good work. I have in my collection 14 species of this family of useful insects.