

*The Balsam Injury in Quebec and its Control.*—By J. M. Swaine. Vol. 6, No. 3, March, 1919.

This paper describes a serious condition of the Balsam Fir in the Province of Quebec, originating in an outbreak of the Spruce Budworm a few years ago, as a result of which the trees were killed over hundreds of square miles, and those not killed outright have subsequently fallen victims to other insect and fungus enemies. These are the Ground Rot (*Polyporus schweinitzii*), the Sap Rot, the Eastern Balsam Bark-beetle and the Eastern Balsam Weevil. The future of the balsam in the affected regions is not considered to be bright. Suggestions for improving the situation are dealt with under three headings: (1) Utilize the threatened balsam; (2) Burn the slash, and (3) Increase the percentage of spruce in the stand.

*The Poplar Borer.* — By R. N. Chrystal. Vol. 6, No. 4, April, 1919. This paper is the outcome of observations by the author on a case of serious damage to cottonwood on a ranch near Cowley, Alberta. It contains an historical account of the depredator (*Saperda calcarata*), descriptions of the larva and adult, and of their life-history and work. Remedial measures are suggested for dealing with outbreaks of the beetle on a large scale and for treating individual trees.

*The Greenhouse Leaf-tyer (Phlyctenia ferrugalis Hbn.).*—By Arthur Gibson. Vol. 6, No. 7, July, 1919. This is another European insect, known in Canada since 1899, and now widely distributed in the East. The caterpillars attack a wide range of greenhouse plants, particularly soft-leaved species. The life-history, injuries, enemies and methods of control are described.

*An Infestation of Apple Sucker, Psyllia malis, Schmidb., in Nova Scotia.*—By W. H. Brittain. Vol 6, No. 7, 1919.

This is a new and very undesirable immigrant from Europe, which appeared in a severe outbreak at Wolfville, N.S. Full descriptions and figures of the adult and fifth nymphal instar are given. The injury is similar to that of the Pear Psylla, the really serious damage being caused by the nymphs only. At the season of its discovery the outbreak was too advanced to permit of saving the crop, but preliminary tests with a liquid spray (nicotine sulphate, one pint to 100 gallons of water, applied as a heavy drenching spray by means of a "Friend" gun) gave excellent results. Other tests were made with various contact dusts, but were less effective.

FROM THE OTTAWA NATURALIST:—

*The Genus Vespa in Canada. Key to the species.* By F. W. L. Sladen. Vol. XXXII, No. 4, Oct. 1918, pp. 71-72. Four new species are accorded, *V. norvegicoides*, *albida*, *acadica* and *atropilosa*

*Insect Galls and Gall Insects.* By E. P. Felt, Albany, N.Y. Vol. XXXII. No. 7, Jan., 1919, pp. 127-131. A popular account of this subject, describing some of the structural and adaptive features of insect galls, the relations between gall insects and their plant hosts, the alternation of generations in the Cynipids and gall aphids, the apparent mimicry of some galls, occurrence of inquiline, etc. It is illustrated by two plates, showing characteristic forms of insect galls.

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(To be continued.)

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