

CENTRAL EXPERIMENTAL FARM ; REPORT OF THE ENTOMOLOGIST  
AND BOTANIST, 1898. (James Fletcher, LL. D., F.R.S.C.)

This very interesting and valuable contribution to the Annual Report on Experimental Farms, includes pages 167 to 219, of that publication, and is illustrated by 25 figures. It furnishes a very comprehensive review of the more important insect enemies of the past year, and contains also Mr. Fixter's report on the Apiary. The insects are dealt with under the heading of the several crops chiefly injured by them, and the various chapters contain many original observations on the species discussed. The absence of Dr. Fletcher during two months of the summer, while enabling him to do valuable work by lecturing at so many farmers' meetings in Manitoba, the Northwest Territories and British Columbia, must necessarily have lessened his opportunities for completing some of his investigations.

CEREALS.—The worst pests of the grain crops were the Midge, Hessian Fly, Wheat-stem Maggot, American Frit-fly, Grain Aphis, Joint-worms (*Isosoma*) and Cut-worms. In Southern Manitoba there was considerable damage caused by the Rocky Mountain Locust. Several districts were visited by Dr. Fletcher, who recommends ploughing under the eggs, and also the use of poisoned bran, which has been found so useful in destroying cut-worms. VEGETABLES and ROOT CROPS seemed to have suffered less than in previous years, but the Black Army-worm was destructive in some districts, and cut-worms, as usual, occasioned a considerable damage. Among other pests are the Pea Moth, Pea and Bean Weevils, Carrot Rust-fly, Turnip Aphis, Root Maggots, White Grubs and Wire-worms.

FRUITS.—This important crop was in general a good one, and was not especially injured by insects. Many of the fruits, including plums and peaches, were attacked, however, by various blights and other fungous diseases. The most noticeable insects were the Apple Fruit-miner and the Plum-Moth (or Lesser Apple-worm) in British Columbia, and the Tent Caterpillars generally. The Plum Curculio and the Green Fruit-worms (*Xylina*) and Apple Aphis caused considerable loss in some sections. One of the most interesting appearances was that of a hitherto rare beetle (*Xylocrus Agassizii*, Lec.) in Victoria, infesting the roots of