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THE FRUIT-TREE LEAF-ROLLER (TORTRIX ARGYROSPILA).

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It is only during the last five or six years that the Fruit-tree Leaf-roller has been known as a dangerous pest in apple, pear or plum orchards in Ontario. It has evidently, however, been present in the province for many years, for otherwise the writer would not have been able the second year of the outbreak to find it here and there in small numbers in almost every fruit-growing district of the province.

Up to the present time only three bad outbreaks have been discovered, and these all occurred almost simultaneously about six years ago. One of these was in a ten-acre orchard in the county of Northumberland, another in a larger orchard in the county of Wentworth, and the other in a still larger orchard in the county of Norfolk. The history of the insect in each of these three orchards may prove of interest and possibly of some value.

The first two years in all three orchards much damage was done, and the owners estimated that from 20% to 60% of the fruit was ruined. In the third year the insect began to decrease in number in both the Northumberland and Wentworth orchards, and has now almost disappeared from them. In the Norfolk orchard there was also a decrease in the third year and comparatively little injury since until this year, when a large portion of the orchard is once more severely attacked. All surrounding orchards in each of these localities have remained practically free from the pest. This shows clearly its remarkable tendency to localize itself and remain almost exclusively in its chosen abode.

The owners of the respective orchards endeavored on the writer's suggestion to control the insect by very heavy applications of arsenate of lead just before the blossoms opened and again immediately after they fell. After the second season it was seen that arsenicals would not control it, and following the experience