

culturist, Prof. Waugh. The purpose of one experiment was to demonstrate the necessity of cross-fertilization in the pollination of apples. Clusters of buds were covered with paper sacks, which were not removed until the blooms had fallen. Out of 2,586 blossoms covered all failed to set fruit except three. Prof. Waugh regards this as conclusive proof that a blossom must be fertilized with the pollen from a blossom of another variety before it will bear fruit.

But were there not other things to prevent the covered blossoms from setting fruit besides lack of pollen from another variety? Doubtless the partial exclusion of light, heat and air by the paper bags had something to do with it. Possibly more blossoms would have been fertilized had the pollen from other trees of the same variety been permitted to touch them. No two trees are exactly alike and cross-fertilization between two trees of the same variety may produce better results than where a single tree is compelled to fertilize itself, as where the blossoms are covered with paper sacks.

These suggestions are offered as affording a possible explanation of the result of the experiment. Prof. Waugh would have us believe that the experiment proves that self-fertilization is practically impossible with apple trees and therefore it is unsafe to plant large blocks of one variety. The fact that

large blocks of one variety are planted and bear heavy crops of fruit proves that this is a wrong conclusion. However we believe it is better to mix varieties, though not absolutely necessary.

Another experiment was made for the purpose of ascertaining to what extent pollen is carried from one tree to another by the wind. Small slips of glass such as are used in microscopes were coated with vaseline and lampback and placed near the plum trees during the blooming season and left in position twenty-four hours. One slip was placed north of the tree, the wind being in the north, and did not catch any pollen. Of course not. How could the wind carry pollen against itself? Another slip was placed east of one tree and west of another and did not catch any pollen. Wind should not be expected to carry pollen at right angles to its course. Another slip was placed south of a tree in line with the wind and another in the midst of several trees. One slip caught seven pollen grains and pollen masses and the other twenty-five. This certainly proves that the wind is an important carrier and distributor of pollen: yet Prof. Waugh says that it proves that the wind is very inefficient and plays no consequential part in the pollination of fruits.—O. H. Barnhill in *20th Century Farmer*.

COMING EVENTS.

Entomological Society of Ontario at London, November 13 and 14; secretary, W. E. Saunders, London.

Ontario Fruit Growers' Association at Cobourg, December 4 to 6; secretary, L. Woolverton, Grimsby.

Ontario Agricultural and Experimental Union, at Guelph, December 9 and 10; secretary, C. A. Zavitz, Guelph.

Ontario Provincial Winter Fair, at Guelph, December 10 to 13; secretary, A. P. Westervelt, Toronto.

Western Ontario Poultry Show at Guelph, December 10 to 13; secretary, A. P. Westervelt.

Eastern Ontario Dairy Association at Whitby, January 8 to 10; secretary, R. G. Murphy, Elgin.

Western Ontario Association (place not fixed), January 14 and 15; secretary, George Hatley, Brantford.

Eastern Ontario Poultry Show, Ottawa, Feb. 12; secretary, A. P. Westervelt, Toronto.

Eastern Ontario Auction Sale of Pure-bred Stock at Ottawa, February 12th; secretary, A. P. Westervelt.

Maritime Winter Fair at Amherst, N.S., Dec. 17 to 19; secretary, W. W. Hubbard, Halifax, N.S.

Ontario Beekeepers' Association at Woodstock, December 3 to 5; secretary, W. Couse, Streetsville.