

Observations on Potato Blight

Potato blight is uncommonly prevalent throughout Ontario this season. The tops of the early varieties have been dead for some little time, and the early crop is exceptionally light. Prices for early potatoes in recent weeks have been very high, as high as \$2 a bush, being paid in many places. The tops of the later varieties are also blighted and will not stay green and retain their structure long enough to develop a fair to average crop of tubers. This partial failure of the potato crop may well be termed as something like the short of a calamity, and it is so much the worse in view of the fact that so far as the blight is concerned it could have been prevented.

During the first week in August one of the editors of Farm and Dairy spent several days in Durham, Northumberland and Ontario counties, and while there observed many patches of potatoes the yield from which will be greatly reduced by the destructive blight. While at Port Hope, our representative observed on the experimental plots in connection with the local branch of the Ontario Department of Agriculture, what has long been known and has been talked about in the columns of Farm and Dairy, that blight can be prevented. The illustrations on this page speak better than words of the possibilities of preventing blight by spraying with the Bordeaux mixture.

The Bordeaux mixture for potato blight is wholly a preventative measure. After the blight once gets well started in the vines it is impossible to check its ravages. It must be prevented from the outset, and this may be done by periodical sprayings with Bordeaux mixture at intervals of about ten days during the season of rapid growth of the potato tops. The object of the spraying is to coat the leaves with the copper sulphate (blue stone) contained in the mixture, and thereby prevent the spores of the blight growing on the leaves and causing the destruction of the tops.

The largest illustration on this page showing the potatoes not affected by the blight does not do the subject justice. The luxuriant growth

made by the potatoes on the plots sprayed with the Bordeaux-Paris Green mixture was remarkable in contrast with other potatoes to be seen in the district. Of late the experimental plots have attracted the attention of all who have seen them. If the tops remain green for another month they will add remarkably to the yield of potatoes over and above those now blighted and which because of the blight will not make further growth.

It would appear that many have learned their lesson this year about potatoes. "Another year," said Mr. Robinson, who is connected with the local Department, and who was showing our representative over the plots, "we reckon that there will be a good many pounds of bluestone go out of this town to be used on the potatoes grown in this district. One farmer only yesterday who saw the plots, remarked: 'If we could only keep our potato tops green, as these are, it would be a great thing for us farmers.'"



Potatoes Not Affected by Blight—There's a Reason Why

The three illustrations on this page are all of the same variety of potatoes, Empire State, planted at the same time on the experimental plots at Port Hope, Ont. The plot here shown as it was photographed by an editor of Farm and Dairy on August 5, was not affected in the least by the blight. It had been sprayed with Bordeaux-Paris Green mixture.

Jottings from Farmers

Every time a cow switches her tail to knock off flies she uses some energy which would otherwise go to milk production. Moral: Spray the cows.—Henry Glendinning, Ontario Co., Ont.

Alfalfa is one of the best crops the farmer can grow, but he can only grow it after years of work, and I would not advise any farmer to undertake to grow a very large amount of alfalfa until he has learned how to grow it on a little field. Start on a nicely cultivated, well drained part of the farm, and grow half an acre, and then gradually spread out until it is all over the farm. We grow it as a regular crop at Ottawa. It is our best hay crop, but it was hard to get it started.—Prof. J. H. Grisdale, Dominion Agriculturist.

Many farmers are possessed with the idea that the suckers or earless stalks, which grow from an ear-bearing stalk of corn, are a hindrance to the best growth of the latter, and valuable hours are sometimes spent in removing them. But, according to Wallace's Farmer, actual experiments during two successive years, on Nebraska farms, demonstrated that corn with the suckers left undisturbed out yielded that from which the suckers had been removed. Their leaves like the others, would seem to perform a useful office in absorbing nutritive elements from the atmosphere, for the benefit of the ear on the main stalk.—C. R. Barnes, Extension Division, Minnesota.

Facts About Alfalfa Seed Production

One reason frequently advanced why more alfalfa is not grown is that the seed is expensive to purchase. Alfalfa seed can be grown by the farmer himself in many parts of Ontario. In order to determine the extent of the alfalfa seed production in Ontario and the success of those who had tried it, Prof. C. A. Zavitz of the O.A.C. has corresponded with many growers in Ontario and gathered much information on the subject.

Replies were received from 81 farmers who have grown alfalfa seed on their own farms from one year to 15, 20, and even 30 years. The 43 farmers who reported that they had grown seed for five years or more reside in seven counties in the south-western part of Ontario, and more than half of them are located in the counties of Haldimand and Lambton. The counties of Welland, Brant, and Lincoln are also well represented, and the counties of Kent and Wentworth are included in the list. The 38 farmers who reported as having grown alfalfa seed for less than five years reside in the seven counties already referred to, and also in the counties of Elgin, Oxford, Waterloo, Huron, York, and Durham.

13 COUNTIES PRODUCE ALFALFA SEED

It will, therefore, be seen that there are reports from 13 counties in Ontario in which alfalfa seed has been grown as a farm crop. The information thus presented has been obtained almost entirely from the reports of those 43 farmers who have grown alfalfa seed on their own farms for five years or more. The 43 farmers have grown alfalfa hay from six to 45 years, the average being about 14 years. The areas used for the production of alfalfa seed have varied from three to 40 acres previous to 1910, and in the last year from nothing to 35, the average for all the men for 1910 being 11.5 acres.

Every one of the 43 farmers stated that he had used the second crop for seed production. One farmer, however, referred to the fact that he had used the first crop for seed in a few instances. According to the reports the yield of seed varied considerably, the highest being seven bushels per acre, obtained by Mr. Jas. Douglas in Brant Co. One farmer in Haldimand County and another in Brant County reported that they had obtained an average of about four bushels of seed per acre. Another farmer in Haldimand County states his average to be only three-quarters of a bushel per acre. The average yield per acre obtained by all of the farmers for all of the years in which seed has been grown is 2.07 bushels. The quantity of seed per acre seems to be influenced to a marked degree by the conditions of the season and by the quality of the soil.



Utter Destruction Caused by Neglect

This plot of Empire State potatoes is immediately between the two plots shown in the other illustrations on this page. Conditions of seed, soil, cultivation, all three plots. This plot, however, was neither sprayed with Paris Green nor with Bordeaux mixture. Potato beetles have made almost a clean sweep here, and left very few leaves left on the plants.

All photos by an Editor of Farm and Dairy.



The Blight Starts its Destructive Work

The potatoes in this plot have been struck by the blight. When photographed on August 5 the tops had turned quite brown and gave evidence that they would Paris Green to combat the "bugs," but no preventive measures were taken against the blight.