

FACTS FOR FARMERS



Potato Blight Disease Of Major Importance

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Late blight of potato has been a disease of major importance to Island growers since its first appearance here in 1945. Reports from the Experimental Farm show that in the past 44 years there were only five in which the disease was unreported. There were light attacks in 13 years and severe epidemics in 26 years. These records show that proper methods for the control of this devastating disease must be applied almost annually.

Late blight disease is caused by a fungus organism, and like other forms of fungi, such as molds, mildews, and mushrooms, it requires moisture for its development and spread. Hence periods of showers, abundant dews, and high atmospheric humidity are always dangerous. Warm, dry seasons, such as that experienced in 1965, are likely to be free of disease.

The fungus overwinters in infected tubers. If a seed piece is cut from such a tuber, the fungus threads invade the sprouts, usually killing them before they emerge. However, some infected sprouts may produce plants and lesions will develop on the stems. These lesions quickly bear spores which are carried to adjacent plants by air currents. The spores germinate and the newly infected plants, in turn, develop leaf lesions and a new crop of spores. Thus the disease spreads rapidly over the field and to other fields. No tuber showing an area of rot should be used for seed.

CHIEF SOURCES
The chief sources of our epidemics are the cull and dump piles. These piles of discarded tubers, some of which may carry the disease organism, are great breeding grounds for blight spores which are carried over the countryside by winds as fast as they are produced.

Proper disposal of discarded tubers is the first step in late blight control programs. When grading is done in the fall and winter, the discard may be spread outdoors where the low temperatures will kill the fungus. Tubers discarded in the spring should be burned or deeply buried. If a cull pile is found, all sprouts and plants in it should be destroyed by fire or by spraying them with a top killer early in the season.

It is generally necessary to spray potato fields with a recommended fungicide at regular intervals through the season. The important thing to remember in this phase of blight control is that fungicides are toxic to the spores. This means that spraying must not be considered as a medication or a cure, but only as a preventive measure. Once a spore germinates and the fungus invades the leaf, no amount of spraying will save that leaf from destruction. It is absolutely necessary to have the fungicide on the plants before spores land on them. The fungicide kills the spores and thus infection is prevented.

REGULAR SPRAYING
Spraying should begin about mid-July and continued at fairly regular intervals until the tops are killed by frost, mechanical beater, or chemical top killer. The number and frequency of the applications depend, of course, on the kind of weather that characterizes the season.

In seasons when showers are frequent, it is necessary to apply more treatments than in drier seasons.

To aid the grower in planning his spray schedule, a series of weekly bulletins is issued from the Experimental Farm at Charlottetown. These bulletins are available through several newspapers and radio stations in Prince Edward Island and Nova Scotia. They include information on the prevalence and control of both disease and insect pests.

The third phase of blight control comes in the fall and it is designed to prevent losses from tuber rot in storage. No field in which even a trace of the disease has been seen should be dug while any green plants or parts of plants are present. Spores are certain to be present on plant lesions and on the soil surface and, if the crop is dug at this time, the tubers will pick up the spores. Later, the spores will germinate during shipment or in storage, causing severe losses from rotting.

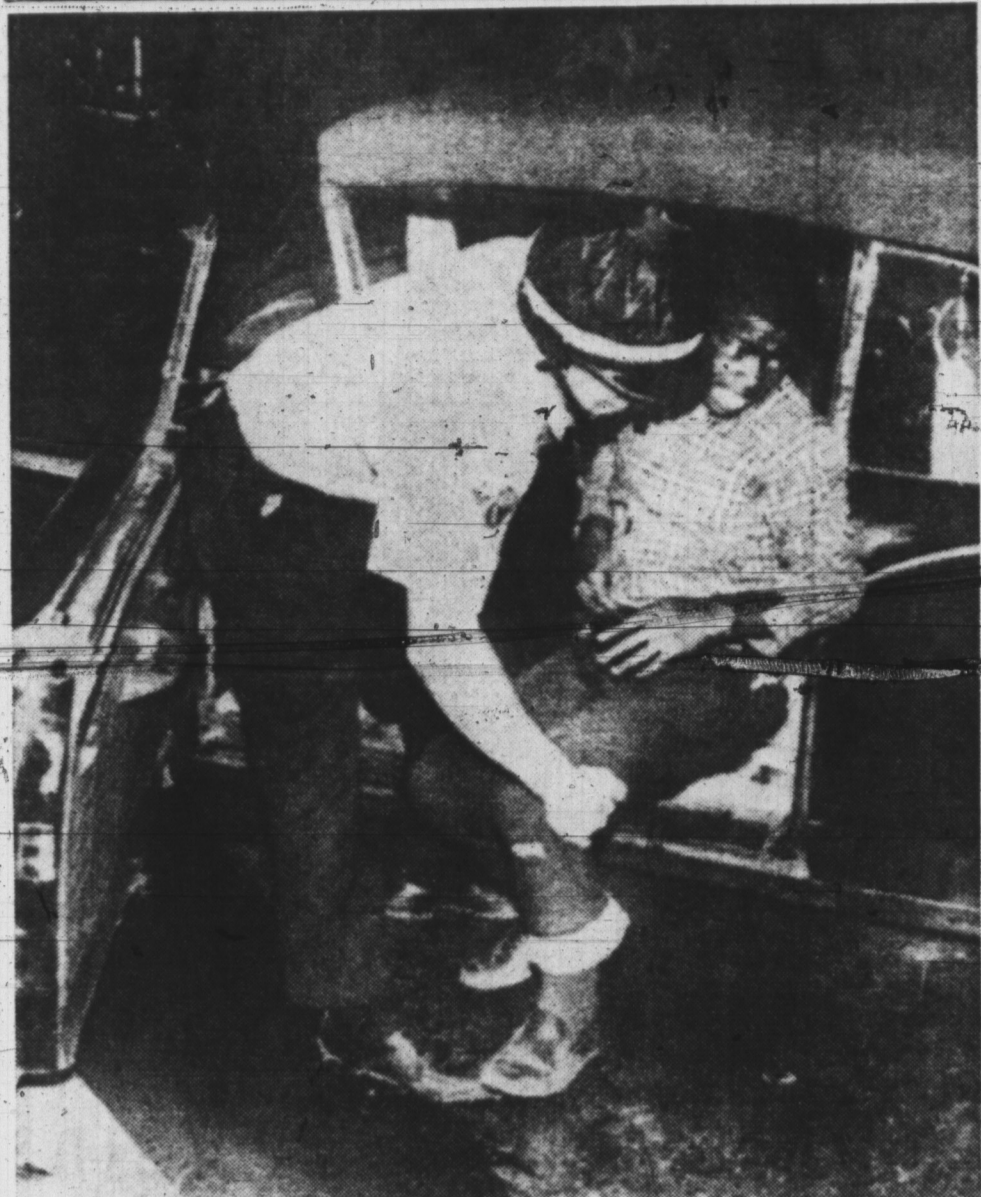
The tops should be completely dead for at least 10 days before the field is harvested. In some years, a heavy frost may come at the right time to kill the plants and, fortunately, the disease spores, as well. Usually, however, it is necessary to use an artificial method such as roto-beating or spraying with a recommended chemical. In years of severe attack, it is sometimes advisable, especially if a roto-beater or other mechanical device has been used, to spray the ground with copper sulphate (bluestone) at the rate of about 15 pounds per acre, a few hours before starting to dig this treatment will destroy any living spores that may be resting on the soil surface.

Joseph Weist of Hyattsville, Md., who lost both hands at an Alexandria, Va., meat packing plant last fall is back to work using electronically operated plastic hands. At the time of his accident, surgeons attempted to sew Weist's hands back on, but they had to be reversed. Earlier this year he returned to work using mechanical hooks. In June he went to the Institute of Rehabilitation in Montreal, Canada, where he was fitted with new devices, designed in Russia. His hands are transistor-powered and controlled by his arm muscles.

NOW HAS ELECTRONIC HANDS

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INJURED BOY AIDED

Ernest Williams, 12, of Cleveland is aided by policeman after he had been wounded by police and guardmen which he was riding failed to stop at checkpoint. Cleveland when automobile in (AP Wirephoto)

CATCH TUNA
ST. JOHN'S, Nfld. (CP)—Total tuna catches in nearby Conception Bay this season reached 91 Wednesday when 25 more of the bluefins were boated by sports fishermen. John Cahill of St. John's, with catches weighing 780 and 740 pounds, has the heaviest fish taken since the first of the season was caught July 13.

FAILURE RATE HIGH
MONTREAL (CP)—Sixty-two per cent of Montreal's 7,695 French-speaking Grade II students have failed one or more of their matriculation examinations. A spokesman for the Montreal Catholic School Commission said he could give no reason for the high percentage of failures but admitted it is much higher than last year.

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