

# Managing Late Blight

Potato growers in Newfoundland have suffered crop losses due to late potato blight for years. A new strain of blight, A2, has been identified and has reached the province through the importation of seed potatoes from Prince Edward Island.

These new strains will cause more severe infestations and are much more persistent. A potato field will look normal even though the stems and leaf petioles have been infected. It will lay dormant during hot dry weather and flare up with heavy dews or damp weather. These new strains will overwinter in soil and plant refuse. These new strains are resistant to some systemic fungicides but **not** resistant to the contact fungicides that growers have access to.

The best defense that growers have against late potato blight is good cultural practices. Growers can significantly reduce potato crop losses and reduce operating expenses by implementing the following cultural controls:

## 1. Removal of Culls and Cull Piles

The effective elimination of culls and cull piles and associated debris is one of the most effective tools that is within the control of growers for late blight management. Culls can be eliminated by burying with a covering of soil, feeding to livestock or composting.

Unattended culls and cull piles can present a considerable hazard to future potato crops. Potatoes dumped beside warehouses, next to fence lines, in the woods or in shallow pits present a major hazard to you and neighbouring farmers.

## 2. Seed

To effectively control late blight, clean seed potatoes are essential. Any potatoes that were infected with blight should not be used for seed. One infected potato seed, if conditions are ideal, could cause a major blight outbreak. Only use blight free certified and resistant varieties.

## 3. Other Cultural Practises

- a. Clean up and disinfect potato storage and equipment.
- b. Do not plant in fields that had blighted potatoes the previous growing season. Rotate with non-blight host crops.
- c. Remove all volunteer potatoes in cropped and uncropped fields.
- d. Increase spacing between and in drills to reduce plant canopy.
- e. The proper hilling of potato drills is very important to prevent blight spores from moving from the stalks down into tubers.
- f. Scout your fields and check areas prone to moisture or dews, tree lines and lower parts of the plants for evidence of blight. If there are any identified blight hot spots in the field, remove the plants or spot treat with a herbicide such as Gramoxone.
- g. Early application of fungicides to prevent blight infestation is essential. Start your spray program when the potatoes are six (6) inches in height. More frequent applications may be necessary if weather conditions warrant it.

- h. Observe weather conditions and be prepared to spray when the ideal weather conditions for blight infestation occur ( ie.humid, wet weather)
- i. Avoid harvesting in wet weather and harvest the tubers when they are mature. Topkill potato vines and allow 2-3 weeks for tubers to mature before harvesting.
- j. If there are blighted tubers going into storage, ventilate and cool down the potatoes to 9<sup>o</sup> C for two weeks and then store at 5<sup>o</sup> C for the rest of the storage season.
- k. Check for hot spots in storage, and when storing potatoes that you suspect might have blight, store them in a location in the storage where you can get at them early.

If you need more information on potato blight control, please contact your Crop Specialist, area Agricultural Office or the Crop Insurance Representative servicing your area.