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## LATE BLIGHT OF POTATOES



Late blight is an extremely serious potato disease that causes severe damage and storage losses. The fungus can only survive between growing seasons as mycelium in living potato tissue. Infected tubers used for seed or discarded onto cull piles at farms and commercial storages or infected volunteer potatoes that overwinter in the field in provinces with milder climates or where snow cover occurs early in the fall are sources of infection for the new growing season. Though late blight most commonly occurs in cool, wet climates, it can occur anywhere when irrigation or wet conditions combine with cool temperatures to favor disease development. The late blight fungus does not require stressed plants in order to thrive and cause the disease. Under weather and crop conditions favorable to late blight, a field of potatoes can be defoliated in two to three weeks.

- Plant clean, disease-free seed.
- Follow a regular spray program. Information relating to fungicide applications may be found in the recent issue of the Potato Crop, Variety, Weed and Pest Control Guide for New Brunswick. Always read product labels before use.
- Start your fungicide program early in order to obtain adequate coverage on the lower leaves.
- Begin your spray program before symptoms develop. If you are using Ridomil MZ<sup>R</sup> (Metalaxyl), include a contact fungicide in your spray program.
- Reduce the likelihood of tuber infection by maintaining soil coverage of tubers through adequate hilling.
- Check your crops regularly for any late blight symptoms, at least once a week. Scout more often in periods of wet weather.
- Avoid frequent or night-time overhead irrigation of potatoes. This practice maintains leaf wetness and high humidity in the plant canopy, which is favourable for the disease.
- If there are known infected areas within a field, they should be flagged, harvested last and tubers stored separately at the front of the storage facility.
- Kill vines at least two weeks before harvesting to reduce the possibility of tuber infection.
- Destroy all cull piles and volunteer plants.
- Use resistant cultivars where possible.
- Grade out rotted tubers before storage. Turn on ventilation systems immediately to keep air moving through the pile in order to dry any rotting tubers. Keep the humidity low to prevent bacterial infection.
- Tubers left on the surface of the field should be left to freeze and not disked or plowed under.
- A balanced fertilizer program must be reached. Petiole analysis for nitrate content can be helpful in regulating fertilizer rates.