

Management of Potato late blight

Recognize the problem

Late blight disease affects all of the aerial parts of potato plants and starts at the tip or the margin of leaves and then develops into water-soaked lesions. Within a few days, the lesions become necrotic, turning brown when dry and purplish-brown when wet. White mildew-like sporulation is visible around the lesions, especially on the lower surface of the leaves. Lesions on stems and petioles are black or brown. Tubers show brown to purplish skin and dry rot. The infested fields give off a distinctive smell.

Leaf symptoms of potato late blight. (Photo by Thorsten Kraska, University of Bonn)



Background

The pathogen that causes late blight can over-winter as mycelium in unharvested, stored and seed tubers. After plant emergence, the fungus invades under favourable conditions, producing primary inoculum. The disease may spread by air, water and via host plants such as tomato and wild species of potato (Solanaceae). A rapid increase in disease potential is often responsible for heavy yield losses, like during epidemics.

Tuber symptoms of potato late blight. (Photo by Anna L. Snowdon)



Management

- The pathogen is an obligate parasite. Destroying all cull piles and volunteer hosts, burying them 2 feet deep and feeding waste potatoes to animals all reduce the primary inoculum.
- Choose fields with good air ventilation and well-drained soil. Low temperatures and good ventilation are needed for storage tubers.
- Seed tubers can be treated with one of the following:
 - Thiophanate-methyl + thiram, e.g. Homai 80% WP, 200g/100kg tubers
 - Metalaxyl + mancozeb, e.g. Ridomil MZ 72%WP, PHI= 7 days, 80-120g/ac
 - Azoxystrobin, e.g. Revive 25% SC, PHI=7 days, 50-100cc/ac

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > *Phytophthora infestans*

The recommendations in this factsheet are relevant to: Myanmar [Burma]



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