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PYTHIUM LEAK OF POTATOES



Pythium lives in the soil and can enter tubers only through wounds. Infection, therefore, usually occurs at harvesting, grading, or less frequently at planting. Serious crop loss does take place in bruised, immature tubers harvested during hot, dry weather. The rot that develops is greatly aggravated by relatively high temperatures and poor ventilation but may be completely arrested under cool conditions.

- Plant clean, disease-free seed.
- Rotate crops out of potatoes for a minimum of 4 years.
- Avoid planting potatoes in low, poorly drained soils.
- Avoid mechanical injury to the potatoes during harvest.
- Delay planting for at least 2 weeks after ploughing down green vegetation as this may temporarily stimulate populations of Pythium fungi.
- The fungus survives in the soil and enters tubers at harvest through wounds and bruises. Therefore, allow skin to mature before harvest so that bruising and wounding during harvest can be reduced.
- If significant amount of potatoes are affected it is advisable to cure between 45°F to 50°F for minimum of 3 weeks.
- If the disease persists; consider rapidly cooling the potatoes to 40-45°F. Provide continuous forced air until the affected areas are dry.
- Consider marketing early and place these potatoes closer to the access doors for easy removal.
- Nitrogen fertility should be monitored closely to prevent heavy top growth as soils tend to remain wetter under a heavy canopy.
- Avoid exposing potatoes to the sun as it increases their susceptibility to Pythium leak.
- Do not harvest during very warm weather. Wait until soil temperatures are below 15 °C. If tubers are windrowed on moist, warm soil (21 °C) they should be removed from the field immediately.
- Grade out rotted tubers before placing them in storage. In storage, turn on ventilation systems immediately to keep air moving through the pile so drying any rotting tubers. Keep the humidity low to prevent secondary bacterial infection.