

(revision date:6/3/2014)

Potato: Potato leafroll mosaic (Leafroll)

Use Integrated Pest Management (IPM) for successful plant problem management.

Biology

Leafroll and net necrosis symptoms are caused by a virus. The virus is transmitted by aphids and is also carried in infected tubers. Leaves of plants grown from infected seed pieces show a distinctive upward rolling of the leaf margins and have a brittle or leathery texture. Symptoms first appear at the base of the plant and progress upwards. These plants are generally slightly stunted and yellowish. Plants that are infected by aphid transmission of the virus may show rolling of leaves beginning at the top of the plant, but are seldom stunted. Infected tubers appear normal on the outside, but may display a net necrosis inside the tissues. This is seen as a brownish network of fine lines at the stem end. Net necrosis often develops in storage. The variety 'Russet Burbank' is highly susceptible to net necrosis.

Management Options

Non-Chemical Management

- ~ Plant only certified, virus-free seed potatoes.
- ~ Plant resistant varieties. 'Cherokee', 'Katahdin', 'Norgold', 'Penobscot', 'Reliance', 'Sebago', 'Sequoia', 'White Rose', and others are resistant to leafroll infection and/or net necrosis.
- ~ Control aphids.
- ~ Remove and destroy infected plants (including tubers) to reduce spread of disease. Infected tubers are safe to eat, but are best used when fresh.
- ~ Remove and destroy volunteer plants and culled potatoes, which may harbor the virus.

Select non-chemical management options as your first choice!

Chemical Management

IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides

None recommended

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Images



*~ Caption: Potato leafroll: healthy vs. diseased
~ Photo by: Unknown*



*~ Caption: Potato leafroll: diseased vs. healthy
~ Photo by: Unknown*