

ADDITIONAL RESOURCES

More PVY Information

<http://whatcom.wsu.edu/ag/edu/whpb>

<https://blogs.cornell.edu/potatovirus/>

Washington Seed Potato

Isolation District

<http://apps.leg.wa.gov/wac/default.aspx?cite=16-325>

Aphid Management Guidelines

<https://pnwhandbooks.org/insect/vegetable/irish-potato/potato-irish-aphid>

PVY Resistant Potato Cultivars

<https://blogs.cornell.edu/potatovirus/pvy/potato-virus-y-pvy-management/#resist>



Whatcom County Horticulture Pest Board

WSU Whatcom County
Extension
1000 North Forest Street
Suite 201
Bellingham, WA 98225

Phone: 360-778-5800

Website:

<http://whatcom.wsu.edu/ag/edu/whpb/>

E-mail:

chrisbenedict@wsu.edu



Whatcom County

WASHINGTON STATE UNIVERSITY
EXTENSION

Potato Virus Y: What You Need to Know



Whatcom County
Horticulture Pest Board



WHAT IS POTATO VIRUS Y (PVY)?

PVY is a plant virus that infects solanaceous plants like potato, tomato, and pepper. It is an economically important virus affecting seed and commercial potato farms. The virus impacts potatoes by reducing yields and tuber quality.

PVY is spread by aphids. As aphids feed on the plant they uptake the virus. When aphids move onto another plant they will deposit the virus into that plant. The virus is also transmitted through infected seed tubers and as a result avoiding buying infected seed is critical.

Symptoms of PVY include:

- Brown/black line patterns on veins or shoots
- Canoe-shaped cracks in tubers
- Death of growing points
- Leaf distortion and leaf dropping
- Stunted growth
- Tuber necrosis or potato tuber necrotic ringspot disease (PTNRD)
- Yellow/light green/dark green mosaic patterns on leaves



WHY IS PVY IMPORTANT IN WHATCOM COUNTY?

Whatcom County is the largest producer of certified seed potatoes in Washington state. With over 3300 acres grown in the County in 2017, it is an economically important crop. Additionally, seed potatoes are an important rotational crop for other parts of the agriculture sector such as red raspberries.

To protect this industry, the 55th legislature of the state of Washington recognized that to produce high quality certified seed potatoes, seed growing areas need to be as free as possible from insect pests and plant diseases. After the Washington State Seed Potato Commission petitioned the Washington Director of the Department of Agriculture, a restricted seed potato production area was created. Rules were adopted in 1998 that created an isolated seed potato production district in Northwest Washington (To See a Map: <https://goo.gl/JhHspm>). As a result, all potato plantings in excess of one acre need to be enrolled in the seed potato certification program, in part, to protect against spread of PVY.

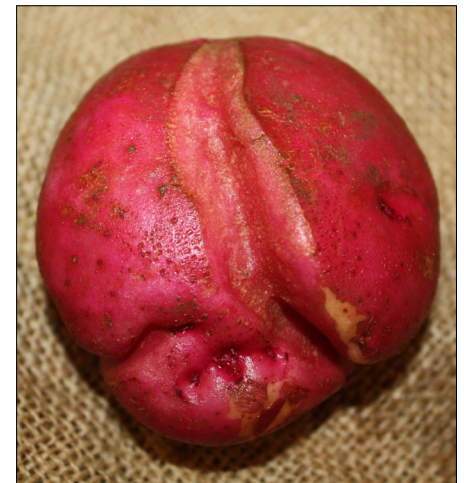
Seed potatoes certified with a blue tag by WSDA to meet state standards for limited seed tuber borne PVY and other diseases are grown in the isolation district.

HOW CAN I HELP MANAGE PVY?

The potatoes you grow at home can introduce PVY or act as a host of PVY.

To avoid this potato disease :

- Buy seed potatoes that have a blue tag certification
- Manage aphids (see back panel)
- Remove volunteer potatoes and dispose them into trash
- Use resistant cultivars (see back panel)
- When selecting seed potatoes, avoid cracked tubers



Cracked 'Chieftain' tuber that tested positive PVY