



Potato Progress

Research and Extension for Washington's Potato Industry

Published by Washington State Potato Commission www.potatoes.com

Andrew Jensen, Editor. Submit articles and comments to: ajensen@potatoes.com

108 Interlake Rd., Moses Lake, WA 98837; Fax: 509-765-4853; Phone: 509-765-8845.

Volume IV, Number 4

March 23, 2004

Border Sprays for Aphids Studied in Minnesota

In the February issue of the *Valley Potato Grower*, Matthew Carroll, Edward Radcliffe, and others reported on their research into field perimeter sprays of Monitor for control of aphids and virus transmission. The project was conducted in grower fields, and was based on earlier research showing that green peach aphids first colonize potato fields at the edges. They had found that “for the first 10 to 14 days post-colonization, more than 90 percent of green peach aphids in fields they sampled occurred within 60 feet of field edges.”

The field-scale project reported in the article had six grower-cooperators who included 27 fields in the trial for a total of 1804 acres. Green peach aphid (GPA) flight was monitored throughout the region, and when GPA catch surged, all studied fields were surveyed to confirm the presence of GPA. Fields were then border-treated with Monitor 60 feet in from the field edges. Good control of early aphid populations was achieved this way in 25 of the 27 fields. One of the two exceptions had a curved perimeter and power lines that prevented good coverage on the edges. The other exception had a poor plant stand, and so the edge-effect of aphid colonization was not observed.

A total of 94 acres were treated in this first application, representing <5% of the total acreage. The authors estimated that these perimeter sprays saved 85% of the costs of the first Monitor application on these fields, or \$23.85 per acre, application costs included.

For more information, or a complete copy of the article, please contact Andy Jensen at the WSPC office.

Leafhopper, Aphid, and Late Blight Information

✓There will be a region-wide leafhopper trapping network as part of the research project into the “potato yellows” or “purple top” disease of potatoes. Directed by Phil Hamm and Andy Jensen, the yellow sticky traps will be placed near potato fields in the Hermiston area of Oregon and throughout the potato-growing region of central Washington. Leafhopper data will be gathered weekly and reported on the WSPC web site, www.potatoes.com. A more precise link will be provided when it becomes available.

✓The aphid and late blight hotlines will continue as they have in recent years. Dennis Johnson administers the latter, while Keith Pike provides the former. The numbers for these are as follows:

Aphid Hotline: 888-673-6273

Late Blight Hotline: 800-984-7400

Washington Potato Seed Lot Trial

Commercial potato seed samples for planting at the 2004 Washington Seed Lot Trial are welcomed from the potato industry. Two to three hundred whole (**single drop**) seed is an acceptable sample size. This seed should not be treated with insecticide or fungicide. Seed tubers need to be uniformly small (not larger than 4 oz) because no seed cutting is done and a cup-type planter is used. Samples may be delivered to the WSU Othello Research Unit, south on Booker Road from State Highway 26 about five miles east of Othello. Alternatively, sample pickup can be arranged by calling your WSU Extension Office at 509.545.3511 or 509.754.2011. A sample randomly taken that represents the entire seed lot received is most desirable. Sampling the first (or last) 300 seed from the truck is not likely to provide a representative sample of the lot. Sample tags may be obtained by calling your extension office or the Potato Commission at 509.765.8845.

In the North Basin, two seed “drop-offs” have been established. One is at the Bob Holloway storage (**west end of the southern-most storage) just north of Road 3 NW and east of Dodson Road.** The second is at CW Potato Services, south of I-90 about six miles east of Moses Lake (just east of the Moses Lake Simplot Soilbuilders). Samples need to be at these locations by 2:00 pm the day before each planting date to be included.

The planned planting dates for 2003 are:

1st (Early)	March 23
2nd	April 6
3rd	April 20
4th (Late)	May 4

Seed Corn Maggot and Bacterial Stem Rot Research

As the growing season gets underway, some of you will probably encounter seed corn maggots in your seed or emerging plants. The Potato Commission is funding a small research project this season to explore the extent and nature of this problem, and the potential link between the maggot and soft rot of seed pieces and stems. If you encounter these problems, or suspect seed corn maggot involvement in a problem field, please contact Andy Jensen at the WSPC office or one of the scientists listed below.

Alan Schreiber, Agriculture Development Group, 509-539-4537

Doug Walsh, WSU Prosser, 509-786-9287

Dennis Johnson, WSU Pullman, 509-335-3753