Potato Progress

Research and Extension for Washington's Potato Industry
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IPM for Green Peach Aphid & PLRV

Entomologists across the Northwest have cooperated the past two years to produce a document full of information and recommendations for the control of aphids and potato leafroll virus. Some of the highlights are listed below. For a copy of the complete document, see http://www.wsu.edu/~potatoes/ or contact the editor at the commission office for a hard copy.

- Volunteer potatoes can serve as a source of both aphids and virus. Cultural control practices are mentioned, and several herbicides are recommended for control of potatoes in various rotational crops.
- Aphid management in early-season potatoes (those not intended for storage): It is important to have an active aphid management program in all potato fields. Systemic insecticides are recommended, and application of foliar aphicides should begin when 5 aphids per 100 leaves or 5 aphids/plant are detected. Recommended foliar aphicides, including Fulfill, Monitor, and Provado, are listed and discussed.
- Colorado potato beetle control – the entomologists strongly recommend against the use of broad-spectrum insecticides such as pyrethroids because they can lead to aphid population explosions. Several alternative materials are discussed, including Success, Imidan, Agrimek, Provado, and Actara.
- Aphid management in potatoes intended for storage – use of soil-applied systemic aphicides is critical. Just prior to the expected "break" in the effectiveness of the soil-applied aphicide, a "no-gap" program should be initiated to maximize aphid and PLRV control. Monitor and Fulfill are highly recommended aphicides, and with the recent Section 24c registration of Actara (see notice in this newsletter), a third effective aphicide can be added to the list.
- Insecticide resistance management – There are now two neonicotinoid chemicals registered on potatoes as both soil-applied and foliar insecticides. These include imidacloprid (Admire, Gaucho, Genesis, and Provado) and thiamethoxam (Platinum and Actara). If these materials are too widely used as both foliar and soil-applied in the same fields, resistance is likely to develop to the whole class of insecticides (i.e. imidacloprid, thiamethoxam, and all related chemicals). A simple method exists that can help avoid the development of resistance to these valuable products. If Admire or Platinum are applied in-furrow or as a side dress, or if Gaucho or Genesis are applied as a seed treatment, do not use Provado or Actara in the same field in the same season.

Potato Varieties in the Northwest

Data for the following table were gathered by the National Agricultural Statistics Service (NASS), and summarized here by the editor. In some cases, NASS does not report numbers for certain varieties, and these cases are indicated by the --. Several minor varieties not listed here were reported by NASS on occasion. If you are interested in a larger table including all reported varieties, please contact Andy Jensen at the WSPC office.

State	Russet Burbank	Russet Norkotah	Shepody	Ranger Russet	Atlantic	Umatilla	Other
Idaho							
1995	83.2%	2.0%	10.0%	2.6%	--	--	2.2%
1996	79.7%	3.7%	10.0%	2.7%	--	--	3.9%
1997	79.7%	5.0%	7.1%	4.0%	--	--	4.2%
1998	77.9%	4.8%	5.6%	6.6%	--	--	5.1%
1999	74.4%	8.3%	4.2%	9.1%	--	--	4.0%
2000	74.9%	8.0%	3.9%	7.7%	--	1.3%	4.2%
Oregon							
1995	41.1%	17.2%	27.2%	3.3%	--	--	11.2%
1996	35.4%	22.5%	25.8%	3.6%	5.6%	--	7.1%
1997	30.9%	38.8%	18.2%	1.8%	2.4%	--	7.9%
1998	39.5%	24.8%	17.2%	10.3%	1.0%	--	7.2%
1999	42.9%	21.4%	12.5%	12.5%	1.8%	--	8.9%
2000	32.7%	27.8%	9.8%	11.2%	2.1%	3.1%	13.3%
Washington							
1995	61.1%	11.8%	13.7%	6.4%	--	--	7.0%
1996	50.3%	17.8%	11.3%	8.7%	--	--	11.9%
1997	50.2%	17.5%	7.6%	15.5%	--	--	9.2%
1998	58.1%	13.2%	8.9%	11.4%	--	--	8.4%
1999	41.3%	15.4%	10.8%	17.6%	--	6.7%	8.2%
2000	33.7%	17.2%	10.8%	20.2%	--	12.3%	5.8%

Washington Potato Pest Management Field Day

Wednesday, August 2, 2001, 9:30 am

Agriculture Development Group, Inc, in cooperation with the Washington State Potato Commission, and several crop protection companies is hosting the Washington Potato Pest Management Field Day to review the latest research results and agrichemical registrations in potatoes. This is the most comprehensive potato pest management field day in Washington.

9:30—**Introductions and Overview**

9:35--**How to prevent spider mites from being a problem** – Panel Discussion

10:20—**Fulfill and Actara – How Well Have they Performed This Year**

10:40—**Leverage-How does it Fit into Washington Potatoes**

10:50—**Disease Control – Research Updates**

Late Blight/Early Blight

White Mold -

Rhizoctonia

11:20**--Company Fungicides/Herbicide Updates**

Noon—**Hog Roast Barbecue**

1:00--**Company product updates for aphid and CPB control**

2:30—**Washington Potato IPM Program**, Tracy Olberding, Agriculture Development Group, Inc.

2:15—**2001 – The Year of the Worm –Gary Reed Tells us Why and What to do about it**,

2:00 —**Green Peach Aphid Control**

-Oregon Research Results, Gary Reed, Oregon State University

-Washington Research Results Alan Schreiber, ADG, Inc.

-Why was 2001 a Record Aphid Year, Keith Pike, WSU

3:00 Comments From Andy Jensen, Washington State Potato Commission

Tour Research Plots

We would like you to RSVP, but it is not required. Call (509) 543 9757 to RSVP

From Othello: Take Hwy 24 south (follow signs to **Basin City** if any); head south on Sagehill Road (this road will take you into Basin City); head east on Road 170; head south on Glade Road; head west on Ringold Road; head north on Bellevue Road; the farm main entrance is on Bellevue Road about .2 miles from the intersection on the left.

From Pasco: From I-182 take the **Road 68** exit and head north for about 17 miles; Road 68 turns into **Taylor Flats** at some point then dead ends into Ringold Road. Turn right on Ringold Road; turn left on Bellevue Road. The farm entrance is about .2 miles from the intersection on the left.

Or

From I-182 take **Glade Road** north for about 17 miles to Ringold Road. (First paved road after Matthews Corner (Texaco Station)); Turn left on Ringold Road; go 2.5 miles on Ringold until you come to Bellevue road. Turn right on Bellevue Road. The farm entrance is about .2 miles from the intersection on the left.

Up-Coming Field Days

A few field days have already passed, including another very successful seed-lot field day on June 28th, but others are still to come.

August 16
4:00 pm
WSU Mt. Vernon R & E Center

- From I-5 take Kincaid Exit at Mt. Vernon; from north turn left (west); From south turn right (west) then right at 1st stop light (3rd St.); through town across bridge (Skagit River) 2.5 miles. WSU Res. Unit sign on left.

September 10
6:30 pm
Columbia Basin College

- South of Argent Road, near the Tri-Cities Airport.
- Demonstration of advanced clones & newly released cultivars.

Potato Samples Requested

Soft stem rot of potato is a bacterial disease that typically appears on above ground portions of stems in the mid to late growing season. It is thought to be caused by Erwinia bacteria. Dr. Brenda Schroeder a plant pathologist at WSU, working with Dr. Dennis Johnson, is trying to characterize the bacteria present on potato plants this year. If you have soft stem rot present in a field, try to obtain about 6 samples (just the affected stem portion and a little more on both ends) and either send directly to Dr. Schroeder at the Department of Plant Pathology, Johnson Hall, Washington State University, Pullman, WA 99163 or get samples to the extension office for shipment. Remember to keep samples as cool as possible.

Plan For Cover Crop Planting Now

Andrew McGuire, Grant/Adams Extension

Starting in mid-July, you may begin to plant cover crops after harvest of the main crop, but you need to consider the following:

*purpose of the cover crop
*previous crop
*following crop
*weed pressure you can expect given your planting date
*various types of cover crops available to you
*benefits vs. costs of a cover crop

Fact sheets and other information on various cover crops are available in print and on the following web site: http://grant-adams.wsu.edu/. The Grant/Adams Extension phone number is 509-754-2011 ext. 413.

Hotline Numbers

Aphid Hotline: 1-888-673-6273
Late Blight: 1-800-984-7400