Pg. 1 of 4

## POTATO UPDATE

Volume IX, Issue 14

Hermiston Agricultural Research and Extension Center

July 17, 2015

2121 South 1<sup>st</sup> Street, Hermiston, Oregon 97838, T 541-567-8321 | F 541-567-2240 | http://oregonstate.edu/dept/hermiston/
Silvia I. Rondon, Extension Entomologist Specialist ● Ken Frost, Plant Pathologist ● Robert Cating, Plant Pathology Lab

Diagnostician ● Ira Thompson, Bio Science Tech Entomology ● Carol Mills, Bio Science Entomology

### Preventing the spread of potato viruses

Potato viruses can severely affect potatoes in North America. Each virus is characterized by its own diverse epidemiology, and should be treated accordingly. I found this presentation that may help you understand the optimization of insecticide use in controlling aphid vectors. You will learn the differences between persistently and non-persistently transmitted viruses, between colonizing and non-colonizing aphid species, and their implications for making proper decisions making. Presentation is only 20 minutes long and it will be free until end of July so hurry up !!! This presentation is part of the Plant Management Network <a href="https://www.plantmanagementnetwork.org/edcenter/seminars/potato/PotatoViruses/">https://www.plantmanagementnetwork.org/edcenter/seminars/potato/PotatoViruses/</a> ......Silvia Rondon, Extension Entomologist

### 2015 IPM management guide

The **2015 IPM Guidelines for Insects and Mites in Idaho, Oregon and Washington Potatoes** are now available online. Visit the NW Potato Research IPM page <a href="http://www.nwpotatoresearch.com/IPM-">http://www.nwpotatoresearch.com/IPM-</a> <a href="http://www.nwpotatoresearch.com/IPMStuff/PDFs/NorthwestInsectGuidelines.pdf">http://www.nwpotatoresearch.com/IPMStuff/PDFs/NorthwestInsectGuidelines.pdf</a>.

#### White flies in the Basin

Now that you are looking for potato psyllids adults, nymphs and eggs you MUST know the

difference with white flies since the immature stages look alike. It is common to find white fly from mid to late season. White flies adults resemble tiny white moths about 1 mm long. Immature forms look like scale insects and are completely sedentary after the first nymphal instar (see picture). Whiteflies occur in most potato fields, and rarely, if ever, require control in Northwest potatoes. Whitefly nymphs are difficult to measure but a leaf sampling scheme is required since they are not dislodged during beating sheet/tray sampling. There is no established treatment threshold for whiteflies in PNW potatoes. More information can be found here <a href="http://www.nwpotatoresearch.com/IPM-WhiteFlies.cfm">http://www.nwpotatoresearch.com/IPM-WhiteFlies.cfm</a>



Pg. 2 of 4

### Soil Fumigant Stewardship and Safety Update Telone and Chloropicrin Products

Tuesday, July 28, 2015 at the Big Bend Community College ATEC Moses Lake, WA

Wednesday, July 29, 2015 at the Pasco Red Lion Pasco, WA

**TO REGISTER FOR THIS EVENT:** Please <u>RSVP no later than July 23<sup>rd</sup></u> Ryan Roslak at <u>rjroslak@dow.com</u> or (509) 994-3273; or Mike Conway at <u>mconway@tridentag.com</u>.

#### LATE BLIGHT HOTLINE .... Sponsored by Syngenta

Oregon State University: 1-800-705-3377

<u>University of Idaho</u>: 1-800-791-7195

Washington State University: 1-800-984-7400

#### **Late Blight Update**

In Washington: From Dennis Johnson- Washington late blight information update on July 14, 2015.

The strain of the late blight pathogen in the Columbia Basin this year is US 8. This strain is resistant to metalaxyl, mefenoxam, or Ridomil and Ridomil Gold and is the A2 mating type.

Late blight is known to be present in two fields in block 1 and one field west of Eltopia. Late blight has not been observed to have increased in these fields the past two weeks. These infections likely originated during the rain that we had the end of May. Fungicide applications should be made every 5 to 7 days in fields with late blight and fields adjacent to those with late blight. Fields from north of Pasco to Basin City should be treated on a 7 to 10 day schedule. Monitor fields frequently for late blight throughout the Basin and be aware of weather forecasts for major rain events. Apply a late blight fungicide before any major rainfall. Be careful not to overwater fields. Extra water adds to tuber rot problems and potentially more late blight.

Please contact Dennis Johnson at 509 335 3753 to report, confirm or to make late blight diagnosis. More samples are needed for research purposes....DJ

**In Oregon:** No Late blight positive samples have been found by the Hermiston diagnostics lab this season and, to our knowledge, late blight has not yet been detected in Oregon. Fields should be monitored frequently. Weather forecasts should also be monitored for major rain events and fungicides should be applied for late blight before any major rainfall.

Across the nation: Over the last 7 days, there were new detections of late blight in PA (potato) and NC (tomoto) <a href="www.usablight.org">www.usablight.org</a>. To date, late blight has been confirmed in CA (US-11), FL (US-23), MD (US-23), NC (Not yet determined), NJ (US-23), NY (US-23), VT (Not yet determined), WA (US-8), and WI (US-23).

Pg. 3 of

Additional *Phytophthora infestans* isolates have been reported in some of these states, but information on clonal lineage is still being determined. Late blight has also been detected in ID, but is not reported at <a href="https://www.usablight.org">www.usablight.org</a>.

If you suspect late blight is affecting your field please contact us immediately for diagnosis (541-567-8321). -Robert Cating and Ken Frost

#### **Extension Plant Pathology Diagnostic Lab Update**

Psyllid submission numbers were down this week. This week, 1797 Potato psyllids were tested for 'Candidatus Liberibacter solanacearum' (Lso), the bacterial pathogen responsible for zebra chip of potato tubers, bringing the annual total to 7729. **Six psyllid submissions tested positive**. These submissions consisted of four psyllids, one psyllid, three psyllids, four psyllids, four psyllids, and 29 psyllids. Tuber softrot, blackleg, PVY, and BLTVA continued to be identified.

-Bryce Robinson, Robert Cating, and Ken Frost

Thanks to the Oregon Potato Commission for sponsoring our trapping and extension efforts, and **the USDA-NIFA Technical Assistance for Specialty Crops Program**. Also, special thanks to Anderson geographic & consulting for sponsoring our interactive map.





Pg. 4 of 4

#### **Insect Trap Report**

Area Pest Alert, Umatilla & Morrow County. Traps are collected on Thursdays. Please note: "-1" value means no data

| TRAP | PTW | BLH | OLH | PP | OP | GPA | PA | OA |
|------|-----|-----|-----|----|----|-----|----|----|
| 1    | 24  | 0   | 0   | 0  | 0  | 0   | 0  | 0  |
| 2    | 1   | 2   | 9   | 0  | 1  | 0   | 0  | 0  |
| 3    | 0   | 2   | 6   | 0  | 1  | 0   | 0  | 0  |
| 4    | 0   | 49  | 0   | 0  | 4  | 0   | 0  | 0  |
| 5    | 5   | 0   | 29  | 0  | 0  | 0   | 0  | 0  |
| 6    | 0   | 0   | 156 | 6  | 0  | 0   | 0  | 0  |
| 7    | 0   | 0   | 3   | 0  | 0  | 0   | 0  | 1  |
| 8    | 0   | 4   | 25  | 0  | 0  | 0   | 0  | 0  |
| 9    | 0   | 0   | 1   | 0  | 0  | 0   | 0  | 1  |
| 10   | 0   | 0   | 2   | 0  | 0  | 0   | 0  | 0  |
| 11   | 0   | 7   | 9   | 2  | 0  | 0   | 0  | 0  |
| 12   | 0   | 4   | 4   | 0  | 0  | 0   | 0  | 0  |
| 13   | -1  | -1  | -1  | -1 | -1 | -1  | -1 | -1 |
| 14   | 1   | 1   | 1   | 0  | 0  | 0   | 0  | 0  |
| 15   | 27  | 0   | 1   | 0  | 0  | 0   | 0  | 0  |
| 16   | 2   | 0   | 1   | 0  | 0  | 0   | 0  | 0  |
| 17   | -1  | -1  | -1  | -1 | -1 | -1  | -1 | -1 |
| 18   | 1   | 0   | 3   | 0  | 0  | 0   | 0  | 0  |
| 19   | -1  | -1  | -1  | -1 | -1 | -1  | -1 | -1 |
| 20   | 1   | 0   | 2   | 0  | 0  | 0   | 0  | 0  |
| 21   | 0   | 11  | 4   | 0  | 0  | 0   | 0  | 2  |
| 22   | 0   | 0   | 0   | 4  | 0  | 0   | 0  | 0  |
| 23   | 0   | 0   | 0   | 6  | 0  | 0   | 0  | 0  |
| 24   | 0   | 1   | 0   | 0  | 0  | 0   | 0  | 0  |
| 25   | 1   | 0   | 5   | 1  | 0  | 0   | 0  | 0  |
| 26   | 0   | 0   | 0   | 11 | 0  | 0   | 0  | 0  |
| 27   | 1   | 1   | 5   | 0  | 0  | 0   | 0  | 0  |
| 28   | 0   | 1   | 4   | 0  | 0  | 0   | 0  | 0  |
| 29   | 0   | 0   | 4   | 0  | 0  | 0   | 0  | 0  |
| 30   | 0   | 0   | 5   | 0  | 0  | 0   | 0  | 0  |
| 31   | 0   | 2   | 3   | 0  | 0  | 0   | 0  | 0  |
| 32   | 0   | 1   | 5   | 0  | 0  | 0   | 0  | 0  |
| 33   | 0   | 2   | 1   | 0  | 0  | 0   | 0  | 0  |
| 34   | 29  | 1   | 3   | 0  | 0  | 0   | 0  | 0  |
| 35   | 0   | 0   | 0   | 0  | 0  | 0   | 0  | 0  |
| 36   | 0   | 4   | 0   | 0  | 0  | 0   | 0  | 0  |

PTW: Potato Tuberworms

GPA: Green Peach Aphids PA: Potato Aphids

BLH: Beet Leafhoppers
OLH: Other Leafhoppers

OA: Other Aphids

PP: Potato Psyllids

**OP: Other Potato Psyllids**