

POTATO UPDATE

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Hermiston Agricultural Research and Extension Center

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The Rise of Potato Tuberworm

Have you noticed the increasing numbers of potato tuberworm (PTW) in our area? As harvest approaches and tuberworm moth numbers rise, it may be time to consider PTW management options. Before you take action (or decide not to), remember that PTW populations can be extremely localized, so it is important to monitor individual fields.

What can you do to control PTW right now?

Cultural Control

- Maintain potato foliage until harvest (harvest green): Green potato foliage keeps the worms feeding on the leaves, not the tubers!
- Irrigate 0.10 in per day between vine kill and harvest: This keeps the soil from cracking, which keeps tuberworms from getting to the tubers, but doesn't increase tuber rot.

Chemical Control

- An approximate threshold for PTW is 105–140/trap per week (15-20/trap per night).
- Insecticidal spray programs should begin 4-8 weeks before vine kill or harvest.
- Be sure to check the pre-harvest intervals (PHI) on chemical selections.
- There are multiple insecticides available for tuberworm control; some of them may be effective against other insect pests too. Please see below for some of the available options.



Lois Douglass
Rondon Lab Insect Monitoring Route Technician



Silvia I. Rondon

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Insecticides effective against PTW with their efficacy against other insect pests*

Product	Group	PHI (days)	Beet Leafhopper	Colorado Potato Beetle	Green Peach Aphid	Thrips
Abamectin	6	14		High	Very Low	Moderate
Asana XL	3	7	High	High	Very Low	Low
Assail	4A	7	High	High	Moderate	Moderate
Avaunt	22	7		Very Low	Very Low	
Baythroid XL	3	0	High	High	Very Low	Low
Coragen	28	14		High		
Imidan	1B	7	High	High	Very Low	
Lannate	1A	6	High	Low	Low	Low
Leverage 360	3/4A	7	High	High	Low	
Rimon	15	14		High	Very Low	
Success	5	7		High	Very Low	Low

* Listed in alphabetical order, order is not based on efficacy.

For more information on efficacy, rates and frequency of applications for PTW, see pages 37-43 of the 2014 Integrated Pest Management Guidelines for Insects and Mites in Idaho, Oregon and Washington Potatoes by Schreiber, Jensen, Rondon and Wenninger:

<http://www.nwpotatoresearch.com/IPMStuff/PDFs/NorthwestInsectGuidelines.pdf>

Your extension agents.....*Alex Murphy and Silvia Rondon*

Plant Pathology Lab Update

This week 1224 psyllids were submitted for '*Candidatus Liberibacter solanacearum*' (Lso) testing, the pathogen responsible for zebra chip disease (ZC), with 3 positives detected. Incidence in psyllids continues to be low but be sure to continue monitoring to prevent this insect from colonizing fields. The lab continues to receive plants with "purple top" on a daily basis. Several BLTVA positive plants were identified this week, as well as several with Lso. If you have questions about testing services, please call the Plant Pathology Lab at 541-567-2240. *Robert Cating and Phil Hamm*



OSU-HAREC-Rondon's IAEP: A. F. Murphy

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Insect Trap Report

Area Pest Alert, Umatilla & Morrow Co.

Traps are collected on Thursdays.

TRAP	PTW	BLH	OLH	GPA	PA	OA
1	11	0	0	0	0	1
2	4	0	0	0	0	0
3	4	0	103	0	0	2
4	4	0	0	0	0	0
5	6	2	0	0	0	1
6	1	1	0	0	0	0
7	10	0	0	0	0	0
8	5	0	0	0	0	2
9	0	0	0	0	0	0
10	26	0	0	0	0	5
11	25	1	0	0	0	1
12	0	0	0	0	0	0
13	28	0	0	0	0	0
14	111	2	3	0	0	0
15	4	1	1	0	0	2
16	9	1	5	0	0	1
17	46	0	3	0	0	0
18	8	2	0	0	0	0
19	9	0	0	0	0	0
20	46	1	0	0	0	1
21	5	0	0	0	0	0
22	1	0	0	0	0	0
23	16	1	0	0	0	0
24	1	0	0	0	1	0
25	3	0	0	0	0	0
26	1	0	0	0	0	0
27	10	1	1	0	0	0
28	5	0	0	0	0	0
29	0	0	1	0	0	0
30	4	0	0	0	0	0
31	13	0	0	0	0	0
32	8	0	0	0	0	0
33	4	2	1	0	0	0
34	10	3	0	0	0	1
35A	24	5	2	0	0	0
35B	3	0	0	0	0	0
36A	0	1	0	0	0	0
36B	0	1	0	0	0	1

PTW: Potato Tuberworms

BLH: Beet Leafhoppers

OLH: Other Leafhoppers

GPA: Green Peach Aphids

PA: Potato Aphids

OA: Other Aphids

From yellow Alphascents sticky cards in 3 feet, one per field.

TRAP	PP	OP
1	1	3
2	0	2
3	0	0
4	2	0
5	1	0
6	0	0
7	2	0
8	0	0
9	5	0
10	2	1
11	1	0
12	-	-
13	1	0
14	-	-
15	0	1
16	0	0
17	-	-
18	-	-
19	-	-
20	-	-
21	0	0
22	1	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	3	0
30	3	0
31	0	0
32	0	0
33	0	0
34	1	1
35A	2	0
35B	0	0
36A	0	0
36B	0	0

PP: Potato Psyllids

OP: Other Psyllids