

POTATO UPDATE

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Insect Trap Report

Area Pest Alert, Umatilla & Morrow Co.
Traps are collected on Thursdays.

TRAP	PTW	BLH	OLH
1	0	0	0
2	0	0	5
3	1	0	3
4	1	0	1
5	0	1	1
6	0	0	7
7	0	0	1
8	0	0	0
9	0	0	2
10	0	1	1
11	0	0	11
12	0	1	23
13	0	0	0
14	0	0	4
15	0	3	1
16	0	1	0
17	0	0	2
18	0	2	1
19	0	1	0
20	0	0	0
21	0	0	1
22	0	0	0
23	0	0	0
24	0	1	2
25	0	1	1
26	0	0	1
27	1	0	11
28	3	0	3
29	1	0	2
30	0	0	2
31	0	0	1
32	0	1	1
33	0	3	5
34	1	4	2

PTW: Potato Tuberworms
BLH: Beet Leafhoppers
OLH: Other Leafhoppers

From BLH yellow sticky cards located outside potato circles.

TRAP	PP	OP
1	0	3
2	0	35
3	0	74
4	0	16
5	0	21
6	0	4
7	0	1
8	0	64
9	0	7
10	0	1
11	0	10
12	0	6
13	0	1
14	0	2
15	0	2
16	0	16
17	0	0
18	0	5
19	0	0
20	0	1
21	0	0
22	0	0
23	0	2
24	0	1
25	0	5
26	0	3
27	0	45
28	0	2
29	0	1
30	0	14
31	0	0
32	0	1
33	0	1
34	0	1

PP: Potato Psyllids
OP: Other Psyllids

Tobacco rattle virus in the area

Tobacco rattle virus (TRV), a member of the genus *Tobravirus*, is a multicomponent virus that causes necrotic arcs and rings in potato tubers as well as symptoms in leaves and plant stunting. Severity of symptoms in tubers varies from distinct, easily identifiable arcs and rings to necrotic flecking, depending on cultivar and symptoms can frequently be confused with other viruses, such as PMTV. TRV is transmitted by stubby-root nematodes (*Trichodorus* and *Paratrichodorus* spp.); therefore **control options depend on an accurate diagnosis**. Over the last few weeks, several submissions to the HAREC Plant Pathology Lab have had the following symptoms: delayed or spotty emergence (Figure 1) frequently accompanied by deformed, brittle stems, sometimes with leaf formation below ground (Figure 2). The stems and tubers were tested for several viruses: *Alfalfa mosaic virus* (AMV), *Potato virus Y* (PVY), *Tomato spotted wilt virus* (TSWV), *Potato mop-top virus* (PMTV), *Potato leafroll virus* (PLRV), and *Tobacco rattle virus* (TRV). Most of the submissions were positive for TRV, but occasionally PVY was detected. If you have questions about TRV or would like to have some plants/tubers tested, please contact the HAREC Plant Pathology Lab.....*Robert Cating and Phil Hamm, Plant Pathologists*



Figure 1. Potato field with delayed emergence (red circles).



Figure 2. Normal potato plant (left) compared to plants infected with TRV (right).

First potato psyllids detected in bittersweet nightshade in spring 2014

A sampling program has been conducted in the Columbia basin area during the past two winters to investigate if the potato psyllid *Bactericera cockerelli* (Sulc.) is able to survive the winter on the solanaceous weed bittersweet nightshade *Solanum dulcamara*. Samples were collected every two weeks from selected sites primarily located in non-disturbed areas. Surveys have been extended in 2014 to investigate whether or not, and if so, how and when, overwintering psyllids move to potato plants and start colonizing potato fields. Psyllid counts showed a strong temperature-dependent trend with lower numbers collected as the winter progresses. Thus, higher psyllid adults were collected in December compared to January and February. No psyllids were collected during March or April (which is when spring temperatures normally terminate dormancy) however, 10 psyllids (adults and nymphs) were collected in May. **Although there is no**



Figure 3. *Solanum dulcamara* a.k.a. bittersweet nightshade in the Basin.

report on psyllids in commercial fields, our data show that a first generation may start to thrive on *S. dulcamara* plants as temperature increases. Our research is now focusing on looking for other potential hosts. **This is the first report of potato psyllids collected in spring in the lower Columbia basin area.** Get traps ready.

Thanks to Erik Echegaray, Postdoctoral Scholar in my lab for information provided....*Silvia Rondon, Extension Entomologist Specialist.*



HAREC Potato Field Day June 25 !!!!!