

INSECT MONITORING REPORT

Summarized Report for July 22-28, 2010

SPIDER MITES: We are just beginning to find spider mites in Columbia Basin potato fields. Growers should be scouting fields for mites now. Sampling for mites requires close visual inspection because they are tiny and difficult to see. It helps to shake the plant over a piece of white paper and then look for the tiny moving dots. Mite populations increase rapidly and the damage they cause can go unnoticed for some time, so it is important to scout often. If you plan to use a miticide, apply it early because none of the registered miticide products provide full control once populations reach outbreak levels. Mites damage potato plants by puncturing the surface cells of leaves, causing them to develop small yellow splotches that darken to reddish brown lesions. Severe damage may lower yield by reducing the capacity of plants to perform photosynthesis. Mite outbreaks have been related to 1) use of non-selective pesticides, like pyrethroids; 2) close proximity to mite harboring crops like corn, alfalfa, hops, and mint; 3) close proximity to dusty roads; and 4) hot, dry weather.

BEET LEAFHOPPERS: Mattawa area beet leafhopper (BLH) traps averaged 20 BLH/trap and ranged 4-55 BLH/trap. Traps in the North Basin (excluding Mattawa) averaged 20 BLH/trap and ranged 0-111 BLH/trap. Traps in the South Basin averaged 7 BLH/trap and ranged 1-34 BLH/trap. The counts were highest in the Mattawa, Quincy, and Ephrata areas this week. Click on the map below to see the BLH counts at each location. You will find that the counts vary a lot.

Recommendations: Beet leafhoppers are important pests because they transmit BLTVA, a phytoplasma that causes purple top disease in potatoes. We recommend growers deploy at least two yellow sticky traps around the margins of each potato field to monitor BLH. Traps should be checked weekly. Treatment thresholds have not been established for BLH in potatoes, but we know that the risk for BLTVA infection increases as the number of BLH increase. If the numbers build to 40-100 BLH/week, then it is probably time to worry. For more information about BLH, go to *IPM Guidelines for Insects and Mites in ID, OR, and WA Potatoes*.

POTATO TUBERWORM: Potato tuberworm (PTW) moths were found in three survey traps this week; one near Connell, and two in the vicinity of Pasco. These traps had 1-4 moth(s)/trap.

Recommendations: Potato growers (particularly in the South Basin) should maintain at least one pheromone trap adjacent to each of their potato fields. PTW infestations can be highly localized, and it is risky to conclude too much from traps that are miles away from your fields. For information on setting up your own traps click on the link for "*Tuberworm Monitoring with Pheromone Traps*". The traps should be checked weekly. If the moth counts increase from week to week, then control measures may be warranted before harvest.

APHIDS: We collected aphids from three fields in Franklin County, six fields in Grant County, and four fields in Adams County this week (13 of 33 fields sampled). None of the fields we sampled had more than 1 aphid/plant.

Recommendations: Potato growers should be checking fields regularly for aphids. Aphids can be found in fields across the Basin, and they are ready to move into your fields. Early

recognition and control of aphids is the best tactic in limiting the spread of potato viruses, especially potato leafroll virus (PLRV). Even a low incidence of virus can spread rapidly if aphids go unchecked. Current recommendations are to treat short-season potatoes when there are 5 aphids/plant, and long-season storage potatoes when there is 1 aphid/plant. Higher action thresholds may be appropriate for cultivars that are less susceptible to net necrosis resulting from PLRV infection. For more information about managing aphids in potatoes go to ***IPM Guidelines for Insects and Mites in ID, OR, and WA Potatoes***.

CATERPILLARS: We are continuing to see a lot of damage in potato fields from caterpillar (loopers, armyworms, cutworms) feeding. They are not always easy to find when scouting fields during the day, so look for the large holes they chew in potato leaves. If you detect a caterpillar outbreak in your field, please contact Andy Jensen at 509-765-8845 or Alan Schreiber at 509-266-4348. They are trying to learn more about this poorly understood group of insects.