

INSECT MONITORING REPORT

Summarized Report for July 2-8, 2010

BEET LEAFHOPPERS: Mattawa traps averaged 13.2 BLH/trap and ranged 6-24 BLH/trap. Traps in the North Basin (excluding Mattawa) averaged 5.0 BLH/trap and ranged 0-18 BLH/trap. Traps in the South Basin averaged 17.4 BLH/trap and ranged 3-93 BLH/trap.

Recommendations: Beet leafhoppers are important pests because they transmit BLTVA, a phytoplasma that causes purple top disease in potatoes. In 2002, purple top was widespread and resulted in significant yield losses in potato fields across the Columbia Basin. It continues to be a problem in some areas of the Basin every year. 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. If the numbers build to 40-100 BLH/week, then it is probably time to worry. The risk of BLTVA infection increases as the number of BLH increase. For more information about BLH, go to *IPM Guidelines for Insects and Mites in ID, OR, and WA Potatoes*. This publication lists several foliar insecticides that may be used to control BLH. Most of these insecticides are applied in May, June, and/or July in the Columbia Basin to target BLH and limit the spread of BLTVA.

POTATO TUBERWORM: Potato tuberworm (PTW) moths were found in three survey traps this week; two of the traps were near Pasco, and one near Burbank. One of the Pasco area traps had 8 moths this week, which is up from 3 moths last week. The other two traps with moths only had 1 in each trap. We recommend that potato growers in the South Basin maintain at least one pheromone trap adjacent to each of their potato fields. PTW can have very localized infestations, 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: Aphids were found in almost half of the fields we sampled this week (14 of 29 sampled). They were found in four fields in Franklin County, six fields in Grant County, and four fields in Adams County. Many of these were winged migratory aphids, but wingless aphids are beginning to build up in some fields.

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*.

THRIPS: Thrips have been found in almost every field we sampled this week, and their populations have been slowly increasing since spring. This is not unusual. Populations of thrips tend to be low in the early spring, and build up over time as nearby fields dry down and are

harvested. Thrips feed by rasping the surface of leaves, which causes a brown scarring or a silvering on the leaves. Cumulative damage on leaves from thrips feeding reduces photosynthesis, which slows growth. Damage from thrips is usually limited to the outside rows in potato fields, but can spread if populations become very large. Thrips are considered secondary potato pests; they are usually kept in check by predators and by a number of insecticides applied to control other pests in potato fields. However, if thrips populations are left unchecked they can become uncontrollably large.