

INSECT MONITORING REPORT

Summarized Report for June 24-July 1, 2010

BEET LEAFHOPPERS: Mattawa continues to be a hot spot for beet leafhoppers (BLH) this season. Mattawa traps averaged 39.6 BLH/trap and ranged 8-72 BLH/trap. Traps in the North Basin (excluding Mattawa) averaged 9.0 BLH/trap and ranged 0-40 BLH/trap. Traps in the South Basin averaged 6.9 BLH/trap and ranged 0-25 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 moths were found in three survey traps this week; two of the traps were near Pasco, and one near Connell. The traps had only 1-3 moths, but we will watch for the counts to increase as harvest time approaches. Trapping is most important in July/August through harvest, because this is when potato tubers become infested by potato tuberworm larvae.

APHIDS: We found equal numbers of winged and wingless aphids in Columbia Basin potato fields this week. Aphids were found in four fields in Franklin County, five fields in Grant County, and two fields in Adams County. The average count in each field was less than 1 aphid/plant, with the exception of one field in the Mattawa area, which had 2.5 aphids/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*.

BENEFICIAL INSECTS: Big-eyed bugs were found in most of the fields we sampled this week. These are beneficial insects known to eat pests including aphids and the eggs and larvae of Colorado potato beetle. Big-eyed bugs are voracious predators that have been observed to eat more than twenty aphids in a day! These are good insects to have in your potato fields. Unfortunately, big-eyed bugs are very susceptible to broad-spectrum insecticides. Dr. Bill Snyder, WSU Entomologist, and his team have observed that big-eyed bugs are six times more

abundant in fields sprayed with selective pesticides (like Fulfill and Success) compared to fields treated with broad-spectrum insecticides (like Monitor).