

Summarized Report for June 1-5, 2009

BEET LEAFHOPPERS: We are finding a lot more beet leafhoppers (BLH) in traps near potato fields this week. Every field that had BLH last week, has more this week. In the Lower Columbia Basin, BLH counts ranged 1-94 per trap and averaged (29.6); almost half had counts over 40. Managers of fields near traps with the highest counts should be concerned about BLTVA. In the Upper Columbia Basin, BLH counts ranged 0-21 per trap and averaged (6.6). We expect these populations to continue to increase rapidly over the next couple of weeks.

Beet leafhoppers are the only known vector of BLTVA, which causes a disease commonly known as purple top. BLH populations in the Columbia Basin usually begin to build in late May and increase through June. Now is the time to closely monitor BLH populations, because most BLTVA infections occur early in the season (the first eight weeks of plant growth). 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 you are finding more than 40 BLH in your traps, it may be time to get worried. We recommend that every grower deploy at least two yellow sticky traps around the margins of each potato field to monitor BLH. Follow the link to "IPM Guidelines for Insects and Mites in Potatoes" for more information about monitoring BLH and managing BLTVA (p. 23-32).

POTATO TUBERWORM MOTHS: No potato tuberworm moths were found in the project traps this week.

APHIDS: Most of the fields we sampled this week had no aphids, but we did find some. In Franklin County, we found aphids in three fields (averaging 0.8 to 15.6 aphids/plant). This area, between Pasco and Basin City, tends to have the highest populations of aphids early in the season; particularly in fields not treated with a systemic insecticide at planting. We did not find aphids in any other fields in the Lower or Upper Columbia Basin, but with aphid activity well under way in some fields in Franklin County, we can expect to see aphids in other fields soon. Farms should be checking fields regularly now for aphids and treat as warranted.

Green peach aphid (GPA) is the most efficient vector of potato leafroll virus (PLRV) which causes leafroll and tuber net necrosis in susceptible cultivars. Early recognition and control of GPA is the best tactic for limiting the spread of PLRV. Even a low incidence of PLRV can spread rapidly if GPA populations go unchecked. Current recommendations are to treat short-season potatoes when counts 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 PLRV and net necrosis. It is important to keep in mind, however, that aphids spread other viruses and can cause direct injury to plants when aphid densities are high.

OTHER INSECTS: We also found some Colorado potato beetle (CPB), thrips, and lygus bugs while sampling fields. The CPB populations were largest in fields not treated with systemic insecticides at planting. Thrips were seen in almost every field, but populations were not large. Beneficial predators, big-eyed bugs and damsel bugs, were also seen in most of the fields sampled.