

Summarized Report for July 6-10, 2009

BEET LEAFHOPPERS: In the South Basin, beet leafhopper (BLH) counts ranged 0-44 per trap and averaged (16.5). In the North Basin, BLH counts ranged 0-136 per trap and averaged (27.5). Beet leafhoppers are the only known vector of BLTVA, which causes a disease commonly known as purple top. 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. We recommend that every grower deploy at least two yellow sticky traps around the margins of each potato field to monitor BLH. If you are finding more than 40 BLH in your traps, it may be time to get worried.

POTATO TUBERWORM MOTHS: No potato tuberworm moths (PTM) were found in the survey traps this week. Early and mid season populations of PTM are usually light to moderate, compared to populations later in the growing season.

APHIDS: In the South Basin, aphid counts ranged 0-19.2 per plant. In the North Basin, aphid counts ranged 0-2.8 per plant. Growers throughout the Columbia Basin should be on the lookout 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 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.

THRIPS: Thrips have been found in every potato field we sample, 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.

CATERPILLARS: Various kinds of caterpillars have been found in surveyed potato fields; this week we found some in about one-third of the fields we sampled. Up to now, the populations do not appear to be large and the damage is not extensive. If you detect a caterpillar outbreak in your field, please contact Andy Jensen at 509-760-4859 or Alan Schreiber at 509-266-4348. They are trying to learn more about this poorly understood group of insects.