

Summarized Report for August 31–September 4, 2009

POTATO TUBERWORM MOTHS: In the South Basin, potato tuberworm moth (PTM) counts ranged 0-8 PTM/trap, and averaged (2.5/trap). This is about 50% more than we caught last week. These counts cannot be readily translated into risk of tuber damage, but it can be reasoned that the more PTM caught, the greater the risk. We recommend that growers in the South Basin monitor PTM populations near their fields and watch for them to increase. Control measures may be warranted prior to harvest. We have not found any PTM in our pheromone traps in the North Basin this season. For more information about PTM, click on the link to the IPM Guidelines for Insects and Mites below.

APHIDS: *Twenty-five fields are being monitored for aphids this season (three fields have been harvested). The fields are planted to Russet Burbank, Ranger, Umatilla, Alturas, or Norkotah.*

In the South Basin, aphid counts ranged 0-17.2 per plant, and averaged (3.1). These numbers have been climbing since mid-August. We found aphids in most of the fields we sampled this week in the South. In the North Basin, aphid counts ranged 0-0.2 per plant, and averaged (0.02). We have been finding very few aphids in the North. It is important for growers to continue to monitor for aphids, and treat as warranted. The green peach aphid (GPA) is a 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.

BEET LEAFHOPPERS: In the South Basin, beet leafhopper (BLH) counts ranged 0-15 per trap and averaged (2.3). In the North Basin, BLH counts ranged 0-100 per trap and averaged (11.2). 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.

SPIDER MITES: It is not uncommon to find spider mites in potato fields as the growing season begins to come to a close. We are finding mites in many of the surveyed fields. We highly recommend growers scout for mites. Sampling for mites requires close visual inspection; they are tiny and difficult to see. It helps to shake the plant over a piece of white paper and look for the tiny moving dots. Mite populations increase rapidly and the damage they cause can go unnoticed, so it is important to scout often. If you plan to use a miticide, apply it early because none of the registered miticides 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. Severe damage may lower yield by reducing the capacity of plants to perform photosynthesis. Mite outbreaks can be 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.

CATERPILLARS: We are finding more and more caterpillars in the potato fields we survey. Caterpillars, a.k.a. worms, are another pest to watch for in potato fields. They are not always

easy to find, so look for the large holes they chew in the potato leaves. 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.