

*Summarized Report for August 17-21, 2009*

**SPIDER MITES:** Two spotted spider mites were found in several fields this week, mostly in the South Basin. 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.

**BEET LEAFHOPPERS:** In the South Basin, beet leafhopper (BLH) counts ranged 0-24 per trap and averaged (5). In the North Basin, BLH counts ranged 0-74 per trap and averaged (12). The counts were highest in the Quincy-Ephrata area, and low everywhere else. 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.

**POTATO TUBERWORM MOTHS:** Potato tuberworm moth (PTM) populations continue to be small. We found PTM in two traps located in the South Basin this week, where counts ranged 0-9 PTM/trap and averaged (0.9/trap). We have not found any PTM in the North Basin.

**APHIDS:** *Twenty-five fields are being monitored for aphids this season. The fields are planted to Russet Burbank, Ranger, Umatilla, Alturas, or Norkotah. All are considered long-season crops.* In the South Basin, aphid counts ranged 0-5.7 per plant, and averaged (2.3). These counts are higher than last week. In the North Basin, aphid counts ranged 0-0.3 per plant, and averaged (0.05). Though aphids are generally on the decline now, it is important for growers to continue to monitor for aphids, and watch for any resurgence in aphid populations. 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.

**CATERPILLARS:** 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.