INSECT MONITORING REPORT
Summarized Report for Aug. 5-11, 2010

APHIDS: Aphids (mostly non-winged, colonizing forms) were found in 60% of the fields we sampled this week. The populations are beginning to increase. In fields where aphids were present, the counts averaged 0.6 aphids/plant and ranged from 0.1 to 3.5 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. **University-based recommendations are to treat short-season, non-stored potatoes when 5 aphids/plant are detected. Late-season storage potatoes should be treated as soon as non-winged aphids are found**. Higher action thresholds may be appropriate for cultivars that are less susceptible to net necrosis resulting from PLRV infection. Foliar insecticides that may be used to suppress aphids in late-season potatoes include Belay 50 WDG, Monitor, Fulfill, Actara, Beleaf, Assail 70WP, Voliam Xpress, Voliam Flexi, and Endigo. When selecting an insecticide it is important to know the use restrictions (PHI, season limits, etc.), follow guidelines for insecticide resistance management, and consider the impact on natural enemies. Always read the product label carefully, and follow all state and federal laws when applying pesticides. For more information about managing aphids in potatoes go to ***IPM Guidelines for Insects and Mites in ID, OR, and WA Potatoes***.

SPIDER MITES: Growers should be actively looking for mites. Sampling for mites requires close visual inspection because they are tiny and difficult to see. It helps to shake the plant over a piece of white paper and then look for the tiny moving dots. Mite populations increase rapidly and the damage they cause can go unnoticed for some time, so it is important to scout often. **If you plan to use a miticide, apply it early because none of the registered miticide products 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 lesions. Severe damage may lower yield by reducing the capacity of plants to perform photosynthesis. Mite outbreaks have been 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.

POTATO TUBERWORM: Potato tuberworm (PTW) moths were found in four survey traps this week; one near Connell, one near Mattawa, and two north of Pasco. These traps had 1-7 moth(s)/trap. The traps near Pasco had the most PTW moths per trap. We are expecting the PTW population (especially in the South Basin) to build over the next couple of months.

Recommendations: Watch for PTW populations to build rapidly in September-October. Potato growers (particularly in the South Basin) should maintain at least one pheromone trap adjacent to each of their potato fields. PTW infestations can be highly localized, and it is risky to conclude too much from traps that are miles away from your fields. The traps should be checked weekly. If the moth counts increase from week to week, then control measures may be warranted before harvest. Insecticide spray programs beginning 4 to 8 weeks before harvest have been successful in reducing PTW in potato tubers.

BEET LEAFHOPPERS: Beet leafhopper (BLH) counts vary a lot across the region, and from field to field. Click on the map below to see the BLH counts at each location. The highest BLH counts this week were in the West Basin (near Mattawa, Quincy, Ephrata). Mattawa area counts averaged 28 BLH/trap and ranged 0-80 BLH/trap. Traps in the North Basin (excluding Mattawa) averaged 17 BLH/trap and ranged 0-115 BLH/trap. The lowest BLH counts were in the South Basin; traps in the South Basin averaged 4 BLH/trap and ranged 0-20 BLH/trap.

Recommendations: Beet leafhoppers are important pests because they transmit BLTVA, a phytoplasma that causes purple top disease in potatoes. We recommend growers deploy at least two yellow sticky traps around the margins of each potato field to monitor BLH. BLH populations vary a lot from field to field, so it is best to have your own traps. Traps should be checked weekly. 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 the numbers build to 40-100 BLH/week, then it is probably time to worry. For more information about BLH, go to ***IPM Guidelines for Insects and Mites in ID, OR, and WA Potatoes***.