### **INTERMOUNTAIN POTATO LEAFHOPPER Homoptera: Cicadellidae** *Empoasca filament*

# DESCRIPTION

**Adults** are about 3 mm long, wedge-shaped, and green or greenish-yellow with lighter colored antennae and legs. **Nymphs** resemble adults in color, but are much smaller and lack fully developed wings.

### ECONOMIC IMPORTANCE

Nymphs and adults suck plant juices from the undersurface of potato leaves causing the leaves to appear "stippled" or speckled. Unlike the "Eastern" potato leafhopper species, *Empoasca fabae*, the intermountain potato leafhopper does not cause the leaves to appear "burnt" (sometimes called hopperburn). Adults and nymphs feed on weeds around field margins before moving into potato fields.

## **DISTRIBUTION AND LIFE HISTORY**

This pest occurs throughout the western United States. Damaging populations do not occur every year in all areas and the migratory nature of adults from weedy areas makes it difficult to predict when damaging populations may occur. The intermountain potato leafhopper overwinters as an adult in uncultivated areas around field margins where there are suitable weed hosts. Females emerge and deposit eggs inside leaves and stems of host plants in the spring. The eggs hatch in four to five weeks into nymphs that begin feeding on the host. Nymphs mature in three to six weeks. There is at least one generation on weed hosts before the adults disperse to potato fields. Development from egg to adult requires one to two months. In the northwest, there are at least three overlapping generations each year.

#### MANAGEMENT AND CONTROL

The intermountain potato leafhopper is attacked by several parasites and predators, which help suppress the population in some areas. However, the impact of natural enemies on this pest has not been well studied. Elimination of weed hosts in waste areas may help reduce breeding areas of this pest, but elimination of these weeds may be difficult and usually not economically feasible. The use of soil insecticides to control other pests also reduces populations of this leafhopper and control measures to specifically control leafhoppers are rarely necessary.



Leafhooper adult



Leafhopper nymph



Leafhopper damage



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