POTATO APHID Homoptera: Aphididae Macrosiphum euphorbiae

DESCRIPTION

Wingless (apterous) **adults and nymphs** are pale yellow to light green, or pink, about 3 to 4 mm long. Appendages generally pale with tarsi and antenna with dark or dusky colored patches. Winged (alatae) **adults** are pale yellowish-green with darker pigmented legs and antennae. The potato aphid is larger than the green peach aphid and the body is more elongate. The cauda is long and extends beyond the tips of the cornicles. The cauda of the green peach aphid is less conspicuous.

ECONOMIC IMPORTANCE

The potato aphid is commonly found on potato in the West. This species is less damaging that the green peach aphid because it transmits potato viruses in a nonpersistent way (just the first time it feeds after acquiring the virus. This aphid transmits potato leafroll, potato Y and A. The potato aphid feeds mostly on the upper leaves whereas the green peach aphid feeds on the lower leaves.

DISTRIBUTION AND LIFE HISTORY

This pest is widely distributed throughout the Western United States. The life cycle of the potato aphid is similar to the green peach aphid. The most common overwintering host of the potato aphid is rose. During the summer, the potato aphid occurs on tomato and weeds such as groundcherry and nightshade. Two or three generations occur on rose before winged aphids migrate to other suitable hosts. During the summer, females give birth to living young (all females), which produce several overlapping summer generations on potatoes and weed hosts. In the fall, fall migrant females are produced which fly back to rose bushes where a wingless egg-laying female generation is produced. Winged males are produced a little later on summer hosts, fly back to winter hosts, and mate with females that lay the winter eggs.

MANAGEMENT AND CONTROL

Control of the potato aphid is seldom necessary in commercial potato fields. Control may be necessary in potato seed growing areas to reduce the transmission of viruses, especially virus Y. Generally, measures used to control green peach aphid also control potato aphid. If insecticides are used, care should be taken to select insecticides that have the least effect on natural predators and parasites.