**APHIDS—PEACH POTATO APHID (Myzus persicae)**

Serious aphid damage to peach

Alate (flying) adult

Cucumber Mosaic Virus

Peach potato aphid colony

Apterous nymph

Alfalfa Mosaic Virus on tomato spread by Peach Potato Aphid

 Colony

Statewide IPM Program, Agriculture and Natural Resources, University of California

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Description

Peach Potato Aphid (PPA) (Green Peach Aphid) attacks a wide variety of plants worldwide. Not only does it damage plants directly but it also spreads 200 virus diseases. Sometimes needs controlling on fruit trees, but summer stage on vegetables (e.g. Potatoes and Cucurbits) causes much damage.

Overwinters in the egg stage on the bark or buds. Eggs begin hatching before buds open in March. Nymphs feed on unopened buds early in spring. After bud break feeding causes leaves to curl protecting aphids while they feed. Aphid reaches adult stage in 2 to 3 weeks and begin to produce nymphs asexually. In each generation some winged aphids are produced which fly to vegetable plants and weeds for summer. In fall males and females return to the orchard to mate and lay overwintering eggs on the bark.

Monitoring

Where virus diseases are a problem, plants must be inspected weekly and this aphid must be controlled even if present at a very low density. There is no threshold for treatment: treat if present.

Control

Plant virus-free seed and control weeds. Viruses spread by PPA affect potatoes, cucurbits (watermelon, marrow, cucumber), tomatoes, cabbage, spinach, lettuce beans and alfalfa. Crop covers or ‘fleeces’ are useful for keeping out early infestations on vegetables.

Imidacloprid, acetamiprid or thiamethoxam—apply at planting of vegetables and incorporate into root zone. N.B. To prevent resistance, do not use these neonicotinoids more than once per year.

Synthetic pyrethroids (cypermethrin, lambda-cyhalothrin, bifenthrin), dimethoate, malathion or chlorpyrifos are all effective against aphids, but are not recommended for IPM as beneficial insects will be killed. The following modern pesticides are all active against aphids: imidacloprid, thiacloprid, acetamiprid or thiamethoxam (all neo-nicotinoids), pyridaben, pymetrozine. Pirimicarb is also highly effective and safe to beneficial insects.