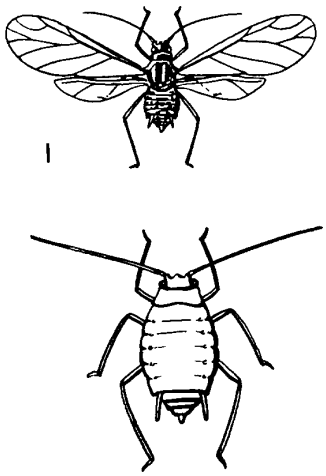
GREEN PEACH APHID **Homoptera: Aphididae** *Myzus persicae*

DESCRIPTION

Wingless (apterous) **adults and nymphs** are pale yellow to light green, yellow or pinkish-green, about 2 mm long, usually with median and lateral longitudinal darker green stripes. All appendages pale with tarsi, tips of antenna, rostrum and cornicle dusky colored. Winged (alatae) **adults** are pale yellowish-green with dark lateral areas and a dark dorsal patch (sometimes broken into bands). The head and thorax are black, tarsi black, cauda, cornicle and antenna pale to dusky.



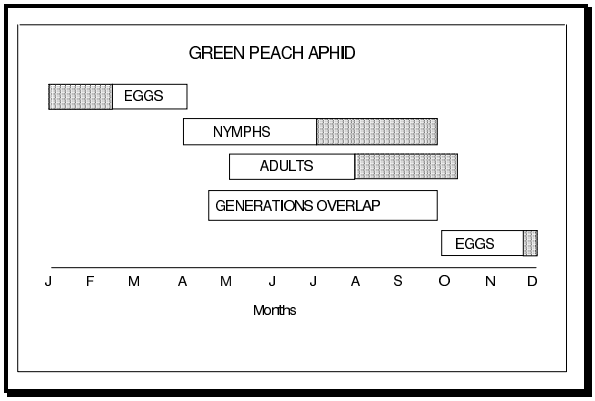
(after USDA Bull. 1371)

ECONOMIC IMPORTANCE

High populations of this pest may build-up in peaches, potatoes, sugarbeets, and garden plants producing serious damage. Adults and nymphs suck plant juices and transmit about 300 virus diseases. The most serious diseases include potato leafroll, beet western yellows, potato virus Y, and bean mosaic.

DISTRUBTION AND LIFE HISTORY

This pest is widely distributed throughout the United States and southern Canada. The green peach aphid overwinters in the egg stage on the bark or buds of peach, plum, apricot, and cherry trees. However, the young nymphs which hatch from the egg the following spring are able to survive only on peach. This aphid also overwinters on weeds growing along warm drain ditches fed by hot springs. Eggs hatch into nymphs (all females) about the time peach trees begin blooming. Two or three generations occur on the overwintering host before winged aphids migrate to other suitable hosts, including weeds such as tumble mustard. Bedding plants from greenhouses also are an important source of infestation. During the summer, females give birth to living young (all females) which produce several overlapping summer generations on cultivated crops and weeds. In the fall, fall migrant females are produced which fly back to the overwintering host and produce wingless egg-laying females. 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

Green peach aphid should be controlled throughout the growing season to reduce the spread of virus diseases on potatoes. The most frequent control procedures involve an application of a soil insecticide prior to plant emergence followed by foliar applications during the growing season. Foliar applications should be based on taking leaf samples (100 leaves) to determine the treatment threshold. On potatoes, a treatment threshold of 3 to 10 apterae per 100 leaves has been suggested. To help reduce the introduction of viruses into a field, growers should: 1) plant certified virus-free seed, 2) destroy volunteer plants, 3) rogue frequently to remove diseased plants, and 4) in the case of potato leafroll, kill potato vines early. Insecticides are most commonly used to reduce populations of this pest, but care should be taken to select insecticides that have the least effect on natural predators (such as nabids, big-eyed bugs) and natural parasites.