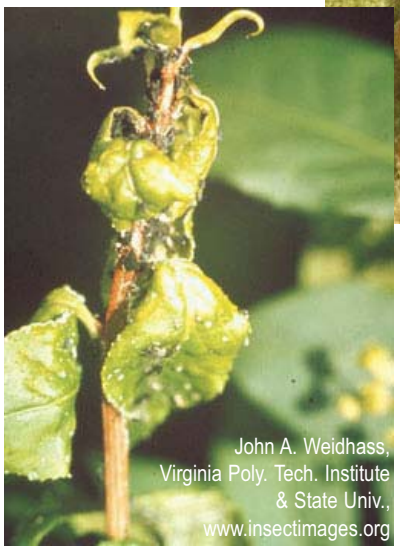
Aphids

Description: Aphids can be green, yellow, brown, red, blue, or black and are about 1/10 inch long. This small, pear-shaped pest has long legs and antennae, and a pair of cornicles (tubelike structures) projecting out of the back of its body. Adults may be winged or wingless. Females give birth to live young that begin feeding on plants right away.

Damage: Aphid feeding may cause curled, yellowed, and deformed leaves, as well as stunted shoots. Sticky honeydew may also be secreted attracting ants and turning black with sooty mold fungus. Some aphid species inject a toxin into plants, that produces distorted leaves. Many transfer viruses from plant to plant.

Management: There are insecticides available to control aphids, but do not spray with chemicals if aphid mummies (parasitized bodies) are present. Allow beneficial insects (syrphid fly larvae, lacewings, ladybird beetles, parasitic wasps) to continue to kill the aphids. Control ant populations, prune areas with aphids, and avoid using high levels of nitrogen fertilizer. Washing aphids from plants with a forceful stream of water obtains good, short-term control. Repeat as necessary.

John A. Weidhass, Virginia Poly. Tech. Institute & State Univ., www.insectimages.org



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Aphids are usually found sucking plant juices on new growth (above). Deformed, curled, yellowed leaves are evidence of aphids (left).

Apple Aphid

Description: Adult females are pear-shaped and light green, sometimes with yellow bodies in spring. The less numerous males are smaller and yellowish brown with black antennae. Nymphs are wingless females that become stem mothers, which give birth to live young without mating. Winged apple aphids (the true sexual forms) mate and lay oval, green eggs on twigs. The eggs eventually turn black.

Damage: In mild climates, apple aphids live all year in the tree, reproducing continuously. Damage is similar to that caused by rosy apple aphids. Apple aphids cause the foliage to curl. They also produce honeydew, upon which grows a black fungus that discolors the leaves and apples. Damaged apples will be dwarfed and appear puckered at the blossom end.

Management: A lack of pruning will encourage aphid colonies. Apply dormant oil at leaf emergence to smother eggs. Pre-blossom applications of aphicides are effective. Foliar applications of systemic compounds in early season through summer kill aphids, particularly if done prior to leaf curling when the aphids are exposed.

Apple aphids cause leaf curling (left).

Adult winged apple aphid (right).

Green Peach Aphid

Description: In spring and fall, deep pink stem mother females bear live young. Pear-shaped adults develop from stem mothers. They are yellowish green with a median and two lateral dark green stripes over their abdomen. The young nymphs are yellowish green with darker green lines on their back.

Damage: Green peach aphids feed early in the season on a variety of plants. When they feed on leaves and extract sap, the leaves turn yellow and drop. Honeydew is excreted and a black, sooty fungus develops. Green peach aphids also transmit virus diseases.

Management: Green peach aphid is resistant to many pesticides and is difficult to control. Delay the use of chemicals to allow predators and weather to reduce the population. When using a pesticide, make sure to cover the plant thoroughly, particularly the undersides of leaves. Use dormant oils in winter and ultrafine horticultural oils in summer.

Feeding by green peach aphids causes leaves to turn yellow (left).

Nymphs and a winged adult, which forms when populations are dense (right).

Rosy Apple Aphid

Description: Adults are rosy brown with a powdery covering. Nymphs are wingless females that become stem mothers, which give birth to live young without mating. Winged rosy apple aphids (the true sexual forms) mate and lay oval eggs on twigs. The eggs change from bright yellow, to greenish yellow, to black.

Damage: Young rosy apple aphids feed on and around the opening buds of apples and other hosts, including ornamentals. They also suck sap from leaves, stems, and young fruits. Feeding causes leaves to curl, which provides protection for the aphids. The leaves may also turn bright red. Feeding results in bunching, stunting, and malformation of fruit. Large populations secrete much honeydew, upon which a sooty fungus grows. Toxin in the saliva of rosy apple aphids prevents fruit from falling at the normal time.

Management: Keep trees trimmed so insects and birds that feed on rosy apple aphids and their eggs can find them. Pre-blossom applications of contact or systemic aphicides may be effective. Use ultra-fine horticultural oil and soaps early. It is hard to obtain control with pesticides after leaf curling has occurred.

Adults are pinkish due to a powdery covering (left).

Feeding by rosy apple aphids results in bunching, stunting and malformation of fruit (right).

Woolly Apple Aphid

Description: The adults are purplish and almost entirely covered by a woolly mass of waxy fibers. The males are smaller and olive-yellow. The eggs are oval and cinnamon-colored. Wingless females (stem mothers) birth live young without mating. Winged woolly apple aphids (the true sexual forms) mate in fall and lay overwintering eggs.

Damage: White, cottony masses can be found above ground on pruning wounds and new growth, or on large knots on the roots and crown. Branches will have gall-like formations and there will be swollen enlargements on the roots. Trees infested with woolly apple aphids will have short, fibrous roots. These aphids prevent healing and cause the roots to decay. Foliage will turn yellow. Woolly apple aphids may transmit apple canker.

Management: Pyrethroid and carbamate pesticides kill natural predators causing outbreaks of aphids and mites. Apply other aphicides to control woolly apple aphids in tree tops. Dormant oils and soap are not effective. Underground aphids are harder to control. Select trees with resistant rootstocks.

Underneath the woolly mass of waxy fibers, woolly apple aphids are purplish (left).

Cottony masses can be found on new growth (right).