Garden Mastery Tips

from Clark County Master Gardeners

Aphids

Aphids come in many colors, most commonly green, yellow, pink, red, grey, black or brown. Most are wingless, but when the temperature becomes cooler (spring or fall) or overpopulation occurs, some species can form wings and move to new areas. They can be found singly, but more often feed in dense groups on leaves or stems. They do not move rapidly when disturbed, unlike other insects that may be confused with them, such as leafhoppers or mealy bugs.

The aphid has three stages in its life cycle: egg, nymph and adult. In mild climates they can reproduce asexually (without mating) throughout most of the year. A large percentage of the offspring are females. During the nymph stage, aphids shed their skins about four times before becoming adults. During warm weather (65 to 80 degrees), many species develop from newborn nymph to reproducing adult in 7 to 8 days. After that time, a female aphid can give birth asexually to a second generation of females. Adult females can give birth to live offspring (as many as 12 per day) without mating, often producing up to 80 offspring in a matter of a week. In the fall, winged males are produced, which will mate with the remaining females. The eggs produced will overwinter, and the cycle begins anew the following spring.

The presence of a few aphids on your plants will not usually cause excessive damage. However, large populations can cause curling, yellowing, and distortion of the leaves. They can also produce large quantities of a sticky excretion known as honeydew. This honeydew often turns black as sooty mold fungus grows. Some species of aphid inject a toxin into plants, which can further distort growth.

Although aphids seldom kill a mature plant, the damage they cause and the honeydew they secrete can warrant control. There are many natural predators that feed on aphids; among them are ladybugs, adult wasps, spiders, birds, and assassin bugs. You can purchase commercially grown ladybugs, but be aware that most will disperse away from your yard within a few days. See <u>Be a Beneficial Gardener – Support Your Local Insects</u> from the March 2004 issue of Clark County Cooperative Extension Master Gardener Garden Mastery Tips.

The presence of ants on your plants may indicate an aphid population, as ants will feed on the honeydew. Ants will also protect the aphids from natural enemies. If you see ants on your plants, you might want to use a band of sticky material such as Tanglefoot around the trunk, to prevent ants from getting up. This is only good on larger, more mature plants and trees. On young plants, the sticky material may have a phytotoxic effect. If you have infestations on younger plants, put a band of fabric tree wrap or duct tape around the stem and then apply the sticky material to the band.

Aphids are attracted to the color yellow, so you might want to place traps containing sticky material close to the host plants. You can make a sticky trap by spreading petroleum jelly on a yellow index card and placing it in an area where you have observed aphids.

Another good means of control is to spray a steady stream of water at the host plant, which will knock the aphids to the ground. Once on the ground, it is difficult for the aphids to return to the plant and they become easily susceptible to ground predators. Be sure that you check the underside of the leaves, as many species of aphid prefer this area of the plant. You can pick off aphids from affected plants, in order to reduce the population. Pruning is also a way to remove overwintering aphid eggs.

If none of the biological or physical control methods are working, you might choose to use insecticidal soap, which can be sprayed on the affected plants to achieve control. Using dormant oil spray during the fall helps to kill overwintering eggs.

Resources

Brenzel, Kathleen N. Sunset Western Garden Problem Solver. Menlo Park: Sunset Books Inc., 1998.

Flint, M. L. How to Manage Pests - Pests in Landscapes and Gardens. Retrieved December 17, 2003.

Grupp, Susan M. University of Illinois Extension. Aphid. "The Bug Review" Aphids. Retrieved January 8, 2004.