APHIDS ARE ON THE WAY!!
By Jolene Adams, Alameda County Master Gardener

Aphids are small, soft-bodied insects. They can be green, yellow, brown, red, or black depending on the species and the plants they feed on. They are small, pear-shaped insects with long legs and antennae. They have a long mouthpart that is used to pierce tender plant tissues in order to suck the juices out of them.

Generally adult aphids are wingless but winged forms will occur in spring and fall or when population pressure builds up and they need to move to other plants in other areas.

You will see aphids start appearing as the spring weather causes faster growth in succulent stems and leaves. They can often be found in thick groups clustered at the tips of the soft new growth. They do not move quickly and are very easy to wash off with a strong jet of water from the garden hose.

LIFE CYCLE

Aphids can reproduce without mating and can have several generations each year. Adult females can give birth to live offspring (often as many as 12 per day) without mating. The young aphids grow rapidly, molting their skins at least four times before reaching adulthood in seven to eight days. Those cast off skins are the white husks you see hanging on the stems and leaves of your plants.

DAMAGE

Having a few aphids in the garden is no problem, but large populations can cause distorted growth in leaves and stems, leaving you with a less than desirable plant with damaged or small flowers and fruits and stunted growth due to loss of vital plant fluids.

The large groups of aphids excrete a sticky fluid known as honeydew, which attracts sooty molds and ants. Ants will actually protect aphids from other insect predators and move them from plant to plant in order to harvest the honeydew. Some aphid species are known to transmit viruses when they go from plant to plant, especially in vegetable gardens. Others are known to produce leaf galls.

Aphids usually do not kill the plants they infest, but the damage they cause is unhealthy, the black molds living on honeydew are unsightly, and crop production can decrease due to heavy feeding.

Check your garden regularly once the temperatures start hovering between 65º F and 80º F. Get rid of the infestation early before the damage builds up. Look for a buildup of honeydew, sooty molds, ants crawling up into the plants, shed skins and globs of adult aphids clustered on the tender parts of the plants.

MANAGEMENT

Natural enemies such as lady beetles, lacewings, leatherwing beetles and syrphid fly larvae will take care of most of the problem if your garden is not sprayed with insecticides. Squirting off the aphids in the mornings is guaranteed to give the ground beetles a hearty breakfast as they can catch the aphids when they fall on the ground. If the aphids have attracted ants, you must treat for the ants first.

Weather can also affect aphids. Cold and also hot weather will diminish the aphid population. That's why you see them mostly in spring and fall. High nitrogen fertilizers attract aphid populations since the juices of the plant will contain higher levels of nitrogen. Feed your plants with a low nitrogen formula and sparsely. Organics that slowly break down can help feed without boosting aphid populations.

Try growing your vegetables with an aluminum coated sheet mulch (made by Reynolds Aluminum Co.) or reflective plastic mulches. These mulches repel aphids and reduce the number of attacks on your seedlings. They can also help increase crop yields due to the reflection of sunlight up to the leaves. Be sure to remove the mulch before the summer gets too hot.

If your plants are thickly coated with aphids and you just can't hose them off, spray them thoroughly with horticultural oils, neem oils, or insecticidal soaps. Only the aphids directly hit with the spray will be killed. You will not be spraying the lady beetles and other predators so they will remain to clean up the plant for you. Don't use soaps and oils when the day is over 90ºF.

There are many insecticides on the market that will kill aphids, but be aware that they also kill the natural enemies that provide long-term control of aphids and other pests. Repeated applications of these insecticides may also develop resistance to the material by the aphids

When considering application of pesticides for aphid control, remember that moderate populations of aphids attacking leaves of fruit trees or ornamental trees and shrubs do not cause long-term damage. Low populations can be tolerated in most situations and aphids will often disappear when natural enemies or hot temperatures arrive. A forceful spray of water or water-soap solution, even on large street trees, when applied with appropriate equipment, will provide sufficient control.

Send comments or questions on this article to acmgfeedback@ucdavis.edu. For more information on food gardening and pest control, visit the UC California Garden Web website, http://cagardenweb.ucdavis.edu/, and the UC Integrated Pest Management Program website, http://www.ipm.ucdavis.edu/.

Jolene Adams is a University of California Master Gardener. For more information on Alameda County Master Gardeners, visit their website http://acmg.ucdavis.edu/.

Free Talks
Every 4th Saturday of the month, the Alameda County Master Gardeners offer free talks on gardening topics at their Lake Merritt Trails Garden in Oakland. The 15-20 minute talks begin at noon. This month, on April 28, Birgitt Evans will speak on "Planning and Planting a Summer Vegetable Garden."

Getting there: The Trials Garden is located in the center of the community garden area behind the Lakeside Garden Center at 666 Bellevue Avenue, Oakland.

Photo caption: Aphids on a rose bud. Photo by Jolene Adams