Aphids

Aphids are small, plant-sucking insects common throughout North America. They range in size from 0.05 inches to nearly 0.4 inches. As a reference, that means most aphids are smaller than a grain of rice. Aphids can come in many colors, such as the yellow aphids found on milkweeds to light green on tomatoes, along with red, black, and white. Aphids may specialize; an aphid on a tomato won't necessarily jump to your roses. There are winged aphids, which can travel from plant to plant, but in most cases, an aphid can travel on the wind for many miles. To complicate matters, aphids can lay eggs or give live birth, and many aphids are born sexually mature. Most aphids live between 20 and 40 days. Due to their rapid reproduction, a single aphid can be responsible for nearly 40 generations in their lifetime. Aphids may lay eggs in the soil in the fall to over-winter and reemerge when the weather warms.

Aphids suck sap out of plants. The sap is high in a mix of sugars, which is the primary food source for aphids. Over-fertilized plants, particularly excess nitrogen, can create an especially tasty environment that may encourage attack. The aphids digest the sugars they need, and excrete the unused ones. This excrement is known as honeydew, and is, unfortunately, aphid poop. The honeydew coats the leaves as a shiny, sticky substance. The honeydew by itself is not a serious problem, but it does provide a perfect environment for the growth of a mold called "Black Sooty Mold". The mold will cover the leaf with a dark substance that can reduce the leaf's ability to use sunlight to photosynthesize food.

The honeydew from aphids is a favorite food source for some varieties of ants. When noticing a large number of ants on a plant, consider looking under the leaves for aphids. Ants will literally farm aphids, protecting them from predators so the ants will have a constant supply of honeydew available. Removing the aphids will reduce or eliminate the ants.

Plants being attacked by aphids may show leaves that are mottled, curled, wilted or yellowed. Check the underside of the leaf for the insect. Inspect curled leaves, uncurling the leaf to see if aphids are present. The damage done by aphids can reduce the plant's yield. Aphids can also spread diseases from plant to plant, such as late blight or cucumber mosaic virus.

Control of aphids can be very simple. Spraying a strong jet of water on the underside of plant leaves can either kill aphids directly, or they will be knocked off the plant, making it nearly impossible for them to return. Insecticidal soap will desiccate the aphid. Horticultural oil will coat and suffocate them. Both are safe and effective pesticides, but must be sprayed directly on the insect. TO BE EFFECTIVE, repeat the treatment at least three times per week, for up to 2 weeks. Spray plants only early in the morning or late in the evening to avoid burning the leaves.

There are a large number of beneficial insects that feast on aphids. Ladybugs and their larvae, hoverfly larvae, green lacewings and their larvae, parasitic wasps, and crab spiders provide natural controls for this pest. By using the least-toxic control, beneficial insects can reduce the number of aphids and the damage they do.

 7.31.12 Jeff Ferris