

# Aphids

By Rebecca Miller-Cripps

Although it's been wintry recently, spring is on the way. One of the first signs of spring is new growth on shrubs, such as roses, that is covered with small green, yellow, red, black or brown insects. Upon closer inspection, you may find that these insects sport twin "exhaust pipes" extending from their rear ends. These exhaust pipes, referred to as cornicles, provide conclusive evidence that your beloved plant is hosting a population of aphids.

According to the California Master Gardener Handbook, "aphids have numerous generations per year" in our conducive California climate. Most pest aphid species in California give birth to live offspring without the necessity of either mating or laying eggs (talk about efficient reproduction)! Mating and egg laying activities only become necessary when the species needs to over winter during harsher weather.

Aphids possess sucking mouth parts which they use to extract juices from plants. Their sucking creates twisted, deformed leaves and shiny, sticky honeydew that may support the growth of sooty mold. If you see a trail of ants marching into a shrub or tree, you may also guess that there's a colony of aphids there. Ants tend the aphids, farming them for their honeydew and protecting them from predators.

So, what to do about these over-populating, plant-sucking invaders? Before you reach for the nearest can of insect spray, let's consider....



Figure 1 Rose Aphids



Figure 2 Plant Damage

By the time you've noticed aphids or their damage, their time on that particular plant may be almost over. We rarely notice insect damage until a certain threshold has been reached. And, often, on landscape plants, some insect damage can be tolerated in the name of natural balance. Remember – in the spring if you don't have insects, then you won't have birds! Also, wait for warmer weather. As temperatures increase, many aphids will leave.

Aphids are attracted to succulent new growth, which is why they're often seen on spring shoots. As growing shoots become stronger and tougher, they aren't so attractive to insects that must make their living by sucking. One of the easiest control methods you can use is to NOT fertilize your favorite shrub. Most landscape shrubs and trees in California do not require fertilization.

Increased fertilizer creates increased growth which creates increased insect attraction (and increased demand for water).

Resist the urge to spray that trail of ants or that aphid-laden rose stem with an insecticide. Most insecticides that kill ants and aphids also kill all other insects in the area. By the time you've noticed a population of aphids, so have their natural enemies (referred to as "good bugs.") If you kill all insects in the vicinity – including the parasites and predators of aphids – you will eliminate their competition, creating a rebound effect that results in a greater population of the insect you originally were trying to eliminate.

To quote Alfred Lord Tennyson, "Nature red in tooth and claw" will assist you in your battle with aphids if you let her. Some of her biological control agents include parasites and predators. Some parasites, such as tiny wasps (so tiny we don't even notice them), lay an individual egg within the body of an aphid. As the wasp larva grows it literally eats the aphid to death from the inside out. Lacewings, those insects with the lovely diaphanous, transparent wings, create larvae that are so voracious on aphid populations that they're referred to as "aphidlions." And ladybugs (or lady beetles) are well-known for their aphid appetites, both as adults and as larvae. Just remember that, like the children's nursery rhyme, ladybugs purchased and released for aphid control will often "fly away home."

If additional control methods are required, aphids can be removed by hosing them off with a strong jet of water (sometimes daily hosing is required during periods of heavy feeding) or the application of soap solution sprays. For more information about aphids, including lady beetle release tips, see <http://ipm.ucanr.edu/PMG/PESTNOTES/pn7404.html>

Pruning out areas of heavy populations can also assist in the control of aphids. On Saturday, March 2, UCCE Master Gardeners of Tuolumne County will have an Open Garden Event at the Demonstration Garden located at 251 S. Barretta Street, Sonora. Some of the presentation topics will include rose pruning, grape pruning, fruit tree pruning, and seed starting. The garden is open from 10:00 am to 1:00 pm and the presentations start at 10:30 am.

*Rebecca Miller-Cripps is a University of California Cooperative Extension Master Gardener of Tuolumne County who leaves aphids to their natural enemies.*

*UCCE Master Gardeners of Tuolumne and Calaveras Counties can answer home gardening questions. Call 209-533-5912 or go to: <http://ucanr.edu/survey/survey.cfm?surveynumber=7269> to fill out our easy-to-use problem questionnaire. Check out our website at: [http://cecentralsierra.ucanr.edu/Master\\_Gardeners/](http://cecentralsierra.ucanr.edu/Master_Gardeners/) You can also find us on Facebook.*