Q: My roses are covered with aphids. How can I get rid of them without using nasty pesticides?

A: Rose buds and new foliage seem to be a favorite with aphids. These tiny, soft-bodied sucking insects proliferate rapidly. Their bodies are pear-shaped, with long legs and long antennae, with appendages that project outwards from their backsides called cornicles. Aphids are the only insects with these cornicles. In only 7-9 days females can give live birth to other females, as many as twelve per day, leading to very rapid increases in their population, which can appear to explode virtually overnight. Most often you will find wingless aphids, but in the spring and fall, winged adults occur that fly to new host plants.

In small quantities, aphids do not cause much damage to plants, but when the numbers increase plant tissues can become stunted, and deformed. The sticky exudate that aphids secrete hosts a black fungus called sooty mold, which is not very pleasing visually. Aphids can also transmit plant viruses.

The first and simplest method of aphid control is to blast them off the plant with a stream of water. Aphids are not good climbers, and once on the ground are unlikely to make it back up the rose bush. You want to do this early in the day so that the foliage has time to dry off.

Aphids have many natural enemies, and as they have few defenses, those predators will often keep them in check if pesticides have not been used. However, the natural predators cannot compete with ants if they are farming your aphids. Ants will defend the aphids, ‘milking’ them and taking the ‘honeydew’ that they exude back to their nests. The next step in your aphid control program needs to be ant discouragement. This can be done by banding the plants with a thick material like ‘Tanglefoot’ in which the ants would get stuck, or by using ant-stakes that contain a bait like Boric Acid that the ants will take back to their nests.

Once the ants can no longer protect the aphids, beneficial insects may move in. The ‘good guys’ include lady bug adult and larvae, syrphid fly larvae, lacewing larvae, soldier beetles, tiny parasitic wasps and others. A number of diseases kill aphids as well. Look carefully at the infested leaves, using a magnifying class or a 10X loop. You may see the larvae of predatory insects there at work for you, or the bloated husks of aphids killed by fungi or disease. If so, you know that nature is taking care of your problem for you, and your best option is patience.

Check your fertilization schedule. If you are applying large quantities of high nitrogen fertilizers, you are encouraging the succulent growth that aphids prefer. Use slow release fertilizers whenever possible.

If these first steps don’t take care of the problem, ask the Master Gardeners to send you a copy of the aphid IPM information sheet from UC. Many different less toxic products are mentioned that can help provide short-term reductions in the aphid population