Fending Off Aphids
By Dennis Hinkamp

To most of us a diet consisting of one item sounds pretty boring and mundane. Most insects, however, are particular about the plants they damage and eat. For example, Mexican bean beetles only attack beans, and asparagus beetles only like asparagus.

Aphids are an exception says Jerry Goodspeed, Utah State University Extension horticulturist. They can be found on many different plants in the garden and landscape. There are many different kinds of aphids, each preferring a certain type or part of plant.

Aphids do not chew on plants, Goodspeed explains. They have a permanent straw sticking out of their mouths to suck the sap and sugar out of stems, leaves and other tender plant parts. They are small, soft-bodied insects that come in a myriad of colors. A few even cover themselves with a waxy, woolly or cottony substance.

Most plants respond to aphid damage by curling their leaves, he says. This provides a nice little protected area for the aphids to feed. Aphids themselves produce a sticky, honeydew substance that covers the leaves. In heavy infestations on trees, this honeydew literally drips off the tree like rain, leaving whatever is beneath the tree, like your car, sticky and messy.

Aphid eggs spend winter laid in a protected location, Goodspeed says. As weather warms, the eggs hatch a generation of winged aphids. They fly to an unsuspecting host and begin eating.

"Aphids have a very high reproductive rate," Goodspeed says. "After the first generation, they reproduce asexually (females giving live birth to more females). These little critters are ready to eat the second they are born. A typical female aphid produces more than 100 offspring every week. These aphids mature within two weeks, keeping the numbers multiplying throughout the summer."

Then, if the plant gets too crowded, he says a generation of flying male and female aphids is produced, and they move on to greener pastures. This generation starts the whole process over again on a new plant. It becomes apparent that, if left unchecked, aphid populations can build to damaging numbers quickly.

Fortunately, there are a number of ways to keep these pests in check, Goodspeed says. Aphids have many natural predators. Lady beetles (ladybugs) and lacewings are probably the most common. Both adults and larval stages feed on aphids.

"Our naturally occurring predators control many aphids," he says. "However, we must be patient for predator numbers to build up, and that usually doesn't happen until the aphid population grows significantly. Keep in mind that most plants can withstand some aphid damage. If the aphids are getting out of control, lady beetles and other predators can be purchased at nurseries and garden centers."
Insecticidal soaps can also be used to control aphids, he adds. These sprays contain a concentration of soap that covers the insects, suffocating them. The product must be sprayed directly on the insect to be effective.

"If the leaves are curling this can be a difficult task," Goodspeed says. "Sometimes just a strong stream of water to knock them off the plant is enough to control the nasty pests."

The last resort for aphid control is insecticides, he says. If nothing else is working, many insecticides are registered for aphid control. Be sure the plant you are treating is listed on the label. One concern with insecticides is their effect on the good predators. They are normally killed along with the aphids. This means the aphids are likely to return again, and start the cycle all over again, with no natural predators to slow them down.

For more information, contact your local USU County Extension office.