

Janet B. Carson  
Extension Horticulture Specialist  
Arkansas Democrat-Gazette  
Bugs of summer 2016

Our mild winter, coupled with a mild spring and plenty of rain, has brought us a bouquet of flowers in our gardens, great vegetables and plenty of bugs! Insects of all kinds seem to be around in abundance this season, so scout your garden often and find them before they take over.

Aphids are the rabbits of the insect world, giving birth to living young and spreading quickly. Aphids have one of the widest ranges of host plants of any insects—from flowers to vegetables, shrubs and trees, they are equal opportunity feeders. The tiny pear-shaped, soft bodied insect can be green, brown, white, black, yellow or pink in color. Both the adult and the nymph stages feed on plants, sucking sap out of the plant and giving off a sweet substance called honeydew. Honeydew can fall on leaves and stems, or on car windows or patio furniture and cause a sticky residue. If the residue stays on the surface long enough, a black sooty mold will form on the residue, which can cover a plant, cutting down on photosynthesis. Aphids have a piercing sucking mouthpart which is similar to sticking a small straw into the stem and sucking out its juices. While they can feed on any plant parts, they prefer the tender new growth and often cluster together as a group to feed. Aphids are not difficult to kill, but they tend to get out of hand quickly if you don't watch for them. A spray of water can knock down a small group, or you can use insecticides including insecticidal soap. If you have lady bug beetles around, let them do the job, since they love to feast on aphids.

Whiteflies are soft-bodied, winged insects closely related to aphids and scales and also feed by sucking sap from the plants. They typically feed on the undersurface of the leaves, and lay their eggs there as well. Each female can lay between 400- 500 eggs in cluster, so you can see how they can multiply. The adults are small, usually less than ½ inch in size, clustered together on the bottom of the leaves. They have four broad, delicate wings that are held roof-like over the body and covered with a white powdery wax. Whiteflies are active during the day when temperatures are warm. If you are near a plant with an infestation of whiteflies it can appear like floating dandruff when you disturb the plant. Eggs are also laid on the undersides of the leaves, typically in clusters. Whiteflies can be challenging to control. Contact insecticides like insecticidal soap can work, but they must come in contact with the insect which is typically on the bottom of the leaves. They are attracted to the color yellow, so you can make a sticky trap to catch them by taking a 12-by-6-inch strip of cardboard or strong poster board. Paint both sides bright yellow and coat with a sticky substance, such as Tanglefoot, petroleum jelly, petroleum jelly/mineral oil mix, or mineral oil. Hang the trap vertically or support it on stakes just above the plants. The adults are attracted to the yellow color and become trapped on the sticky substance. Whitefly traps are available commercially also. Whiteflies can attack a wide variety of plants, from ornamentals to edibles, but gardenias are one of their favorite hosts.

Another common pest which has a piercing/sucking mouthpart is scale insects. Related to aphids and whiteflies, there are a wide range of insects in the scale family. Scale insects are generally divided into two categories, soft scales and armored or hard scales. Soft scales produce a soft, thin covering which can be cottony, powdery or waxy in nature. This layer covers the insect and cannot be separated from the insect body. Soft scales insects often produce copious amounts of the sweet honeydew resulting in black sooty mold forming on leaves and trunks of infested plants. Armored scales have a hard, shield-like cover that conceals the body but is not attached to the body of the insect. This hard shell is composed of shed skins and wax. Scale insects attach themselves to plant parts using their piercing-sucking mouthparts and feed on plant sap. Once they attach themselves, they don't move. Individual scales may look like oval or rod-shaped bumps, ranging in color from white, yellow, grey, brown to black. These insects can be a major problem on many shrubs and trees. Heavy infestations of scale insects can cause yellowing or mottling of foliage and premature leaf drop. In the case of the crape myrtle felt scale, they also decrease the number of flowers. Scale insects rarely kill a plant, but a plant weakened by a scale population is often more susceptible to damage by a secondary insects or diseases that may ultimately kill the plant. While they do attack a wide range of ornamentals, including the crape myrtle, they are also very common on golden euonymus, camellias and hollies.

Stink bugs are another insect pest which feed on a wide range of plants, including fruits, vegetables and ornamentals. Stink bugs range in color from brown to brilliant green, although many have a dull shade designed to blend in with the plants they are feeding on. Nearly all species are distinguished by a triangle- or shield-shaped plate on their backs. Stink bugs are part of an order of insects sometimes called "true bugs," which do not chew with their mouths; instead, they have a piercing/sucking mouthpart that allows them to suck the sap out of what they are feeding on. There are multiple generations per year. Females typically lay eggs in a cluster on the surface of the leaf. (The related squash bug, lays her eggs on the undersurface of the leaf.) The eggs hatch in about a week, and the nymphs look like tiny adults, and take about 4 weeks to reach maturity. At night, they are attracted to light and therefore can sometimes be seen flying around outdoor lights. Often, they hang around some of their favorite host plants, especially tomatoes, melons, and beans. When they feed on tomatoes and peaches, they can create ugly scars called "catfacing." Stink bugs can be difficult to control because they are resistant to some insecticides and the later in the season it is, the tougher they are to kill. Scout your garden and if you see the egg clusters, rub them off. You can trap the adults by placing melon rinds in the garden overnight. The insects will congregate under them to feed and you can dispose of them in the morning. Be aware that they are aptly named. When disturbed or killed they can give off a noxious odor.

Squash vine borer is a serious pest problem on members of the cucurbit family, with summer and winter squash and pumpkins the most commonly attacked. It is less of a problem on melons or cucumbers. The adult is a clearwing moth which looks somewhat like a wasp. It is about 1/2 inch long with an orange abdomen with black dots. Adults emerge in June from cocoons where they overwintered in the ground. The wasp-like

moths are unusual in that they fly during the day, while most moths fly at night. The adult lays her eggs near stems at the soil line. Eggs are small, flat, and brown, not readily visible. The larvae hatch in about a week and begin to tunnel into the stem to feed. They are white or cream-colored with brown heads, and will eventually grow to almost an inch in length. As they feed they block the flow of water to the rest of the plant and the tops of the plants collapse. If you can prevent them from entering the stems, using a small piece of aluminum foil wrapped lightly around the stem, or catch them as they enter and kill them, the plants can be saved. The larvae feed for four to six weeks and then burrow back into the ground to pupate and spend the winter, where they stay until the next season. Thankfully there is only one generation per year, and so late planted squash is not affected.

There are almost 30 million species of insects in the world, and some we couldn't live without, but some we would rather not have in our lives. The key to success in the garden is regular scouting. The sooner you can catch a problem and properly identify it, the sooner you can begin to control it. If you aren't sure if you have an insect or a disease, or you aren't sure what insect is causing the problem, take a sample to your local county extension office for a correct diagnosis.