Bagworms not to be confused with other insects

Texas A&M AgriLife Extension Service — Galveston County Office

Q: I have found several odd-looking creatures on my oaks and arborvitae. They look like slender Christmas tree ornaments dangling from the branches. I know they are alive because I have seen them move. What are they and can they harm my plants?

A: After a homeowner first takes serious notice of a bagworm, they are not likely to confuse this insect with any other insect. Bagworms can be a major insect pest problem on arborvitae, junipers, pines and many other evergreen species. They also attack certain deciduous trees, including oaks and sycamore.

Bagworms infestations tend to spread slowly since adult females are unable to fly and lay their eggs inside the bags. Dispersal of bagworms over wide areas occurs primarily through movement of infested nursery stock and ornamental plants. Young caterpillars are often caught by the wind and "ballooned" to new sites with the aid of silken threads to nearby plants.

Bagworms are most easily recognized by the case, or bag, the caterpillar forms and suspends from landscape plants on which it feeds.

When the caterpillar is mature, the bag can be up to 1.5 inches in length. The bag is made of silk and bits of host leaves and twigs. These materials are interwoven to add strength to the case and provide camouflage against adversaries, including birds and humans.

This camouflage works very well because most homeowners overlook these bagworms for several seasons until their presence and damage on plants become very apparent. Bagworm caterpillars injure plants when they feed on needles and leaves.

Bagworms can severely defoliate and kill evergreens, such as arborvitae. Since deciduous trees (such as oaks and sycamores) grow new leaves each year, the defoliation caused by the feeding usually does not kill them and control by insecticides is not necessary in most cases.

Bagworms can be controlled on small shrubs and trees by handpicking or cutting bagworms from infested plants during late fall, winter, or early spring, before the eggs inside hatch.

Don't discard the bagworms onto the ground since they are capable of crawling back onto plants. Place bagworms in a sealed plastic bag for disposal by household trash pickup.

Q: I want to recycle my coffee grounds. Should I apply them directly to the soil or place them in my compost bin?

A: With so many coffee houses around, there is interest in recycling used coffee grounds to divert them from the landfill. Gardeners often ask if coffee grounds can be used as a soil amendment or added to the compost bin.

Coffee grounds are a low-level source of nitrogen, having a fertilizer value of around 2.0 percent nitrogen, 0.3 percent phosphorus and 0.2 percent potassium as well as a minor source of calcium and magnesium.

Brewed coffee grounds are

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Dr. William Johnson is a horticulturist with the Galveston County Office of Texas A&M AgriLife Extension Service. Visit his website at http://aggie-horticulture.tamu.edu/galveston.

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commonly reported to be slightly to highly acidic. However, contrary to popular belief, most coffee grounds are not strongly acidic.

After brewing, the grounds are close to a neutral pH (between 6.5 and 6.8). The acid in the beans is mostly water-soluble, so it leaches into the coffee we drink.

Given the already high pH of most of gumbo clay soils in our area, adding coffee grounds will not likely be an issue if applied at a moderate rate (10 to 15 pounds dry weight per 1,000 square feet).

Composting also is an excellent method to recycle the grounds. Use the grounds as you would green, leafy material, mixing with some dry, brown plant materials in the compost. The Environmental Protection Agency suggests adding no more than 25 percent coffee grounds by volume.

Because of the fine grind that typically is used for brewing, the grounds should not be used as mulch since they are likely to pack down tightly, decreasing aeration. Also avoid using coffee grounds with potted houseplants because of the potential buildup of soluble salts.

Q: Do you recommend use of fertilizer spikes around landscape trees?

A: I do not recommend their use. Fertilizer spikes are effective when used in sufficient quantities. However, since each spike contains only a small amount of fertilizer, they are not cost-effective compared to granular products.

Fertilizer spikes provide some nutrients in a limited area while not providing any nutrients in remaining areas. The roots of most trees extend out as far as the limbs (known as the dripline) and in many cases, extend out much farther than the limbs.

Tree roots that absorb water and nutrients are also distributed fairly uniformly under a tree's dripline.

I recommend use of a complete fertilizer (such as 15-5-10) that is spread uniformly around the tree within the dripline.