Time to Prepare for Bagworms

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

Cooler than normal May temperatures, coupled with cloudy rainy days, has slowed a lot of nature down this year including bagworm hatching and early season development. We know, based on accumulated heat units (growing degree days), when bagworms will start hatching. We hit that minimum threshold about a week ago. But continued cooler than normal temperatures and cloudy weather will likely keep them hatching for several more weeks. Which ultimately means we need to push the start of treatments back several days.

Bagworm are a caterpillar that will feed on almost anything that has leaves. They prefer evergreens like junipers/cedars, arborvitae, and blue spruce which, if left uncontrolled on, they can kill. All of these species grow from the tips of the branches (buds) out so if all of those are eaten the tree will die from lack of foliage. On deciduous trees bagworms can eat a lot of leaves, but deciduous trees have the ability to generate new leaves from dormant buds so it isn't really damaging when they feed on those trees and shrubs. We traditionally have not worried about spraying the few that got on deciduous trees and shrubs. In the past three years, however, we have witnessed a population explosion of bagworms unlike anything I've seen in over 35 years. That has caused some unusual problems to develop.

Bagworms overwinter as an egg in the bags of the females from last year. There can be several hundred up to a thousand eggs in one bag. When these eggs hatch the small caterpillars immediately move out and start feeding on the foliage of their host plant creating a little silken bag around them, open at one end, and then they start to decorate it with bits of foliage from the host plant for camouflage. That camouflage works very well too because far too many homeowners don't see the bags on the trees until they are about two inches long and their tree has lost about half of it's foliage.

When a tree is heavily infested early in the season, as in the past several years, the bagworms will crawl as high in the tree as they can and then create tiny little strands of silk that fly in the wind. When a gust of wind catches it, they let go of the original host tree and use that silken parachute to carry them possibly hundreds of yards away to a new host plant that likely has less competition for food. When those bagworms are only on the evergreens and we treat and control them, then that's fine. But now we have all these other trees that have bagworms in them. Some of those bagworm bags have eggs in them. We spray our evergreens to kill the bagworms on them but next week a good breeze comes along and a whole new group of little bagworms may blow in and land on our evergreens to continue feeding!

We can spray weekly from now through early July, but if you have a lot of trees that can be expensive. I'd suggest a two spray approach. Because of the late hatch I'd apply my first treatment around June 10th to the 15th and then apply a second treatment two weeks later. The second treatment is to get bagworms that were missed, hatched late or blew in from somewhere else. There are many good insecticides labeled for bagworms including spinosad, permethrin, cyfluthrin and others. Which one you use is less important than using a hose end sprayer that will apply a lot of material providing thorough coverage of the entire tree or shrub. You need to spray it down good. Even after the second application, which hopefully gets them all, I'd continue to check weekly for re-infestation.