

News Article

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Do you have aliens in your evergreens?

My title may conjure up images borne from science fiction movies, and I'd like to "make you look." There is a pest that may be lurking in your evergreen trees, and from now through early May is a good time to scout for it. If a problem exists, you can employ a simple, non-chemical control strategy. But, it will take some time and effort.

The pests are called bagworms. These illusive pests can kill evergreens, their primary target. These caterpillars, named for their habit of living in leaf-covered silken bags, are most commonly found in dense plantings of evergreen spruces, pines and arborvitae. They damage these trees by stripping their needles or leaves. Occasionally it can even attack some deciduous ornamental trees.

However, Purdue Extension entomologist, Dr. Cliff Sadof, said in a recent *Purdue Landscape Report* article that the evergreen bagworm may have been killed by the cold weather we had at the end of December and early January.

"Evergreen shrubs, like juniper, red cedar, falsecypress, spruce, arborvitae, fir and pines can be killed when they lose more than half of their leaves to this pest," Sadof said. "Although deciduous trees like maples, elms, birch, crabapples, willows and poplars are more likely to survive when they lose their leaves, affected trees are unsightly and repeated defoliation is likely to kill these trees."

The non-chemical strategies that can be employed now to combat this pest are inspection and physical removal of bags.

Inspection involves removing a random sampling of a few of the larger bags from last year. These contain last year's females, and inside her body are the eggs. See if the eggs inside are a healthy creamy color. If they are, they survived. If everything inside is brown and brittle, the eggs did not survive. Each female bag can produce over 1,000 bagworms.

If some of the bags contain live eggs, then picking off the bags and drowning in soapy water is the next step. Alternatively, they can be burned.

"Unlike many insects who insulate themselves from the cold by burying below the soil surface, bagworm eggs dangle in bags from branches, well above the soil," Sadof said. "Also, they lack the protective mechanisms that many other insects have to protect their tender tissues from ice crystals that form during the freezing process." Sadof said research conducted at Purdue shows that most bagworm eggs can die when they are kept below -0.6° F for 24 hours. So, if the daily HIGH temperature is less than this temperature you may not have a bagworm problem.

"Bagworms hatch from old bags, filled with eggs in late May or early June," Sadof said. "Young caterpillars crawl out of the bags and either crawl to new leaves, or are blown on silken strands to new plants." Sadof said the caterpillars continue feeding through August when winged male bagworms fly out of their own bags to mate with wingless females. Bags of mature females can be up to 2 inches long and are often mistaken for pinecones.

"If you do live in areas where it was colder than 0° F you should check your bagworm infested plants for new bags starting in late May," Sadof said.

When I have observed young bagworms in evergreens in early June, it almost appears like a piece of fuzz stuck between needles – but it moves! If these young bagworms are observed on your trees, it is the prime time of the year to employ a chemical control, if you so choose. Typically, this is around mid-June in northern Indiana.

Find Dr. Sadof's complete article at: <https://www.purduelandscapeporeport.org>. For more information on bagworms, search for Purdue Extension publication E-27-W, *Bagworms*, at Purdue Extension's Education Store: <https://mdc.itap.purdue.edu>.

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Bagworm; Photo: John Woodmansee