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Get Ready to Spray for Bagworms

This week I have seen bagworms emerging in Northeast Kansas. If you had problems with bagworms in recent years, this means you should start spraying in about a week.

Bagworms (*thyridopteryx ephemeraeformis*) are insects native to North America that can cause damage to our trees when they are in their larval form. These insects feed on plant tissue, usually conifers – especially eastern redcedars. As they feed, they also use the plant tissue to create a bag that they carry around on their backs with only the head and thorax sticking out of the bag. This is how they get the name bagworms.

When they mature, the males transition into a moth and leave their bags to search for a female. The female does not leave her bag, as female bagworms do not have any wings. After a male bagworm mates with a female, the female lays eggs inside the bag. These eggs stay in the bag over winter then emerge sometime in the spring, usually late May to mid-June depending on our weather. When the bagworms emerge from their eggs, they create a thin strand of silk to use as a parachute and let the wind carry them to trees. Generally, the females stay at the top of the trees and males are closer to the bottom. This is why you may notice more bags near the tops of your trees.

Bagworms are not necessarily a death sentence for your plants, especially if there is not a heavy infestation. However, conifers, a bagworms preferred host, are slower to regenerate plant tissue compared to deciduous trees. Heavy infestation for several consecutive years can kill well-established plants and shrubs.

For small infestations, you can pick the bags off the trees in August or later. You can kill the bags by letting them soak in soapy water. Simply pulling them off the tree and throwing them in the grass or a compost pile will not kill them and the eggs may still hatch.

For larger trees or big plantings, picking bags off is not always feasible. In this case you can spray insecticides for bagworms. Apply insecticides in the morning or evenings when the bagworm larvae are most active. The common insecticides used for bagworms are stomach poisons, meaning the bagworm larvae must eat the insecticide to die. Once larvae reach about 1 to 2 inches long, they have significantly reduced their feeding and spraying is ineffective. Therefore, spraying in late July or later will have no impact on the bagworms.

Bagworms do not all emerge from their eggs at the same time. After you notice, they have started emerging, wait a few weeks to allow for more to emerge then begin spraying. If the bagworms have not emerged, spraying them will not kill them. After the first spraying, you may consider waiting another week or two and spraying again to kill any larvae that are late hatching from their eggs.

Insecticides commonly used for controlling bagworms include (but is not limited to) spinosad, acephate, cyfluthrin, Malathion, and permethrin. Products containing *Bacillus thuringiensis* are effective when used against bagworm larvae while they are still small. Be sure to read the label of a product to check that it is rated for bagworms before use and follow application instructions on the bottle. If you have any questions, you can reach out to me or search online for our K-State extension publication, "Bagworm, Insect Pest of Trees and Shrubs."