Now is the time to be looking for bagworms. Although the cool weather we experienced this spring may have slowed development, and consequently larvae emerging from eggs, bagworm caterpillars are going to be present throughout Kansas feeding on broadleaf and evergreen trees and shrubs. Therefore, be prepared to take action against bagworms once they are observed on plants. Bagworms are primarily a pest of conifers; however, they feed on a wide-range of host plants including many broadleaf plants, such as; elm, flowering plum, hackberry, honey locust, linden, maple, oak, rose, sycamore, and wild cherry. It is important to apply insecticides when bagworms are approximately 1/4 inch long or less to maximize effectiveness of insecticide applications and subsequently reduce plant damage.

There are many insecticides labeled for use against bagworms; however, the insecticides that can be used now to suppress populations of bagworms are Bacillus thuringiensis subsp. kurstaki and spinosad. These active ingredients are commercially available and sold under various trade names or as generic products. The bacterium, Bacillus thuringiensis subsp. kurstaki, is only active on young caterpillars and must be consumed or ingested to be effective. Therefore, thorough coverage of all plant parts and frequent applications are required. The insecticide is sensitive to ultra-violet light degradation and rainfall, which can reduce residual activity. Spinosad is the active ingredient in several homeowner products, including: Borer, Bagworm, Tent Caterpillar, and Leafminer Spray; Captain Jack’s DeadBug Brew; and Monterey Garden Insect Spray. The insecticide works by contact and ingestion; however, activity is greatest when ingested by bagworm caterpillars. The key to managing bagworms with these insecticides at this time of year is to apply them early and frequently enough to kill the highly susceptible young caterpillars feeding on plant foliage. Applying insecticides weekly for four to five weeks when bagworms are first noticed will reduce problems with bagworms later in the year.

Thorough coverage of all plant parts, especially the tops of trees and shrubs, where bagworms commonly start feeding, and frequent applications are essential in achieving sufficient suppression of bagworm populations. The reason multiple applications are required is that bagworm caterpillars do not emerge from eggs simultaneously but emerge over time depending on temperature. In addition, young bagworms can be 'blown in’ (called ‘ballooning’) from neighboring plants on silken threads. If left unchecked, bagworms can cause significant damage and ruin the aesthetic quality of plants. In addition, bagworms may kill plants, especially newly transplanted small evergreens, since evergreens do not usually produce another flush of growth after being fed upon or defoliated by bagworms.

For more information, please contact the local K-State Research and Extension Office. K-State Research and Extension is an equal opportunity provider and employer.