## **Time to Treat for Bagworms**

**AGRI-VIEWS** 

by Chuck Otte, Geary County Extension Agent

Bagworms are a small insect with a big appetite. They will feed on over 200 species of plants but we generally only become concerned when they are on their favorite food plant, which is anything in the juniper family or their second favorite, spruces. On deciduous trees and shrubs they are a nuisance. On junipers or spruces, they are potentially lethal!

Bagworms are in the insect order known as Lepidoptera. The adult form of a bagworm is a moth. The male moth is rather inauspicious, the female is flightless. In late summer the adult males emerge from their bags, they follow scent trails to the females and mate, the females fill their bags with eggs and that's where the story ends for the winter.

But now it is late spring. The eggs have just hatched and the tiny caterpillars are out and starting to feed on whatever plant the female was on. The small caterpillars start feeding and immediately form a little bag around them using bits of vegetation from the host plant. This will continue most of the summer as they grow. By late July and early August their bags will be nearly two inches long and their appetites will be voracious! By this time they are easily seen and hard to kill! This is the stage of appetite and growth when they will do maximum damage and can kill heavily infested junipers.

If you had bagworms on your junipers last year, even if you sprayed, you need to be spraying again. If even one female bagworm escaped last year's treatment it can mean several hundred, up to one thousand, little bagworms are roaming around and feeding on your plants. When bagworms are small they are relatively easy to kill. Once you get to late July and August it's another story. The choice of insecticide isn't nearly as important as the application method. Many of the common lawn and garden insecticides are labeled for use on bagworms and will work very well. The trick is to apply them with a hose end applicator. Because of their habit of feeding from within that silken cocoon covered with plant material, you have to really soak them to get control. A hose end sprayer that applies the spray to the point of almost running off is critical for successful treatment.

The most common products labeled for bagworms include: permethrin, cyfluthrin, acephate, spinosad and bT (Bacillus thuringiensis). Spinosad and bT are naturally occurring products, often considered as "organic" controls. bT will work but has to be applied very early and regularly to be effective. Spinosad is likely our best control product and will even work on large bagworms. But all will be effective especially if applied early (now!) BUT, for any of the products to be effective they need to be applied with a hose end sprayer. Treat now, and again in two weeks.

The important thing right now is for you to be out inspecting your plants. The bagworms are small, about 1/4 inch long, and easily overlooked. On junipers look for subtle changes in foliage color. On deciduous plants, look for small holes in the leaves or more likely just areas of leaves where the leaf surface has been eaten off.

If you want to learn more about bagworms and how to identify them when they are small I'm holding a demonstration Monday night, June 11<sup>th</sup> at 7 p.m. in the parking lot behind Central National Bank, 116 West 8<sup>th</sup> Street in Junction City. We will discuss how to identify small bagworms and how to effectively treat an infestation. No registration required and no cost! Call the Extension Office at 238-4161 if you have any questions!