Keep Your Eye Out for Bagworms

Many people who have multiple plantings of certain evergreens have been noticing a browning of foliage on one shrub or tree that may be spreading over time to a bordering plant of the same species. Symptoms may appear to be those of a disease, but a close inspection of the browning areas may reveal a different problem. Spindle-like bags hanging from twigs are structures formed by common bagworm caterpillars (*Thyridopteryx ephemeraeformis*) which take needles or leaf material from the host plant and attach these to a bag they construct from silk.

Preferred hosts are arborvitae, juniper, spruce, pine, and cedar but they will also attack deciduous trees. One deciduous trees, like oak or cherry, check the undersides of leaves where the bags will likely be attached. Since as many as 300 eggs may survive over winter inside the bags, severe defoliation can occur, especially if smaller trees and shrubs have a high number of bags going into winter.
Caterpillars can remain unnoticed as they feed at night and hide inside the bags during the day. If the bag contains a caterpillar a little squeeze to the bag may cause it to poke its head out. As caterpillars grow, they will enlarge the bags. If the foliage used remains fresh, they can remain undetected until it turns brown later in the year. Left unchecked, these caterpillars will move on to bordering plants and plants may be killed in a couple of years. Entire hedgerows, especially of arborvitaes and junipers may be lost over time.

Female moths cannot fly, so eggs will be laid on the same host plant she was feeding on as a caterpillar, usually in early fall. Moths die after mating, with only eggs surviving in the bags.
through the winter. In New England, caterpillars will hatch sometime in May. Check hostplants for new bags which will be small and blend in with the foliage. If large numbers are found, a product called *Bacillus thuringiensis* or Bt var. Kurstaki, can be sprayed on foliage. This product is only effective on caterpillar species and will not harm other types of insects including bees. Or simply look for the bags and remove them by hand.

If bagworms have killed one plant in a hedge, and the plant is replaced, chances are good that the bagworms have already moved on to the next plant in the line. Simply replacing a tree or shrub with another of the same species may not be very effective, as bagworms just move down the line and may eventually kill the next plant (s). Make sure no bagworms are on bordering plants before replacing one they had destroyed.

If you have noticed junipers arborvitaes or other evergreens have brown sections of foliage, winter is a good time to check for a possible bagworm problem. Bags will stand out as they will now be brown against the foliage of evergreens. Clip off bags or clip off small twigs with bags near the ends. Mechanical removal now may keep populations low next spring. Check next year for signs they are still around and treat accordingly.

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