

## Bug-Wise



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**Fall Webworms:** Based on the number of fall webworm webs that are already present through much of the state it appears that many pecan and persimmon trees will be heavily defoliated by the end of the growing season. Fall webworms build their webs around the ends of limbs, encompassing the leaves inside the webbing where they can feed in relative protection. This insect is called the fall webworm because it is more abundant in the fall, but webs begin appearing in late spring, and there are several generations per year.

Fall webworms are a yearly problem on home grown pecans in the southern portion of the state, where trees often suffer heavy defoliation. Last year, populations were especially heavy and many pecans in the northern portion of the state sustained total defoliation. Although this insect occurs on a large number of hardwood species, pecan and persimmon are the two favorite hosts of this caterpillar in Mississippi, and it is the attacks on pecan that cause the greatest concern among homeowners.

Will this hurt the tree? While the webs and accompanying defoliation caused by fall webworms are unsightly, trees do not die as a result of being defoliated by caterpillar pests. However, pecan trees that are heavily defoliated will suffer from reduced nut-fill on the current year's crop and, even if no defoliation occurs in the following year, vigor and nut production will be reduced. For most homeowners it is the unsightliness of the webbing and defoliation that causes the greatest concern.

What can homeowners do to control fall webworms? Doing nothing is the most commonly employed fall webworm management tactic. Few homeowners have the power spray equipment needed to treat large trees, and in urban situations the potential for insecticide drift onto adjacent property is often an overriding concern. Of course homeowners can largely avoid fall webworms by not planting susceptible species, pecan and persimmon.

When only a few webs are present on small to medium-sized trees, they can be removed by using a hook fashioned from a coat hanger taped to the end of a long pole or a large nail driven through a long pole (exercise appropriate caution around power lines). Destroying the web in this fashion also exposes the caterpillars to predation and parasitism. Burning webs is not a good idea. Twigs and branches that are defoliated by caterpillars will produce new leaves; twigs and branches that are killed by fire will not.

Webworms can be controlled with contact insecticide sprays that penetrate the webbing. Although there are a number of insecticides labeled for use on ornamental trees, pecans may only be treated with insecticides that are specifically labeled for use on this edible crop. Some, but not all, formulations of carbaryl (Sevin), malathion, and permethrin are labeled for use on pecans. Sprays of Bt products are also useful against small caterpillars. Read the label carefully – before purchasing the product.

Small, recently planted trees can often be treated with a hand sprayer, and it is a good idea to protect small trees in order to promote rapid growth. Severe defoliation is more damaging to the growth of young, newly established trees than to older trees. Hose-end sprayers designed for treating trees and shrubs can be used to treat trees up to 20-25 feet tall. However, few homeowners have the power spray equipment needed to treat larger trees. Treatment of large trees usually must be performed by licensed commercial applicators. Always be aware of the potential for drift onto neighboring properties and other non-target sites, and take appropriate precautions to avoid drift related problems. The potential for drift is much greater when treating trees than when treating shrubs and smaller plants. In many urban settings the potential for problems due to spray drift may be so great as to negate making such treatments.

**Check St Augustine Lawns for Chinch Bugs:** Chinch bugs are important pests of St. Augustine lawns, but they are rarely a problem in other types of grasses. Obviously, this means that chinch bug problems will be more common in the southern portion of the state where St Augustine is more commonly grown.

Chinch bugs especially favor the more sunny areas of the lawn, and damage will likely occur in these areas first. Chinch bugs have piercing/sucking mouthparts, which they use to feed on root crowns and stolons. While feeding, they inject a toxin, and it is this toxin that causes heavily infested areas to turn yellow, then brown, and eventually die. Because, there are several diseases and other problems that can cause similar damaged areas in St. Augustine lawns, it is important to verify the presence of chinch bugs before initiating treatment. Chinch bugs tend to be of greater concern during prolonged dry periods.

Adult chinch bugs are approximately 1/5 of an inch or less in length and are black with white wings that are folded in an 'X' over their back. The nymphs, or immature chinch bugs, are red with a light colored band across the back.

Scout turf on sunny days by parting the stems and looking for the small, reddish nymphs and/or the black and white adults in the crown region or running across the exposed soil. Another method is to remove both ends of a gallon-sized can, press one end of the can two to three inches into the turf, and then fill the can approximately half full with water. If chinch bugs are present, they will float to the top within a few minutes. When using this method it is important to check several sites, choosing areas where the yellow and green grass meet.

If chinch bugs are identified as the cause of the problem, they can be controlled with the insecticides listed in the following table. **If the infestation is heavy, a second application should be applied approximately two weeks after the initial treatment.** For control of chinch bugs, liquid treatments are usually more effective than granular treatments. Many of the liquid insecticides listed below are available in ready-to-use hose-end applicators, which is a convenient way for homeowners to apply chinch bug treatments.

### Some Insecticides for Control of Chinch Bugs in Home Lawns

Insecticide	Brand Name *	Rate/1000 sq ft	Comments
<b>Treatments Applied as Sprays</b>			
carbaryl (22.5% liquid)	Sevin Concentrate Bug Killer	12 – 16 fl oz	Irrigate before application.
cyfluthrin (0.75% liquid)	Bayer PowerForce Multi-Insect Killer	6 fl oz	Irrigate before and after application
lambda-cyhalothrin (0.5% concentrate)	Triazicide Soil & Turf Insect Killer Concentrate	4 fl oz	Water lightly following application
permethrin (2.5% concentrate)	ProTech Sniper Yard & Garden Concentrate	6 fl oz	Water lightly following application
permethrin (38% concentrate)	Hi-Yield 38 Plus Turf, Termite & Ornamental Insect Concentrate	0.8 fl oz	Water lightly following application

This information is for initial planning purposes only. Always read and follow product label.

Brand names listed here are examples only. Many insecticides are marketed under a number of different brand names. Other products containing the same active ingredient should provide equal performance, provided they are labeled for use in the site in question and are applied at equivalent rates.

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