

## **Bug-Wise**

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Asian Wooly Hackberry Aphid: Although low numbers of this non-native insect have been observed in the state for several years, last year was the first year we experienced really heavy populations. Many clients called to report that they were seeing snow flurries in August and September or that the hackberry trees in their yard had 'turned black'. These insects are present again this year and, although it is difficult to predict if populations will be as high as they were last year, there are many sugarberry trees that are already black with sooty mold, and there is time for several more generations.

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Closer examination of the leaves of sooty sugarberries will reveal the presence of numerous 'fuzzy white lumps' on the undersides. Even closer examination, using a hand lens, will show that these are aphids that are covered with a white, cotton-like waxy material.

Asian wooly hackberry aphid is one of the many 'new' pests that have been accidentally introduced in recent years. This insect was first reported in Florida in 1997, and has since spread to many other southern states. Adults are about 1/16 inch long and are covered with a white, cotton-like waxy material that makes them conspicuous and relatively easy to identify. Adults may be winged or wingless, and the winged adults may often be seen drifting slowly through the air. When they are numerous the reason for the snow flurry analogy is obvious.

In areas where there are a lot of infested sugarberries, winged adults may be seen resting on many non-host plants, and in some cases sooty mold will accumulate on plants growing underneath the infested trees. Often this gives the false impression that the insects are actually infesting these non-host plants, but hackberries and sugarberries (members of the genus *Celtis*) are the only hosts of this insect. Obviously this means that populations can potentially be quite heavy in areas where there are a lot of sugarberry trees (according to foresters, what we call hackberry is really sugarberry), while being absent in areas where sugarberries do not grow.

Both adults and nymphs produce large amounts of honeydew, which accounts for the sticky accumulations on vehicles parked beneath sugarberry trees, as well as the heavy accumulations of sooty mold. Heavy infestations of this pest can cause affected trees to defoliate prematurely.

What about control? While this insect can be controlled with foliar sprays, few homeowners have the equipment needed to apply foliar treatments to mature sugarberry trees, and it is difficult to locate a commercial applicator who is willing to apply such treatments. Even when equipment is available, foliar sprays are often not an option in urban situations because of concerns about drift onto adjacent property and other non-target areas. Often the best approach is simply to live with the situation. Hopefully, the intensity of outbreaks will decline in future years as predators and parasites of this pest become better established.

In particularly sensitive situations, such as a tree that shades a patio or parking site, it may be worth trying a systemic soil treatment **next year** in an effort to prevent, or reduce the amount of honeydew accumulation. Currently the only treatment of this type available to homeowners is Bayer Advanced Garden Tree and Shrub Insect Control, which contains the active ingredient imidacloprid. This product is applied as a drench to the soil around the plant being treated. Imidacloprid usually works well against aphids and other honeydew-producing insects, but it can take several weeks for this systemic insecticide

to be taken up by the roots and translocated to the leaves, where it can provide control. So, treatments should be applied in the spring or early summer.

Homeowners should be aware that treating large trees with proper rates of imidacloprid is somewhat costly. The rate is 1 fl. Oz for each inch of <u>circumference</u> at breast height, and the product costs around \$20 per quart. This means it will take a quart to treat a tree that is 10 inches in diameter ( $10 \times 3.14 = 31.4$  inches in circumference) and 2 quarts to treat a tree that is 20 inches in diameter (63 inches in circumference).

**Lantana Lace Bug:** Lantana lace bug is another non-native pest that has recently become established in the state. Lantana is actually considered a noxious weed in many parts of the world and lantana lace bug is used as a biological control agent. This explains why heavy infestations of this insect can cause plantings of lantana to look so bad. In addition to lantana, this insect also attacks verbena.

Quite often the problem is misdiagnosed and attributed to disease, drought stress or spider mites. Initially the leaves will appear 'bleached' or will begin turning brown around the edges. In more advanced infestations the plants will begin to brown and die back. Positive identification can be made by examining the undersides of the leaves for the presence of the spiny dark-colored nymphs and/or the small grey-brown adults. Adults of this species are about 3/16 inches long, including the conspicuous antennae, and do not have an enlarged pronotum like the azalea lacebug. Even when insects cannot be found, the presence of the shiny dark fecal dropping on the undersides of the leaves, combined with the damage symptoms, is diagnostic for lantana lace bugs.

Although contact insecticides such as Sevin, malathion, permethrin, or cyfluthrin will control this pest, systemic insecticides such as acephate or imidacloprid are generally more effective. Heavy infestations are best controlled by first pruning out severely damaged stems and then treating with an effective insecticide, such as acephate. Given adequate water and nutrients, plants will recover and resume blooming, following effective treatment.

A soil drench with the imidacloprid product (Bayer Advanced Garden Tree and Shrub) can be used as a preventative type treatment, or as a follow-up to foliar sprays on severely infested plants. Severe damage can be prevented by applying the soil drench treatment in the spring before symptoms appear, or by observing plants closely and applying foliar treatments at the first signs of infestation. Note that when treating low growing shrubs, such as lantana, the rate for the Bayer Advanced Tree and Shrub Insect Control is given as 3 fluid ounces per foot of shrub height.

This information is for educational and preliminary planning purposes only. Brand names mentioned in this publication are used as examples only. No endorsement of these products is intended. Other appropriately labeled products containing similar active ingredients should provide similar levels of control. Always read and follow the insecticide label.

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