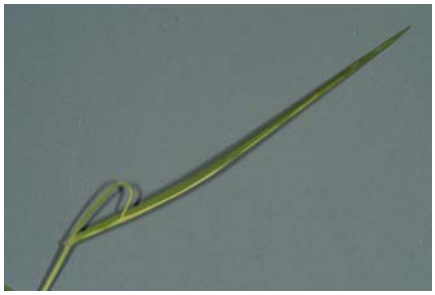
Bug-Wise



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Asian Wooly Hackberry Aphid: Why is this sticky stuff getting on my car when I park under a hackberry tree? I used to only have this trouble under pecans. What are all these white things flying around? What's making my hackberry tree turn black?

The Asian wooly hackberry aphid is one of the many 'new' pests that have been accidentally introduced in recent years. During the last couple of weeks we have seen large numbers of these in several areas of the state. 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. It is often difficult to see that there really is an insect under that pile of fluffy white stuff on the leaf. Adults may be winged or wingless. During the past few weeks large numbers of winged adults are being seen in areas where there are a lot of sugarberry trees (according to foresters, what we call hackberry is really sugarberry). These may be observed flying about or resting on non-host plants and structures.

Both adults and nymphs produce large amounts of honeydew, which accounts for the sticky accumulations on vehicles parked beneath sugarberry trees. This also accounts for the heavy accumulations of sooty mold seen on sugarberries in recent years. Heavy infestations of this pest can cause affected trees to defoliate prematurely. There is little risk of this pest attacking other plants. Asian wooly hackberry aphid is host specific and only occurs on sugarberries and other members of the genus *Celtis*. However, the presence of large numbers of these aphids resting on other non-host plants can create concern, and can potentially trigger unnecessary insecticide treatments.

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. 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. For now, the best approach seems to be to live with the situation.

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 the 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. However, it can take several weeks for this systemic 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. Also, homeowners should be aware that treating large trees with proper rates of this product can be rather costly. The rate is based on the number of inches of circumference at breast height, and it can cost $20 to $40 per tree to treat medium sized trees.

When exotic pests like these first arrive in the country it is not uncommon to see them develop unusually high populations, because they have escaped the key beneficial insects, and/or diseases, that keep them in check in their native lands. However, after such exotic pests have been established for a while, it is not uncommon to see their numbers subside in response to the arrival, or adaptation, of biological control agents. Hopefully, this will happen relatively soon with the Asian wooly hackberry aphid.

Lantana Lace Bug: This year many plantings of lantanas are looking 'bleached out' or have leaves that are turning brown around the edges. These symptoms are often attributed to drought or disease, but are really caused by the lantana lace bug. This insect is a pest on lantanas every year, but seems to be somewhat more common than normal this year. Positive identification can be made by examining the undersides of the leaves for the presence of the spiny 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. 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.

Z**oysiagrass Mites:** This is a problem that has become more common on zoysia in recent years. From a distance the grass has a yellow appearance that may be mistaken for a nutritional problem. Closer examination will reveal that individual leaf blades are only yellow along one edge, and an even closer look will reveal that the edge is rolled inward. Often the tip of an emerging leaf will be caught inside this rolled edge at the base of the previous leaf, resulting in a 'buggy whip'. Together these symptoms can be described as a 'pin stripe and bow tie' effect and they are characteristic of an infestation of zoysiagrass mites (see photo at top of newsletter).

Zoysiagrass mites, *Eriophyes zoysiae*, belong to a group of mites known as eriophyidae mites. These mites are very small, and are difficult to see even with a good hand lens. Zoysiagrass mites are also difficult to see because they primarily live inside the tube formed by the rolled leaf edge. These mites look much different than the spider mites that are often found feeding on the leaves of ornamental plants. They only have two pairs of legs and their bodies are elongate, but these characters can only be seen under a good microscope. Bermudagrass mite is a closely related species that causes a 'witches broom' effect or shortening of internodes on Bermuda. However, eriophyidae mites are very host specific. Neither zoysiagrass mite nor bermudagrass mite will attack species of turf other than the one for which they are named.

According to the literature, zoysiagrass mite is considered a relatively minor pest that seldom causes serious damage to overall stand health. However, heavy infestations do adversely affect the overall appearance of the turf, and the potential for infestation should be considered when establishing zoysiagrass turf. Varietial resistance is the most effective means of avoiding problems with this pest. Emerald zoysiagrass currently exhibits resistance to zoysiagrass mites. Unfortunately, some of the more commonly planted varieties, such as Meyer, Belair, and El Toro are susceptible. When purchasing susceptible varieties, one may want to first check for symptoms of infestation. Not purchasing infested turf is another means of avoiding the problem. Lasting chemical control of this pest can be difficult to achieve. Not only are there few effective miticides labeled for use in commercial turf and home lawns but the protected environment in which the mites live, inside the rolled leaf blade, makes them difficult to contact with miticides.

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