Orchid-tree yellowing? Nutrients or/and Lace Bugs?

Cotton lace bug (Corythucha gossypii)

Typically, landscape diagnosticians will associate yellowing of orchid-tree (Bauhinia spp.) leaves as a micronutrient (iron or manganese) deficiency due to the inability of the roots to pick these elements up in our typically alkaline soil.

However, lace bug infestations will cause a similar yellowing. Up close, lace bugs resemble a walking lace doily. The pattern their wing veins forms is a work of art!

Nutrient yellowing is, initially, between the veins with some green left beside the veins. However, lace bug feeding, when they are abundant, results in yellowing of the entire leaf. It is best to flip the leaf over to be sure. Lace bugs feed primarily on the undersides of the leaves. They suck the chlorophyll (the green stuff) from the leaf, thereby causing the leaves to turn yellow. They also leave behind black gooey excrement referred to as tar spots. These lace bugs are active year-round, but really build up in the late fall through the early winter months. Severe infestations cause premature defoliation which may cause a decline in flowering the following year due to inadequate carbohydrate storage because the leaves dropped early.

There are other species of lace bugs that are host specific and will not attack other plants. However, the cotton lace bug is not a finicky eater and has a wide host range including citrus, hibiscus, lima beans, Annona species, egg plant and even royal palm.
What to do. Lace bugs are easy to manage, if the invasion is caught early. If it is just a few leaves, remove them and toss into a soapy water solution. If abundant (I found a row of Bauhinia with more than 50 lace bugs per leaf!), use an appropriately labeled insecticide. This is one insect that is managed better with horticultural soap rather than the horticultural oils. Follow the label dose rates (spray mixture concentration) to avoid leaf or flower burn.

Try a long-term strategy and use a new soil drench systemic (root absorbed and translocated to the leaves). It is slower acting and it may take 4 weeks or longer to move into the tree foliage. The product is called Bayer Advanced Garden™ Tree and Shrub Insect Control (imidacloprid). This product is safer to use than older systemics and has the advantage of prolonged protection, maybe 4 to 12 months.

Doug Caldwell, Ph.D. Commercial Landscape Horticulture Extension Educator with the University of Florida Collier County Extension. The Extension Service is an off-campus branch of the University of Florida, Institute of the Food and Agricultural Sciences and a department of the Public Services Division of Collier County government. E-Mail dlcaldwell@ifas.ufl.edu; call (239) 353-4244 ext. 203. Extension programs are open to all persons without regard to race, color, creed, sex handicap or national origin.