

## White Sugarcane Aphid Considerations and Status in Louisiana Grain Sorghum

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I've been getting numerous calls about sugarcane aphid, a.k.a. white sugarcane aphid in grain sorghum over the past few weeks, and I wanted to address and re-address a few good questions. Currently we are finding them throughout most of the state. This week I easily found them in sorghum in Tensas and Franklin parishes. The neonicotinoid seed treatments work on this pest, but will play out in about 40 days. We generally begin to detect colonization just prior to boot. Once the plant begins to boot the aphid population rapidly grows and continues to do so until treated, something eats them, the plant dies, or adverse environmental conditions reduce them. We do see a great many lady beetles, syrphid fly larvae and lacewing larvae feeding on the aphid colonies, but in most cases there are so many aphids there is no way for the beneficial to effectively manage the aphid outbreak until damage has already occurred.

Scout by lifting up leaves with your forearm to reveal early aphid colonies. Look for honeydew on lower leaves (will have a sticky, shiny appearance) to locate larger established colonies. The aphid has a whitish, light yellow appearance with dark tips on the cornicles. There is no established threshold for this pest, but based on experiences this year in TX and S. LA, when approximately **30% of the plants have at least 1 aphid, and the average number of aphids per leaf is 100-250 per leaf**, then treatment is justified. The more water deficit the crop is the more likely injury and yield loss will occur. **DO NOT TREAT SIMPLY BECAUSE THERE ARE A FEW APHIDS.** Additionally, there are some indications from TX that charcoal rot may be more severe where aphids were plentiful.

In Louisiana, we have a Section 18 registration to use Transform to manage this insect. This product does appear to be working very well. Most applications are going out at 1 oz per acre. There is no evidence that the addition of an adjuvant improves or hinders product performance.

Another very good question I have gotten centers on midge control with aphids in the mix. There is no evidence that Transform has any activity on sorghum midge and based on midge biology, and the MOA and pest spectrum of Transform, I would think it unlikely to have activity. It has been demonstrated that pyrethroids flare white sugarcane aphid in sorghum. Thus, scout closely behind midge sprays for aphid outbreaks. There have also been questions about alternatives to the pyrethroids for midge control, namely chlorpyrifos (Lorsbans, Nufos). Chlorpyrifos at the midge rate (1/2 pt/ac) will probably not provide much aphid control but does have decent activity on midge, although it's not as effective as the pyrethroids. If you choose to use chlorpyrifos for midge control, treat at the normal treatment window (20-30% bloom) but it's **CRITICAL** to make a second application 3 days later. Also, if it rains the same day as your application, consider it no application.

For many of the fields in Louisiana one application of Transform will control sugarcane aphids season long, however; there may be instances where a second insecticide application is warranted to stop re-

colonization. If you are faced with having to make a second shot and have a significant amount of time until harvest, insecticides such as dimethoate at 1 pt/ac and chlorpyrifos 1 pt/ac will give aphid suppression (~50% control). At these rates, the above-mentioned products have a 28 and 30 day PHI, respectively. Recent insecticide efficacy tests in TX demonstrated very good control of sugarcane aphid with chlorpyrifos at 2 pt/ac; however the PHI at this rate is 60 days. Use of these insecticides for a mid-season re-treatment application has two benefits, the first being resistance management and the second being flexibility later season. By not making sequential Transform applications, you save a late season option incase aphids re-colonize your fields three weeks before harvest. Using either chlorpyrifos or dimethoate in this window will violate the PHI on the label. Beware, Transform has a 14 day PHI and producers are limited to two applications totaling 3 oz/acre for 2014. If you have any questions or concerns, please contact Sebe Brown, David Kerns or Julien Beuzelin for more information.

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**Sugarcane aphids can easily reach several thousand per leaf.**



**Sugarcane aphid is whitish to light yellow in color with dark cornicles.**



**Discolored plants, presence of sticky, shiny honeydew and black sooty mold is indicative of a heavy aphid infestation**