



South Texas Sugarcane Aphid Update: As February was fading into the sunset abundant sugarcane aphid (SCA) populations were observed on volunteer and ratoon sorghum in south Texas. Their early population increase was attributed to unseasonably warm and dry conditions in January and February. There was concern around the possibility of early season SCA outbreaks on south TX sorghum if unseasonably warm conditions persisted.

Fortunately, a change in weather patterns brought rain and cooler conditions in March. Recent surveys of SCA on volunteer and ratoon sorghum along the



Johnsongrass bordering a recently cultivated production field. Johnsongrass is a year-round host of sugarcane aphid.

Coastal Bend of Texas suggest that their populations have declined. However, they can still be found. SCA on Johnsongrass has been more difficult to find. Dry conditions through the winter months allowed for maintenance of roadside areas and the combination of events prevented Johnsongrass regrowth until recent rain events. The lack of Johnsongrass top growth in the winter may have been responsible for

small SCA populations on this alterante host. Conversely, one year ago frequent heavy rain events prevented roadside and production field maintenance and Johnsongrass and volunteer/ratoon sorghum provided excellent overwintering hosts for SCA.

So, where does that leave us for the current season? It is difficult to predict SCA outbreaks but, with the recent warming trend, look for SCA populations to increase on overwintering hosts. Also, SCA infestations in Tamaulipas (Mexico) and the Rio Grande Valley will provide some indication of potential movement into sorghum growing in the Coastal Bend and Wintergarden regions of Texas. Currently, SCA populations in the Valley are increasing on winter hosts and small to moderate SCA colonies have been reported on sorghum in some fields.

Remember, insecticide seed treatments will provide early season plant protection from the SCA. *How long should I expect insecticide seed treatments to provide early protection against SCA?* Longevity of these products will vary from season-to-season and from one field to another. A reasonable expectation for residual activity of most insecticide seed treatments is about 30 days but they may be active for up to 50 days. It is advisable to start checking SCA on sorghum three to four weeks after planting if the seed was treated with an insecticide.

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Will hybrids earmarked as 'highly tolerant' be immune to SCA infestations?
There is much to learn about SCA resistance (often referred to as tolerance) in sorghum. Hybrids that have been deemed as 'highly tolerant' may become infested with economic levels of SCA. A good rule of thumb is to treat each field as though it were susceptible to SCA and scout all sorghum on



Sugarcane aphid overwintering on Johnsongrass. This plant was on the edge of a production field. The overwintering aphids serve as a reservoir to infest sorghum during the production season. Cleaning up Johnsongrass along field edges may help reduce SCA populations.

a regular basis. A better understanding of SCA resistance in sorghum and, possibly, new sources of resistance may be identified by seasons end.

Insecticide applications will be an important tactic to manage economic populations of SCA on sorghum. The EPA ruling on the Section 18 request for Transform is forthcoming. Until then, Sivanto is the only registered product that provides consistent suppression of SCA. The

Section 18 for Transform will be reported once EPA announces its decision.

*This is the time to initiate **detection monitoring** in sorghum in south TX, especially in early seeded fields.* Take some time to monitor SCA on Johnsongrass neighboring sorghum field borders. These populations frequently move to plants on the edges of sorghum fields. Take note of predator and parasite activity. They will be an important limiting factor for SCA population growth. Eliminate volunteer and ratoon sorghum from production fields, even if the fields are fallowed. They serve as a reservoir for the sugarcane aphid.

Remember, this aphid is easily managed in sorghum with careful and frequent monitoring and timely insecticide applications. *When should I consider spraying SCA in my fields?* The economic threshold is 50 to 125 aphids per leaf. For detailed instructions on detection and scouting please refer to the 'Scouting Sugarcane Aphids in South, Central, and West Texas' scouting card. The card can be picked up at your local Extension office or downloaded from our website. Please see <http://ccag.tamu.edu/files/2015/05/ScoutCard.pdf> to download the card. (By Robert Bowling, Stephen Biles, Danielle Sekula-Ortiz, and Kate Harrell)

It is involuntary blood donor season! Rain events in March coupled with cooler conditions have provided a favorable environment for mosquito outbreaks. And, brother, the mosquito business is a booming!

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Zika has been headline news for much of the year with complications in fetal development in pregnant women. So, what do the mosquitoes and Zika have in common? Certain mosquito species vector the disease and may transmit the virus during feeding events. Now that spring has sprung, folks will be spending more time outdoors subjecting themselves to the illicit activities of these small animals. Also, there is an increased probability of contracting one of the pathogens they are capable of transmitting during their feeding activity. The following is a short blurb on **Zika** virus.

- *What is Zika?* Zika is a virus reported in 1947 from the Zika forest of Uganda. The disease was confined in Africa for years but slowly spread east with reports of the virus on Easter Island in 2014 off the coast of South America. In May of 2015 the first cases of Zika were reported in Brazil. Cases of Zika have been confirmed in South and Central America since then.
- *How is Zika transmitted?* Zika is transmitted primarily through the bite of certain Aedes species of mosquitoes. Mosquitoes become infected when they bite a human carrying the virus. Infected mosquitoes can then spread the disease to other susceptible humans. It is estimated that 20 to 25 percent of persons that become infected will develop symptoms. It is possible for the disease to be spread through

sexual transmission from human to human, but that mode of transmission is extremely rare.

- *What are the symptoms of Zika virus?* Symptoms of Zika include fever, skin rash, red eyes, and joint pain. In some cases patients report muscle pain, general malaise, headache, and vomiting. Symptoms usually last two to seven days. Complications are very rare, but some cases require hospitalization. No known deaths have been reported as a result of Zika virus infection.
- *What other maladies may be associated with the Zika virus?* Top investigators say that Guillain-Barre syndrome (an autoimmune disorder) and suspicion of various neurological disorders such as encephalitis, meningitis, and myelitis may occur in people exposed to the Zika virus (please refer to the link <http://mobile.reuters.com/article/idUSKCN0X22TP> for details on this information).
- *Is there a treatment?* To date, there is no specific cure or treatment for Zika fever.
- *Can the virus be prevented?* There is no vaccine for the virus yet, so preventative measures should center around preventing mosquito bites. Preventative practices include eliminating standing water and other mosquito breeding sites, using mosquito screens on windows, and

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applying appropriate insect repellants when outdoors.

- *What do pregnant women need to know about Zika virus?* In Brazil, there is an association between being infected with Zika virus and increased incidences of microcephaly in new born babies. The greatest risk appears to be associated with pregnant mothers becoming infected during their first trimester. Consequently, pregnant women and those who might be pregnant should be especially careful to avoid mosquito bites.
- *What should I do if I think I might be infected with Zika virus?* If you suspect that you are infected with the virus avoid mosquitoes from biting you and possibly transmitting the disease to other people. Get plenty of rest and drink fluids to prevent dehydration.
- *Is Zika a threat to livestock and domesticated animals?* To date, there have been no reports of livestock and domesticated animals suffering from the Zika virus.

[NTO-040-Mosquitoes-and-the-Diseases-they-Transmit.pdf](#)

<http://medicalento.tamu.edu/presentationspublications/>

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Mosquitoes are very active right now. Protect yourself from mosquito bites anytime you are outdoors. It takes only one bite from an infected mosquito to possibly contract the virus. Additional information on Zika and other mosquito borne diseases can be accessed through the following links:
<http://medicalento.tamu.edu/files/2016/03/E>