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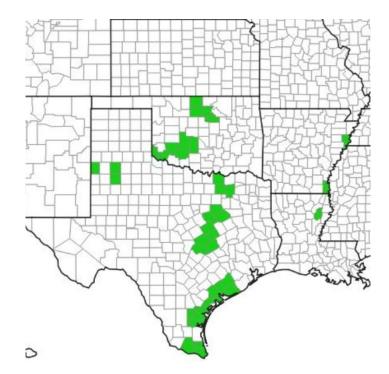
http://entoplp.okstate.edu/pddl/pdidl

7/20/2019

## Managing Sorghum Pests, 2019

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**Sugarcane Aphid:** Sugarcane aphid has arrived in Oklahoma. Dr Norm Elliott, research leader at the USDA ARS lab in Stillwater and crew found it in Harmon, Jackson, Comanche, Kiowa, McClain, Caddo, Grady, Payne, Nobel, Garfield and Grant counties. We will provide regular sugarcane aphid reports throughout the rest of the summer, along with control suggestions and updates on research activities regarding sugarcane aphids and sorghum. Growers can check out the current sugarcane aphid map and its progress at the <u>myFields</u> web site.



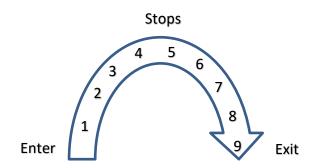
Below are some reference pictures to aid in identifying sugarcane aphid. Sugarcane aphid is light yellowish, with black "feet" black cornicles (the two "tailpipes on the abdomen) and black antennae. The next picture is a "group" of approximately 25 + sugarcane aphids on a leaf.





We encourage growers to inspect their fields once a week. When aphids are detected in a field, increase sampling to two times per week. Look at three consecutive plants and examine one upper and one lower leaf on each plant. Keep track of all samples Estimate the average number of aphids found per sample by counting aphids on both leaves. Then move 5 feet and sample two leaves from each of three more consecutive plants. This is considered one "stop". Next, move 90 feet from the first spot using an inverted "U" shaped pattern in the field and sample six more plants for the next stop. Collect counts for nine stops (for 54 plants) and estimate the percentage of samples that totaled at least 50 + aphids on the 2 leaves combined.

Example: leaf 1 has 30 aphids, leaf 2 has 25 aphids, that sample has 30+25 = 55 aphids. # samples with 50+ aphids/54 \* 100.....



Based on research conducted at OSU, we recommend treating **when 30% of plants are infested with 50 or more aphids per sample.** Do not spray until suggested threshold is reached, but if needed; apply the spray with the highest amount of water carrier as possible (5 or more gallons/acre by air, or 10 or more gallons/acre by ground). This will reduce chances that a second application is needed.

Two registered insecticides, *Sivanto Prime* and *Transform WP*, will provide effective control of sugarcane aphid in sorghum.

*Sivanto Prime* received a Section 24c registration that allows producers to apply it at 4-7 fl oz per acre for sugarcane aphid. The preharvest interval in 7 days for forage and 14 days for grain.

*Transform WG* has a Section 18 Emergency Exemption for sorghum set to expire by November 30, 2019. It can be applied in sorghum at 0.75-1.5 oz. /acre. It also has a pre-harvest interval of 7 days for forage and 14 days for grain. Follow all drift management directions.

For pollinator protection, both products should be applied before 7:00 am or after 7:00 pm, or if temperatures are below 55 degrees F. at the site of the application (an extremely rare event until later in the fall).

**Sorghum Headworm:** A complicating factor in later maturing sorghum involves sorghum headworms. We are catching corn earworms in our pheromone traps of late. If you both headworms and aphids need



control, a tank mix of Sivanto or Transform with Blackhawk or Coragen are options. Data from University insecticide trials suggests that Coragen and Blackhawk provide excellent control of headworms and won't likely flair sugarcane aphid.

The threshold for corn earworm is two or more larvae per head before the plant reaches hard dough.

We may be testing a biological product for corn earworm called Heligen, a caterpillar virus that targets

corn earworm specifically. It is very inexpensive and is very compatible as a tank mix with sugarcane aphid products. Application timing is critical for this product as it targets headworms that are less than ¼ inch long AND that are actively feeding. I will keep you informed as we get some data and experience with this product.

Consult CR-7170 (Management of Insect and Mite Pests in Sorghum) for current control suggestions.

## Co-Editors: Eric Rebek and Justin Talley; Oklahoma Cooperative Extension Service

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