



# Pest Management News Runnels-Tom Green Counties



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## General Situation

Cotton is up, looks great and is making good progress. Keep monitoring those fields for the presence of fleahoppers, grasshoppers or thrips leaf damage.

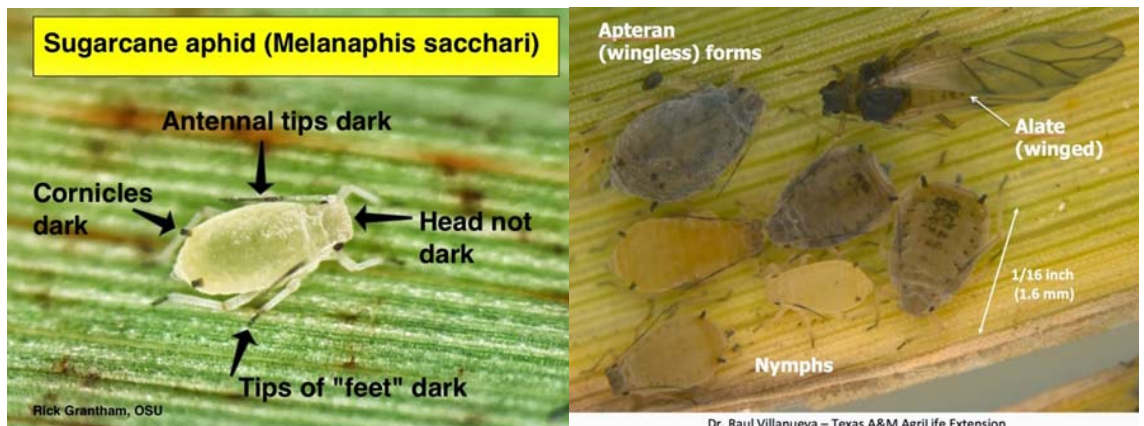
Grain sorghum also looks great right now. Rick said to remind y'all to monitor for headworms and stinkbugs. See the sorghum headworm information below. Scout your fields every 5-6 days till hard dough for these pests. Monitor for Sugarcane aphids as temperatures continue to increase and conditions dry out they could become an issue.

Also want to Thank Rick Minzenmeyer, Dr. David Drake, Dr. Charles Allen, Dr. Gaylan Morgan and Brad Easterling for proofing the newsletter for me and contributing information.

Josh Blaneck, CEA, Tom Green County

## Sugarcane Aphid

**Identification:** Sugarcane aphids (SCA) are distinct from other common aphids in sorghum, in part because the cornicles or "tailpipes", feet and antennae all have dark black tips. They are often light green to yellowish-whitish-green in color and can be winged or wingless. You will find SCA feeding on the underside of the sorghum leaves. SCA can also feed on the grain head. If honeydew is present, look for SCA on the underside of a leaf above the honeydew. A guide to recognizing sugarcane aphid is available at: <http://txscan.blogspot.com/2015/02/recognizing-sugarcane-aphid.html>.



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**Life Cycle:** All SCA are females and give birth to live young. Immature aphids mature to adults in about five days and live for about 4 weeks. Aphid numbers can increase very rapidly during the summer. As SCA colonies become crowded and food quality declines, adults with wings begin to appear and disperse. Although they are weak fliers, winged aphids can be carried on the wind across long distances.

**Host Plants:** SCA are known to feed on grain and forage sorghum, and Johnsongrass. All in the genus *Sorghum*.

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## Sugarcane Aphid (Cont. from Page 1)

**Damage:** SCA feed by sucking plant sap. Feeding causes leaves to turn yellow, purple and finally brown as leaf tissue dies. Infestations present during grain development will reduce yields. The sticky leaves and stalks clog combines at harvest and reduce separation of the grain from the plants. Infestations in forage sorghums also kill leaves, slow growth and reduce forage yields.

### Scouting Sugarcane Aphids:

#### **First Detection: Is the Field at Risk of Sugarcane Aphid Damage?**

1. Once a week, walk 25 feet into the field and examine 15-20 plants along 50 feet of row. Inspect underside of leaves from both the upper and lower canopy. If honeydew is present, look for sugarcane aphids on the underside of the leaf above the honeydew.
2. Repeat this sampling in at least four locations (total 60-80 plants per field). Include locations on each side of the field and sites near Johnsongrass and tall plants in the field.
3. If no sugarcane aphids are present, or only a few individual wingless or winged aphids are present on upper leaves, then continue once a week scouting.
4. If sugarcane aphids are found on lower or mid-canopy leaves, begin twice a week scouting to determine if aphid densities exceed the economic threshold using the sampling protocol below.



Photo: Dr. Jourdan Bell, USDA-ARS Research Station – Bushland, TX

\*Small circle represents an estimated 50 SCA

\*\*Plant leaf represents an estimated 750 SCA

#### **Sampling Protocol for Making Treatment Decisions.**

1. Walk 25 feet into the field and examine the underside of one completely green leaf from the lower canopy and the upper most leaf (or leaf below flag leaf at boot to heading) and estimate and record the number of SCA per leaf.
2. Examine 2 leaves from each of 5 randomly selected plants (10 leaves) per location.
3. Repeat at 4 locations (or more for large fields) for a total of at least 40 leaves per field.
4. Calculate the average number of aphids per leaf for the field (total aphids counted/total leaves inspected).
5. If the field average is 50-125 sugarcane aphids/leaf or greater, apply an insecticide within 4 days and evaluate control after 3-4 days (refer to insecticide labels for re-entry intervals). Consider treatment at 50 aphids/ leaf if limited to only once a week scouting.

**Insecticides:** The insecticide Transform WG (Dow AgroSciences) is labeled under a Section 18 Emergency Exemption in Texas for control of sugarcane in sorghum in 2015. Sivanto 200SL (Bayer CropScience) insecticide has been issued a Section 2(ee) label for use on sorghum to control sugarcane aphid in 2015. Both insecticides can be applied to grain and all types of forage sorghums. Good coverage is necessary for effective control.

Information in chart below is for educational purposes. Read and follow label directions.

	<b>Sivanto 200 SL</b>	<b>Transform WG</b>
Use Rate for Sugarcane Aphid	4-7 oz/acre	0.75-1.5 oz/acre
Minimum interval between applications	7 days	14 days
Minimum application volume	10 GPA by ground 2 GPA by air	Full plant coverage by ground 5 GPA by air
Maximum rate per year	28 oz/acre	3.0 oz/acre, 2 applications
Pre-harvest interval	21 days for dried grain, straw or stover. 7 days for grazing, forage, fodder or hay harvest.	14 days for grain or straw. 7 days for grazing or forage, fodder or hay harvest.
Restricted entry	4 hours	24 hours

## Pest Management News

**Sorghum Headworm Calculator....** Estimating the economic injury level for headworms is complicated because the potential yield loss varies with the size of the larvae. That is why it is necessary to record the number of small (up to ¼ inch), medium-size (1/4 to ½ inch long) and large (½ inch long or longer) headworms. Small larvae consume very little grain (about 10 percent of the total) and about 80 percent of them die in this stage. Therefore, small larvae should not be considered in determining the economic injury level. If most headworms are this size, sample the field again in 3 to 4 days. About 19 percent of medium-size larvae survive beyond this stage. Thus, the potential grain loss from medium-size larvae is only 19 percent of the potential loss from large larvae. Most corn earworm larvae larger than ½ inch will survive to complete development, and these large larvae are most damaging; they consume 83 percent of the total grain consumed during larval development. If most of the larvae are larger than 1/4 inch, determine which size (medium size or large) is most common and use the corresponding threshold to make treatment decisions.

The beat-bucket technique is the best way to estimate the number of headworms in sorghum. Shake sorghum grain heads into a 2.5 to 5 gallon plastic bucket (a small white office trash can works well), then count the caterpillars in the bucket. For easy math work with sets of 10; shake ten random heads walking down the row then count and evaluate the size of the larvae. If more heads are sampled in a set there may be too much “trash” in the bucket to efficiently make counts. Record the number of small, medium and large headworms found in the samples. Then use the threshold appropriate for the size of the majority of the headworms.

Go to the website below and use the Sorghum Headworm Calculator to calculate threshold. Input control cost/acre, grain value in \$/cwt and heads/acre and click “Calculate”. It will calculate the threshold of medium and large larvae threshold to give you an idea of when to spray. There is also a Sorghum Midge and Sorghum Rice Stinkbug calculator as well. You may have to copy and paste the link: <https://insects.tamu.edu/extension/apps/sorghumheadwormcalculator/>



**Management of Volunteer Wheat:** Now that cotton planting and wheat harvest has wound down hopefully you will have more time to catch up on those other chores on your list. Destruction of volunteer wheat and grassy weeds is an important control strategy to break the “green bridge” from one wheat crop to the next. This will stop the transmission of Wheat Streak Mosaic Virus spread by the wheat curl mite. It is also needed to stop Hessian Fly infestations. Grass weeds and volunteer wheat should be destroyed by tillage or a burn-down herbicide around your fields and neighboring properties. Be careful not to have any misses or leave any skips, a few volunteer host plants can lead to serious problems next season.

### Turn Row Meetings:

**Tuesday June 30 at 9:00am – Wall Coop Gin –**

Featured guest Dr. Charles Allen, Extension Entomologist & IPM Coordinator

**Tuesday July 7 at 9:00am – Wall Coop Gin –**

Featured guest Dr. Gaylon Morgan, State Extension Cotton Specialist



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