



Improving Lives. Improving Texas.

*Pest Management News
News About integrated pest management for
producers in Runnels-Tom Green Counties*

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GENERAL SITUATION

Cotton is progressing well and ranges from 6 to 11 true leaf stage with square sets ranging from 88% to 100%. Cotton fleahopper numbers remain very low to non-existent. It is quite evident which cotton fields have high infestations of reniform nematodes. The most visible symptom is stunted growth. Infected plants also show signs of nutrient deficiencies. Unfortunately, there are few management options at this time in the growing season. Growers should consider rotating to a grain crop where infestations are severe.

Grain sorghum looks great as well and many fields began blooming this week. Several sorghum fields were checked on Monday and headworms averaged 0.8 per grain head. Conchuela stink bug adults were also found. About 40-50% of the plants in these fields were still blooming. So as these fields begin making grain, they will need to be monitored every 5-6 days till hard dough.

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 1/4 inch), medium-size (1/4 to 1/2 inch long) and large (1/2 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 1/2 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/>

Sugarcane Aphids-Blacklands IPM Newsletter, Volume 19, #10 June 19, 2014

Mary Jungman, EA-IPM in Hillsboro, is reporting high numbers of sugarcane aphids infesting many sorghum fields within the Blacklands of Texas. Hillsboro is not very far from us as the crow flies. Growers need to monitor their sorghum fields regularly for the presence of this pest. Growers in the valley are having trouble preparing their grain crop for harvest because of all the honeydew, mold growing on leaf tissue and high numbers of aphids present. The sorghum plants are not absorbing the RoundUp, therefore, not drying down in a timely fashion. It has been recommended by several specialists for growers to use sodium chlorate as the harvest-aide. They hope more immediate drying of the sorghum leaves using sodium chlorate, the plants will be less attractive to the aphid. If anyone suspects potential sugarcane aphids in their grain sorghum or forage sorghum, let me know immediately.

Identification of Aphids... Unlike other cotton aphid species that feed on sorghum, sugarcane aphids have dark, paired, tailpipe-like structures, called cornicles, at the rear, and their tarsi (feet) are dark at high magnification. The dark cornicles and tarsi contrast distinctively with the lighter body color of the sugarcane aphid. Sugarcane aphids differ from other aphids that attack grain sorghum:

- * Greenbugs have a distinctive darker green stripe down the back; sugarcane aphids do not.
- * Yellow sugarcane aphids have many hairs on the body (seen with magnification).
- * The legs and head of corn leaf aphids are dark.

Behavior of Aphids... Sugarcane aphids colonize the lower surfaces of lower leaves first and then advance to the upper leaves. In some situations if they are not controlled, the aphids may even colonize the grain sorghum head. When conditions are favorable, small colonies can quickly grow to large colonies and produce large amounts of sticky honeydew. Highly sticky leaf surfaces may help protect the aphids from predation.

Damage from Aphids... Aphid feeding causes yellow to red or brown leaf discolorations on both sides. The honeydew may also support the growth of black, sooty mold fungus. Infestations of seedlings can kill young grain sorghum plants; later infestations can prevent grain from forming.

During harvest, honeydew-coated leaves and stalks stick to the inner parts of harvest equipment, clogging the combine and preventing it from moving material through the machine efficiently. Combines may require service time to wash off the honeydew and remove lodged stalks and heads. The sticky leaves also prevent the grain from separating from the stalks and leaves in the combine, causing grain to “ride over” and be lost on the ground. Grain sorghum losses of up to 50 percent were reported in 2013.

UPCOMING MEETINGS

TURNROW MEETINGS..... Wall Coop at 9:00 am on July 15th. Ballinger Courthouse, Third Floor, Large Room at 8:30 am on July 16th. See you there.

2014 BIG COUNTRY WHEAT CONFERENCE coming Thursday, August 14 beginning at 8:30a.m. at the Taylor County Expo Center, Big Country Hall. 3 CEU's 1 IPM, 1 General, 1 L&R. Event is free of charge if you register by August 12th or \$20 at the door. FMI or to register, please call 325-672-6048. For agenda go to:
<http://today.agrilife.org/2014/07/09/big-country-wheat-conference-set-aug-14-in-abilene/>

A MULTI-COUNTY FARM BILL MEETING is set for Wednesday September 24th. It will be held from 8:30-12:00 noon at the Tom Green County 4-H Building. This is a very necessary meeting. Many changes are coming and almost everything you do will pertain to internet and computers.