

Bluestem Breezes
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September 12, 2016

Sugarcane Aphids

The sugarcane aphids arrived in Wabaunsee County <at least> a few weeks back. Keep an eye out in your sorghum fields! Here is the latest information provided by K-State's Extension Entomology team:

Sugarcane aphids are on the increase. Many fields previously treated for headworms have reduced beneficials populations, but beneficials are coming back.

These fields also probably had aphids in the heads and top leaves which were controlled with the spray and the residual activity will probably last for a couple weeks after this application. However, the lower leaves that are aphid infested will not be affected by this headworm treatment. So, now the question is: if I have aphids infesting 100% of my sorghum plants and they are producing great quantities of honeydew, what should I do to protect sorghum that, right now, is worth just a little over \$2/bushel?

Unfortunately, there is not an easy or perfect answer. But, here is what you should consider:

In the 10 to 15 days after flowering, sugars, amino acids, and proteins produced in the leaves are transported to the kernel where they are converted to starch and protein and kernels will reach their maximum size during this time. After this, the foliage is not really needed by the plant for further yield production.

Sugarcane aphids will be sucking the sap out of leaves, although they do not inject any toxins which impact plant health, and thus producing copious quantities of honeydew. This feeding will not kill the leaves immediately, but if allowed to feed unchecked might kill them eventually.

However, if the sorghum is at least 10 days past flowering, this aphid feeding, and honeydew production and consequent sooty mold development should not impact grain production, i.e. yield.

So, at this point we only need to be concerned with the stickiness of the honeydew, and it is sticky, interfering with harvest. If you spray now at \$10-25/acre to decimate the aphid populations in the head, or before they move into the head (and they will move into the head because the plant dries from the bottom up, thus the last plant juices will be found in the head) and use 5-20 gal/acre of carrier, it should do a good job of cleaning up the aphids.

We have found that once the aphids stop actively producing honeydew, it quickly loses its stickiness. Residual activity for most of these insecticides seems to be about 2 weeks. If you are going to harvest within that 2 week period, spraying will get rid of the aphids, honeydew, and stickiness. However last year, and the only year we have had any experience with these aphids,

they were still migrating into north central Kansas in late October. Therefore the harvest-ability problem may return before harvest, and therefore another application will be needed.

Sugarcane aphids are considered a subtropical insect, so cool and cold weather should slow down reproduction and/or kill populations off. So, if harvest will not be done until after the first hard freeze, populations, and thus the sticky honeydew, will likely be gone. However, weather changes predicted for the next couple of weeks will probably not reduce aphid populations in any way.

In summary and conclusion, if sorghum is 10 days past flowering, sugarcane aphid infestations should not impact yield although they will likely cause plants to dry down quicker. If stickiness in the heads will interfere with harvest you may consider killing the aphids prior to harvest at \$10 – 25/acre. Remember to check pre-harvest intervals on insecticide labels! If you choose to spray now, use at least 5 gal/acre – more is better! Another option is to hold off spraying and hope beneficials or cold weather control aphids before harvest. Beneficials are still present and hopefully will be increasing.

For more information visit the Extension Office (215 Kansas, Courthouse, Alma; kamayer@ksu.edu; 765-3821). For Bluestem Breezes archives, check out wabaunsee.ksu.edu.