

Bluestem Breezes
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Sorghum Pests

If you are reading this column consistently, I am beginning to sound like a broken record with these sugarcane aphids. If you're a more sporadic visitor, just know I am hot to trot on sorghum pests this year. Here is the latest update from K-State's Entomology Team:

Many later-planted fields of sorghum in Kansas are being hit hard by sugarcane aphids (SCA), and this is only part of a bigger problem. Most SCA-infested fields also have some greenbugs and corn leaf aphids in the mix. As plants mature, both SCA and the corn leaf aphids will move up into the panicles where they can reduce seed weight and quality (see photos).

However, there are also large numbers of chinch bugs, false chinch bugs, and lygus bugs feeding in panicles and blasting grain. Their feeding damage is much worse than aphid damage because this damage leaves no grain at all.

Under normal conditions, a variety of generalist predators probably consume a lot of seed bug eggs, and also the eggs of headworms. The large populations of SCA probably represent "easy pickings" for these predators, so these natural predators are likely focused mostly on SCA and not so much on other types of prey, resulting in many secondary pests escaping biological control.

So far, harvesting problems resulting from heavy honeydew deposition have been limited to southern regions. Recent rains may have been sufficient to wash off a lot of the honeydew in some parts of Kansas. Under hot, windy conditions, the honeydew can become less sticky and tends to dry on the leaves. There is a concern that growth of sooty mold on the honeydew could present a problem fouling the heads, but growth of mold seems to be quite limited so far.

The question of whether to spray is a difficult one, given the current low grain prices. Consider the stage of the crop first. If your grain is already turning color, you are probably OK, but sorghum at all stages up until hard dough will be at risk from this complex of pests.

Applications costs (assuming either Transform or Sivanto is used) will range from about \$12 an acre (Transform from the ground) to about \$22 an acre (Sivanto from the air). There is a good chance this cost will not be recovered unless the field yields 100 bushels per acre or better – not a very encouraging proposition.

These products should also control the seed bugs, which have the potential to inflict much greater losses than the aphids, but will not control headworms, which are also having a late generation in southern regions of the state.

Growers need to consider not only the yield potential of the field, but also how much is invested in the crop. If the field is in earlier stages of development (say, just beginning grain fill), a

treatment may be considered for sake of preserving the grain and the investment already made in the crop, even if it appears unlikely the cost will be fully recovered. Even in later stages of grain fill, an application may be warranted if a majority of plants are heavily infested with lots of aphids in the heads, given the risk of harvesting problems.

It is important to use a minimum of 5 gallons per acre of carrier in aerial applications, or 15-20 gallons per acre from a ground rig, in order to get good coverage of the plants. These two insecticides will penetrate the leaves and kill the aphids on the undersides, but they have low residual activity, providing only about 10-14 days protection at best, which is why any “escape” plants can give rise to resurgent infestations. One should also consider that the efficacy of these materials will be significantly reduced at lower temperatures.

Cooler overnight temperatures should substantially slow aphid feeding (and thus their growth and reproduction), although it will take a good freeze to kill them.

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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.