SORGHUM HEADWORMS

It was during the week of August 22-26, 2011. I was back home on the farm near Phillipsburg, putting up alfalfa hay for my dad. It was mid-week, either Wednesday or Thursday, and I was baling hay, driving an older John Deere 4430 tractor and pulling a newer Vermeer round baler.

I know it was mid-week because I had swathed all day Monday and Tuesday, then had taken a break from swathing to start baling just as soon as the first batch of hay was dry enough to roll. Then, for the next couple of days I would bale in the morning and swath in the afternoon, continuing the pattern until all 85 acres of alfalfa was on the ground.

I had just dumped a bale when I felt my phone vibrate and I answered the call. Even though my phone at the time didn’t identify callers by name, the number was familiar and I knew the caller well. Nevertheless, I still put on my business voice and answered the call with the standard, “Hello, this is Greg.”

My friend identified himself, then after a brief period of chit-chat, he moved quickly to the point. He asked, “Have you seen worms in any of these milo fields and what do you know about it?”

He didn’t know that I was 150 miles to the west and had been gone since Sunday evening. I don’t recall whether I told him where I was, or if I figured it didn’t matter. But, I had to admit that I hadn’t seen any of the infested fields. “Fill me in,” I said.
After being filled in, I gave the response that is the reason I remember exactly where I was and what I was doing. I said I wouldn’t worry too much about it, that headworms, in previous years, had shown up too late to do much damage.

Now, here’s the problem. It wasn’t too late to do much damage in 2011. I was wrong!

The headworm question was still running through my mind when I was baling again the next morning, so I made a call to Jeff Whitworth, our Extension entomologist at K-State, to ask him to bring me up to speed. Jeff told me that there indeed was a problem that year, and that we could expect a 5% yield loss for each worm per head. If there was one worm per head, the loss would be 5%. If there were two worms per head, the expected loss would be 10%, and so on.

So, I quickly contacted the original caller, passing along the new information. I don’t remember if he thanked me for calling back, but I do remember him saying he was “disappointed” in me for not knowing more the first time we talked.

Ouch! I still don’t know if that comment was made in jest or if it was in fact how he felt, but I’ve always believed he meant it. And, why not? I was disappointed too. I hate it when I’m wrong.

Sorghum headworms can be found in milo fields across Kansas again this year. At the time of this writing, heavy populations hadn’t yet been reported in Riley county, but there is no reason to believe numbers won’t increase in coming days.

As mentioned earlier, left untreated, an average of one headworm per sorghum head can be expected to decrease the grain yield by 5%. In 2011 the spray list was so long that it took several days for the airplane to get to some fields. In one case, the producer and I estimated about a 35% loss, going from what should have been 150 bushel per acre milo down to just under 100 bushels per acre. (Yes, yields were that good in 2011.)
With most of our grain sorghum being planted late this year, there is a greater chance that sorghum headworms will do significant damage. In years when headworms arrive later and sorghum is planted earlier, larvae won’t feed on the grain like they will in a year like this, when the grain is immature and soft.

It’s still a guess, but I expect many producers will need to apply an insecticide to control sorghum headworms. Scouting is the only way to know when to make that application though. Spraying before the larvae arrive does no good, and spraying too late will allow larvae to cause considerable yield loss.

The target I see mentioned most often is to apply an insecticide when you find an average of one small worm per head. If the sorghum is immature and worms are larger, you may choose to treat when there are just .25 worms per head. And, on the other end of the scale, when grain is reaching maturity and worms are reaching maturity, you may choose not to spray because the damage is already done or the grain is too hard for larvae to feed.

The bottom line is that you need to be scouting milo fields. Take a white bucket, bend a head over the bucket rim and beat it against the inside of the bucket. Repeat several times, count worms, figure the average number of worms per milo head, and make a decision. It’s that simple.

If you have questions, you can reach me at the Riley County Extension Office at 785/537-6350. Or, you can send e-mail to gmcclure@ksu.edu.

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