

CORN & GRAIN SORGHUM PROMOTION BOARD – 2014 CONTINUATION

Progress Summary

Title: Insect Control in Grain Sorghum

Investigators: Gus Lorenz

Production System: Grain Sorghum

Status: Year 2

Stated Goal: Insect Pest Education and Selecting Insecticides for Control of Corn Earworm and Other Insect Pests Of Grain Sorghum

Specific Objectives:

1. Increase awareness of the impact insects pests can have on production
2. Provide growers and other decision-makers with the proper tools to make decisions on insect pest populations in their fields
3. Overall improvement of insect pest management in grain sorghum in Arkansas and increased adoption of IPM in production
4. Determine efficacy of selected insecticides for control of grain sorghum pests

Planned Milestones:

1. Put the sampling tools and information needed in the hands of our growers and other decision-makers to promote effective and economical control of insects.
2. Educate our clientele on the proper management techniques for insect control and increase awareness of Integrated Pest Management (IPM). This should promote the use of thresholds, proper insecticide choices, and conservation of beneficial insects that are so important in the grain sorghum ecosystem.
3. Evaluate products for efficacy of the major pests of grain sorghum and distribute trial results at meetings, in newsletters and popular press articles.

What We Accomplished in 2013

1. We conducted one insecticide seed treatment trial and two foliar trials with selected insecticides (see Fig. 1). With resistance to pyrethroids beginning to appear in corn earworm this type of work is needed to make recommendations for growers and clientele.
2. We conducted 5 scouting schools which included information on grain sorghum scouting. We also handed out beat buckets (Fig. 2) to scouts and consultants with Promotion Board Logo at the trainings and to individuals during the growing season. We gave about 100 buckets away.
3. We prepared a 13 minute video on scouting sorghum. I'd like to say it was good, but that would not be true. Content is very good and it was as well done as could be expected by the videographer, Kevin Quinn. He just didn't have much to work with (me). If you can bear to watch it, you can find it on the Extension Website or go to Youtube:
<http://www.youtube.com/watch?v=uVn3vAMvdxg&feature=youtu.be>
The information is good and you can see the pests, I just need to keep my entomology job and forget about doing anything in the entertainment sector.
4. We started reevaluating our threshold for corn earworm and fall armyworm with colleagues in MS and TN. I have to say I think our thresholds are not where they need to be. **Based on our preliminary work, I think the threshold for these pests should be at one per head and not two per head.** Time and more trials will nail it down, but I want to adjust the threshold for 2014 right now based on the work done here and in the other two states.

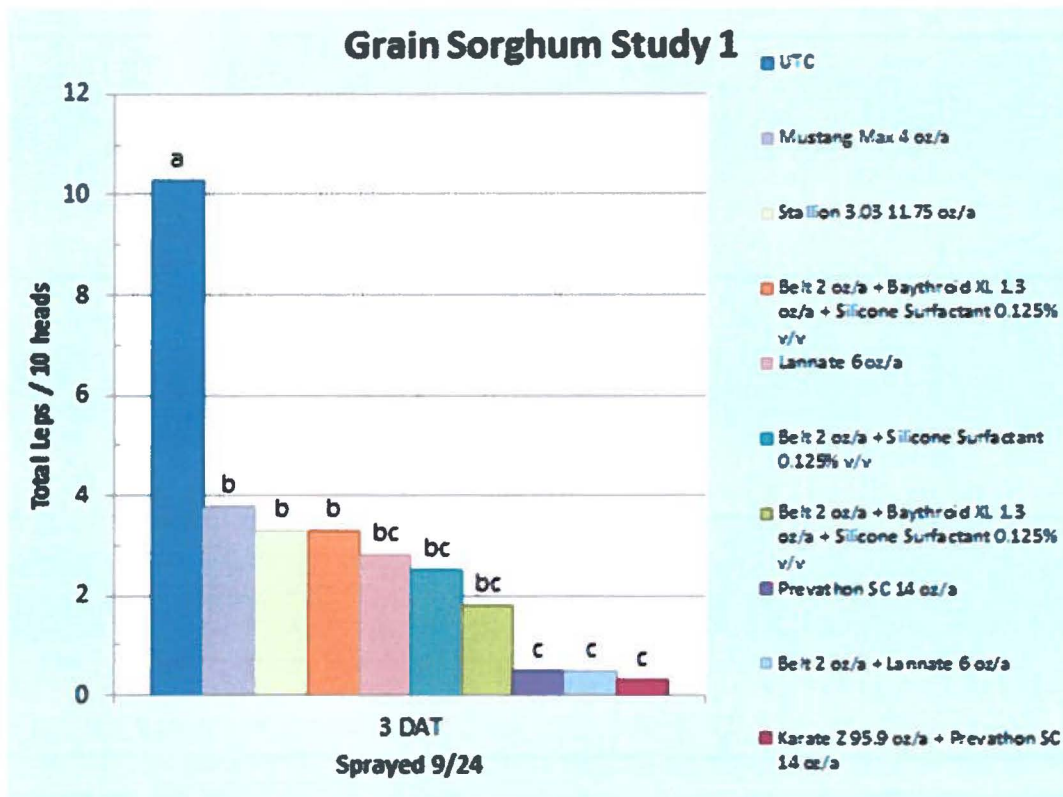


Figure 1. Efficacy of selected insecticides for control of larval pests of grain sorghum.



Figure 2. Beat Bucket Sampling Tool