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Blacklands IPM Update



GENERAL:

Wheat across the area is progressing nicely and some fields are starting to have the heads change colors as the grain filling process continues. Leaf and stripe rust spores are still floating around the area and causing new infections, but the crop's growth stage is at the point where a fungicide may not provide a return on its investment. Aphids remain in area wheat fields at populations below the economic threshold, and we still need to keep an eye out for armyworm issues in area wheat fields. Corn is growing nicely thanks to timely rains and cooler than normal temperatures. It appears the low temperatures and light frost we had on April 23rd had little to no impact on area crops. Cotton is up, but is emerging and growing slowly thanks to the cooler temperatures we have had over the last couple of weeks. Thrips, aphids, and spider mites are being found in area cotton fields, but for most of the fields I am looking at remain below their respective economic thresholds.

WHEAT:

The area wheat crop is progressing really good, and some fields are in the late grain filling stages and head are starting to turn color. Leaf rust and stripe rust infections are continuing to be found, but at the growth stage we are at, we are very limited on what fungicides we can use, and these fungicides may not provide a return on their investment based on the costs of these products. Both propiconazole and tebuconazole are labeled for applications though Feekes 10.5, and carry a 30 day pre-harvest interval, and every field I have seen is past Feekes GS 10.5 and within 30 days of harvest. This leaves only our three mode of action fungicides like Approach Prima, Miravis, and Trivapro which cost a little more but carry a 7 day preharvest interval. However, the cost of these products may not be returned from an application even with wheat prices near \$7.00 per bushel.

English grain aphids (**Figure 1**) are still being found in area wheat fields at populations below the economic threshold. There is a good beneficial insect population in area wheat fields that are helping keep these aphids numbers down. At this point in the growing season the economic threshold for English grain aphids in wheat is 10 or more per plant.



Figure 1. English grain aphid. Photo credit. University of Nebraska Department of Entomology

I still have not seen or heard of reports of true armyworm issues in area wheat fields, but with this cooler weather and recent rains the environmental conditions are favorable for them to become an issue. Earlier this week I found one small true armyworm larvae in a dense area of a wheat field outside of Malone. The economic threshold for armyworms in wheat is 4 to 5 larvae per square foot with evidence of defoliation in the lower canopy.

COTTON:

The area cotton crop is up and growing slowly thanks to the cool temperatures. There are some area fields with emergence issues due to dry planting, and crusting following the recent rains. Insect activity in area cotton fields is increasing with thrips, aphids, and spider mites being found in area fields. Thrips (**Figure 2**) are a big concern for cotton until the field starts squaring, and as area wheat fields begin to dry down they will start moving into area cotton fields. Thrips populations for the most part are well below the economic threshold, but I do have a few fields that are at the economic threshold. The fields that are at the threshold are surrounded by wheat fields on all sides. Cotton fields should continued to be monitored for thrips for the next couple of weeks, especially as our seed treatments will start loosing efficacy as we reach the 2nd true leaf stage. The economic threshold for thrips is cotton is 1 thrips per true leaf, and 1 thrips per plant on cotton in the cotyledon stage.



Figure 2. Adult thrips. Photo Credit: David Kerns, Texas A&M University

Aphids (**Figure 3**) and spider mites (**Figure 4**) are present in some area cotton fields, and their populations are still well below the economic thresholds. Currently there are not many beneficial insects in area cotton fields to keep aphid populations in check, so fields should also be monitored for potential aphid issues. The threshold for aphids in cotton is 40-70 aphids per leaf. Spider mite issues are present in a few fields and are well below the economic threshold of 40% of plants with visible damage and the population continuing to grow.



Figure 3. Aphid on cotton seedling. Photo Credit: Kate Crumley



Figure 4. Spider mites feeding on cotton leaf. Photo Credit: Kate Crumley

SORGHUM:

Sorghum acres should start being scouted for sugarcane aphids as they are present in Johnsongrass in both Hill County and Northern McLennan Counties. I have not seen or hear of reports of sugarcane aphids (**Figure 5**) in sorghum fields yet, but with them already in area johnsongrass we need to keep an eye on them so we can treat fields in a timely manner once the economic threshold is reached. The economic threshold for sugarcane aphids in pre-boot and booting sorghum is 20% of plants with 50 or more aphids.



Figure 5. Sugarcane aphids feeding on sorghum leaf. Photo credit: Rick Grantham

AUDIO UPDATES:

The Texas A&M AgriLife Extension Service's Integrated Pest Management Program has developed an IPM Audio Update for different regions of Texas. These audio updates are released weekly and when subscribing with a cell phone number, you will receive a text when the new audio clip is posted with a link to the recording. To sign up for the Audio Update that cover the Central Texas Blacklands, North East Texas, the Brazos River bottom, and Upper Gulf Coast click here. To register for audio updates from other regions in Texas please click here.

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