



Cotton Comments



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Crop Situation Update

High temperatures and winds, drought, and fire potential continue to plague the southwest corner of the state. We did receive some badly needed rainfall in the region, but only about one-quarter an inch fell at the Altus Mesonet Station this week. Based on Altus Mesonet records, it has now been about 180 days since the last one-inch or greater rainfall event has occurred.

The overall situation is dire, and at this time, substantial rainfall is necessary to allow the establishment of the 2011 cotton crop. Many producers with center pivots ground water have opted for pre-irrigation in order to provide timely stand establishment. If irrigation capacity diminishes during the growing season, this means that rainfall will be required to carry the crop forward once that occurs.

At-Risk Acreage Estimate

The 2011 NASS estimate for planted acres was 326,000 acres. Based on NASS data from 2000-2008 the irrigated acreage averaged about 80,000 with most of that in southwestern, OK.

If we assume that most of the new acreage is non-irrigated, then we likely have about 200-250,000 dryland acres potentially at risk due to extreme drought conditions. Final planting dates for crop insurance purposes are all June 20th for non-irrigated cotton in southwestern OK counties. The irrigated acreage is certainly going to be under drought pressure also. All irrigation systems including the Lugert-Altus Irrigation District are essentially supplemental to rainfall. The irrigated acreage is at risk for considerably lower than normal production due to short water availability. We need rainfall soon to preserve the production capability of these dryland and irrigated acres.

Lugert-Altus Reservoir Status

The Lugert Reservoir is currently about 47% of capacity. There is little if any water flowing into the reservoir at this time. Based on discussions at a meeting earlier in the week, there is concern about how the irrigation water “run” will be executed. Most likely, the system will be turned on near the end of May. Producers will be able to irrigate cotton land during the next two weeks or so. The amount of water available will be expended on the “up front irrigation run.” Therefore, sizable rainfall and

runoff into the North Fork watershed will be necessary to provide additional in-season irrigation. From the crop insurance perspective, three components were emphasized: 1) plant the crop, 2) water the crop, and 3) don't sell your water allocation. Now is a good time to discuss crop insurance issues with your insurance provider representative to make sure all are on the same page.

Soil Temperatures and Dry Planting

Due to hot, dry conditions, soil temperatures are very warm at this time. A forecast for low temperatures in the mid-40s at Altus is projected over the next several days. Some producers are considering "dry planting cotton" ahead of the scheduled irrigation run. As long as the soil remains dry, this cool spell should not affect seed or seedling performance. Potential for imbibitional chilling injury exists only if soil temperatures are less than 50 degrees during the time seeds are imbibing moisture from the surrounding soil. One other risk producers can encounter is "dry planting" and then obtaining a one-half inch or so rainfall event. This may prove to be just good enough to trigger the germination process. If the germinating seedling dries out or if there is dry soil beneath the seed, seedling death can occur. If producers are thinking about "dry planting" several days in front of an irrigation run, this complicates management unless irrigation can be

applied shortly after one of these minor rainfall events that can trigger germination in a dry field. We just need to watch the forecast and hope for the best.

Drought Relief Programs for Transgenic Traits and Seed

The modern transgenic varieties have provided a lot of value to producers in terms of improved yield and quality. Producers are fortunate that transgenic trait providers are sharing the risk in our region (Monsanto Seed Drop Zone E, Bayer CropScience Southwest Geography Zone CE, both of which cover the entire State of Oklahoma). Drought associated losses are covered for all Monsanto Genuity traits by 100% refund of the published technology fee price. These traits would include Roundup Ready Flex and Bollgard 2.

One important requirement for the Monsanto program for Genuity Traits is that:

"You purchase only Roundup WeatherMAX or Roundup PowerMAX agricultural herbicide from an authorized retailer for the first postemergence application on cotton acres containing the Genuity Roundup Ready Flex trait."

This can be triggered either by non-emergence or if the field ultimately produces less than 150 lbs lint per land acre. Bayer CropScience has a similar program for its Liberty Link and GlyTol technology fees.

In addition to 100% trait refunds in case of non-emergence or 150 lb lint production per land acre, various seed companies are also sharing risk. However, a 50% refund of published seed cost is provided. There are issues specific to the various companies. It will be important to know and file the required paperwork (seed and herbicide purchase receipts, FSA forms) by the specific deadlines (which can vary by company). Some companies may require one of their representatives to investigate claimed acres while the crop is still in the field. Some reserve the right to reject without settlement any potential claim not inspected by their representative. Losses due to other perils such as disease, pests, hail, blowing sand damage, etc are not eligible for coverage.

If producers have specific questions, Shawn Wade with Plains Cotton Growers in Lubbock has acquired and posted information which is company specific. The direct link for this information on the PCG website can be accessed here:

[click here](#)

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Controlling Volunteer Cotton

When driving around southwest Oklahoma, it is evident that considerable seedcotton from last year's crop remains on top of many no-till and clean-till fields. With the lack of rainfall to germinate this seedcotton, it is anticipated that

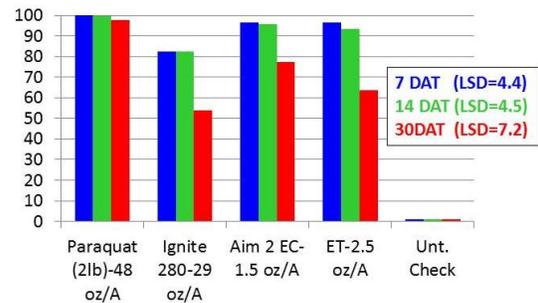
many fields will encounter this challenge in 2011. Remember – a weed is a plant out of place, and cotton plants growing between rows compete for the same fertilizer nutrients, water, etc. as those in the row. However, modern harvesting equipment will not be able to harvest cotton that is even a few inches off the center of the row. Thus, volunteer cotton is essentially a weed.



Circumstances often make it impossible for growers to control volunteer without some form of tillage. Since volunteer often germinates and emerges at the same time planted cotton emerges producers are left with very few options. The lack of height differential between the crop and the volunteer make it difficult to safely and effectively control the volunteer with hooded or shielded applications. For this reason it is generally imperative that producers make every attempt to control any volunteer present prior to planting in hopes of avoiding this situation. With the lack of rainfall in 2011 thus far, this is not necessarily feasible.



Volunteer Cotton Control (Applied to 8-9 Leaf Volunteer)



In 2010 due to untimely rainfall events we sprayed volunteer cotton in the 8-9 leaf stage...much larger than preferred. Typically we try (and recommend) to spray volunteer prior to the 4 leaf stage, as larger plants are generally harder to kill with available products. Fortunately growing conditions at this time were extremely good and we observed "better than expected" control from the treatments we applied. The graph below presents the treatments applied and their respective control information at 7, 14 and 30 days after treatment. Treatments were applied in 15 gallons of water with TurboTee nozzles at 26 PSI. At the 7 day after treatment (DAT) observation all treatments controlled volunteer cotton greater than 80%. However by 14 DAT, only paraquat, Aim and ET controlled volunteer greater than 90%. By 30 DAT, only 48 oz/A of Paraquat controlled volunteer (greater than 90%). Aim applied at 1.5 oz/A controlled volunteer 78% while 2.5 oz/A of ET and 29 oz/A of Ignite 280 provided less than 65% control.

Although paraquat effectively controlled 8-9 leaf volunteer (at the 48 oz/A rate) there are some additional considerations. Typically the conditions that germinate volunteer cotton also tend to produce additional broadleaf weed species. One of the most common broadleaf weeds experienced in cotton is morningglory. If morningglory is present at the time of the volunteer application it may be prudent to consider a treatment that provides the best dual-purpose weed control for the situation. Aim has proven extremely effective on morningglory as well as on volunteer cotton. Utilizing this treatment may provide the best all-around control for growers dealing with both weeds. There are a few important things to remember when applying Aim 2 EC. The Aim label recommends the inclusion of a crop oil concentrate (1% v/v). Also, water volume is important. Since Aim is strictly a contact herbicide the label recommends a minimum volume of 10 gallons per acre. Good coverage is critical for success. It is also important to remember that if any grass species are present tank-mixing with glyphosate will be required (due to the fact that Aim will not control any grass species).

The Aim label (as well as other product labels) does allow for hooded applications (completely closed) however caution is advised. On young, 5-6 node (planted) cotton all spray contact must be avoided. Fast ground speeds resulting in bouncing of the hooded sprayer applicator may result in escape of spray mix. Theoretically, one should think of running a hooded sprayer as a cultivation of cotyledon cotton. Precision pays big dividends and can prevent considerable grief later. The slightest off-target drift can easily result in the loss of your entire stand. In this situation a shallow cultivation would be much safer and should help create the height differential needed for later-season post-directed sprays.

In closing, remember a few key points when dealing with volunteer cotton. First and foremost, starting clean is extremely important since our in-season options are so limited. Effective preplant/preemergence applications are critical. Next, the size of the volunteer at application time is also very important. There is a relatively small window of opportunity when it comes to effectively controlling volunteer cotton. Oftentimes this window is overlooked. In good growing conditions cotton can add an additional leaf every three days. Therefore, one leaf volunteer can turn into 4 leaf cotton in a very short period of time (10-14 days). Once this volunteer passes the 4 leaf stage, your potential for effective

control decreases significantly. **Despite our 2010 results, if your volunteer does pass the “easy to control” stage (1-4 leaf) then shallow cultivation should be a consideration.**

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