The University of Georgia

CRISP CO. AG NEWSLETTER

110 West 13th Avenue, Suite C, Cordele, GA 31015, (229) 276-2612

JUNE UPDATE-1

- ***Planting in Dry Soils, Crop Insurance Concerns***
- ***Current Cotton Issues***

As drought conditions persist, relevant information is sent to me via our UGA specialists regarding crop production. I hope you find the information below useful. Please call me if you have questions. Tucker 229-947-0298

• PLANTING IN DRY SOILS, CROP INSURANCE CONCERNS – John Beasley, UGA Peanut Agronomist

I've had several calls concerning what to do about planting in non-irrigated fields if growers are forced to plant by crop insurance agents OR if the grower elects to plant anyway. The question is how much (in terms of cost and inputs) do I put in at planting. I'm copying my UGA Peanut Team colleagues on this in case they wish to e-mail you with a differing opinion.

Because we have UGA recommendations for insect (thrips) control and weed control that can effectively be used post emergence, I would recommend that producers plant the seed and leave off the soil insecticide and/or PPI and pre-emerge herbicides at planting. In the event a grower has to make a claim on their crop insurance because of weather related stand problems, they have put a minimum amount, but certainly acceptable, into their planting costs and inputs. We also recommend planting 5-6 seed per foot of row so planting 5 seed per foot would be acceptable. These recommendations would be for those growers without irrigation that have insufficient moisture at the recommended planting depth.

REMINDER: DO NOT plant peanut seed shallow (less than 2 inches) and DO NOT plant seed too deep (below 2.5 inches) trying to place them in moisture! Regardless of the soil conditions at this time it is imperative that growers plant peanut seed at the recommended depth!

In the event a sufficient rain event occurs within a reasonable time period following planting so that the producer does end up with an acceptable plant stand, we do have insect, weed, and disease management options for early post emergence that would result in acceptable pest management and could result in maximum yield potential for the late planting, provided there is adequate moisture the remainder of the season.

Current Cotton Issues *- Collins, Whitaker, Roberts, Culpepper, and Shurley*

There have been several recent reports of poor stands and seedlings having difficulty emerging. The information below involves complex and multidisciplinary information, and was released to county agents one week ago, however the situation in Georgia has changed very little since then.

1. Since it has been so dry, many dryland fields were planted rather deep (1.25-1.5 inches) in hopes of utilizing some of the moisture that was present at these depths for a very short period of time. Anytime cotton is planted this deep, difficulty with seedling emergence could be expected. Exceptions may include rather soft soils that do not form a surface crust, with moisture relief in the near forecast. In many of the recent reports, some seedlings germinated/emerged while others did not, primarily resulting from inconsistencies in available moisture at these depths, and also a result of this moisture being depleted more rapidly than anticipated. Some of the seed that did not germinate soon after planting, may in fact still germinate once rains return, and only time will tell. In several cases this week, some seed may have germinated and died before (or soon after) emergence, due to hot soil temperatures and rapid depletion of moisture at or near the soil surface. Some growers were able to save their seedlings with a very timely irrigation, which will likely need to be followed by subsequent irrigations. However in these cases, timeliness of irrigation was absolutely critical, as waiting another day or two may have been too late. If this is the case, the grower may consider replanting, although this is something that should generally be avoided. The need for replanting must be determined on a case-by-case basis, and potential benefits must be weighed against additional costs for each individual situation. Previous data from Georgia suggests that replanting may generally be justified if approximately half of the planted area is occupied by 3-foot skips. When determining how many 3-foot skips are present, remember to give appropriate credit to large skips (for example, a 12-foot skip should be considered as four 3-foot skips)

2. Some folks have reported seedlings expressing difficulty emerging through the soil surface with some "broken neck" seedlings observed, where the cotyledons appear stuck in the soil and the hypocotyls break under this pressure. For most situations, the only option was to keep the water running in fields where irrigation is an option. We don't want to flood any cotton, nor irrigate unnecessarily, however it is very important that the soil remain moist until seedlings have fully emerged. Remember, that we have had deficit soil moisture for quite some time, and warm windy conditions continue to dry the soil more rapidly than normal. These situations must also be monitored very frequently to determine if and when the soil surface dries out again. Light to moderate (0.5 to 0.75 inches of water, depending on soil type) and frequent irrigation could also improve stands. Heavier irrigations may be required in fields where subsurface moisture has been severely depleted. There is a risk of herbicide injury in these cases, but establishing a decent stand should be priority at this point. Herbicide injury can be managed in most cases, if a good stand is present. Delays in maturity can be expected, possibly increasing the importance of very frequent monitoring for thrips. If particular fields are crusting over, light rotary hoeing may help seedlings emerge, but this needs to been done in a very timely manner, as it could damage fully emerged seedlings. Switching to a hill-dropped planting system from this point forward could also improve stands in soils that tend to crust.

3. Similar to last year, some growers have observed extensive herbicide injury with evidence of severe thrips damage. Herbicide injury typically slows seedling growth for a while, allowing thrips to feed longer on developing leaves. We have been experiencing higher than normal thrips infestations, especially in early planted cotton, which tends to exacerbate the problem. In these cases, growers should monitor for thrips presence very frequently, and should also treat these fields very promptly, **if** a foliar spray is justified. Keep in mind that seed treatments may not provide optimal suppression in situations where seedlings are not growing rapidly, and one or more foliar sprays may be required.....this can only be determined through frequent monitoring, and unnecessary sprays should be avoided. Additionally, these situations may scare some folks away from the use of some pre-emergent herbicides. This should not be the case!!!! By now, most folks should realize the absolute necessity of every pre-emergent herbicide option we have available for combating pigweed,

and this should not change. Prior to Roundup Ready cotton, a little herbicide injury was not uncommon at all. This is nothing new.

By this point in time, thrips numbers appear to have decreased substantially. With warm temperatures and moisture, seedlings should be growing rapidly, and are therefore less likely to require a foliar spray. Again, unnecessary sprays should be avoided, but the necessity of a foliar spray can only be determined by intense and frequent scouting.

4. There have been a number of questions regarding the decision to "dust-in" cotton and wait on rainfall prior to the insurance cut-off date. There are two ways to approach this. One approach is a risk management and/or business decision based on prior experience and the rapidly approaching insurance cutoff date. This approach may result in variable business decisions from grower to grower. The other approach is from an agronomic standpoint. Some folks may dust in cotton, and get a rain two to three weeks later and achieve optimal stands. Others may have poor stands. This is largely dependent on how much (if any) moisture is available at planting, how deep this moisture is, temperatures after planting, and how much rain occurs when it finally does rain. Due to this variability, it is very difficult to recommend that a grower dust-in cotton unless a rain event is almost guaranteed within a few days (usually a tropical depression or a wide-spread front / storm system that covers most of the state). Some folks have dusted in cotton in fields that had some very marginal moisture in the zone where seed was placed. In many cases this has led to erratic stands and other complications. Keep in mind that replanting should be generally avoided, so it is important to get it right the first time, speaking from an agronomic standpoint. Additionally, if a grower decides to dust in cotton, the seed should be placed in a relatively shallow zone without moisture to allow rainfall to reach the seed and begin germination. A significant risk of dusting in cotton is associated with a very light rain (0.1-0.2 inches) following planting which may provide just enough moisture for some seed to germinate but not enough to sustain seedling growth through full emergence. Of course, there is always the risk that conditions will remain dry to the end of our planting window, however we can achieve acceptable yields if germination occurs by June 15th if we have good weather throughout most of our growing season, so we still have some time. However, preventing delays in maturity may become more important if cotton is planted towards the end of our planting window. At these later planting dates, rapid germination and stand establishment becomes more critical, as we have lost most of our flexibility by that point in time. Therefore, timely irrigation and managing the crop for a short-season (preventing any additional delays in maturity) are more critical to the success of later planted cotton.

Dr. Shurley recently released some helpful information regarding planting/replanting considerations from a crop insurance and risk management standpoint. This report entitled “2011 Drought and Cotton Planting/Replanting Decisions” can be found at www.ugacotton.com under “Breaking News”.

5. As we are in the second half of our planting window, some folks have asked when they should start planting earlier maturing cultivars. There are several things to consider here as well. Historically, approximately 20 percent of our cotton is planted in the first two weeks of June, even when DP 555 BR was widely planted. Not all June planted cotton was planted to DP 555 BR, but some likely was. Late June planting was not necessarily uncommon in far South Georgia, however this may have been risky in some circumstances. We now have a rather wide range of maturity among our currently available varieties, but it is important to remember that essentially all of our newer varieties are earlier maturing than DP 555 BR to some degree. Additionally, there is no magical date when we need to convert over to earlier maturing varieties for several reasons. Keep in mind that even an early maturing variety may have late maturing tendencies if it is over-fertilized and over-watered, with little or no PGR management. Thrips and herbicide injury may also further delay maturity. Other varieties may behave like an early or a late maturing variety depending on the environment in which it is grown. For early June planted cotton, naturally we will have to focus more on developing a crop in a shorter season environment, but this encompasses more than just variety maturity alone. Therefore these decisions should be made more in regards to management and environment as opposed to simply making these decisions based on variety maturity. At later planting dates (first 2 weeks of June), possible delays in maturity should be

prevented or managed, and growth should be monitored very frequently to prevent excessive growth, regardless of the variety planted. For later planted cotton, more attention and/or management may need to be given to mid/full-season or growthy varieties in order to rapidly develop an acceptable crop before the onset of unfavorable conditions, but variety decisions should still be made based on yield potential in particular environments (dryland versus irrigated). For example, it may be unwise to plant a very early maturing variety in a dryland situation (if its performance is likely to be reduced) just because it is planted late.....on the other hand, a grower may not want to plant a late maturing growthy variety in a heavily irrigated situation of if he is not likely to manage it for a shorter season environment.

Rapid emergence is also imperative for later planted cotton. As the planting window comes to an end, replanting may no longer be an option, therefore irrigation may be necessary for rapid emergence and stand establishment. Slightly increasing seedling rate may be necessary in some cases in order to offset the risk of stand loss. Remember that we tend to lose a lot of flexibility during the latter part of our planting window. Additionally, waiting on rain during this time will further delay emergence and maturity of this late planted cotton. Keep in mind that soil temperatures during this time are usually quite a bit hotter, and soil moisture may deplete much quicker than normal.

Sincerely,

Tucker Price

Crisp County Ag Agent
229-276-2612
229-947-0298
tprice@uga.edu