

THE TURN ROW



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PGR APPLICATIONS & INSECT CONTROL

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Early as it may seem, the Dog Days of Summer are upon us. Triple digit temperatures have been commonplace for weeks across the Cotton Belt with little relief in sight. Compounding the situation, rainfall has been limited to isolated showers in the Southeast while the exceptional drought conditions in the Southwest remain unchanged. Despite these weather extremes, planting is all but complete with 96 percent of the crop in compared to 95 percent at this time last year. Unfortunately, these same weather extremes are beginning to take a toll on the crop as the portion rated good to excellent has fallen to 40 percent from last week's 52 percent. Worse yet, that rated poor to very poor has increased to 26 percent from the previous week's 19 percent. When looking at crop conditions from California to Virginia, the difference maker is subsoil moisture. Where present, young cotton plants are holding their own by searching deep to find it. In areas where its absent, stands are very questionable.

SOUTHEAST CONDITIONS

This region has been the benefactor of earlier rainfall which, despite causing some planting delays, did recharge our underground water. Being an arid plant, cotton is thriving in this heat where soil moisture is available. Our driest areas are Southwest Georgia and the Tennessee Valley region of North Alabama. Though cotton is hanging in there for now, a much more vulnerable corn crop is suffering. It is going to take something to push this high-pressure dome eastward for us to get back to more normal rainfall patterns.



WHILE WE AWAIT
CONDITIONS TO
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JUNE CHECKLIST
OF PRODUCTION
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INCLUDE PGR
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Some have suggested a mild hurricane for cotton crops have been made with a mid-summer hurricane but let us not rush things because we cannot order them exactly like we want them. Also, this writer lives too close to the coast. While we await conditions to improve, our June checklist of production practices include PGR applications and insect control, all of which will be topics discussed in this newsletter.

SOUTHWEST CONDITIONS

Unfortunately, the Southwest region has not been so lucky, as I'm sure you are all aware. The first round of culling acres across west Texas began last week and the abandoned acres are starting to add up. Though it's too early to do much more than speculate, it's safe to say there will be more abandonment in the weeks to come as crop adjusters make their way through counties with the earlier insurance planting deadline. Non-emerged acreage has to wait fifteen days after their final planting date before it can be appraised. But, it's not all doom and gloom. There are isolated areas that have had timely rain throughout the months of May and June and the cotton looks good. These areas may be few and far between, but we are thankful for what rain we have received and remain optimistic

Pinhead square damage on cotton



When monitoring plant growth for follow up applications, measure the length between the fourth and fifth node from the terminal. If it exceeds 2.5 to 3 inches (three fingers width), then another application is justified.

for whatever happens over the next few weeks.

INSECT CONTROL

This year, insect control is even more important as the high cost of production inputs requires we do everything possible to maximize yields. With that in mind, Scott Graham, Auburn University Extension Cotton Entomologist, points out previously established economic threshold levels for insecticide treatments does not consider the price of cotton. An insect may damage the same amount of cotton, but it's more costly at a dollar plus a pound. Therefore, thresholds may need to be tightened up this season. We must keep in mind that water should be our only limiting factor, not insects or other factors within our control.

Plant Bugs – Now that thrips are behind us our next primary insect pest will be plant bugs. Plant bugs are now entering cotton fields as they move off wild host plants. This migration is being sped up

by hot dry weather conditions rapidly drying down these host plants. We scout for adult plant bugs in one of two ways. Sweep nets can be used where the treatment threshold is two adults per twenty-five sweeps. An alternative method is looking for feeding damage. Adults will feed on small pinhead squares causing them to abort. So, look at the pinhead square associated with the quarter-sized leaf nearest the top of plants. If square retention falls below 80 percent, an insecticide treatment is warranted. It is advisable to use materials such as Transform, Admire, or Centric when spraying for adults. These are easier on beneficial insects and lessen the risk of flaring other damaging insects. Aside from feeding, plant bug adults will be laying eggs in the stem of the plant when in the field. Thus, effective control of the adults now present will decrease populations of the next generation.

Spider Mites – Spider mites are considered a secondary pest in cotton for their presence is sporadic from year to year. We are mentioning them today because they are more prevalent in hot, dry weather conditions. They cause cotton leaves to turn rusty brown and can be found on the underside of leaves. The economic threshold for treatment is when 30 percent of the plants are infested.

Stink Bugs – We will be talking more about this insect in our next Turn Row because it's still a little early for it to be in cotton fields in any substantial number. However, with bollworms now considered a minor pest with the advent of Bt technology, the stink bug has taken the throne as the most damaging insect in cotton. The generation of stink bugs that move into cotton come off corn. Alarmingly, there are reports of large numbers of stink bugs being found in corn currently. So, I mention them now just to say they are likely to become a major problem as corn dries down and harvest gets underway, so be aware. Research has found utilizing corn as a trap crop and treating it with a pyrethroid can significantly reduce later stink bug pressure in cotton.

PGR APPLICATIONS

Effective use of plant growth regulators has always been more of an art than science. Timing and rates are both key. Depending on the year, one is sometimes more important than the other. Currently, such is the case under these hot, dry weather conditions. Rather than run the risk of limiting plant growth, the use of multiple lower rate applications may be safer. Building concentrations of PGR in a plant is critical to its effectiveness. The above-mentioned method allows for this while letting future growth conditions dictate rates.

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