

AgriLIFE EXTENSION

Texas A&M System

WEST PLAINS IPM UPDATE

News about
Integrated Pest
Management in
Hockley and
Cochran Counties
from Kerry Siders.



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COTTON IRRIGATION MANAGEMENT

Most years it seems as though irrigation management here in our neck of the High Plains is pretty simple - you turn it on and you do not shut it off. Unless of course it rains or it is August 25th then you may shut it off. However, this is a terribly unusual year and many are wondering when they can start backing off or just shut the water off. So first, before I give my annual example of when to stop irrigating, let me say that I understand the desperation that many are in and literally can not water any longer. Also, you are the owner of your farming enterprise and it is your prerogative to make any decision you feel necessary.

Again, the NAWF measurement can be helpful. This will let you know where your current top boll position is and how old previously set bolls are. As an example if we have a white bloom three nodes down from the top I would say you have 2 NAWF. Now I am only referring to first position fruit. So just below that white flower should be a small boll which would be approximately 3 days old. The boll directly below it was formed 60 heat units before this small boll. Which on average this year is 3 days. So if there are a total of 4 first position bolls we can estimate that the oldest boll is somewhere around 12 days old right now (the only boll which may not come off). The oldest boll would have been a bloom around July 17th. Okay, now that you know how to judge the age of a boll you should consider which of the uppermost bolls you can realistically take to harvest. Let us say that the current white bloom up near the top is the last one we think we can hold based on the drought. Okay then, this flower will be a boll in a day or so. This boll cannot be water stressed for about twenty days. So this plant needs good water through August 20th. Now this moisture may come from irrigation or rain. After August 21st this boll can take moderate stress, meaning that it can wilt down on a hot afternoon as long as it completely recovers the next morning. By September 15th or when this last boll is about 45 days old it can take severe water stress and it should not cause quality or yield loss. Remember also, that until a small boll is 7-10 days old it can easily be shed when the plant is put under stress.

So, there you have it, with the drought we will already suffer yield and quality reduction. However, if you turn the water off too soon you are guaranteed to cause additional if not total loss of

yield and quality. I would much rather see you try and keep up with portions of a field rather than shutting a whole field off. Unless of course it is a scenario such as in the last newsletter where irrigation water is being shared with another field. Then it may be the right thing to sacrifice one field for another.

Another point about irrigation now. We are not capable of storing water at this time of the season. No matter what, we are in a deficit mode. So best thing for any plant whether it is cotton, peanuts etc. is to reduce the interval at which it is receiving moisture. So in other words let us say you are putting out 1.5" in 6 days on a full circle of cotton and it is really wilting in front of the pivot. My suggestion would be to speed up the pivot to only put out 1-1.25" on a 4-5 day interval. Should help alleviate some stress in the short term. On peanuts this would be a must to maintain that environment which is conducive to flowering and pegging. On peanuts if you are using drag hoses, which is ideal for water application efficiency, change to sprinkler. This helps in-canopy conditions for making this environment friendly to flowers and pegs.

No change on pest activity at the end of this week. Very quiet.

IPM Radio Program Ag Talk on KJTV, radio 950 AM, on Wednesdays from 12:30 to 2:00.

AgriLife Extension in Hockley County Report on KLVT, High Plains Radio Network, radio 1230 AM, Wednesdays from 7:30 am to 7:45 am.

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