

Pre-Emergence Herbicide Injury In Cotton



DR. LARRY STECKEL

JACKSON, TENN.

To say this has been a challenging start to the cotton growing season is an understatement. Way too much of the mid May planted cotton has needed to be replanted in some areas. The big factor was the weather as we had 18 days of rain out of

the first 26 days of May. We also had some record cold temps during that time. Needing to wear a coat in May, while looking at germinating cotton in the mud, is a recipe for replant. Add to this the fact that we are now using pre emergent herbicides on most cotton acres and that these herbicides under cold, wet conditions are more prone to injure cotton. This injury exacerbated the building seedling diseases. Lastly, heavy thrips pressure in many of these fields made poor cotton stands worse.

This is really the first year in Tennessee that we are going back to weed control, over a large area now, like it was back in the early 1990s. That is relying heavily on pre emergent herbicides. Will McCarty wrote in 1994 in a MSU extension publication "all preemergence herbicides can damage young cotton and re-

duce or destroy stand if a high concentration of the herbicide comes in contact with the germinating seed or young seedling. Tolerance depends upon soil type, organic matter content and amount and timeliness of rainfall the first two weeks after planting." It appears in some respect we are repeating history.

I hope the problems out of the gate this year do not discourage folks from using pre applied herbicides next year. The reason I say this is over the last couple days the phone calls have moved from replant concerns to "I did not use a pre herbicide and have Palmer amaranth up in my cotton.... now what do I do?"

The answer is if the field is planted to a glufosinate tolerant cotton, spray Ignite. Unfortunately, some of the cotton in question is not glufosinate tolerant. A couple folks have asked about tank mixing Cotoran with glyphosate to control the Palmer in this cotton. If the Palmer amaranth is very small (just emerged), the Cotoran will provide some control. Barring that, if the Palmer is in small patches, organize a chopping crew. If the Palmer pressure is too heavy to chop, the only viable option is to apply Gramoxone Inteon and replant. Δ

DR. LARRY STECKEL: Extension Weed Specialist, University of Tennessee