

## Field Notes:

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### The year of the five lock boll?

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This time of year in the South people who don't commonly pay much attention to fields as they pass by begin to notice the ones that have been planted to cotton. These fields transform within a few days from the usual green to veritable snowbanks of white. A lot of passers-by from other regions will stop to look in amazement at the miracle that we southerners have come to know.

Cameras capture this wonderment as people from childhood to the professional photographer snap cotton-framed images of friends and family, newlyweds, as well as farmers themselves with their grandchildren. Some well-meaning folks also seem to think that these fluffy bolls are free for the taking as souvenirs, but I suggest that this not be done without the permission of the farmer who may cherish not only the beauty but the monetary value of them.

Some of us have been around cotton so much through the decades that it has become a part of us much deeper than we realize. A walk through a field of open cotton speaks volumes, revealing the results of the season that has produced the crop. The apparent differences in plant size can no longer be trusted since farmers modify this parameter with regulators.

The things that really catch my attention are the number of missing positions on the plants, the degree to which each boll has opened, the overall size and fluff of the boll, and of course the color of the fiber. I have become used to seeing some level of bolls that instead of the standard four locules or "locks" per boll have five locks. The level of this characteristic within the field is normally low enough that I must actively search for bolls with five locks.

This year is different in that the level of five lock bolls "seems" to be much higher than usual in that they are very easy to see just walking down each middle. Often there are two of them on one branch and many branches have at least one. A very unscientific estimate of the difference from previous years may be as much as a change from one five lock boll or less in a dozen to as many as three or four or more per dozen.

Anyone who has worked with crops will be quick to point out that this is very subjective, and they would be correct. However, I suggest that you take a look for yourself even though I realize there may be fields in which this is the case and others where it is not. As with any growth or plant development character this issue will be influenced by several of the old standard factors including variety, soil fertility, drainage, and weather, as well as the more debatable things like tillage system, soil type, rotation program, and so on to infinity. Some of the older folks may even include the stages of the moon at the time of planting, a factor that is still commonly considered by more people than we may want to admit.

This year however has been a little different somehow, and I want to believe that the early stages of this crop were supplied better with moisture as well as improved balance of nutrients to support a more vigorous plant. These conditions that were more favorable to growth in turn likely stimulated the plant to produce many embryonic bolls with an "extra" carpel that developed into the increased level of these larger and more productive bolls.

I suspect that we have seen similar effects in other crops as well, but since cotton is the one I notice most readily I have limited this wandering discussion to it. It would be interesting to know whether others across the region are seeing this difference as well, or if I am seeing a localized phenomenon. Regardless, I will suggest that for many fields in this area this is "The year of the five lock boll".

Thanks for your time.