



2018 Arkansas Cotton Update &
2018 Cotton Research Verification / Sustainability Weekly Update
June 10, 2018
Bill Robertson and Amanda Free

Overview

The cotton crop continues to make good progress both above and below the soil surface. It was not a problem last week to find good cotton roots 16 inches below the soil surface in a core sample on 8 inch tall cotton. Field work, particularly weed control is job one at this time. Wet weather in and around planting and string of windy days has had most in the catch-up mode all season. Pigweeds are getting larger than most like to see, but we are doing a decent job of holding them back. Many producers this last week are working on the second round of our over-the-top products for that knockout punch. Highboys and hooded sprayers are a common sight all across the state. Many still need a few more days yet to get across the farm. Unfortunately, we are also beginning to see off-target movement of some of our herbicides.

The National Agricultural Statistics Service (NASS) Crop Progress and Condition Report for the week ending June 3 (last week) reported cotton squaring at 11% which was ahead of the five-year average of 5%. Crop progress should continue to be well ahead of the five-year average with current favorable conditions. They also reported that 86% of the cotton was in good (53%) to excellent (33%) condition with only 13% being fair, 1% poor, and none rated very poor.

The NASS acreage intentions released March 29 were at 480,000 acres, up 8 percent from the 445,000 acres planted last year. Early June numbers from the Arkansas Boll Weevil Eradication Foundation has the state near the 455,000 planted acre mark.

Current Issues

Mepiquat chloride applications were made on our end of April and first of May planted cotton beginning last week. Common timings to begin the use of this product is pinhead (PHS) to match head (MHS) square or the 9 to 10 node cotton. This product works as a result of the concentration in the plant which goes to reason that it is much easier to obtain and maintain the desired concentration in a plant if we start early on a smaller plant. It is difficult to even obtain the concentration needed to be effective if we start late on a large plant. Our more aggressive varieties on strong ground are receiving 16 oz/A for starters. Most report that they are going with a base of 12 oz/A and bumping it on strong fields with aggressive varieties and dropping in weaker areas. Of the very early planted cotton, very few are dropping below the 10 oz/A rate.

Travelling across the state, it was common last week to see many producers starting irrigation in soybeans. It is rare that we irrigate pre-squaring cotton in Arkansas. However, we often see many of our record yields being set in years in which we see little water stress once cotton begins squaring. The first sign of stress we can easily measure in pre-squaring and squaring cotton is node production. Node production will slow when cotton is stressed. Tom Barber has studies early irrigation in cotton. One week before flower is a critical time to avoid moisture stress in cotton. May 1 planted cotton could begin flowering 50 to 55 days after planting this year putting us about 2 weeks from flower today.

In our Verification/Sustainability fields we monitor soil moisture at a 6, 12, and 18 inch depth as well as the rate at which the plants put on a new node or leaf from emergence. Our 6 inch sensors are getting dry but we have very good soil moisture levels at the 12 and 18 inch depths. Node production has appeared to slow slightly but the slope of the line for node production from the 2nd true leaf to current last week for our fields basically mirrored that of the Target Development Curve in COTMAN. Node production at this time is still adequate.

Ideally we need enough dry calm days to finish our over-the-top weed control programs and then catch a good rain to get us to layby and then lay our pipe.

**2018 Cotton Research Verification / Sustainability
Weekly Update**

Update No. 3

June 8, 2018

General	There are 12 Cotton Research Verification / Sustainability Program fields in 2018. Growth stage across fields ranges from 4 to 8 nodes. All fields have received rainfall since the previous field visit, amounts range from .02”-.58”. All field in Desha county are squaring. All fields will be in need of a good rain before long or irrigation pumps will begin being turned on. Fields which are squaring were graphed on the target development curve with previous node counts to make sure cotton growth is still running parallel to the target development curve. At this time all fields in Desha County which are squaring are running parallel to the curve. As far as insects, both thrips and plant bugs have been seen but all checks are well below treatment level at this time.							
County	Field Name (Tillage Practice)	Date Planted	Variety	# of Nodes of Previous field visit	# of Heat Units Accumulated	# of Nodes On field visit	% Square Shed	General Information
Desha	East Weaver (Farmer Standard)	4/30	DP 1646 B2XF	7	89.5	8	5.9	Field received .52” of rainfall since last field visit. Field was visited on 6-4-18, cotton has herbicide burn from herbicide application of Liberty and Warrant. Field was clean of weeds, and all insect checks were below treatment level. All new leaves have good color.
Desha	East Weaver (No-till / Cover)	4/30	DP 1646 B2XF	6	89.5	7	5.2	Field received .52” of rainfall since last field visit. Field was visited on 6-4-18, cotton has herbicide burn from herbicide application of Liberty and Warrant. Field was clean of weeds, and all insect checks were below treatment level. All new leaves have good color.
Desha	Grain Bin (Farmer Standard)	4/30	DP 1646 B2XF	7	89.5	8	3.8	Field received .50” of rainfall since last field visit. Field was visited on 6-4-18, cotton has herbicide burn from herbicide application of Liberty and Warrant. Herbicide has done a good job of killing out weeds. Insect pressure was below treatment threshold. All new leaves have good color.
Desha	Grain Bin (No-till / Cover)	4/30	DP 1646 B2XF	6	89.5	7	24.2	Field received .50” of rainfall since last field visit. Field was visited on 6-4-2018, cotton has herbicide burn from herbicide application of Liberty and Warrant. Herbicide had done a good job of cleaning up weeds. Insect pressure was below treatment threshold. All new leaves have good color.
Desha	Shop (Farmer Standard)	4/30	DP 1646 B2XF	7	89.5	8	0	Field received .58” of rainfall since last field visit. Field was visited on 6-4-2018, cotton has herbicide burn from herbicide application of Liberty and Warrant. Herbicide has done a good job of cleaning up weeds. Insect pressure was below treatment threshold. All new leaves have good color.

Desha	Shop (No-till / Cover)	4/30	DP 1646 B2XF	7	89.5	8	1.8	Field received .58" of rainfall since last field visit. Field was visited on 6-4-2018, cotton has herbicide burn from herbicide application of Liberty and Warrant. Herbicide has done a good job of cleaning up weeds. Insect pressure was below treatment threshold. All new leaves have good color.
Desha	Homeplace (Farmer Standard)	4/30	DP 1646 B2XF	6	89.5	7	2.2	Field received .54" of rainfall since last field visit. Field was visited on 6-4-2018. cotton has herbicide burn from herbicide application of Liberty and Warrant. Herbicide has done a good job of cleaning up weeds. Insect pressure was below treatment threshold. All new leaves have good color.
Desha	Wellcot (Farmer Standard)	5/2	DP 1646 B2XF	6	89.5	7	18.4	Field received .50" of rainfall since last field visit. Field was visited on 6-4-2018, cotton has herbicide burn from herbicide application of Liberty and Warrant. Herbicide has done a good job of cleaning up weeds. Insect pressure was below treatment threshold. All new leaves have good color.
St. Francis	Conder's (Farmer Standard)	5/5	DP 1725 B2XF	5	97.5	6	-	Field received .42" of rainfall since last field visit. Field was visited on 6-7-18, cotton has herbicide burn from herbicide application of Liberty, Roundup Powermax, and Dual. Herbicide has done a good job of cleaning up weeds. Insect pressure was below treatment threshold. Crop has good color.
St. Francis	Conder's (No-till / Cover)	5/6	DP 1725 B2XF	4	97.5	6	-	Field received .42" of rainfall since last field visit. Field was visited on 6-7-18, cotton has herbicide burn from herbicide application of Liberty, Roundup Powermax and Dual. Herbicide has done a good job of cleaning up weeds. Insect pressure was below treatment threshold. Crop has good color.
Mississippi	Manila Airport (Farmer Standard)	5/15	DP 1518 B2XF	2	51.3	4	-	Field received .02" of rainfall since last field visit. Field was visited on 6-5-18, cotton has good color, no weed pressure, and all insect checks were well below treatment level.
Mississippi	Manila Airport (No-till / Cover)	5/15	DP 1518 B2XF	2	51.3	4	-	Field received .02" of rainfall since last field visit. Field was visited on 6-5-18, cotton has good color, no weed pressure, and all insect checks were well below treatment level.