



**C**otton Outlook starts its second season of publication. If you have topics or suggestions to improve this newsletter or questions arise during the season, please call or e-mail. The first of May traditionally is the start of the cotton season. Hopefully with the beneficial rains we received in the past month this year start will surpass last year. One of the most critical factors for planting this time of year is soil temperature. With Mesonet stations located in every county of Oklahoma this should provide producers a better handle on “is this right time to plant?”. If you have any doubts or questions about planting please call. J. C. Banks or Shane Osborne 580-482-2120.

## Soil Temperature

**S**oil temperatures should average 65 degrees for the low temperature at a depth of approximately 3 to 4 inches for three days.

Following planting, the 5-day forecast should call for daytime temperatures exceeding 80 degrees and nighttime temperatures above 60 degrees. Under favorable conditions, seedlings should push through the soil surface in 5 to 10 days.

Low Average Soil temperature at Altus  
April 29- May 1

**65°F**

## Best Management Practices

Excerpts from  
*"The First Forty days  
The Most Critical Period in  
Cotton Production"*

## Seed & Variety Selection

**V**ariety selection and seed quality have a lasting effect upon the crop's early season vigor, and overall plant health and uniformity during the first forty days. The crop's ultimate yield and fiber quality potential at harvest begins with variety selection and seed quality. Less vigorous cultivars are more susceptible to stresses caused by inadequate moisture, cool temperatures, thrips feeding, seedling diseases and other pests.

➤ **Primary criteria.** Choose varieties with the genetic potential for higher yield and fiber quality. Yield still is the ultimate measure for a cotton crop, although the ever-increasing demand for higher fiber quality makes this factor a close second in priority. Eventually, fiber quality could become the single most important factor for American cotton.

Choose varieties with the genetic potential to produce excellent technical fiber long staple length; a strong, premium micronaire fiber; high length uniformity; and a smooth

leaf with a plant conformation that's conducive to efficient mechanical harvesting. Because of the extended fruiting period of the cotton plant and subsequent development cycle, each boll develops under different environmental conditions than other bolls on the plant. Fibers from a single plant, single boll and even a single seed will be variable for length, strength and micronaire. It's the average fiber quality within the plant that determines value; and, plant genetics and environment provide the platform for higher yields of fiber.

Growers are well advised to grow more than one variety – preferably three or four varieties. Larger-seeded varieties with high seed quality and strong seedling vigor are also more desirable. In addition to the standard warm germination test, a cool germination test also is recommended. When cool germ and warm germ numbers are added together, high quality seed will have a germ index of at least 160 (i.e., a warm germ of 90 plus a cool germ of 70 equals 160).

Early planting into cool soils requires a high germ index. When planting early, always begin with a variety that has the highest germ index.

➤ **Secondary criteria.** Trait factors and maturity rank lower in priority. The general consensus reached at the workshops discourages the selection of varieties based upon trait factors – especially if the available trait factors result in a yield drag or if the traits are coupled with poor-yielding varieties.

## **Seedbed Preparation, Emergence and Plant Population**

The two workshop groups addressed overlapping factors – emergence and plant population – with seedbed preparation as a common denominator. The overriding concern among all participants is that growers do not adequately address planting-time considerations and needs, opting instead for speed of planting over all else. The bottom line in cotton production is that one-half the variable costs, as well as the annual fixed costs, are spent prior to or during the first forty days. The general consensus is that growers would be well advised to plan better going into the season and to do a better job of planting with precision.

### **FOR FURTHER INFORMATION CONTACT:**

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