

# PLANTING

*Joel Faircloth, Former Extension Cotton/Peanut Specialist, Tidewater AREC*

## Planting Date

The recommended planting dates for Virginia are from April 20 to May 25. Regardless of the planting date, soil moisture and soil temperature need to be suitable for rapid germination, and emergence. To obtain good germination, soil temperature should be 65°F by 10 a.m., at a soil depth of 3 inches. Delay planting cotton whenever temperatures below 50°F are expected. Whenever possible, planting should be done when a warming trend is expected for 5 to 7 days after planting. Cotton planted in early to mid May typically does very well in Virginia. Later-planted cotton grows much more aggressively than early-planted cotton (it will actually pass the early cotton) and needs higher rates of mepiquat-type growth regulators applied prior to bloom to prevent rank growth.

## Planting Depth

Planting depth depends on the year and sometimes the day. Seed placement to a depth of 3/4 inch in the soil is optimum in a good, moist seedbed. In cool, wet springs, shallow planting allows for a stressed seedling to emerge with less effort. Shallow planting provides fast emergence as long as moisture is sufficient. Long hot, dry spells often prevent shallow planting, and deeper planting is preferred under these conditions. Seed germinates and emerges quickly when it is in the moisture. Planting seed 1 inch deep is often necessary in the light soils in order to find moisture. If rain is forecast prior to expected emergence, then deeper planting becomes risky. It would be better to plant shallow in extremely dry conditions and let the rain initiate germination rather than planting 1.5 inches or deeper. The hill-drop planting method is a way to allow greater "push" and reduce the risk associated with deeper planting.

## Plant Population

Planting at a rate of 3.0 to 4.0 seed per foot of row in 36-inch rows and 2.5 to 3.5 seed per foot of row in 30-inch rows should provide optimum plant populations. Optimal yields are obtained with final stands of 1 to 2 plants per foot. It is not uncommon to have 50 percent emergence under stressful conditions but this is still acceptable. Hill drop planting rate recommendations are the same as conventional planting rates.

## Replanting

Replanting may be necessary through mid-May if the stand or plant health is questionable. Provided plant stand is a minimum 1 plant per foot of row, replanting is typically not recommended. Variability in plant stand within a field may justify replanting certain areas. However, the time interval between plantings should not exceed 2.5 weeks to minimize in-season management challenges. However, producers often wish they had left the first stand which often recovers dramatically. Weak, gappy stands planted early often out-yield good stands planted in late May or early June.