

PLANTING

"Knock-off" beds and plant in the center of a smooth uniform surface 12 to 16 inches wide. Wet beds may need to be leveled 1 to 4 hours ahead of planting. Equip planters with 6 to 8 inch wide depth bands or gauge wheels, or 12 to 16 inch wide gauge shoes to provide seed depth control and smooth drill area. Set planters to place seed 0.75 to 1.25 inches deep. The shallow depth range is preferred for "dusting in" in dry soil and/or cool-weather planting, a greater planting depth is preferred for hot-weather planting if moisture is adequate. Cotton is very sensitive to deep planting. Open center press wheels and low press wheel loading are preferred to minimize soil crusting.

If "rip-plant" equipment is used, off-set row drill 2 to 3 inches to one side of ripper shanks to reduce risk of stand loss from "fall-in." Contamination of the preplant incorporated herbicide treated zone with untreated soil resulting in grass emergence in the drill occasionally occurs behind ripper-planters. This can be minimized by using ripper shanks with a sharp rather than flat leading edge and by not planting in wet soil.

With good soil moisture and warm temperatures at planting, seedlings usually begin to emerge in 5 to 7 days with full stand in 8 to 11 days but can be delayed or complicated by seedling diseases. Physical hazards to establishing stands that occasionally occur during this period include hard soil crusts and blowing sand. The adverse effects of both can be greatly reduced with rotary hoe or rolling cultivator operations. These implements should be operated just deep enough to break the crust. A 0.3 to 0.5 inches irrigation can be used to soften or weaken a crust and accomplish the same objective. Timing this operation is critical. If a hard crust is evident when the seed root is 0.6 to 0.75 inches long, it should be broken immediately, being careful not to completely uproot more than 20 to 25 percent of the seedlings. Soil crust strength can be measured with a small pocket penetrometer. Emergence decreases rapidly at soil strengths above 10 psi when cotton is planted deeper than 1 inch.