

**COTTON TOLERANCE AND WEED CONTROL
IN SANDY SOILS WITH COMMAND**

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than 80% in loamy soils. Weed control by Command in sandy soils will be examined in 1996.

Abstract

Command (clomazone) received a federal label in 1993 for broadcast soil incorporation and preemergence band applications in cotton. Command controls many annual broadleaf weeds that are not controlled by dinitroaniline herbicides. Although organophosphate insecticides (Di-Syston or Thimet) must be used in-furrow to minimize cotton injury from Command, injury may still occur in sandy soils. Field studies were conducted on producer fields in 1995 to evaluate cotton tolerance to Command rates and formulations in sandy soils and weed control in a variety of soil types.

Command 4 EC at 0.38, 0.5, 0.75, and 1.0 lb ai/A and Command 3 ME at 0.5, 0.75, and 1.0 lb/A were applied to an Amarillo fine sandy loam soil near Lamesa, TX and an Amarillo loamy fine sand soil near Wellman, TX. At Lamesa, cotton was planted and Command applied on May 10. At Wellman, cotton was planted on May 12 and Command was applied on May 16. Cotton was harvested at Wellman and Lamesa on October 25 and November 6, respectively. Both locations were irrigated with an overhead sprinkler system. Cotton stand, early-, mid-, and late-season visual injury, yield, and fiber quality were recorded at each location.

Command at 1.0 lb/A did not reduce cotton stand at either location, regardless of formulation. Visual cotton injury (4 to 16%) was observed with Command at 0.75 lb/A up to 12 WAT, but no differences in cotton yield, turnout, micronaire, staple, or grade between Command treatments and the nontreated control were observed at either location. Cotton yields ranged from 769 to 895 lb/A and 1079 to 1184 lb/A near Wellman and Lamesa, respectively. These results indicated that slight injury symptoms mid-season did not affect cotton yields.

Command at 0.5 lb/A controlled prairie sunflower by 96% and common cocklebur by 75% at 13 WAT in sandy soils. Command at 1 lb/A effectively controlled lanceleaf sage, Venice mallow, Eastern black nightshade, and common cocklebur greater than 95% and morningglories greater