

**INCIDENCE OF THE FUSARIUM  
WILT/ROOT-KNOT NEMATODE COMPLEX  
AMONG EIGHT COTTON VARIETIES TREATED  
WITH AND WITHOUT A NEMATICIDE**

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**Abstract**

Eight cotton varieties, treated with and without a nematicide, were evaluated for their affect on the incidence of the Fusarium wilt/root-knot nematode complex of cotton in a field test during 1994 and 1995. A randomized complete block design with a split-plot arrangement of treatments was used with cotton varieties as the main plots and with and without the nematicide aldicarb as the subplots. Subplots without aldicarb were treated with disulfoton to control early season insects. Results in 1994 and 1995 were similar. Yield of lint, boll weight, and wilt and root gall ratings were significantly different among varieties and between nematicide treatments. Increased lint yield, boll weight, and reduced root-gall and wilt ratings were associated with application of aldicarb both years. Increased lint percent was associated with the application of aldicarb in 1994, but not 1995. Fiber micronaire, elongation, and strength were significantly different among varieties, but not between nematicide treatments in either year. Fiber length (UHM) was different among varieties and higher in aldicarb-treated plots in 1994 and 1995. *Meloidogyne incognita* juvenile and egg populations in soil samples taken in July were significantly lower in the aldicarb-treated plots both years. Juvenile and egg populations from soil samples taken at harvest in November were not significantly different among varieties or between nematicide treatments.