## RESPONSE OF COTTON VARIETIES AND STRAINS TO FUSARIUM WILT AND ROOT-KNOT NEMATODES W.D. Caldwell, P.D. Colyer, P.R. Vernon and J.A. Hayes Louisiana State University Agricultural Center Red River Research Station Bossier City, LA

## Abstract

Selected cotton varieties were evaluated for response to the Fusarium wilt/root-knot nematode disease complex on a Norwood very fine sandy loam soil heavily infested with the wilt pathogen (*Fusarium oxysporum* Schlect. F.sp. Vasinfectum [Atk.] (Snyd. & Hans.)) and root-knot nematode (*Meloidogyne incognita* [Kofoid & White] Chitwood). To insure a heavy population of root-knot nematodes, cotton is rotated with kenaf each year. Experimental design was a randomized complete block with four replications. Plots consisted of 40 inch rows, 45 feet in length. Disease ratings were taken on ten randomly selected plants at crop maturity. Wilt ratings were based on the degree of stem discoloration and root gall ratings were based on the number of nematode galls formed on the roots. There were significant differences in wilt and root-gall ratings among cultivars. Acala Nemx had the lowest wilt (0.2) and root-gall (1.3) ratings followed by Stoneville LA 887 with a wilt rating of 0.5 and a root-gall rating of 1.5.