

ALABAMA COTTON COMMISSION 2005

Boll Rot and Hard Lock of Cotton-project summary. Kathy S. Lawrence, Associate Professor, Plant Pathology Department; C. Dale Monks, Professor and Extension Specialist, Agronomy & Soils Dept; Dennis Delaney, Extension Specialist, Agronomy & Soils Dept; Kathy Glass, Ag Program Associate, Agronomy & Soils Dept; Malcomb D. Pegues, Assistant Superintendent, Gulf Coast AAES Research Station.

Our objectives are 1) to determine the environmental factors that induce boll rot on early and full season cotton varieties; 2) to determine cotton variety response and potential yield losses due to boll rot; and 3) to conduct efficacy trials with fungicides to determine boll rot incidence and yield effects. The earliness of planting increased the cotton boll rot disease index for both early and full season varieties. Hard lock incidence was also higher for the earlier planting dates than the later planting dates. Seed cotton yields for both varieties for the earlier planting dates were higher than the last planting on 3 Jun. Cotton boll rot and hard lock were more severe in the early season cotton varieties including the flex varieties as compared to the full season and full season flex cotton varieties. Fungicide tests indicated the Quadris 2.08SC and Topsin M foliar spray treatments reduced cotton boll rot as compared to the control treatments. Both fungicide treatments applied 2 to 4 times bi weekly increased seed cotton yield as compared to the control.

