

ALABAMA COTTON COMMISSION 2006

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 cotton variety response and potential yield losses due to boll rot; and 2) to conduct efficacy trials with fungicides to determine boll rot incidence and yield effects. Cotton boll rot and hard lock indexes ranged from an average low of 2.65 % to a high of 9.45 % across all tests. Under the dry conditions of the 2006 season, the cotton boll rot and hard lock were more severe in the full season cotton varieties including the flex varieties as compared to the early season and early season flex cotton varieties. This response is directly opposite of the intensely moist 2005 season in which early season varieties sustained significantly more boll rot and hard lock than the full season varieties. Fungicide tests indicated the Quadris 2.08SC and Topsin M foliar spray treatments numerically reduced cotton boll rot and hard lock incidence as compared to the control treatments. Seed cotton yields were increased 4 % by two applications of Quadris 2.08SC and 9 % by 1 to 4 applications of Topsin M.

