PROGRESS REPORT ON A CONTEMPORARY SURVEY OF THE FUSARIUM WILT FUNGUS IN THE UNITED STATES **Rebecca S. Bennett USDA-ARS-Western Integrated Cropping Systems Research Unit** Shafter. CA **Elizabeth A. Holmes R. Michael Davis** University of California Davis, CA Patrick D. Colyer Louisiana State University AgCenter **Bossier City, LA** Kathy S. Lawrence **Auburn University** Auburn, AL Jason E. Woodward **Texas AgriLife Extension Service** Lubbock, TX Alois A. Bell USDA-ARS-SPARC **College Station, TX** Garv W. Lawrence Mississippi State University Mississippi State, MS **Craig S. Rothrock** University of Arkansas Fayetteville, AR **Robert J. Wright Texas Tech University** Lubbock, TX

## Abstract

The last survey of *Fusarium oxysporum* f. sp. *vasinfectum* in the U.S. was conducted in 1985. Since that time, race 4, previously thought to occur only in Asia, appeared in California in 2001, causing significant problems for the San Joaquin Valley cotton industry. Also, the presence of race 8 has been confirmed in California, Arkansas, Louisiana, Georgia, and Missouri, and race 3 was found in California and Louisiana. In addition to new distributions of known races, four novel genotypes of the pathogen were recently reported from a small sample of isolates collected from Arkansas and Georgia. These developments point to the need for a current and comprehensive survey of the Fusarium wilt pathogen. We initiated a multi-state collaboration to characterize the *F. oxysporum* f. sp. *vasinfectum* population in the United States, and present a progress report on preliminary samples from Alabama, Arkansas, Mississippi, and Texas that have been screened with sequences of the translation elongation factor gene.