Seed Transmission of *Fusarium oxysporum* f. sp. *vasinfectum* Race 4 in California

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Fusarium oxysporum f. sp. *vasinfectum* (Atk.) W.C. Snyd. & H. N. Hans. race 4, a biotype highly virulent on certain Pima cotton (*Gossypium barbadense* L.) cultivars, was detected in California in 2001. The propensity of this disease to appear in isolated spots in previously uninfested fields has given rise to several hypotheses regarding potential mechanisms of disease dispersal. One of these hypotheses is that the disease may be spread through the planting of infected seed. In independent assays using two methodologies, the fungus was detected in acid-delinted Pima cotton seed from plants in known race 4-infested field sites. Seed was either plated directly onto Komada's agar or incubated en masse in a selective liquid medium. DNA isolated from the recovered fungi was amplified with race 4-specific primers. With both approaches, seed from susceptible Pima cultivars was infected with race 4, albeit at different levels. These results suggest that infected seed has the potential of spreading race 4 within and among cotton production regions.