EFFECTIVE SCREENING FOR FOV4 RESISTANCE Don C. Jones Cotton Incorporated Cary, NC Jim Olvey Mike Olvey O&A Enterprises Maricopa, AZ Chris Saski Clemson University Clemson, SC

Abstract

In order to identify and deploy FOV4 resistance in Upland cotton, the authors used a proven protocol that used multiple proprietary checks with known pathogen reaction in a multi-year screening trial. Each trial was planted early to maximize pressure on emerging plants, and data was collected on early cotyledon death, late season vascular staining, and lint productivity in multiple years. Due to the use of numerous checks and high replications, pathogen load was well characterized and false positive calls of FOV4 resistance greatly reduced. Upland line U1, the most resistant line known to date, was identified, increased, and released as a tangible deliverable from the project.