

Project Summary 2005

Title: Breeding Improved Soybean Cultivars for Alabama

Investigator: D. B. Weaver

One-hundred ten experimental genotypes were evaluated in preliminary tests at Tallassee, and 50 lines were evaluated in advanced tests at multiple locations in Alabama. The best-performing of these lines will be advanced to the next level of testing, the USDA Cooperative Uniform Tests. In 2005 USDA tests, five of our best advanced lines were tested in the Preliminary 6 test, four in the Preliminary 7 test, and two in the Preliminary 8 test. Only one line, a MG 6 line that ranked fifth overall in the 2004 Preliminary test was advanced into the 2005 Uniform test. Performance of these lines in USDA tests is currently not available, as the preliminary data have not yet been released. We also continue to work (in cooperation with Clemson University) to develop a cultivar with a combination of the long-juvenile trait (lack of photoperiod response) and Roundup-Ready technology for commercial production. Around 600 accessions were evaluated in the field for resistance to Asian soybean rust, but sufficient levels of disease did not develop.