

FINAL
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2005

NATIONAL PEANUT BOARD/SOUTHEAST PEANUT
RESEARCH INITIATIVE

Final Report

PROJECT EXTENSION REQUEST FOR WORK

June 30, 2006

DONE UNDER RESEARCH AGREEMENT

INSTITUTION: USDA, ARS, PGRCU

PROJECT TITLE: New research to increase the genetic base and shorten the time for variety development

RES. AGR. NO.: 5086607542 PROJECT LEADER: Dr. Roy Pittman

GACCP Control NO.:

EXPIRATION DATE: June 30, 2006

NPB CONTACT: Stephen O'Brien

NPB Control NO.:

PROJECT EXTENSION REQUEST:

This report serves to document research conducted under a non-funded cooperative agreement between ARS and the University of Georgia and University of Florida. Additional details can be found in the report for the parent CRIS 6607-21000-009-00D Conservation, Characterization, and Evaluation of Crop Genetic Resources and Associated Information. Advanced generation seed increased in the greenhouse were planted in the field at Attapulcus and Tifton from crosses CRSP-20/I6 and NemaTam/CRSP-14. In addition, other crosses include: Georgia Valencia / PI 339967 and Georgia Valencia / CRSP-8. Planting dates were April 18&19 and May 16, 2006. Plants are being evaluated and selected during the current growing season for TSWV resistance, LS resistance, and insect resistance. At harvest selected plants will be evaluated for pod load and pod/seed characteristics. The team members meet in Attapulcus in mid-August to evaluate advanced material from crosses, advanced lines from Bolivian crosses, and the Hirsuta, Aequatoriana, Peruviana increase/evaluation test.

Other work includes the following:

PROJECT TITLE: New research to increase the genetic base and shorten the time for variety development.

Report Summary: University of Florida Report by Dr. Dan Gorbet for team members.

Report Period: Jan 1, 2006 - June 30, 2006; Final Report for Florida

Report of Progress:

Tests evaluated included Variety and New Candidates Yield Test and UPPT in Florida. Other Tests evaluated include tests in Georgia which are Paraguay and Bolivia Germplasm Tests, Bolivia Advanced Breeding Line Test, Variety and New Candidates Yield Test, Maturity Test, and F3 to F4 Evaluation Test. Recommendations for selection were discussed with Dr. Pittman.

PROJECT TITLE: New research to increase the genetic base and shorten the time for variety development.

Report Summary: University of Georgia Report by Dr. Jim Todd for team members.

Report Period: Jan 1, 2006 - June 30, 2006; Final Report for Georgia

Report of Progress:

Plans were developed with Dr. Roy Pittman as to what experiments and where they would be grown. Test plots were grown in Georgia, Florida, and Alabama this year (2006). Plots were in Tifton and Attapulgus, Georgia; Marianna, Florida; and Headland, Alabama. Plots have been evaluated on a 2 to 3 week cycle since July. Plots evaluated thus far include TSWV Cultivar Test, Leaf hopper and Three-Cornered Alfalfa Hopper Resistance Test, Genotype/Insecticide Test, F3&F4 Selections, Bolivian Cross Selections, Hirsuta increase/evaluation test, Maturity tests and Mutations Work. Tests are also in Midville and at the Stripling Farm. Resistance to TSWV (the virus and thrip) has been evaluated thus far in the season.