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NATIONAL PEANUT BOARD/SOUTHEAST PEANUT  
RESEARCH INITIATIVE **FINAL PROGRESS REPORT**  
FOR WORK DONE UNDER RESEARCH AGREEMENT:

#034336-01

DATE: June 25, 2008

INSTITUTION: University of Georgia, Tifton Campus

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PROJECT TITLE: **Development and Characterization of Candidate Multiple  
Pest Resistant Peanut Breeding Lines for Traditional Food  
Uses and Non-traditional industrial Uses**

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RESEARCH AGREEMENT NO.: 25-21-RF330-388

PROJECT LEADER: Dr. James W. Todd

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EXPIRATION DATE: December 31, 2007

EXTENTION GRANTED TO: June, 30, 2008

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NPB CONTACT: R. Marie Fenn

NPB Control No.: 034336-01

NPB Project No.: 221

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**FINAL REPORT OF PROGRESS:**

The breeding line CRSP14 was released as a germplasm line in the spring of 2008 as recommended by the University of Georgia Cultivar Release Committee. The line was proposed for release as a cultivar, but this was not approved and the committee recommended release as a germplasm instead. The germplasm release was accomplished through the USDA with the University of Georgia cooperating. Since release, CRSP14 has been distributed to interested growers and other individuals as requested for additional evaluation. Other elite breeding lines (F<sub>10</sub>) from crosses of 'C99R x Bayo Grande' and 'VA98R x Bayo Grande' are being considered for release as full or associate cultivars or as germplasm in August of

2008 or April of 2009 when the committee meets again. One of these breeding lines, CRSP 702 was found to have excellent resistance to "sclerotinia" in the Texas UPPT. This line is in further testing in 2008 and will be released if results continue to be impressive. Seed size has become one of the most important considerations for new plant cultivars due to economics and strong processing industry preferences. We are responding to this by evaluating the variability of seed size in our advanced breeding lines. It is unknown at this time whether this approach will be feasible. In addition to the above lines, fifty-eight selections of F<sub>5</sub> material with outstanding resistance to early leafspot and TSWV are being evaluated in preliminary yield tests in 2008. These lines will also be further selected this year and increased to have sufficient seed supplies for future testing in regional and state cultivar tests. Results from these tests will be used to select candidate for release as cultivar or germplasm in 2009.