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FINAL RESEARCH REPORT
National Peanut Board/Southeast Peanut Research Initiative

For Work Done Under Research Agreement:

Quarter ending: December 31, 2003

INSTITUTION: Auburn University

PROJECT TITLE: Economic Evaluation of Management Systems for Insect and Disease Pests of Peanut.

RES. AGR. NO. APPA-RIA-PA-INSC&DIS 5-33722

PROJECT LEADER: Mr. James R. Weeks

EXPIRATION DATE: December 31, 2003

SPRI CONTACT: Mr. Randy Griggs

NPB CONTACT: Mr. Stephen O'Brien

FINAL REPORT OF PROGRESS: This is a final report on this project conducted by Ron Weeks at Wiregrass Experiment Station in Alabama during 2001, 2002, and 2003. Studies were also conducted in 2002 and 2003 as part of the project protocol in Florida at North Florida Research Station in Marianna by Dr. Richard Sprenkel and Mr. Tim Hewitt. The economic analyses of field data were completed by Tim Hewitt. A summary of their results will be incorporated into this report. All work for this project is complete.

Changes in the peanut program have drastically affected the economics of production. Increased yields with optimized inputs are a necessity for peanut growers to remain viable. Three systems of production inputs in insect and disease control were evaluated in these studies at Headland and Marianna. At Headland irrigated and non-irrigated studies were evaluated during 2001-2003. At total of 5 studies were conducted over this period. At Marianna 2 irrigated studies were conducted in 2002 and 2003. Georgia Green variety peanut was most economically efficient under high levels of management. Maximum disease and insect control programs improved yields particularly under irrigated conditions. The partially disease resistant variety C99R produced high yields even with low inputs for disease control. However, over all the locations and years the IPM management program produced the most efficient economic returns. Yields of peanuts were not always highest in the IPM system, but with moderate levels of disease and insect management under a carefully monitored situation the net returns were as good as or better than the high input system.

These studies provide useful information for peanut growers who continue to look for management tools to allow them to stay economically viable. Integrated Pest Management

systems for peanuts have been well developed since the mid 1970's in the southeast. Peanut grower usage of IPM during the late 90's had declined because of crop insurance and other economic factors of the old peanut program. The results of these studies support the resurgence in the adoption of tried and tested IPM practices to help peanut farmers in sustaining their peanut production.

FINAL RESEARCH REPORT
National Peanut Board/Southeast Peanut Research Initiative

For Work Done Under Research Agreement:

Quarter ending: December 31, 2003

INSTITUTION: University of Florida

PROJECT TITLE: Economic Evaluation of Management Systems for Insect and Disease Pests of Peanut.

RES. AGR. NO. 02-ENT- 5-33722-UF (Subagreement)
PROJECT LEADER: Tim Hewitt and Dr. Richard Sprenkel

EXPIRATION DATE: December 31, 2003

SPRI CONTACT: Mr. Emory Murphy
NPB CONTACT: Mr. Stephen O'Brien

FINAL REPORT OF PROGRESS: This is a final report on this project conducted by Dr. Richard Sprenkel and Mr. Tim Hewitt. A summary of their results is reported in Ron Weeks' final report.

FINAL RESEARCH REPORT
National Peanut Board/Southeast Peanut Research Initiative

For Work Done Under Research Agreement:

Quarter ending: December 31, 2003

INSTITUTION: Auburn University

PROJECT TITLE: Effects of Winter Cover Crops and Crop Rotations on Peanut Yield, Insect and Disease Incidence in Strip-Tilled Peanut.

RES. AGR. NO. 02-ENT- 5-33185-UG (Subagreement)
PROJECT LEADER: Dr. John Baldwin University of Georgia

EXPIRATION DATE: December 31, 2003

SPRI CONTACT: Mr. Emory Murphy
NPB CONTACT: Mr. Stephen O'Brien

FINAL REPORT OF PROGRESS: This is a final report on this project conducted by Dr. John Baldwin and collaborators in Georgia on this minimum tillage project. Studies are completed and summary results are reported in Mr. James R. Weeks' Final Report of this project.