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IMPACT STATEMENT

Results from these activities resulted in continued development of a research base needed to address key production and pest management issues associated with peanut production in all regions of North Carolina. Field tours and training sessions allowed dissemination of information to appropriate clientele and resulted in excellent interaction among components of the peanut industry.

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 EXTENSION X RESEARCH
REPORT PERIOD 02/08-11/08
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*Annual
Summary*

**PROGRESS REPORT TO
National Peanut Board
and
North Carolina Peanut Growers Association**

TITLE: **Enhancing Research and Extension Efforts in Peanut Through On-Farm Testing and Field Tours**

LEADERS: **David Jordan, Rick Brandenburg, and Barbara Shew**

DEPARTMENTS: **Crop Science, Entomology, and Plant Pathology**

REPORT:

Research was conducted in North Carolina during 2008 in Bertie (Peanut Belt Research Station), Chowan (Northeast Ag Expo), Duplin, Edgecombe (Upper Coastal Plain Research Station), and Halifax counties to evaluate a range of production and pest management strategies for peanut. Variety and pest management trials were conducted at both research stations and on-farm locations to evaluate performance and interactions of these technologies in order to improve and refine recommendations. These experiments included runner, Virginia, and Spanish market types grown when a range of pest management and production practices. Promising new Virginia and runner market type lines were compared to complement results from the PVQE program. These experiments are also used to compare maturities of cultivars and promising breeding lines so that growers can more effectively plan harvesting operations. Peanut response to combinations of inoculants and other agrichemicals were also compared at these locations as well as determining optimum nitrogen rates to correct inoculation failures. The effectiveness of Cadre (postemergence herbicide) and Stance (cotton plant growth regulator) at minimizing excessive vine growth was compared with efficacy of the currently registered plant growth regulator Apogee. Cropping systems experiments were continued at research stations (Lewiston, Rocky Mount, Whiteville) with traditional crops. Experiments were established at Lewiston to evaluate effects of unique crops such as sage, snap beans, cucumbers, and sweet potatoes on peanut-based cropping systems. Experiments are currently in place at four locations to compare yield of peanut and other crops following a fescue pasture versus a standard reduced tillage crop production system.

Peanut was the focus of the Northeast Ag Expo held in early August in Chowan County. Additionally, Cooperative Extension agent training sessions were held at several locations in the state to increase proficiency in addressing peanut issues common to the region. Pod maturity clinics were held in Duplin and other counties to assist growers with decisions on digging peanut.