

NATIONAL PEANUT BOARD/SOUTHEAST PEANUT
RESEARCH INITIATIVE
QUARTERLY PROGRESS REPORT FOR WORK
DONE UNDER RESEARCH AGREEMENT

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2005
(GM-45)
357
Quarter ending

December 31, 2005

INSTITUTION: University of Georgia

PROJECT TITLE: Determination of factors that contribute to risk of aflatoxin
contamination

RES. AGR. NO.: 25-21-RD315-112 PROJECT LEADER: Dr. Stanley Fletcher
GACCP Control NO.:

EXPIRATION DATE: December 31, 2005 NPB CONTACT: Chris Destino
NPB Control NO.:

BACKGROUND, GOAL and OBJECTIVES:

The overall goal of this project is to determine the relative contributions that various factors have on preharvest aflatoxin contamination in peanuts. The main contract with is with the Auburn University, while the University of Georgia contributes a small portion to these project activities. The main role of the University of Georgia is to install and maintain data collection units for monitoring temperatures and moisture conditions and provide assistance with data analysis if necessary.

REPORT OF PROGRESS:

The peanuts were harvest during the week of September 26, 2005. All sensors were removed on September 26, 2005 and all data were downloaded. In addition, a 2-meter length of row of peanuts was harvested in each of the seven plots. Plant samples were separated into leaves, stems pods and roots. The number of plants per 2-m of row, the number of pods and the number of seeds were counted. In addition, the samples were dried in the oven until constant moisture and then weighed to determine stem+leaf biomass, root biomass, pod biomass and seed biomass.

The soil moisture sensors were calibrated with the local soil and the soil moisture measurements were adjusted accordingly. Further data analysis will need to be conducted in cooperation with Auburn University.