

347
1045
1044
Final
Summary

Project Title: Refining and validating an index for Pre-harvest Aflatoxin Contamination Risk

Funding received: \$30,540 for 2011
Fund #: 367380

Final Report (through June 2012):

In 2011, a study on burrower bug was initiated at the Wiregrass Research Center in southeast Alabama. This study involved pitfall trap sampling in conventionally- and conservation-tilled plots, and in rain-fed and drought plots (achieved by covering plots with a plastic tunnel). Over 8 weeks of sampling (Aug. through Sept.), a small number of burrower bugs were collected. Although not a significant difference, burrower bug counts from the drought plots are higher than from rainfed plots.

In October at peanut maturity, yield samples were be collected from all plots. Pods were shelled and skins removed for assessing discoloration and burrower bug damage incidence. Burrower bug feeding damage was found to be significantly higher in kernels from reduced tillage plots compared to conventionally tilled plots. Winter cover crop did not affect incidence of burrower bug damage. These seed samples were then ground and assayed for aflatoxin content; aflatoxin levels were non-detectable.

A report on this work is to be presented at the 2012 American Peanut Research and Education Society Annual Meeting in July.