

# ACES 2015 Project Summary

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2014

Annual report  
+ summary

**Project Title: Peanut Insect Management**

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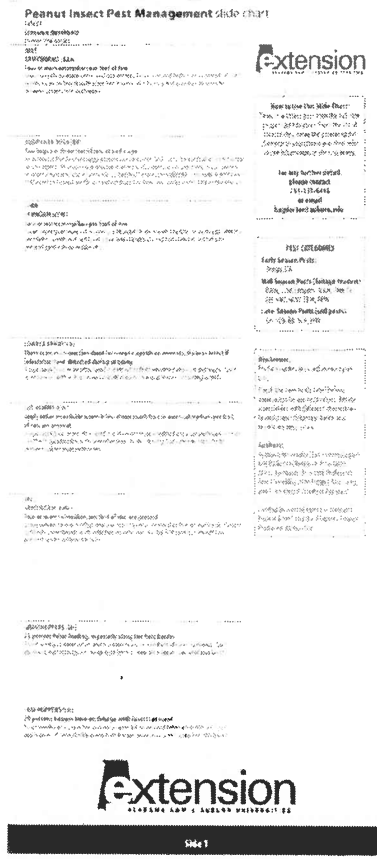
**Activities:**

Peanut plots were established at the Wiregrass Research and Extension Center (Headland, AL) and Brewton Ag Research Unit (Brewton, AL) to test new insecticides/miticides. Caterpillar control products included two insect growth regulators for comparison (novaluron and diflubenzuron), two stomach poisons (flubendiamide and one insecticide premix with lambda cyhalothrin+chlorantraniliprole), and one biological insecticide (a more bioactive species of *Bacillus thuringiensis*). These products are more selective for pest management than conventional products that protect natural enemies. We also included two test plots for spider mite control. We monitored insect pests (6 species of major caterpillars) at 6 locations using sticky wing pheromone trap and co-developed a phone app (MyTraps) with Spensa Technologies to archive insect counts for sharing statewide with Regional Extension Agents, crop specialists, and crop advisors/industry.

Results indicated prolonged (14-d) control of insect pests with new selective chemicals which is better than synthetic pyrethroids. Our data suggests that selective insecticides can be used in rotation with pyrethroids to avoid spider mite outbreaks during hot weather (July/August). Other IPM details from the studies will be shared via production meetings in 2016. The spider mite test was unsuccessful this year (even after multiple synthetic pyrethroid applications) due to frequent rainfall and other weather patterns. This effort will continue in 2016 with peanuts grown under special conditions to increase spider mite populations and generate data in order to register miticides.

**Producer training/information:**

Information about insect pest occurrence and control methods was shared with peanut producers in Alabama via new publications, indoor meetings and field events. The Alabama Peanut IPM Guide for Insect Control (<http://www.aces.edu/pubs/docs/I/IPM-0360/IPM-0360.pdf>) was updated with research-based information; this IPM information is now also available as a slide chart (pictured above). Peanut IPM slide charts are available to all producers, crop advisors, and pesticide dealers. Pest management/outbreak information was also shared with producer through the Alabama IPM Communicator newsletter ([www.aces.edu/ipmcommunicator](http://www.aces.edu/ipmcommunicator)) and Facebook (<https://www.facebook.com/Alabama-Peanut-IPM-Program-166598770047038/>). Blogs that use the MyTraps maps based on insect trap catches are available online, for example, <https://sites.aces.edu/group/commhort/blog/Lists/Posts/Post.aspx?ID=262>. These blogs and web-based resources have also become popular among commercial publishers such as the Peanut Grower magazine and AgFax who frequently link to the Alabama Peanut IPM website ([www.aces.edu/peanutipm](http://www.aces.edu/peanutipm)).



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