

**2018 Georgia Peanut Commission Grant Report**  
**On-Farm Demonstration of Irrigation Uniformity, Efficiency, and Peanut Irrigation Scheduling and Planter Downforce Trial and Education**

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**Objectives:**

Many questions arise each year concerning mid- to end-season irrigation scheduling for peanuts. Providing education on irrigation apps and new information on irrigation scheduling can allow producers to be more efficient with their water usage as under-watering, as well as over-watering, can cause decreased yields.

The on-farm mid-season update meeting provided producers with details of the Mobile Irrigation Lab (MIL) as well as utilizing injection pumps for chemigation and fertigation highlighting the importance of accuracy of irrigation when utilizing this technology. The demonstration also helped producers understand some of the options for irrigation scheduling.

In addition, grant funds were used to support a planter downforce trial and education. This project was the second year in a series to evaluate different planter components and technology to recommend optimized settings for crop production practices and help producers achieve higher crop yields

**Plan of Action:**

The Mobile Irrigation Lab demonstration was incorporated into the Jefferson County mid-season disease and pest management update held on-farm and open to surrounding counties. Area water educators provided efficiency and uniformity testing information. Results from other uniformity tests conducted in the county earlier in the year were shared to demonstrate the need for such tests on irrigation units and the economic impact of inefficiencies. Dr. Wes Porter discussed applications for peanut irrigation scheduling.

The planter downforce project specifically evaluated downforce in Jefferson County with a producer cooperator on various soil EC zones to address peanut emergence issues. Planter downforce consisted of three settings to include producer's normal downforce as a reference (D2), 50% lower than reference (D1), and 50% higher than reference (D3) and each replicated three times across the EC zones. Plant stand counts were evaluated at various growth stages and analyzed to determine the effect of different planter downforce settings D1, D2 and D3 on crop growth. Data collected is being utilized to develop recommendations for planter downforce and educate producers and agents.

**Funds:**

Funds were utilized to conduct a workshop at an on-farm site where producers from the surrounding counties were invited to attend. Supplies included: food, supplies for clinic, supplies for plot work.