

SCSB Quarterly Report

General Information

Principal Investigator(s) Name(s): C. Nathan Hancock (USCA) and Kendall Kirk (Clemson)

Organization: University of South Carolina Aiken

Date: 15 July, 2021

Quarter: Second

Proposal Information

Title: Strategies for rescue of nitrogen deficient soybeans

Amount Expended to Date: \$470

Progress Assessment

Report the progress toward the situation described in the proposal summary. Include progress against budget, timeline and scope.

The 5 research plots were set up on 12 July 2021, as described in the proposal. Four nitrogen treatments (0, 40, 80, and 120 pounds per acre) were arranged in 4 complete randomized replicates. We identified a range of chlorotic patches from severely stunted to moderately shorter plants. One of the plots was a healthy control, to assess the effect in properly nodulated soybeans.

In addition to the nitrogen applications, we took soil and leaf samples and measured height and NDVI (handheld Greenseeker). Aerial images were also captured to allow for before and after leaf color and canopy closure analysis.

Key Performance Indicators

What KPI(s) are being used to measure project success? How are KPI(s) being measured? Will KPI(s) not be met? Are KPI(s) on track? Will KPI(s) be exceeded? Explain the key circumstances that are impacting achieving or not achieving KPI(s).

We are currently on track with all of the aims of the project.

Next Steps

Explain the next steps of the projects and what you hope to achieve during the next quarter.

In mid-August, we will measure height, collect leaf tissue, and take aerial images of the plots to determine what effect the nitrogen application had. The yield in these plots will be measured at the end of the season to determine what effect N application had on productivity. We will then calculate the economic feasibility of nitrogen application.

Additional Information

Provide all additional supporting information, facts or figures here.

Prior to submission, reports should be saved as a pdf document using the following naming convention; 2018Date(yrmoday)_(PI Last Name)_(Abbreviated Proposal Title)_Qtr1.