

Project Title:

***Expanding On-Farm Testing Through
Large-Scale Research***

Project Investigator:

David Jordan, Department of Crop and Soil Sciences

NC State Extension Agents

Project Purpose

To increase the database for variety, plant growth regulation, and a wide range of other production and pest management strategies from on-farm research using large-scale plots designed by County agents

Hypothesis and Objectives

The objective of this project is to increase the amount of information growers receive from trials conducted within their counties by local County Extension agents





Cost

50% NCPGA

25% Extension Administration

5% DEP (Shew)

5% CSS (Jordan)

5% Birdsong

5% Severn

5% BASF, Bayer, Syngenta

2021

10 on-farm trials (Bertie, Chowan, Columbus, Martin, and Northampton)

2022

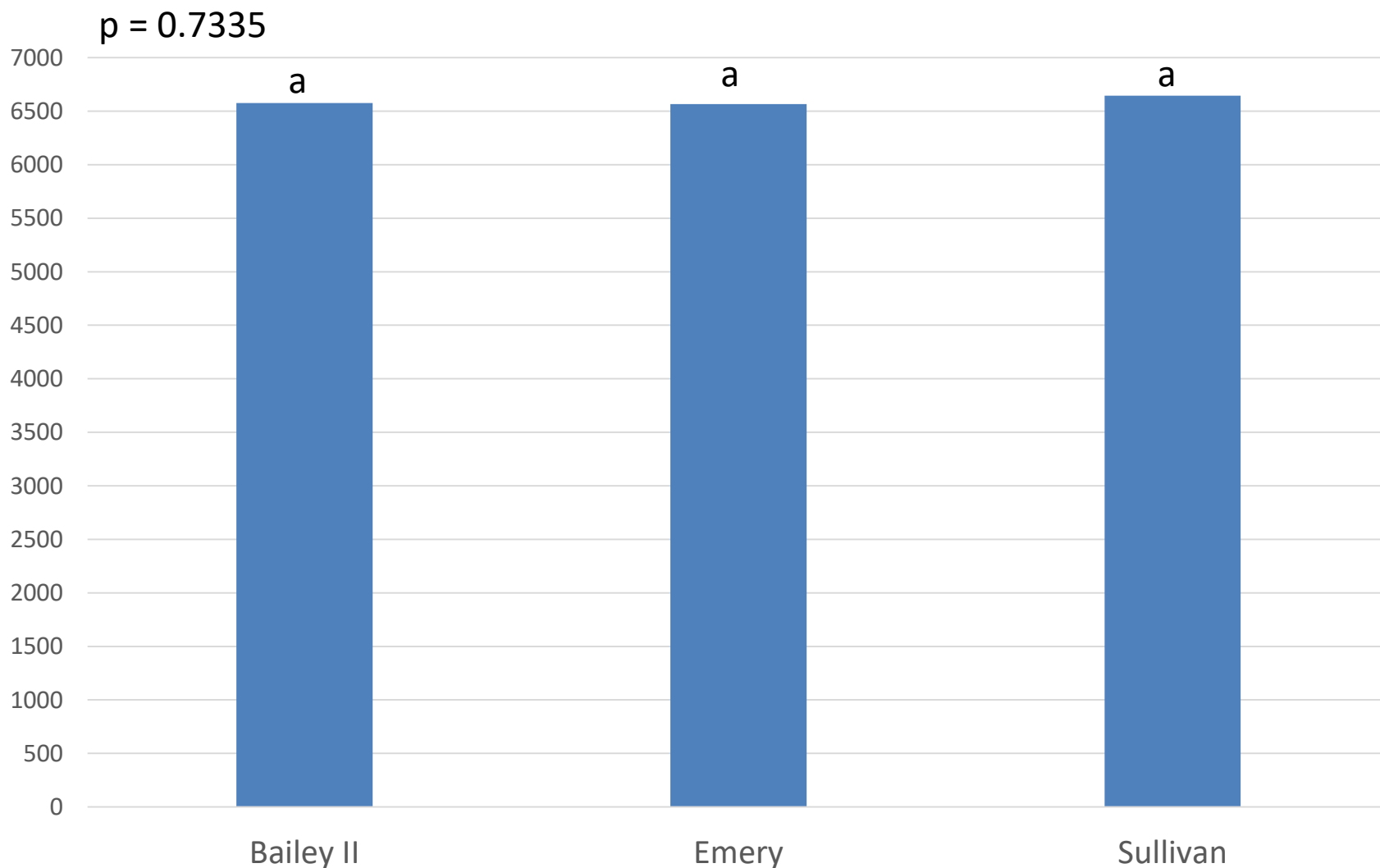
15 on-farm trials (consider multiple trials with a single cooperator) and 3 trials at Lewiston-Woodville

Resources

15K for supplies and travel to plots

Yield (lbs/acre) of Bailey II, Emery and Sullivan

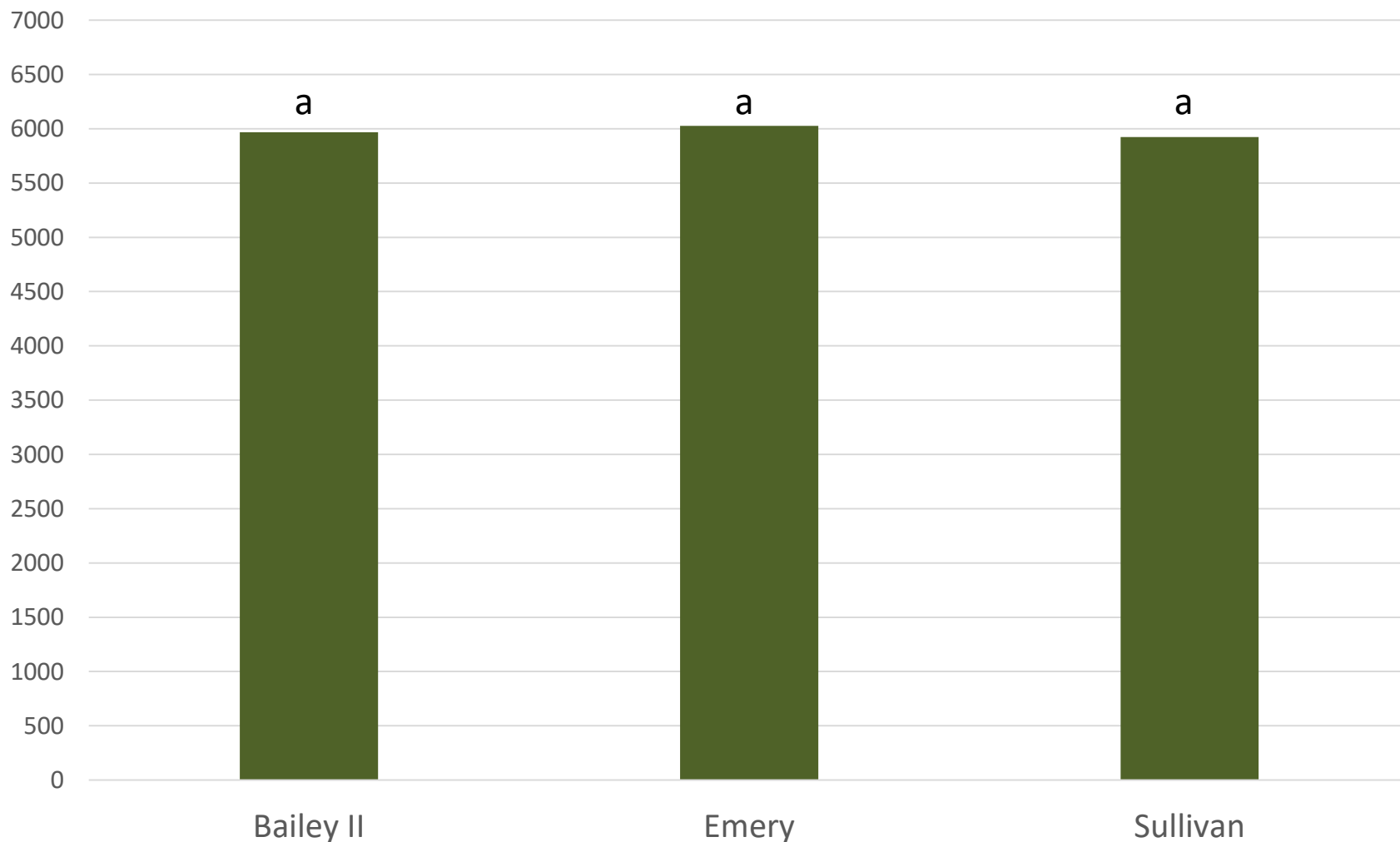
Martin County, Ben Cowin and Lance Grimes



Yield (lbs/acre) of Bailey II, Emery and Sullivan

Columbus County, Ellis Jordan and Lydia Miles

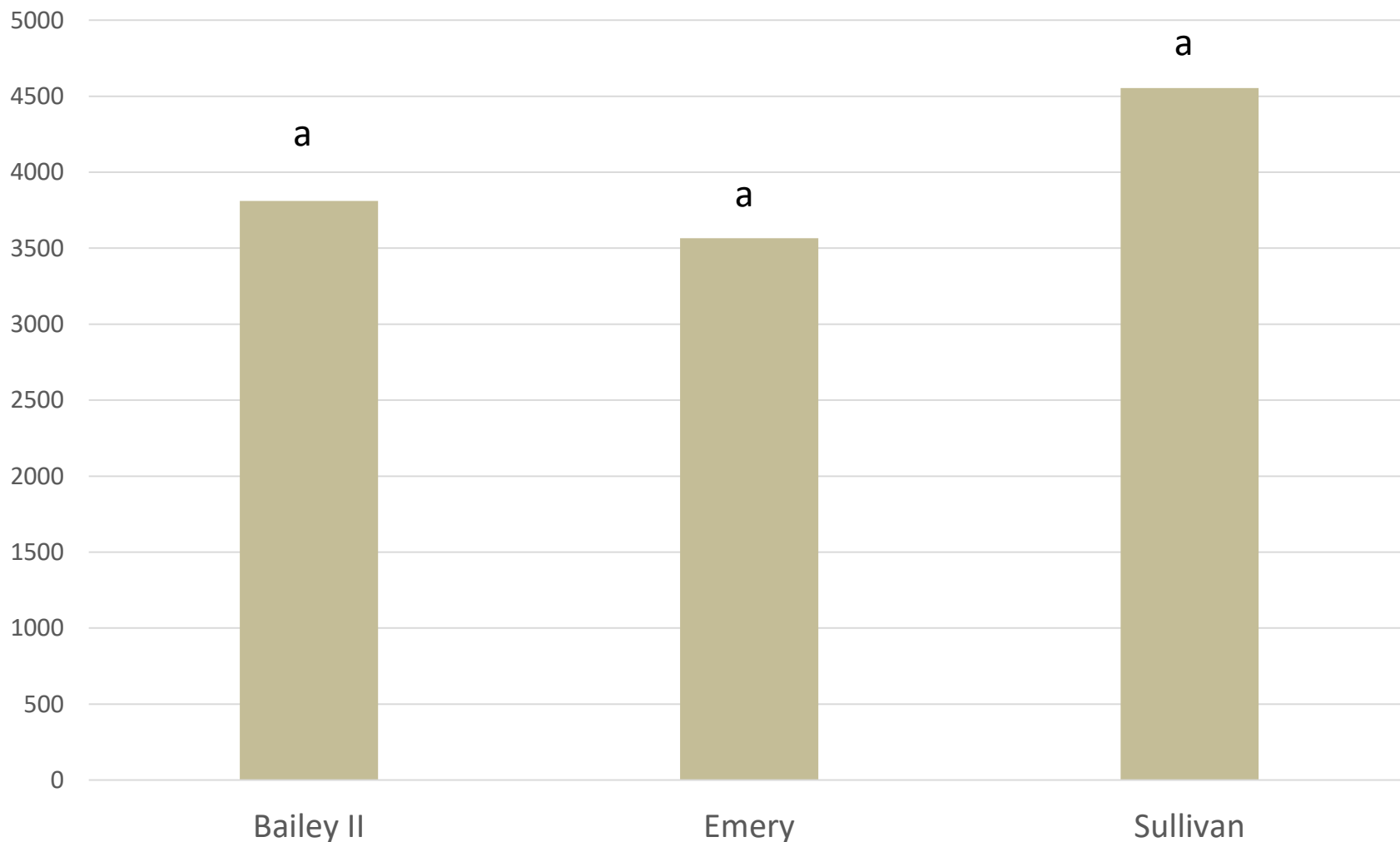
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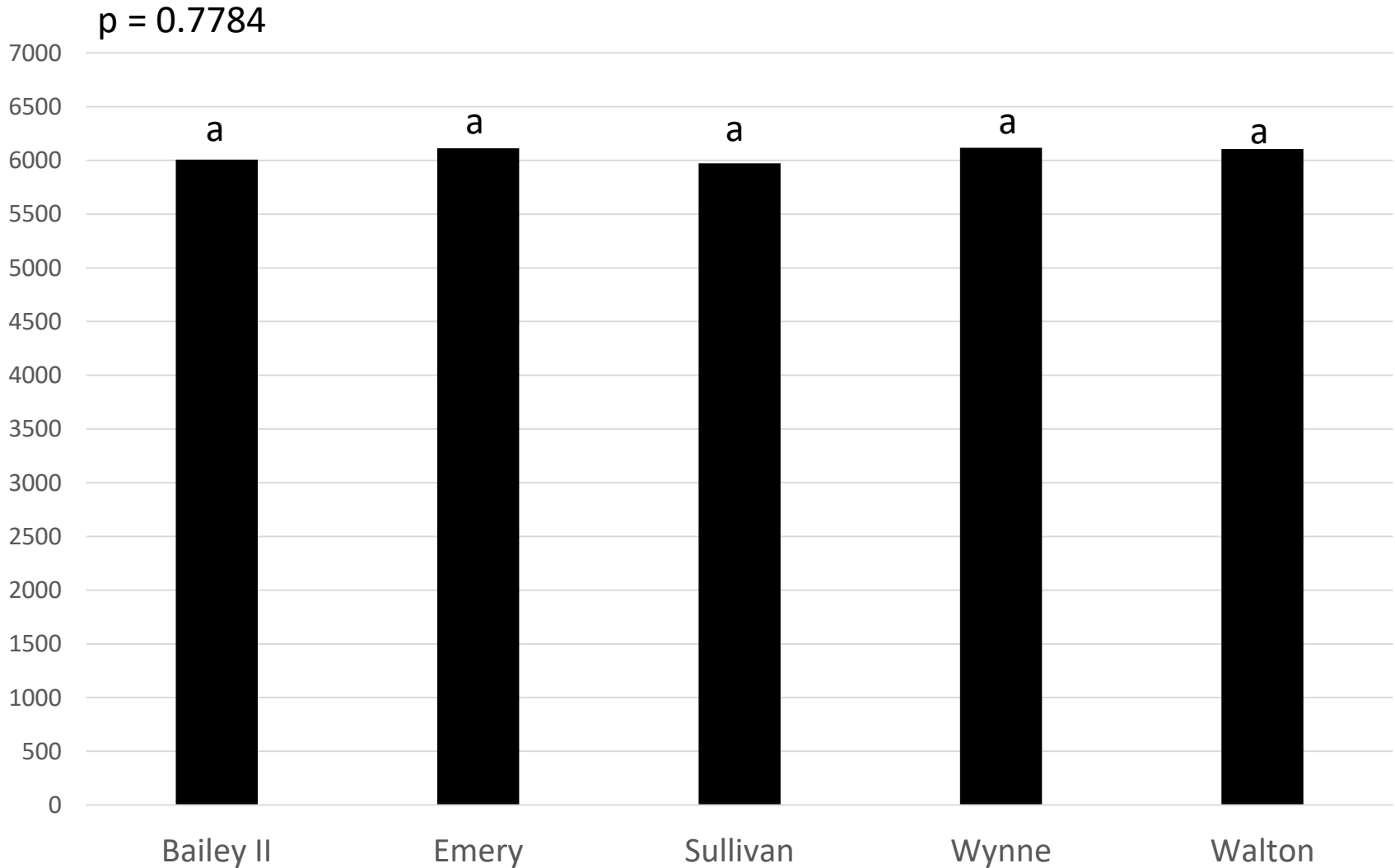
Yield (lbs/acre) of Bailey II, Emery and Sullivan

Chowan County, Beech Fork Farms and Matthew Leary

P = 0.4064

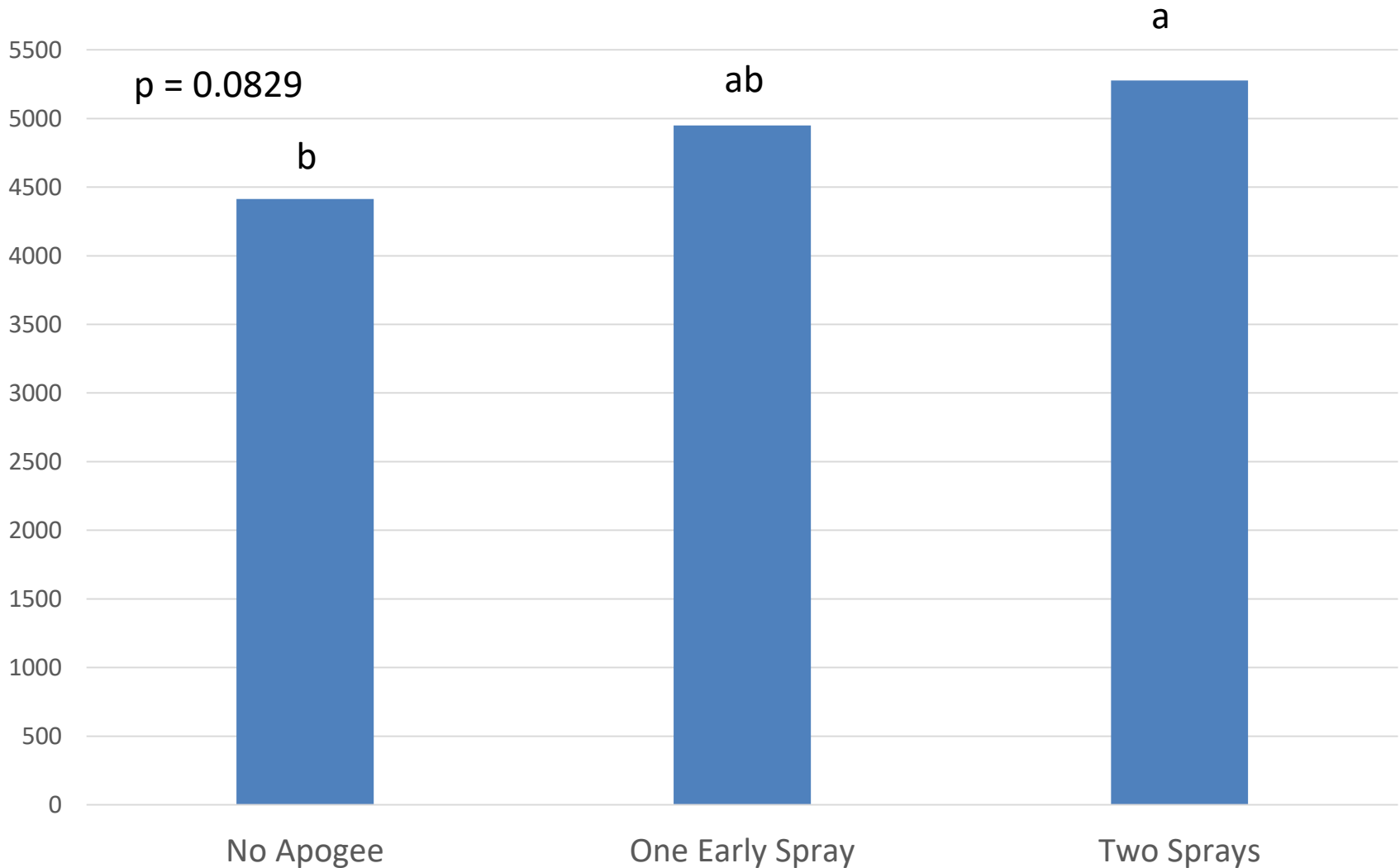


Yield (lbs/acre) of Bailey II, Emery, Sullivan, Wynne and Walton Bertie County, David Leggett and Billy Barrow



Peanut Yield (lbs/acre) Response to Apogee

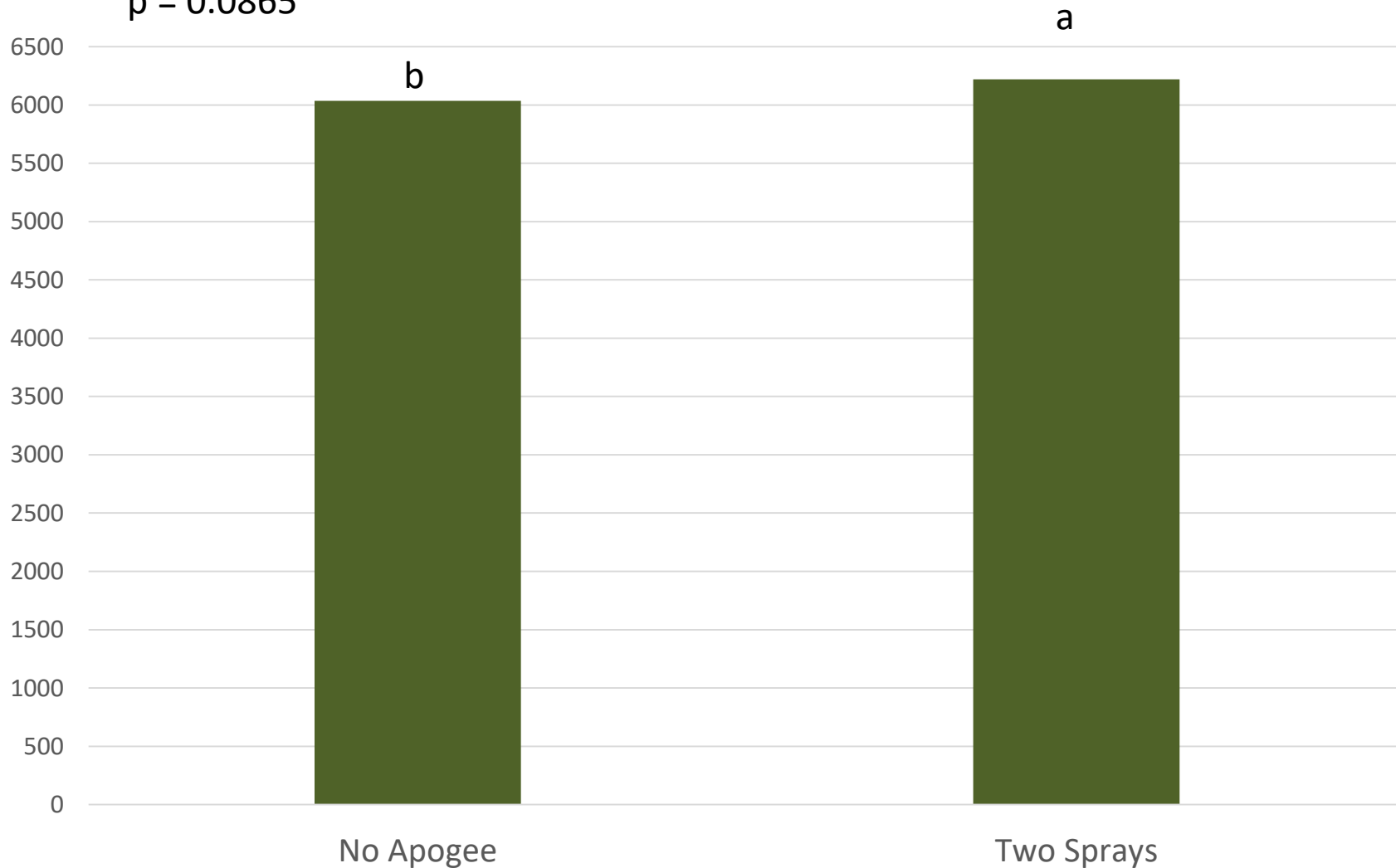
Martin County, John David Williams and Lance Grimes



Peanut Yield (lbs/acre) Response to Apogee

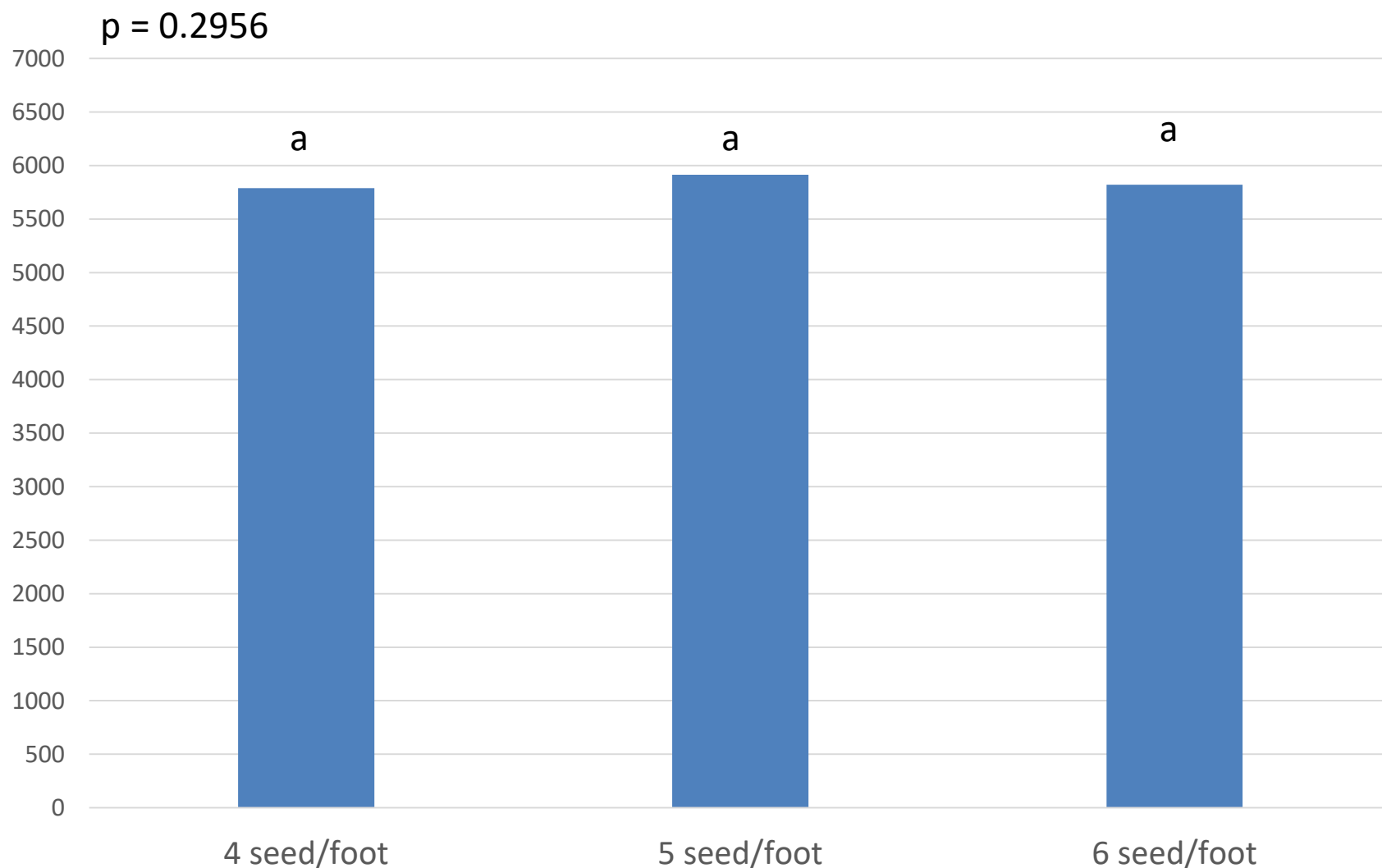
Columbus County, Ellis Jordan and Lydia Miles

p = 0.0865



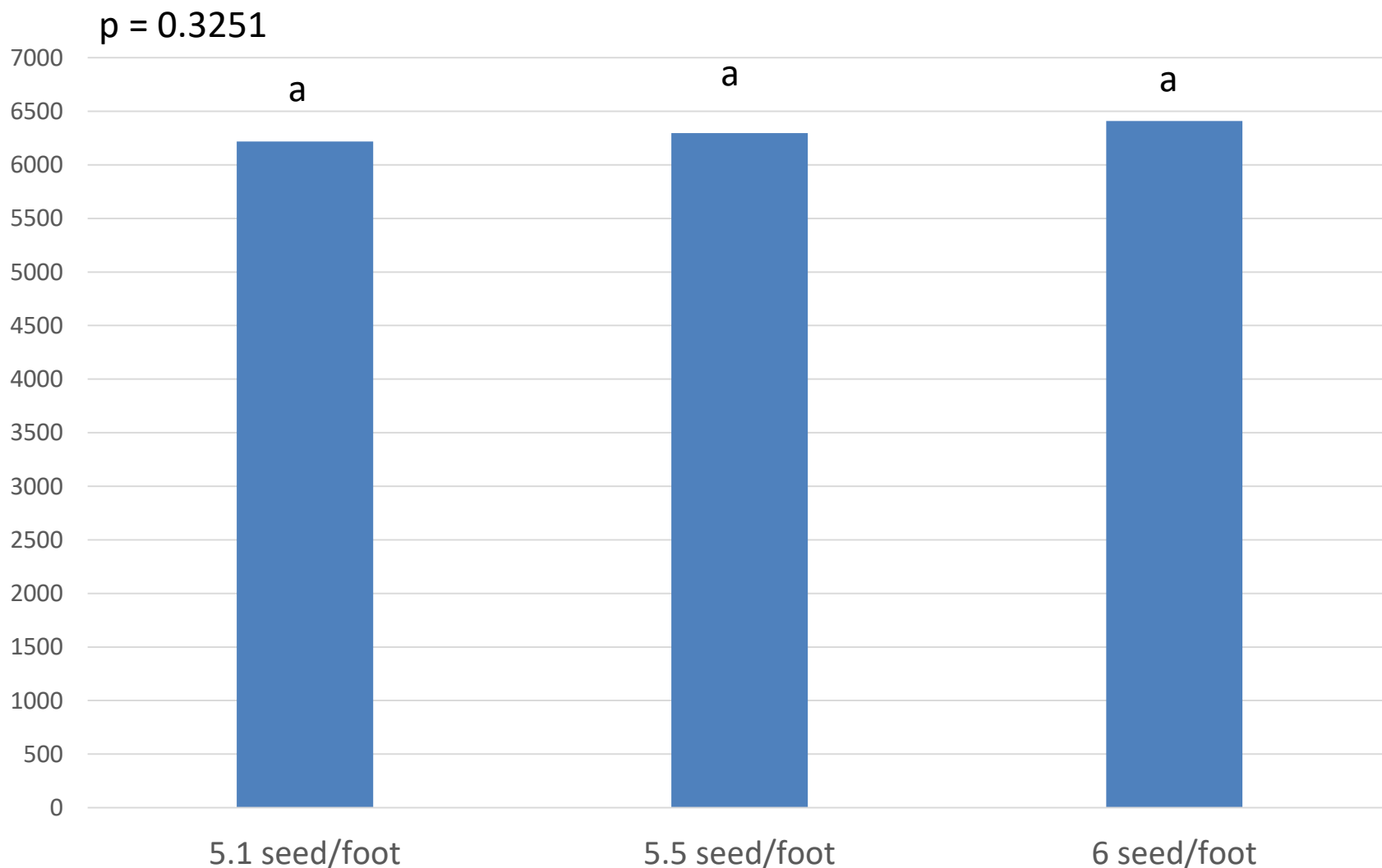
Peanut Yield (lbs/acre) Response to Seeding Rate

Martin County, Geoffrey Corey and Sons Farms, Inc. and Lance Grimes



Peanut Yield (lbs/acre) Response to Seeding Rate

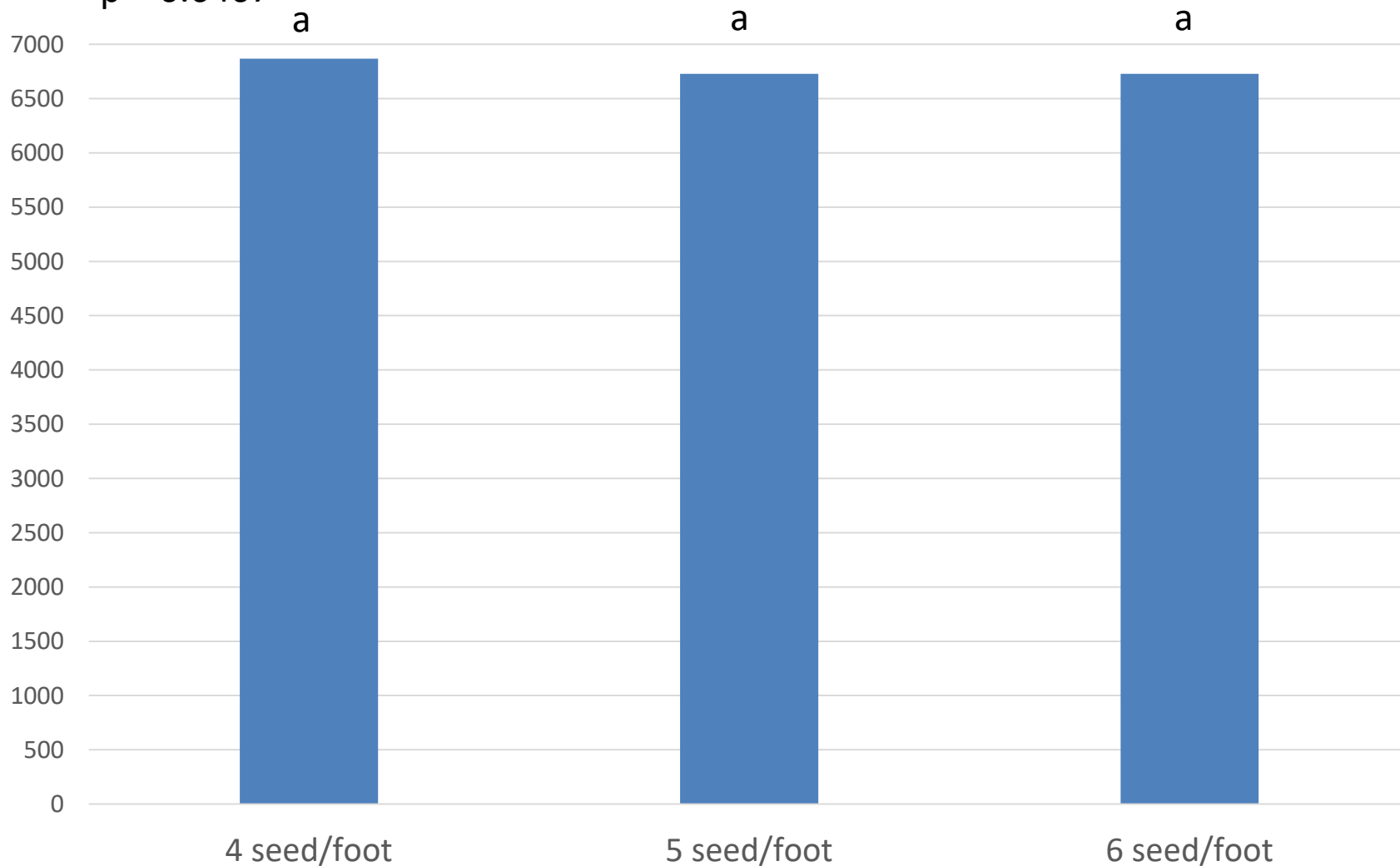
Northampton County, Mike and Brandon Belch and Craig Ellison



Peanut Yield (lbs/acre) Response to Seeding Rate

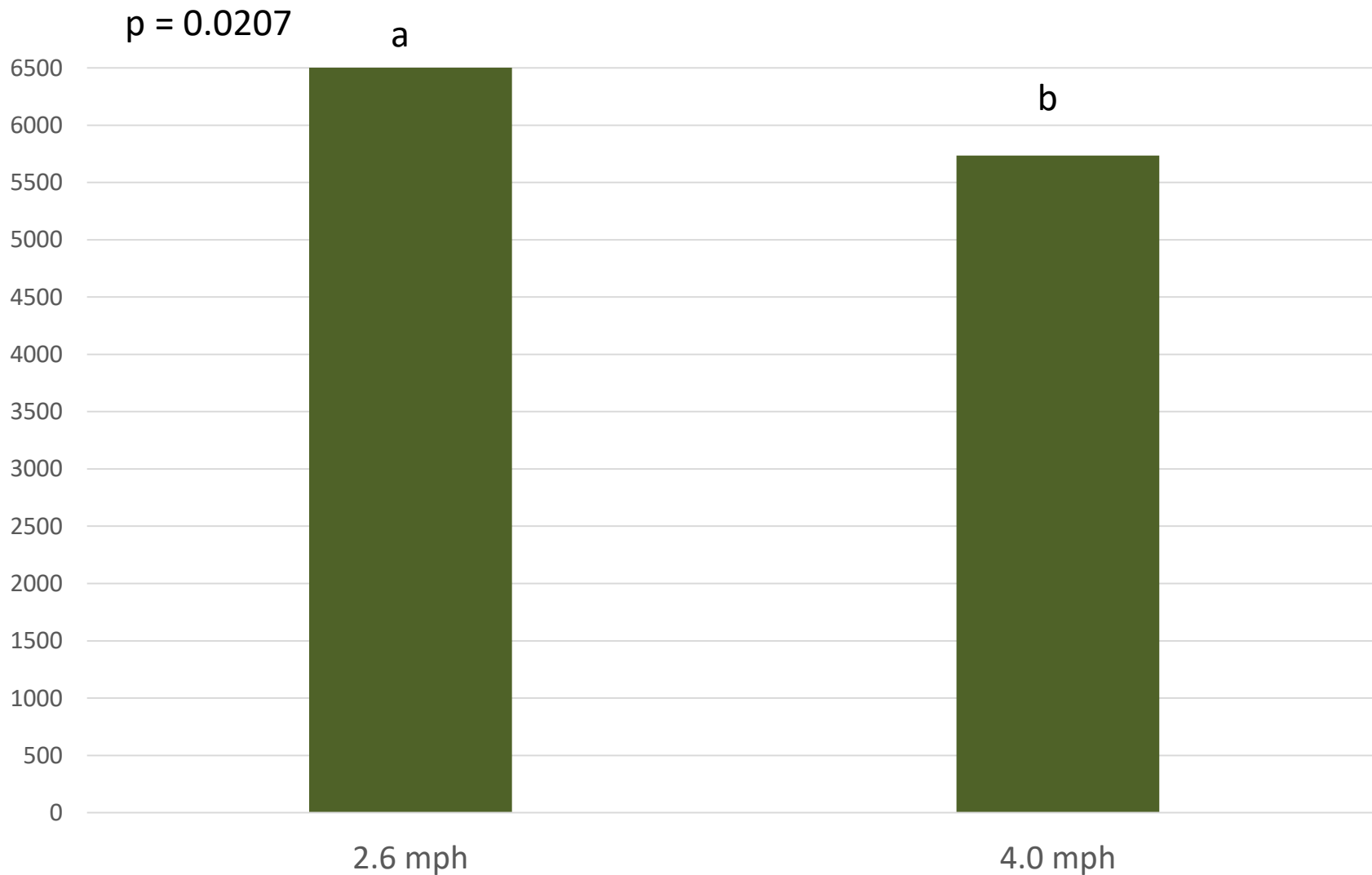
Bertie County, Joey Baker and Billy Barrow

$p = 0.6467$



Peanut Yield (lbs/acre) Response to Digging Speed

Columbus County, Ellis Jordan and Lydia Miles



Summary

No difference in yield was noted when comparing Bailey II, Emery and Sullivan in three trials (Chowan, Columbus and Martin Counties) and Bailey II, Emery, Sullivan, Wynne and Walton in one trial (Bertie County)

Peanut yield at seeding rates of 4, 5, and 6 seed per foot (Martin and Bertie Counties) or 5.1, 5.5, and 6 seed per foot did not differ (Northampton County)

Two applications of Apogee increased peanut yield in two trials compared with non-treated peanut (Columbus and Martin Counties)

Digging at 4.0 mph with a KMC digger resulted in lower yields compared with digging at 2.6 mph in a trial in Columbus County