

2005 Project Summary

Title: Evaluation of Variable-Rate Seeding for Cotton

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Results:

The goal of this project is to evaluate opportunities for increased yield or profits through variable-rate seeding. The following statements provide results for the 2005 growing season.

1. Poor growing conditions immediately following planting likely contributed to the final plant populations.
 - a. Weather was not conducive to plant germination and emergence at the field sites.
 - b. An evaluation is needed to compare the actual planted rates to the prescription map based on the first year results.
2. No difference in cotton yields were found in either field 1 or field 2.
3. As expected, irrigated cotton yields were significantly higher than dryland cotton yields. Irrigated yields were around 60% or higher for the various treatments

Plans are to continue this investigation during the 2006 and 2007 growing seasons.

Field 1 Results – Non-Irrigated.

Treatment (Population - Seeds/ac)	Actual Population (Seeds/ac)	Yield (lbs seed cotton per acre)
55,000	16,596.9	1771.4
65,000	36,067.7	1842.9
75,000	41,875.7	1858.3
85,000	42,979.2	1810.7

Field 2 Results – Irrigated.

Treatment (Population - Seeds/ac)	Actual Population (Seeds/ac)	Yield (lbs seed cotton per acre)
55,000	35,622.4	2792.3
65,000	43,318.0	3126.2
75,000	48,884.0	2985.0
85,000	50,190.8	3124.9