

OBJECTIVE

To assess the yield response of adding Excelis Maxx nitrogen stabilizer to 326 Lbs of urea (150 Lbs N) as a pre-plant fertilizer application in grain corn.

Site Location:

Blackville, SC

Researcher:

Bhupinder S. Farmaha, Ph.D.
Clemson University

STUDY INFORMATION

Planting Date	25-Mar-2019
Harvest Date	21-Sept-2019
Variety	DK 65-20
Population	32,987

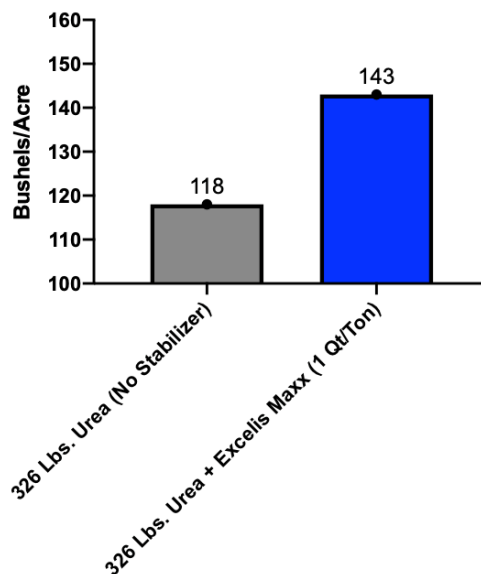
TIMAC AGRO PRODUCT



KEY FINDINGS

+25 bu/ac
 when Urea treated with Excelis Maxx
ROI: \$83.97/ac

Yield Response from Treating Urea with Excelis Maxx in Pre-Plant Fertilizer Application - Irrigated Corn



Graph: Excelis Maxx added. The Gross Revenue was calculated at \$3.75/bushel for corn with Excelis Maxx retail cost of \$240/gallon.

APPLICATION

Treatment	Application Rate
Urea (No Stabilizer)	326 Lbs (150 Lbs of N)
Urea treated w/ Excelis Maxx	326 Lbs (150 Lbs of N) + 1 Qt/Ton

MATERIALS AND METHODS

This study was conducted in a grower field with conventional tillage practices on an Orangeburg Loamy Sand soil type. Soil test taken in the early spring pre-plant indicated high to very high soil nutrient levels with excess amounts of P and K, with a soil pH of 6.0. No additional fertilizer was applied due to specifications of the trial. The experimental design was a randomized complete block with 4 replications. Plots consisted of four 30-inch rows that were 32' long. Seeding population was 32,987 seed an acre, and Dekalb '65-20' was planted on March 25. Irrigation was used to prevent water stress. Temperatures for the test site were consistently 5-10 degrees F above the historical average from the first week of June until the middle portion of July. Weather was milder in August but crop maturity was sped up due to these previous months' heat. Plots were allowed to mature and harvested on August 21. Total weight of grain from the center 2 rows of each replicate was used to calculate moisture, test weight, and yield.

RESULTS AND CONCLUSIONS

Pre-plant urea treated with Excelis Maxx improved corn yield at 326 lbs of urea (150 lbs N) over untreated urea at same rate without a nitrogen stabilizer. This resulted in a ROI of \$83.97/acre.

RETURN ON INVESTMENT

Treatment	Yield (bu/ac)	Gross Revenue @ \$3.75/bu	Change from Control	Added Costs/ac	ROI
Urea (No Stabilizer)	118	\$442.50	-	\$0.00	-
Urea treated w/ Excelis Maxx (1 Qt/Ton)	143	\$536.25	\$93.75	\$9.78	\$83.97

Author:

Michael Pisciotta, Regional Product Manager

mpisciotta@timacusa.com 229-402-1246 (please contact if further information is needed)

3/17/2021