

HYBRID: Various

DESIGN: Replicated plots, 5-8 per treatment

RESEARCHER(S): Data compiled and submitted by Pennsylvania State University. Write up of results by Jordan Martin, CCA and Dr. John D. Bailey, Timac Agro USA.

OBJECTIVE

The current data presented represent compiled averages across 3 years of trials comparing Excelis Maxx against various competing stabilizers.

INTRODUCTION

Excelis Maxx is a fertilizer additive that is more than just a stabilizer. It is designed to protect urea-based fertilizers from various loss pathways. It contains NBPT, DCD, LCN Complex, and other proprietary technology that controls volatility, denitrification and leaching. With the addition of our patented root biostimulant (Rhizovit) and organic acids, Excelis Maxx enhances nutrient availability and stimulates root growth and nutrient uptake.

It is well known that the effectiveness of nitrogen stabilizers depends upon the rate of applied nitrogen. At high rates of nitrogen, there appears to be little advantage to their use. However, at low to moderate rates of nitrogen, they appear to be useful.

MATERIALS AND METHODS

Excelis Maxx was applied at 25 oz/ton of liquid UAN and 1 qt/ton of dry urea, compared to competing stabilizers including: Agrotain Plus at 3 qts/ton, NZONE at 2 qts/ton, N-Ergize at 2 qts/ ton, Nutrisphere-N at 2 qt/ton and untreated fertilizer (Control).

KEY FINDINGS

+20.9 bu/ac
Excelis Maxx vs.
Untreated Control

DETAILED RESULTS

Corn grown with **Excelis Maxx treated UAN** showed the highest average yield of all treatments at **177.6 bu/ac**. This was **20.9 bu/ac** higher than the untreated Control plots, resulting in higher returns per acre (see Table 1). Some years, volatility loss was a factor and other years it was not. In general, products that didn't contain NBPT did not perform as well as those that did but this depended on the year (data not shown).

Excelis Maxx's formulation includes other technology (Rhizovit biostimulant) that substantially enhances nutrient availability, root growth, and uptake. **This innovation is likely the reason for the higher yields noted for all 3 years, since no other stabilizer has this technology.**

Table 1: Treatments, Grain Yield and Gross Revenue in corn production using treated UAN (3 year compilation)

Treatment	Grain Yield (bu/ac)	Yield Difference vs. Control (bu/ac)	Gross Revenue vs. Control @ \$3.50/bu (\$/ac)
Excelis Maxx	177.6	20.9	\$621.60
Agrotain Plus	172.5	15.8	\$603.75
N-Ergize	171.1	13.9	\$598.50
NZONE Max	170.6	14.4	\$597.10
Nutrisphere-N*	156.0	-0.8	\$546.00
Untreated Control	156.7	-	\$548.45

*Only 2 years of data available