

Liquid Starter Fertilizer Comparison on Corn

EXPERIMENT INFO

Planted: 05/10/2015

Harvested: 10/30/2015

Hybrid: A6757G8

Population: 32,000/acre

Row Width: 30"

Prev. Crop: Soybeans

Plot Size: 12 rows x 2191'

Replications: 3

Sidedress: 06/16/2015 (40
GPA 28% UAN + 1 L/ac
eNhance)

SOIL DATA

pH: min: 6.1; max: 7.8

CEC: min: 5.7; max: 14.3

% OM: min: 2.5; max: 4.4

% P: min: 1; max: 4

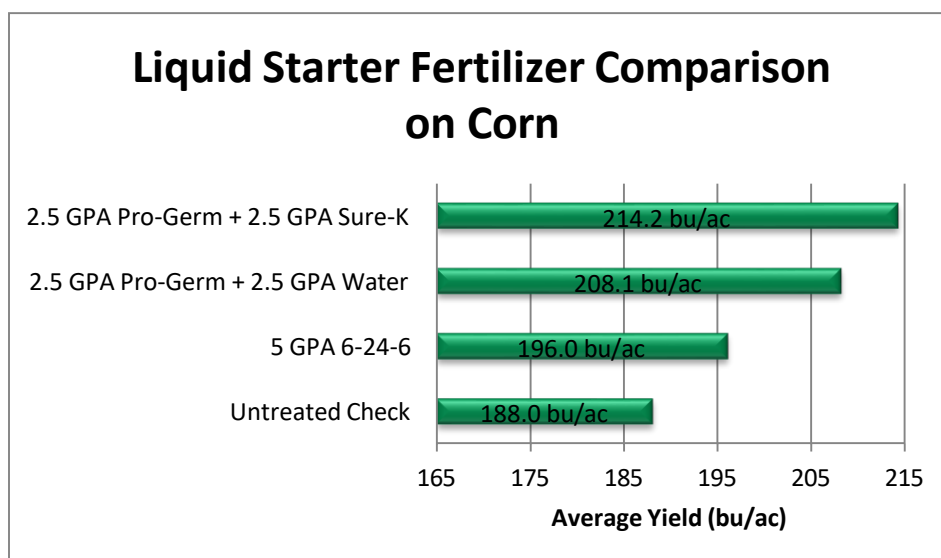
% K: min: 1.2; max: 3.9

% Mg: min: 8.8; max: 16.1

% Ca: min: 45.1; max: 89.2

Objective:

Placing small to moderate amounts of plant nutrients in a band in close proximity to the seed at planting increases early-season growth and yield of grain crops (Bates, 1971; Walker et al., 1984; Reeves et al., 1986; Osborne 2005). Yield response to starter fertilizer has been observed even when soil test values are high (Touchton, 1988; Gordon and Whitney, 1995; Osborne 2005). Limited uptake of P early in the growing season can reduce yield because of the importance of adequate P nutrition in the development seeds (Tisdale et al. 1993; Osborne 2005). Starter fertilizer is known to increase corn yield, regardless of hybrid or planting date, by increasing early-season plant height and reducing grain moisture and days to silking (Mascagni and Boquet 1996; Osborne 2005).



Conclusions:

It has been well established that a corn crop with a starter fertilizer application of some blend has stronger results than a crop with no starter fertilizer.

The ability to mix products together in varying quantities to better match the needs of the soil can produce notable results, as illustrated by the yield of the Pro-Germ and Sure-K treatment. Overall, this plot location is low in both phosphorous and potassium; soil test data can ensure the best choice of fertilizer is applied.