In-Furrow Micronutrients on Soybeans

EXPERIMENT INFO

Planted: 06/05/2015

Harvested: 10/10/2015

Variety: PS2082NR2

Population: 160,000/acre

Row Width: 30”

Prev. Crop: Corn

Plot Size: 12 rows x 900’

Replications: 3

Foliar Application : R2 - 07/22/2015 (1 GPA ferti-Rain)

SOIL DATA

pH: min: 5.9; max: 7.6

CEC: min: 4.3; max: 11.7

% OM: min: 1.3; max: 2.7

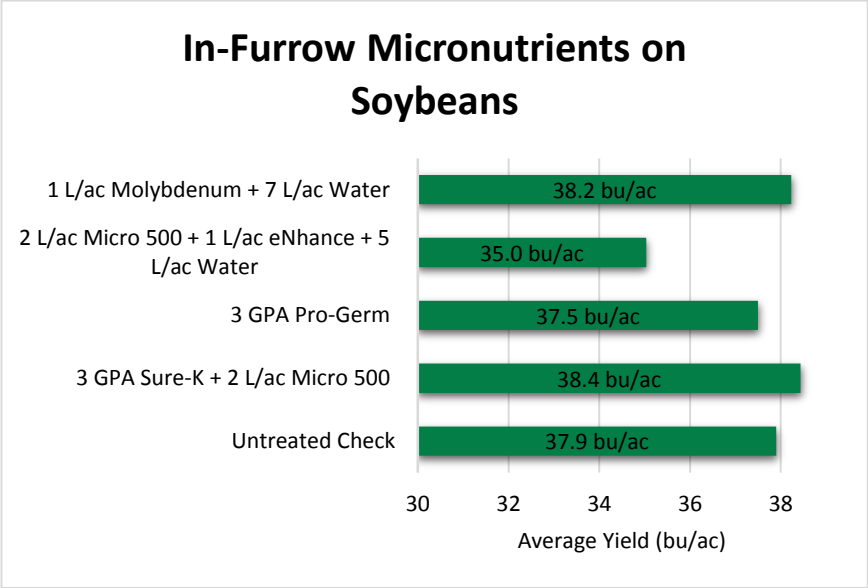
% P: min: 5; max: 30

% K: min: 1.2; max: 6.7

% Mg: min: 8.5; max: 16.3

% Ca: min: 51.9; max: 89.6

Objective:
There is continued interest in increasing soybean yields, and growing interest in using starter fertilizer in soybean production. Historically, however, starter fertilizer has not produced consistent yield increases in soybeans (Staton, 2014). This lack of positive response to starter fertilizer has been at least partially attributed to not incorporating adequate amounts of the proper nutrients in the starter fertilizer (Staton, 2014). This trial aims to provide insight into which nutrients are most likely to produce a positive yield response when included in starter fertilizer program for soybeans.



Conclusions:
This is the first year of this trial, and it was a dry growing season. There were very small differences between the untreated check and most treatments.

The treatment with the 2 L/ac Micro 500 + 1 L/ac eNhance + 5 L/ac of water showed a yield reduction when compared to the untreated check. Perhaps this antagonism can be partially explained by the addition of S; this nutrient may have inhibited nodule formation due to the increased uptake of N.

Notably, Molybdenum appears to demonstrate a stronger response in an in-furrow application, as opposed to a foliar application.

It will be interesting to see the results of this trial in the 2016 growing season.