

Foliar Applications on Soybeans

EXPERIMENT INFO

Planted: 05/28/2016

Harvested: 10/26/2016

Variety: PS2082NR2 with CruiserMaxx

Population: 145,000 seeds/ac

Row Width: 30"

Prev. Crop: Corn

Plot Size: 12 x 760'

Replications: 3

SOIL DATA

pH: min: 5.9; max: 7.4

CEC: min: 4.0; max: 7.8

% OM: min: 1.4; max: 2.3

% P: min: 6.0; max: 18.0

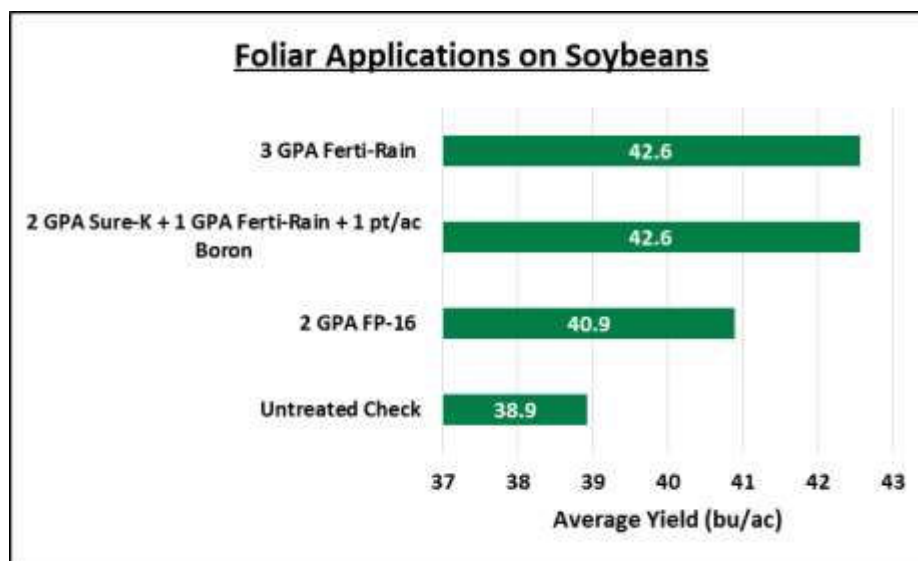
% K: min: 3.1; max: 3.8

% Mg: min: 11.7; max: 18.6

% Ca: min: 52.8; max: 81.5

Objective:

The utilization of foliar fertilizers during the growing season has been demonstrated to boost nutrient availability and to help correct nutrient deficiencies the plant may exhibit. Agricultural fields are often found deficient in phosphorus and/or in one or more of the micronutrients. Current foliar phosphorous sources have proved to be an inefficient means of increasing phosphorous levels in the plant. In addition, in many cases, "deficiency of certain micronutrients is the factor responsible for the ineffective utilization of the major and secondary nutrients supplied in fertilizer and liming programs" (A&L Agronomy Handbook 2001). With the continued need for increased soybean yields, this trial explores potential avenues for such increases.



Conclusions:

Two treatments provided strong yield results this year: the 3 GPA Ferti-Rain treatment and the 2 GPA Sure-K + 1 GPA Ferti-Rain + 1 pt/ac Boron treatment. Both treatments resulted in a 3.7 bu/ac yield advantage over the untreated check.

The comparable results between these two treatments may be connected to the specific nutrient levels in this field. This soil has boron, zinc, and sulfur deficiencies. These two foliar applications helped to provide the soybeans with the necessary nutrients.