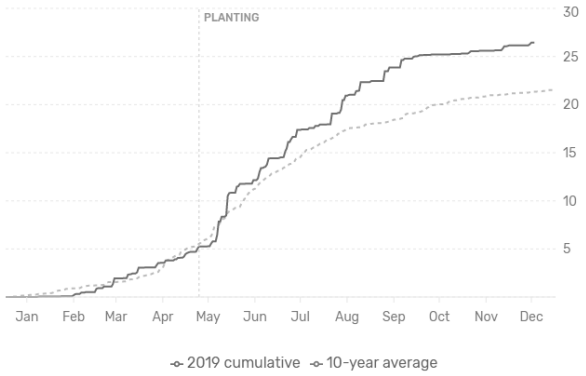
Impact of Soygreen® on Soybeans

Study ID: 0911101201901
County: Keith
Soil Type: Bayard very fine sandy loam, 1-3% slope
Planting Date: 5/9/19
Note: Hailed off on 5/30/19; hailed off again on 6/7/19; replanted at 60,000 6/12/19
Harvest Date: 10/17/19
Seeding Rate: 160,000
Row Spacing (in): 15
Variety: Stine® 28LF32
Reps: 4
Previous Crop: Corn
Tillage: No-Till
Herbicides: ***Pre:*** 10 oz/ac Verdict® on 4/28/19
Post: 32 oz/ac Liberty®, 8 oz/ac Select®, and 3 oz/ac Zidua® PRO on 6/12/19; 32 oz/ac Liberty® on 7/10/19
Seed Treatment: Conklin® Magnify® LST, insecticide, and fungicide

Foliar Insecticides: None
Foliar Fungicides: None
Fertilizer: 3 gal/ac 8-16-11-2S foliar with in-season herbicide; 75 lb/ac AMS sidedress on 7/5/19
Irrigation: Pivot
Rainfall (in):



Introduction: Iron deficiency chlorosis (IDC) of soybeans is a common problem in fields with high pH levels (alkaline soils). Soygreen® is an iron chelate of ortho-ortho EDDHA form that can help make iron more available to plants. The field in this study has areas with high pH and is susceptible to IDC. In this study, Soygreen® was applied in a dry formulation (2%) at a rate of 9 lb/ac and was compared to an untreated check.

Results:

	Yield (bu/ac)†	Marginal Net Return‡ ($/ac)
Check	80 B*	650.03 A
Soygreen®	85 A	658.07 A
P-Value	0.040	0.495

†Bushels per acre adjusted to 13% moisture.
*Values with the same letter are not significantly different at a 90% confidence level.
‡Marginal net return based on $8.10/bu soybean and $28/ac Soygreen®.

Summary:

- The Soygreen® treatment had a 4.4 bu/ac yield increase.
- There was no difference in marginal net return. Applying Soygreen® only in areas of the field that are susceptible to ICD through site-specific management technologies, such as a multi-hybrid planter, may help maximize the profitability of using this product.

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