

2011 KARA Research

Continued Study: Titan fertilizer additive on wheat

Thank you for the grant

www.lovelandproducts.com/PlantNutritionNutriscription/SoilApplied/

- The Titan® line of products are innovative fertilizer catalysts designed for use with both dry and liquid fertility programs, which significantly increase fertilizer availability and overall plant performance.

Equipment Used

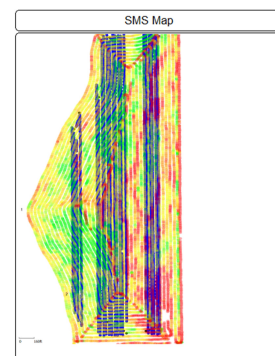
- 1890 30ft John Deere air seeder
- Agleader Insight to mark strip location & RTK autosteer tractor
- Gleaner S77 & 40ft header with Fieldstar yield monitor
- Agleader SMS software to analyze data
- Excel to tabulate data

- Fertilizer blend 85 # / acre
- 15.5-30-6-7.5s-.75zn
- Made from
- 12-40-0-10s-1zn
- ESN 44-0-0 (polymer coated urea)
- 0-0-60

Application Method

- 1 gallon of Titan was added per ton of fertilizer as it was being blended
- Strips of Titan treated fertilizer were drilled with skips of 120ft or more left undrilled. Then the treated fertilizer was emptied and filled with fertilizer without Titan and the skips were filled in that same day.

Blue is where no Titan was used



Comparison

Wheat yields

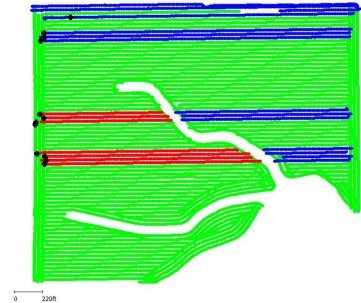
Wheat after beans

With	Without	Difference
47.22	49.83	-2.61
53.15	58.14	-4.99
50.16	58.06	-7.9
	Avg. dif.	-5.16

Double crop soybeans

With	Without	Difference
35.4	35.0	.4
34.55	34.05	.5
36.7	36.0	.7
33.6	33.4	.2
35.0	34.0	1.0
	Avg. dif.	.56

2010 comparison
 Green is with Titan
 Blue is without in wheat stubble
 Red is without in soybean stubble



2010 Comparison

Wheat yields

With	Without	Difference
Wheat after wheat		
73.36	70.86	2.5
70.77	69.77	1
68.64	65.40	3.24
68.39	65.4	2.99
Wheat after beans		
67.21	67.36	-0.15
69.36	69.58	-0.22
	Ave. Dif.	1.56

Double crop Soybean yield

With	Without	Difference
26.77	27.57	-0.8
26.84	26.79	0.05
26.95	24.72	2.23
26.92	26.92	0
	Ave. Dif.	0.37

2011 Conclusion

- Titan does not pay on wheat after soybeans
- Titan might pay on wheat after wheat
- It might help double crop soybeans