



Field Trial Report

2013 Molybdenum and Foliar Fertilizer Study

Delbert G. Voight, John Bray, Alyssa Collins Doug Beegle and Greg Roth, Penn State University

Field Information

Location: Southeast Research and Extension Center, Landisville

Field Name:YS **Acres:** 15

2012 Crop: Corn

Tillage: No-till

Planting Date: 4/26/2013

Variety: Pioneer 93M11

Seed Treatment: Trilex/Gaucho

Planter: JD 1250 Drill

Planting Depth: 1 inch

Seeding rate: 180 k

Herbicide: Gramazone plus Canopy f/b Credit Extra+ Pursuit 6/22/2013

Harvest Date:

Plot size: 20 x 250 Feet

Replications: 4

Treatments

- 1 Untreated (Trilex base) plus Cell Tech 2.1 oz/50lb
- 2 Manni-Plex B Moly 1 pint/acre at V2
- 3 M power 5 ounce/acre AT v2 f/b Micropower at R2
- 4 M Power 5 ounce/acre at V2

Results

Treatment	Yield	Moisture	Pop up Population	Final Population	Nodules per plant	Spad Meter Reading	Nitrogen Tissue Test Pre	Nitrogen Tissue Test Post	Moly Post	CU	Final Height	Pod Count	Total Pods
	Bu/a	%	ppa	ppa	Per Plant		%	%	%	%	inches	Per Plant	Per acre
Check	62.33	14.05	121967	148500.00	26	40.4	5.8	5.8	0.15	9.8	27	28	4255900
Manni-Plex B Moly	59.73	13.85	124581	170500.00 +	25	42.4 +	6.1	5.7	0.15	9.5 +	28	29	5029750
M Power f/b Micro Power	61.85	13.70	118483	159500.00	29	41.9 +	5.9	5.6	0.15	8.8 +	28	30	4761350
M Power Alone	61.75	13.70	120225	130000.00	29	40.7 +	5.9	5.9	0.15	9.0 +	25	25	3250000
Significance	ns	ns	ns	ns	ns	+ P=.1	ns	ns	ns	+ P=.1	ns	ns	ns
CV	6.15	2.5	9.4	10.44	12.7	2.1	1.4	3.4	0	5.7	6.2	0	16.9
LSD	5.2	0.4	14794	20578	4.6	1.2	.1	.25	0	.6	2.2	0	950039
Mean	61.96	13.82	121314	152125	28	41.3	5.4	5.8	.15	9.2	27	28	4324250

Comments: We were unable to detect any differences in any of the parameters of the study for yield. However there were significant differences in Spad Meter Readings for all three treatments compared to the check. The pre and post tissue tests did not however show significant levels of contained N in the leaves. Also there were significant differences in the level of CU(Copper) in the plant tissue tests.

Field Trial Report

2013 Soybean Response to Tall Harvest Applications

Delbert G. Voight, John Bray, Alyssa Collins Doug Beegle and Greg Roth, Penn State University

Field Information

Location: Southeast Research and Extension Center, Landisville

Field Name: YS

Acres: 15

2012 Crop: Corn

Tillage: No-till

Planting Date: 4/26/2013

Variety: Pioneer 93M11

Seed Treatment: Trilex/Gaucho

Planter: JD 1250 Drill

Planting Depth: 1 inch

Seeding rate: 180 k

Herbicide: Gramazone plus Canopy f/b Credit Extra+ Pursuit 6/22/2013

Harvest Date:

Plot size: 20 x 250 Feet

Replications: 4

Treatments

1 Untreated

2 Tall Harvest

1 gal/at V2

3 Tall Harvest

1.5 gal/a at V2

4 Tall Harvest

1 gal/a V2 f/b .5 gal/acre at R2

Results

Treatment	Yield	Moisture	Pop up Population	Final Population	Nodules per plant	R2 Height	Spad Meter Reading	Nitrogen Tissue Test 2week post app	Final Height	Pod Count	Total Pods
	Bu/a	%	ppa	PPA	Per Plant	Inches	Hand held	%	inches	Per Plant	Per acre
Untreated	78.35	13.02	89733	137500	44	21	39	6.01	38	59	8204351
Tall Harvest	79.18	12.82	95831	132000	39	22	41	5.878	37	60	8056401
Tall Harvest	78.88	13.5	93218	126500	44	21	39	6.115	37	63	8068501
Tall Harvest	73.63	12.85	92347	137500	39	21	39	6.053	36	70	9771851
Significance	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
LSD	4.703	0.030 t	10882	21648	7.83	2.7	2.087	0.26	2.74	6.84	1491121
CV	4.6	2.0	9.0	12.5	14.4	9.6	4.0	3.3	5.6	8.3	13.4
Mean	77.51	1.15t	92782	133375	41.72	21.59	40	6.01	37	63	8525275

Comments: We were unable to detect any differences in any of the parameters of the study.