FIELD EXPERIMENT HISTORY

Title: **Plant Growth Regulator Effect on Corn - Stoller**

Experiment: 08Seed **Trial ID:** 3688 **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T. Diallo

Location: Arlington, WI **County:** Columbia

Supported By: Stoller

Site Information

Field: ARS407 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam

Soil Test: **Date:** 10/1 /13 **pH:** 6.8 **OM (%)** 3.6 **P (ppm)** 72 **K (ppm)** 258

Plot Management

Tillage Operations: Disk Field Cultivator

Fertilizer:

Preplant Analysis:	46-0-0	**Rate lbs/A:**	150 lbs/A	**Date:** N/A
Starter Analysis:	N/A	**Rate lbs/A:**	N/A	**Date:** N/A
Post plant Analysis:	28-0-0	**Rate lbs/A:**	50 lbs/A	**Date:** 6 /19/13

Manure: N/A

Herbicide: Dual II Mag 28 oz/A
Hornet 3.0 oz/A

Insecticide: None

Hybrid: Pioneer P0193AM1

Irrigation: None

Planting Date: 6/4/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Almaco Precision Planter

Harvest Date: 10/30/13 **Harvest Method:** Massey 8XP

Experimental Design

Design: Latin Square **Replications:** 6

Plot Size Seeded: 5 x 25 **Experiment Size:** 0.36A

Harvest Plot Size: 22' x 5' **Harvest Plant Density:** 33880 plants per acre

Factors/Treatments:

Treatment:

1) Untreated Check
2) Ryzup @ 0.3 oz wt/a V3-V5 Dry formulation (40%)
3) N-Large 40 SP @ 0.3 oz wt/a V3-V5 Dry formulation (40%)
4) N-Large @ 3 fl oz/a V3-V5 Liquid formulation (4%)
5) N-Large Premier @ 1.5 fl oz/a V3-V5 Liquid formulation (6.26%)
6) Bio-Forge @ 16 fl oz/a V3-V5 Liquid formulation

Results: Table 1308-01.

Table: 1308-01. Plant Growth Regulator Effects on Corn - Stoller. Arlington, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return	Plant Ht (DOY)		Vigor (DOY)	
					Total	Stalk	Root	$4.04	182	189	182	189
	plants/A	bu/A	%	lb/bu	%	%	%	$/A	inches		Scale 0-5	
UTC	33330	237	31.3	48	0	0	0	827	16.8	26.0	4.4	4.2
Ryzup @ 0.3 oz wt/a V3-V5 Dry formulation_40%	33858	237	30.9	48	4	4	0	828	17.8	25.9	4.4	4.2
N-Large 40 SP @ 0.3 oz wt/a V3-V5 Dry formulation_40%	34122	237	30.4	48	1	1	0	832	17.8	27.8	4.4	4.2
N-Large @ 3 fl oz/a V3-V5 Liquid formulation_4%	34584	237	30.8	48	0	0	0	829	17.7	25.8	4.4	4.1
N-Large Premier @ 1.5 fl oz/a V3-V5 Liquid formula_6.26%	34320	226	30.3	48	1	1	0	796	18.0	26.8	4.4	4.2
Bio-Forge @ 16 fl oz/a V3-V5 Liquid formulation	33066	244	29.9	48	5	5	0	860	18.0	26.5	4.4	4.1
Mean	33880	236	30.6	48	2	2	0	829	17.7	26.5	4.4	4.2
Probability(%)												
Treatment (T)	19.2	39.1	84.3	44.1	50.4	47.3	56.3	30.2	36.8	0.1	40.1	77.6
LSD(0.10)												
Treatment (T)	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.7	NS	NS

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3663

Location: Arlington, WI **County:** Columbia

Supported By: HATCH

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam

Soil Test: **Date:** 10/01/13 **pH:** 6.7 **OM (%)** 3.8 **P (ppm)** 68 **K (ppm)** 244

Plot Management

Tillage Operations: Disk Field Cultivator

Fertilizer:

Preplant Analysis:	46-0-0	**Rate lbs/A:**	150 lbs/A	**Date:**	N/A
Starter Analysis:	10-34-0	**Rate lbs/A:**	3.0 gal/A	**Date:**	5 /1 /13
Post plant Analysis:	28-0-0	**Rate lbs/A:**	50 lbs/A	**Date:**	6 /19/13
Manure:	N/A				

Herbicide: Dual II Mag 28 oz/A
Hornet 4.0 oz/A

Insecticide: Force 3G 4.4 lbs/A

Hybrid: Dekalb DKC55-09RIB

Irrigation: None

Planting Date: 5/1/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 10/18/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/10/13

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 33428 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-01.

Table: 1311-01. Influence of BioForge on Corn Grain Yield. Arlington, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return $4.04
					Total	Stalk	Root	
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	32765	219	28.8	51	0	0	0	775
Untreated Check	34343	272	28.6	52	0	0	0	968
Mean	33554	246	28.7	52	0	0	0	872
Probability(%)								
Treatment (T)	35.7	19.7	59.5	11.0	-	-	-	18.6
LSD(0.10)								
Treatment (T)	NS	NS	NS	NS	-	-	-	NS

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3544

Location: Chippewa Falls, WI **County:** Chippewa

Supported By: HATCH

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Sattre Silt Loam

Soil Test: **Date:** 10/01/13 **pH:** 5.7 **OM (%)** 2.9 **P (ppm)** 61 **K (ppm)** 105

Plot Management

Tillage Operations: Field Cultivator

Fertilizer:

Preplant Analysis:	N/A	**Rate lbs/A:**	N/A	**Date:**	N/A
Starter Analysis:	10-34-0	**Rate lbs/A:**	3.0 gal/A	**Date:**	5 /7 /13
Post plant Analysis:	28-0-0 46-0-0	**Rate lbs/A:**	130 lbs/A 93 lbs/A	**Date:**	
Manure: N/A					

Herbicide: Outlook 15 oz/A
Hornet 3.0 oz/A

Insecticide: None

Hybrid: Dekalb DKC42-72

Irrigation: None

Planting Date: 5/7/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 10/24/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/15/13

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 31770 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-02.

Table: 1311-02. Influence of BioForge on Corn Grain Yield. Chippewa Falls, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return $4.04
					Total	Stalk	Root	
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	31628	57	26.2	50	2	2	0	201
Untreated Check	31912	70	27.5	51	2	2	0	251
Mean	31770	63	26.8	51	2	2	0	226
Probability(%)								
Treatment (T)	68.5	4.7	-	21.8	39.1	39.1	-	3.7
LSD(0.10)								
Treatment (T)	NS	6	-	NS	NS	NS	-	18

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3541

Location: Coleman, WI **County:** Marinette

Supported By: HATCH

Site Information

Field: **Previous Crop:** Corn **Soil Type:** Oconto Silt Loam

Soil Test: **Date:** 10/01/13 **pH:** 7.6 **OM (%)** 2.9 **P (ppm)** 54 **K (ppm)** 202

Plot Management

Tillage Operations: Chisel Plow Field Cultivator

Fertilizer:	**Preplant Analysis:**	46-0-0 11-52-0 21-0-0-24s	**Rate lbs/A:**	200 lbs/A 25 lbs/A 75 lbs/A	**Date:**	N/A
	Starter Analysis:	10-34-0	**Rate lbs/A:**	3.0 gal/A	**Date:**	5 /15/13
	Post plant Analysis:	N/A	**Rate lbs/A:**	N/A	**Date:**	N/A
	Manure:	N/A				

Herbicide: Lumax 3.0qts/A **Insecticide:** Force 3G 4.4 lbs/A

Irrigation: None **Hybrid:** Dekalb DKC42-72

Planting Date: 5/15/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 11/7/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/18/13

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 31202 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-03.

Table: 1311-03. Influence of BioForge on Corn Grain Yield. Coleman, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return
					Total	Stalk	Root	$4.04
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	31723	178	25.9	51	0	0	0	640
Untreated Check	30681	232	24.3	52	0	0	0	845
Mean	31202	205	25.1	52	0	0	0	743
Probability(%)								
Treatment (T)	59.8	0.8	10.9	12.8	-	-	-	0.8
LSD(0.10)								
Treatment (T)	NS	21	NS	NS	-	-	-	76

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3525

Location: Fond du Lac, WI **County:** Fond du Lac

Supported By: HATCH

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Virgil Silt Loam

Soil Test: **Date:** 10/01/13 **pH:** 7 **OM (%)** 3.4 **P (ppm)** 23 **K (ppm)** 88

Plot Management

Tillage Operations: Chisel Plow Field Cultivator

Fertilizer:

Preplant Analysis:	46-0-0	**Rate lbs/A:**	150 lbs/A	**Date:**	N/A
Starter Analysis:	10-34-0	**Rate lbs/A:**	3.0 gal/A	**Date:**	5 /20/13
Post plant Analysis:	46-0-0	**Rate lbs/A:**	88 lbs/A	**Date:**	7 /3 /13
Manure:	N/A				

Herbicide: Lumax 3.0qts/A **Insecticide:** None

Irrigation: None **Hybrid:** Pioneer P0453AM1

Planting Date: 5/20/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 10/23/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/18/13

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 32812 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-04.

Table: 1311-04. Influence of BioForge on Corn Grain Yield. Fond du Lac, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return
					Total	Stalk	Root	$4.04
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	32765	197	24.7	51	0	0	0	715
Untreated Check	32859	168	25.6	51	0	0	0	608
Mean	32812	183	25.2	51	0	0	0	662
Probability(%)								
Treatment (T)	91.6	11.2	28.0	84.0	39.1	39.1	-	11.3
LSD(0.10)								
Treatment (T)	NS	NS	NS	NS	NS	NS	-	NS

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3530

Location: Galesville, WI **County:** Trempeleau

Supported By: HATCH

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Downs Silt Loam

Soil Test: **Date:** 10/01/13 **pH:** 6.4 **OM (%)** 3.7 **P (ppm)** 41 **K (ppm)** 173

Plot Management

Tillage Operations: Chisel Plow Field Cultivator

Fertilizer:

Preplant Analysis:	46-0-0	**Rate lbs/A:**	150 lbs/A	**Date:**	N/A
Starter Analysis:	10-34-0	**Rate lbs/A:**	3.0 gal/A	**Date:**	5 /8 /13
Post plant Analysis:	N/A	**Rate lbs/A:**	N/A	**Date:**	
Manure:	N/A				

Herbicide: Harness 3.0 oz/A
Callisto 3.0 oz/A

Insecticide: None

Hybrid: Pioneer P0453AM1

Irrigation: None

Planting Date: 5/8/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 10/14/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/15/13

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 31676 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-05.

Table: 1311-05. Influence of BioForge on Corn Grain Yield. Galesville, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return
					Total	Stalk	Root	$4.04
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	31344	178	24.1	53	0	0	0	646
Untreated Check	32007	258	23.9	54	1	0	1	940
Mean	31676	218	24.0	53	0	0	0	793
Probability(%)								
Treatment (T)	55.1	20.1	80.3	14.2	39.1	-	39.1	19.6
LSD(0.10)								
Treatment (T)	NS	NS	NS	NS	NS	-	NS	NS

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3546

Location: Hancock, WI **County:** Waushara

Supported By: HATCH

Site Information

Field: **Previous Crop:** Corn **Soil Type:** Plainfield Sand

Soil Test: **Date:** 10/01/13 **pH:** 6.6 **OM (%)** 0.8 **P (ppm)** 76 **K (ppm)** 47

Plot Management

Tillage Operations: Disk Soil Finisher

Fertilizer:

Preplant Analysis:	N/A	**Rate lbs/A:**	N/A	**Date:**	N/A
Starter Analysis:	10-34-0	**Rate lbs/A:**	3.0 gal/A	**Date:**	4 /30/13
Post plant Analysis:	21-0-0-24S 46-0-0	**Rate lbs/A:**	150 lbs/A 161 lbs/A	**Date:**	
Manure: N/A					

Herbicide: Prowl 2.0 pt/A
Laudis 3.0 oz/A

Insecticide: None

Hybrid: Pioneer P0453AM1

Irrigation: yes

Planting Date: 4/30/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 10/17/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/10/13

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 31818 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-06.

Table: 1311-06. Influence of BioForge on Corn Grain Yield. Hancock, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return
					Total	Stalk	Root	$4.04
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	33143	253	23.1	53	0	0	0	926
Untreated Check	30492	245	22.9	53	0	0	0	897
Mean	31818	249	23.0	53	0	0	0	912
Probability(%)								
Treatment (T)	3.1	24.7	21.1	97.4	-	-	-	27.8
LSD(0.10)								
Treatment (T)	1627	NS	NS	NS	-	-	-	NS

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3531

Location: Janesville, WI **County:** Rock

Supported By: HATCH

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam

Soil Test: **Date:** 10/01/13 **pH:** 6.9 **OM (%)** 3.5 **P (ppm)** 48 **K (ppm)** 154

Plot Management

Tillage Operations: Chisel Field Cultivator

Fertilizer:

Preplant Analysis:	N/A	**Rate lbs/A:**	N/A	**Date:**	N/A
Starter Analysis:	5/1/13	**Rate lbs/A:**	10-34-13	**Date:**	5 /1 /13
Post plant Analysis:	N/A	**Rate lbs/A:**	N/A	**Date:**	N/A
Manure:	N/A				

Herbicide: Lumax 3.0 qt/A
Status 7.0oz/A

Insecticide: None

Hybrid: Dekalb DKC55-09RIB

Irrigation: None

Planting Date: 5/1/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 10/21/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/11/16

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 33617 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-07.

Table: 1311-07. Influence of BioForge on Corn Grain Yield. Janesville, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return $4.04
					Total	Stalk	Root	
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	34090	208	18.6	58	2	2	0	781
Untreated Check	33143	251	18.8	58	5	5	0	938
Mean	33617	229	18.7	58	4	3	0	859
Probability(%)								
Treatment (T)	27.8	2.7	4.6	10.4	30.0	28.8	39.1	2.7
LSD(0.10)								
Treatment (T)	NS	24	0.2	NS	NS	NS	NS	91

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3261

Location: Lancaster, WI **County:** Grant

Supported By: HATCH

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Fayette Silt Loam

Soil Test: **Date:** 10/01/13 **pH:** 6.8 **OM (%)** 2.1 **P (ppm)** 22 **K (ppm)** 94

Plot Management

Tillage Operations: Chisel Plow Turbo-Till Cultivated 6/20/13

Fertilizer:

Preplant Analysis:	46-0-0	**Rate lbs/A:**	125 lbs/A	**Date:**	N/A
Starter Analysis:	10-34-0	**Rate lbs/A:**	3.0 gal/A	**Date:**	5 /14/13
Post plant Analysis:	N/A	**Rate lbs/A:**	N/A	**Date:**	N/A
Manure:	N/A				

Herbicide: Lumax 3.0 qt/A **Insecticide:** Force 4.4 lbs/A

Irrigation: None **Hybrid:** Dekalb DKC55-09RIB

Planting Date: 5/14/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 10/16/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/11/13

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 32765 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-08.

Table: 1311-08. Influence of BioForge on Corn Grain Yield. Lancaster, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return $4.04
					Total	Stalk	Root	
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	32954	123	21.0	55	1	1	0	456
Untreated Check	32575	189	19.9	55	0	0	0	705
Mean	32765	156	20.4	55	0	0	0	580
Probability(%)								
Treatment (T)	61.3	0.9	1.7	75.1	18.2	18.2	-	0.9
LSD(0.10)								
Treatment (T)	NS	26	0.5	NS	NS	NS	-	97

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3534

Location: Seymour, WI **County:** Outagamie

Supported By: HATCH

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Onaway Silt Loam

Soil Test: **Date:** 10/01/13 **pH:** 7.5 **OM (%)** 2.7 **P (ppm)** 41 **K (ppm)** 132

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivated

Fertilizer:

Preplant Analysis:	46-0-0	**Rate lbs/A:**	150 lbs/A	**Date:**	N/A
Starter Analysis:	10-34-0	**Rate lbs/A:**	3.0 gal/A	**Date:**	5 /15/13
Post plant Analysis:	46-0-0	**Rate lbs/A:**	55 lbs/A	**Date:**	6 /26/13
Manure:	N/A				

Herbicide: Harness Xtra 1.7 qt/A
Callisto 3.0 oz/A

Insecticide:

Hybrid: Dekalb DKC42-72

Irrigation: None

Planting Date: 5/15/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 11/12/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/18/13

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 33664 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-09.

Table: 1311-09. Influence of BioForge on Corn Grain Yield. Seymour, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return
					Total	Stalk	Root	$4.04
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	33522	241	20.9	53	0	0	0	891
Untreated Check	33806	248	21.4	53	0	0	0	914
Mean	33664	244	21.1	53	0	0	0	903
Probability(%)								
Treatment (T)	67.1	7.9	33.6	39.5	-	-	-	9.7
LSD(0.10)								
Treatment (T)	NS	6	NS	NS	-	-	-	23

FIELD EXPERIMENT HISTORY

Title: **Corn Grain Yield Response to BioForge**

Experiment: 11BioForge **Year:** 2013

Personnel: J.G. Lauer, K.D. Kohn, and T.H Diallo **Trial ID:** 3537

Location: Valders, WI **County:** Manitowoc

Supported By: HATCH

Site Information

Field: **Previous Crop:** Wheat **Soil Type:** Silt Loam

Soil Test: **Date:** 10/01/13 **pH:** 7.2 **OM (%)** 3.4 **P (ppm)** 31 **K (ppm)** 118

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivated 6/26/13

Fertilizer:

Preplant Analysis:	N/A	**Rate lbs/A:**	N/A	**Date:**	N/A
Starter Analysis:	10-34-0	**Rate lbs/A:**	3.0 gal/A	**Date:**	5 /16/13
Post plant Analysis:	46-0-0	**Rate lbs/A:**	55 lbs/A	**Date:**	6 /26/13
Manure:	10,000 gallon				

Herbicide: Steadfast 1.0 oz/A
Callisto 3.0 oz/A
Atrazine 0.25 lb/A

Insecticide: Force 3G 4.4 lbs/A

Hybrid: Dekalb DKC42-72

Irrigation: None

Planting Date: 5/16/13 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Almaco Precision Planter

Harvest Date: 10/22/13 **Harvest Method:** Massey 8XP

Notes: BioForge applied at 16 oz/A on 7/18/13

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.05 A

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 34375 **plants per acre**

Factors/Treatments:

Treatment:

1) BioForge
2) Untreated Check

Results: Table 1311-10.

Table: 1311-10. Influence of BioForge on Corn Grain Yield. Valders, WI - 2013.

Treatment	Harvest density	Grain yield	Grain moisture	Test weight	Lodged			Return
					Total	Stalk	Root	$4.04
	plants/A	bu/A	%	lb/bu	%	%	%	$/A
BioForge	34090	241	26.5	51	0	0	0	867
Untreated Check	34659	224	30.0	51	0	0	0	791
Mean	34375	233	28.2	51	0	0	0	829
Probability(%)								
Treatment (T)	51.2	45.7	15.7	33.8	-	-	-	40.0
LSD(0.10)								
Treatment (T)	NS	NS	NS	NS	-	-	-	NS