

FIELD EXPERIMENT HISTORY

Title: Corn Inoculant Trial
Experiment: 08 Corn Inoculant Trial **Trial ID:** 2847 **Year:** 2006
Personnel: J. G. Lauer, K.D.Kohn and P.J. Flannery
Location: Arlington, WI **County:** Columbia
Supported By: Brett-Young Seeds Limited

Site Information

Field: ARS427 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 10/15/06 **pH** 7.2 **OM (%)** 3.7 **P (ppm)** 75 **K (ppm)** 254

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Soil Finisher Cultivated 6/14/06
Fertilizer: **Preplant Analysis:** 46-0-0 **Rate lbs/A:** 325 **Date:** 4 /24/06
Starter Analysis: 9-23-30 **Rate lbs/A:** 150 **Date:** 5 /23/06
Post plant Analysis: N/A **Rate lbs/A:** N/A **Date:** N/A
Manure: N/A
Herbicide: Outlook 20 oz/A **Insecticide:** N/A
 Hornet 4.0 oz/A **Hybrid:** Dekalb DKC53-34(RR2YGCB)
Irrigation: None
Planting Date: 5/23/06 **Planting Depth:** 1.5" **Row Width** 30"
Target Plant Density: 30000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 10/23/06 **Harvest Method:** Massey Ferguson 8XP
Notes: Seed treated with Apron XL and Maxim

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 5' x 25' **Experiment Size:** 0.11 Acre
Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 29898 plants per acre

Treatments (Inoculant):

CORN01
 CORN02
 Untreated Check

Results: Table C-45.

**Table C-45. Performance of corn inoculants.
Arlington, WI- 2006.**

| Treatment (inoculant) | Yield | Moisture | Test Weight | Lodging | Grower Return |
|------------------------------|-------|----------|----------------|---------|------------------|
| | bu/A | % | lbs/bu | % | \$/A |
| Check | 231 | 28.5 | 53 | 0 | 670 |
| Corn 01 | 222 | 29.7 | 53 | 1 | 639 |
| Corn 02 | 222 | 29.0 | 53 | 2 | 640 |
| Mean | 225 | 29.1 | 53 | 1 | 650 |
| <u>Probability(%)</u> | | | | | |
| Treatment | 54.8 | 16.8 | 72.9 | 48.8 | 50.7 |
| <u>LSD (0.10)</u> | | | | | |
| Treatment | NS | NS | NS | NS | NS |
| <u>CV(%)</u> | | | | | |
| | 5 | 2 | 1 | 201 | 5 |

FIELD EXPERIMENT HISTORY

Title: Corn Inoculant Trial
Experiment: 08 Corn Inoculant Trial **Trial ID:** 2848 **Year:** 2006
Personnel: J. G. Lauer, K.D.Kohn and P.J. Flannery
Location: Lancaster, WI **County:** Grant
Supported By: Brett-Young Seeds Limited

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Fayette Silt Loam
Soil Test: **Date:** 10/01/06 **pH** 7.5 **OM (%)** 2.9 **P (ppm)** 75 **K (ppm)** 104

Plot Management

Tillage Operations: Soil Finisher Cultivated 6/15/06
Fertilizer: **Preplant Analysis:** 46-0-0 **Rate lbs/A:** 348 **Date:** N/A
Starter Analysis: 9-23-30 **Rate lbs/A:** 150 **Date:** 5 /6 /06
Post plant Analysis: N/A **Rate lbs/A:** N/A **Date:** N/A
Manure: N/A
Herbicide: Aatrex 4L 1.0 qt/A **Insecticide:** N/A
 Harness 1.0 qt/A **Hybrid:** Dekalb DKC53-34(RR2YGCB)
 Glyphosate 1.0 qt/A
Irrigation: None
Planting Date: 5/6/06 **Planting Depth:** 1.5" **Row Width** 30"
Target Plant Density: 30000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 10/12/06 **Harvest Method:** Massey Ferguson 8XP
Notes: Seed treated with Apron XL and Maxim

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 5' x 25' **Experiment Size:** 0.15 Acre
Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 28908 plants per acre

Treatments (Inoculant):

CORN01
 CORN02
 Untreated Check

Results: Table C-46.

**Table C-46. Performance of corn inoculants.
Lancaster, WI - 2006.**

| Treatment (inoculant) | Yield | Moisture | Test Weight | Lodging | Grower Return |
|------------------------------|-------|----------|----------------|---------|------------------|
| | bu/A | % | lbs/bu | % | \$/A |
| Check | 230 | 19.9 | 57 | 3 | 708 |
| Corn 01 | 208 | 20.0 | 56 | 2 | 639 |
| Corn 02 | 230 | 19.7 | 56 | 4 | 708 |
| Mean | 223 | 19.9 | 57 | 3 | 685 |
| <u>Probability(%)</u> | | | | | |
| Treatment | 9.6 | 76.2 | 67.4 | 78.3 | 10.3 |
| <u>LSD (0.10)</u> | | | | | |
| Treatment | 18 | NS | NS | NS | NS |
| <u>CV(%)</u> | | | | | |
| | 5 | 3 | 1 | 128 | 5 |

FIELD EXPERIMENT HISTORY

Title: Corn Inoculant Trial
Experiment: 08 Corn Inoculant Trial **Trial ID:** 2849 **Year:** 2006
Personnel: J. G. Lauer, K.D.Kohn and P.J. Flannery
Location: Marshfield, WI **County:** Wood
Supported By: Brett-Young Seeds Limited

Site Information

Field: W5 **Previous Crop:** Soybean **Soil Type:** Loyal Silt Loam
Soil Test: **Date:** 10/1 /05 **pH** 6.6 **OM (%)** 2.5 **P (ppm)** 39 **K (ppm)** 125

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivated 6/15/06
Fertilizer: **Preplant Analysis:** N/A **Rate lbs/A:** N/A **Date:** N/A
 Starter Analysis: 9-23-30 **Rate lbs/A:** 150 **Date:** 5 /4 /06
 Post plant Analysis: 28-0-0 **Rate lbs/A:** 27 gal **Date:** N/A
 Manure: N/A
Herbicide: Hornet 2.4 oz/A **Insecticide:** N/A
 Outlook 14.0 oz/A **Hybrid:** Dekalb DKC40-08(RR2YGCB)
 Atrazine 1.0 qt/A
 Accent 0.67 oz/A
 Northstar 5.0 oz/A
Irrigation: None
Planting Date: 5/4/06 **Planting Depth:** 1.5" **Row Width** 30"
Target Plant Density: 30000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 10/20/06 **Harvest Method:** Massey Ferguson 8XP
Notes: Seed treated with Apron XL and Maxim

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 5' x 25' **Experiment Size:** 0.15 Acre
Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 29818 plants per acre

Treatments (Inoculant):

CORN01
 CORN02
 Untreated Check

Results: Table C-47.

**Table C-47. Performance of corn inoculants.
Marshfield, WI - 2006.**

| Treatment (inoculant) | Yield bu/A | Moisture % | Test Weight lbs/bu | Lodging % | Grower Return \$/A |
|------------------------------|---------------|---------------|--------------------------|--------------|--------------------------|
| Check | 142 | 32.9 | 53 | 0 | 399 |
| Corn 01 | 140 | 32.1 | 53 | 1 | 395 |
| Corn 02 | 136 | 32.2 | 53 | 0 | 384 |
| Mean | 139 | 32.4 | 53 | 0 | 393 |
| <u>Probability(%)</u> | | | | | |
| Treatment | 85.1 | 63.0 | 64.8 | 44.4 | 87.7 |
| <u>LSD (0.10)</u> | | | | | |
| Treatment | NS | NS | NS | NS | NS |
| <u>CV(%)</u> | | | | | |
| | 10 | 3 | 1 | 300 | 10 |

FIELD EXPERIMENT HISTORY

Title: Corn Inoculant Trial
Experiment: 08 Corn Inoculant Trial **Trial ID:** 2850 **Year:** 2006
Personnel: J. G. Lauer, K.D.Kohn and P.J. Flannery
Location: Valders, WI **County:** Manitowoc
Supported By: Brett-Young Seeds Limited

Site Information

Field: **Previous Crop:** Corn **Soil Type:** Kewaunee Clay Loam
Soil Test: **Date:** 10/15/06 **pH** 6.9 **OM (%)** 2.6 **P (ppm)** 51 **K (ppm)** 90

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivated 6/21/06
Fertilizer: **Preplant Analysis:** N/A **Rate lbs/A:** N/A **Date:** N/A
 Starter Analysis: 9-23-30 **Rate lbs/A:** 150 **Date:** 5 /5 /06
 Post plant Analysis: 34-0-0 **Rate lbs/A:** 147 **Date:** 6 /21/06
 Manure: N/A
Herbicide: Dual II Mag 0.75 pt/A **Insecticide:** N/A
 Accent Gold WDG 2.5 oz/A **Hybrid:** Dekalb DKC40-08(RR2YGCB)
 Callisto 1.5 oz/A
 Atrazine 0.25 lb
Irrigation: None
Planting Date: 5/5/06 **Planting Depth:** 1.5" **Row Width** 30"
Target Plant Density: 30000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 10/25/06 **Harvest Method:** Massey Ferguson 8XP
Notes: Seed treated with Apron XL and Maxim

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 5' x 25' **Experiment Size:** 0.15 Acre
Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 27720 plants per acre

Treatments (Inoculant):

CORN01
 CORN02
 Untreated Check

Results: Table C-48.

**Table C-48. Performance of corn inoculants.
Valders, WI - 2006.**

| Treatment (inoculant) | Yield | Moisture | Test Weight | Lodging | Grower Return |
|------------------------------|-------|----------|----------------|---------|------------------|
| | bu/A | % | lbs/bu | % | \$/A |
| Check | 196 | 20.2 | 56 | 0 | 602 |
| Corn 01 | 196 | 20.1 | 56 | 0 | 600 |
| Corn 02 | 205 | 20.4 | 56 | 0 | 627 |
| Mean | 199 | 20.2 | 56 | 0 | 610 |
| <u>Probability(%)</u> | | | | | |
| Treatment | 51.1 | 69.8 | 54.5 | - | 50.3 |
| <u>LSD (0.10)</u> | | | | | |
| Treatment | NS | NS | NS | NS | NS |
| <u>CV(%)</u> | | | | | |
| | 5 | 2 | 1 | - | 5 |