

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08SeedFungicide **Trial ID** 1449 **Year:** 1999
Personnel: J.G. Lauer, K.D. Kohn, P.J. Flannery, D. Weiersma
Location: Marshfield, WI **County:** Wood
Supported By: Gustufson

Site Information

Field: 3 **Previous Crop:** Alfalfa **Soil Type:** Loyal
Soil Test: **Date:** N/A **pH** 6.7 **OM (%)** 3.0 **P (ppm)** 53 **K (ppm)** 169

Plot Management

Tillage Operations: Moldboard Plow Field Cultivator 1 Cultivation

Fertilizer:		<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
	Preplant	N/A	N/A	N/A
	Starter	6-24-24	150	5 /11/99
	Post plant	33-0-0	136	5 /1 /99
	Manure:	Dairy	30 Tons	

Herbicide: Harness @ 2pt/A **Insecticide:** none
Hornet @ 4 oz/A

Irrigation: none **Hybrid:** See Factors

Planting Date: 5/11/99 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 29000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 10/19/99 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 22' x 10' **Experiment Size:** 0.1 A
Harvest Plot Size: 22' x 5' **Harvest Plant Density:** 26200 plants per acre

Factors/Treatments:

Seed Treatments

Captan 400C + Allegiance + CTS @ 1.75 + 0.1 + 1.0 oz/cwt
LS 274 @ 0.25 oz/cwt
Maxim + Allegiance @ 0.08 + 0.1 oz/cwt
Maxim + Apron XL @ 0.08 + 0.0425 oz/cwt
Maxim + Apron XL + CTS + Assault @ 0.08 + .0425 + 2.5 + 2.0 oz /cwt
Control

Hybrids

Pioneer 3905
Pioneer 3921

Results: Table E-51.

**Table: E-51. Corn Seed Decay and Seedling Blight in Difficult Emergence Environments
Marshfield, WI - 1999**

Seed treatment	Hybrid	Stand population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu
Captan 400C+Allegiance+CTS		25806	25344	1.8	160	23.5	57.3
Control		22902	22572	2.1	146	24.0	57.0
LS 274		28578	26334	0.9	166	23.5	57.8
Maxim+Allegiance		29238	28380	1.8	170	23.3	57.9
Maxim+Apron XL		25674	25278	0.3	160	23.5	57.8
Maxim+Apron XL+Assault+CTS		30162	29370	1.9	175	23.6	57.7
	P3905	24398	23276	1.1	152	23.6	57.0
	P3921	29722	29150	1.8	173	23.6	58.2
Captan 400C+Allegiance+CTS	P3905	22704	22572	1.2	150	23.4	56.9
Control	P3905	17688	17820	2.2	123	24.3	56.1
LS 274	P3905	28248	24420	0.5	163	23.3	57.4
Maxim+Allegiance	P3905	27456	25872	0.9	166	22.8	57.7
Maxim+Apron XL	P3905	22572	21912	0.6	144	24.1	57.1
Maxim+Apron XL+Assault + CTS	P3905	27720	27060	1.4	168	23.4	57.1
Captan 400C+Allegiance+CTS	P3921	28908	28116	2.3	170	23.6	57.8
Control	P3921	28116	27324	1.9	168	23.7	58.0
LS 274	P3921	28908	28248	1.3	168	23.6	58.2
Maxim+Allegiance	P3921	31020	30888	2.7	175	23.8	58.2
Maxim+Apron XL	P3921	28776	28644	0.0	177	22.9	58.6
Maxim+Apron XL+Assault+CTS	P3921	32604	31680	2.5	182	23.7	58.2
Mean		27060	26213	1.5	163	23.6	57.6
Probability (%)							
Seed treatment (S)		0.0	0.1	46.8	4.3	81.7	32.1
Hybrid (H)		0.0	0.0	29.2	0.0	98.5	0.0
S x H		3.4	39.1	84.3	19.8	34.8	63.3
LSD (0.10)							
Seed treatment (S)		2286	2348	NS	15	NS	NS
Hybrid (H)		1320	1356	NS	9	NS	0.4
S x H		3233	NS	NS	NS	NS	NS
CV (%)							
		9	9	121	9	4	1

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Seed Fungicide **Trial ID** 1448 **Year:** 1999
Personnel: J.G. Lauer, K.D. Kohn, P.J. Flannery
Location: Seymour, WI **County:** Outagamie
Supported By: Gustufson

Site Information

Field: **Previous Crop:** Soybean **Soil Type:**
Soil Test: **Date:** N/A **pH** 7.3 **OM (%)** 4.0 **P (ppm)** 22 **K (ppm)** 125

Plot Management

Tillage Operations: Fall Chisel Plow Soil Finisher 1 Cultivation
Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	N/A	N/A	N/A
Starter	6-24-24	150	5 /4 /99
Post plant	N/A	N/A	N/A
Manure:	Dairy	9000 gal	

Herbicide: Northstar @ 4 oz/A **Insecticide:** none
Irrigation: none **Hybrid:** See Factors
Planting Date: 5/3/99 **Planting Depth:** 1.5" **Row Width:** 30"
Target Plant Density: 29000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 10/12/99 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 22' x 10' **Experiment Size:** 0.1 A
Harvest Plot Size: 22'x 5' **Harvest Plant Density:** 23870 plants per acre

Factors/Treatments:

Seed Treatments

Captan 400C + Allegiance + CTS @ 1.75 + 0.1 + 1.0 oz/cwt
LS 274 @ 0.25 oz/cwt
Maxim + Allegiance @ 0.08 + 0.1 oz/cwt
Maxim + Apron XL @ 0.08 + 0.0425 oz/cwt
Maxim + Apron XL + CTS + Assault @ 0.08 + .0425 + 2.5 + 2.0 oz /cwt
Control

Hybrids

Pioneer 3905
Pioneer 3921

Results: Table E-52.

**Table: E-52. Corn Seed Decay and Seedling Blight in Difficult Emergence Environments
Seymour, WI - 1999**

Seed treatment	Hybrid	Stand population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu
Captan 400C+Allegiance+CTS		24816	23826	6.3	156	17.7	62.4
Control		24222	22902	5.5	162	18.0	62.1
LS 274		22770	20922	5.6	148	17.7	62.8
Maxim+Allegiance		25344	24816	6.9	162	17.5	62.6
Maxim+Apron XL		27654	24618	8.1	163	17.4	62.6
Maxim+Apron XL+ Assault+CTS		27918	26136	7.2	169	17.4	62.6
	P3905	23518	22132	3.9	158	17.5	62.1
	P3921	27390	25608	9.3	162	17.7	62.9
Captan 400C+Allegiance+CTS	P3905	22572	21384	5.5	150	17.5	61.9
Control	P3905	21912	21516	3.1	154	17.9	62.0
LS 274	P3905	19668	17160	2.4	137	17.6	62.2
Maxim+Allegiance	P3905	23364	22704	3.9	158	17.2	62.1
Maxim+Apron XL	P3905	27060	24420	4.4	173	17.2	62.6
Maxim+Apron XL+Assault+CTS	P3905	26532	25608	4.2	177	17.4	61.7
Captan 400C+Allegiance + CTS	P3921	27060	26268	7.0	162	17.9	63.0
Control	P3921	26532	24288	7.9	169	18.2	62.2
LS 274	P3921	25872	24684	8.8	158	17.8	63.4
Maxim+Allegiance	P3921	27324	26928	9.8	166	17.7	63.0
Maxim+Apron XL	P3921	28248	24816	11.8	152	17.5	62.6
Maxim+Apron XL+Assault+CTS	P3921	29304	26664	10.3	162	17.3	63.4
Mean		25454	23870	6.6	160	17.6	62.5
Probability (%)							
Seed treatment (S)		0.0	0.9	87.3	5.9	28.2	22.3
Hybrid (H)		0.0	0.0	0.1	37.8	21.3	0.0
S x H		28.1	9.2	86.5	2.3	95.3	4.5
LSD (0.10)							
Seed treatment (S)		1798	2161	NS	11	NS	NS
Hybrid (H)		1038	1248	2.4	NS	NS	0.3
S x H		NS	3057	NS	16	NS	0.7
CV (%)							
		7	9	63	7	3	1

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Seed Fungicide **Trial ID** 1447 **Year:** 1999
Personnel: J.G. Lauer, K.D. Kohn, P.J. Flannery, S. Hendrickson
Location: Valders, WI **County:** Manitowoc
Supported By: Gustufson

Site Information

Field: **Previous Crop:** Alfalfa **Soil Type:** Kewanee
Soil Test: **Date:** N/A **pH** 7.2 **OM (%)** 3.0 **P (ppm)** 49 **K (ppm)** 155

Plot Management

Tillage Operations: Moldboard Plow Field Cultivated 1 Cultivation

Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	N/A	N/A	N/A
Starter	6-24-24	150	5 /3 /99
Post plant	N/A	N/A	N/A
Manure:	Dairy	12000 gal	

Herbicide: Accent @ .33 oz/A **Insecticide:** none
Northstar @ 4 oz/A

Irrigation: none **Hybrid:** See Factors

Planting Date: 5/3/99 **Planting Depth:** 1.5" **Row Width:** 30"
Target Plant Density: 29000 plants per acre **Planting Method:** Kinze Plot Planter
Harvest Date: 10/13/99 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 22' x 10' **Experiment Size:** 0.1 A
Harvest Plot Size: 22'x 5' **Harvest Plant Density:** 30800 plants per acre

Factors/Treatments:

Seed Treatments

Captan 400C + Allegiance + CTS @ 1.75 + 0.1 + 1.0 oz/cwt
LS 274 @ 0.25 oz/cwt
Maxim + Allegiance @ 0.08 + 0.1 oz/cwt
Maxim + Apron XL @ 0.08 + 0.0425 oz/cwt
Maxim + Apron XL + CTS + Assault @ 0.08 + .0425 + 2.5 + 2.0 oz /cwt
Control

Hybrids

Pioneer 3905
Pioneer 3921

Results: Table E-53.

**Table: E-53. Corn Seed Decay and Seedling Blight in Difficult Emergence Environments
Valders, WI - 1999**

Seed treatment	Hybrid	Stand population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu
Captan 400C+Allegiance+CTS		31812	31350	5.5	182	17.2	60.8
Control		29502	29568	6.7	189	17.1	60.4
LS 274		31284	30294	10.2	175	17.0	60.8
Maxim+Allegiance		31746	30624	8.1	183	16.7	61.2
Maxim+Apron XL		32406	32076	7.2	182	16.9	60.7
Maxim+Apron XL+Assault+CTS		31614	30888	6.4	187	17.0	60.8
	P3905	30008	29194	4.9	190	17.0	60.1
	P3921	32780	32406	9.8	176	17.0	61.5
Captan 400C+Allegiance+CTS	P3905	30492	29964	1.7	195	17.2	60.8
Control	P3905	26532	27456	7.0	194	17.0	59.6
LS 274	P3905	29568	28512	5.1	185	16.9	59.9
Maxim+Allegiance	P3905	31020	29304	6.2	190	16.8	60.3
Maxim+Apron XL	P3905	31812	30756	6.9	189	16.6	60.1
Maxim+Apron XL+Assault+CTS	P3905	30624	29172	2.3	191	17.3	59.8
Captan 400C+Allegiance+CTS	P3921	33132	32736	9.3	170	17.3	60.8
Control	P3921	32472	31680	6.3	184	17.1	61.1
LS 274	P3921	33000	32076	15.2	165	17.1	61.7
Maxim+Allegiance	P3921	32472	31944	9.9	177	16.6	62.0
Maxim+Apron XL	P3921	33000	33396	7.5	176	17.2	61.4
Maxim+Apron XL+Assault+CTS	P3921	32604	32604	10.5	183	16.7	61.7
Mean		31394	30800	7.3	183	17.0	60.8
Probability (%)							
Seed treatment (S)		25.6	14.0	2.8	48.9	61.3	54.5
Hybrid (H)		0.1	0.0	0.0	0.2	97.3	0.0
S x H		38.9	93.2	0.2	84.0	45.6	19.3
LSD (0.10)							
Seed treatment (S)		NS	NS	2.3	NS	NS	NS
Hybrid (H)		1172	886	1.3	7	NS	0.4
S x H		NS	NS	3.2	NS	NS	NS
CV (%)		7	5	31	7	3	1