

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Seed Fungicide **Trial ID:** 2243 **Year:** 2001
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Arlington, WI **County:** Columbia
Supported By: Gustufson

Site Information

Field: 408 **Previous Crop:** Soybean **Soil Type:** Plano Sit Loam
Soil Test: **Date:** 11/19/01 **pH** 6.6 **OM (%)** 3.0 **P (ppm)** 81 **K (ppm)** 187

Plot Management

Tillage Operations: Chisel Plow Soil Finisher Cultivated

Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	46-0-0	325	4 /26/01
Starter	6-24-24	150	4 /28/01
Post plant	N/A	N/A	N/A
Manure:	None	N/A	

Herbicide: Harness 2.5 oz/A
Permit 0.66 oz/A **Insecticide:**

Irrigation: None **Hybrid:** See Factors

Planting Date: 4/28/01 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 10/5/01 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 23' x10' **Experiment Size:** 0.17 A
Harvest Plot Size: 23' x 5' **Harvest Plant Density:** 32000 plants per acre

Factors/Treatments:

Seed Treatments:

Control;
Maxim XL @ 0.167 fl oz/cwt;
Captan 400C @ 1.76 fl oz/cwt+CTS @ 1.0 oz/cwt;
LS274 @ 0.25 oz wt/cwt;
Maxim XL @ 0.167 fl oz/cwt+Gaucho @ 0.16 oz/cwt+CTS @ 1.0 oz/cwt;

Hybrids:

Pioneer 38P05
Pioneer 39F06

Results: TableC-31.

**Table C-31. Corn Seed Decay and Seedling Blight in Difficult Emergence Environr
Arlington, WI - 2001**

Hybrid	Seed treatment	Population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu	Grower return \$/A
	Captan400C+CTC	31250	32197	1	190	20.2	59	392
	LS274	32070	32007	0	195	20.1	58	403
	MaximXL	31755	31565	1	191	20.3	58	395
	MaximXL+Gaucho	32070	32260	2	197	20.3	58	407
	Control	31565	31628	0	199	20.1	59	412
Pioneer 38P05		31616	31893	1	209	20.7	58	431
Pioneer 39F06		31868	31969	0	178	19.6	59	370
Pioneer 38P05	Captan400C+CTC	31060	32575	1	202	20.7	58	416
Pioneer 38P05	LS274	32197	31565	0	210	20.6	58	433
Pioneer 38P05	MaximXL	31818	31313	2	202	20.9	58	415
Pioneer 38P05	MaximXL+Gaucho	31944	32449	2	208	20.7	58	429
Pioneer 38P05	Control	31060	31565	1	224	20.7	58	462
Pioneer 39F06	Captan400C+CTC	31439	31818	1	177	19.7	59	368
Pioneer 39F06	LS274	31944	32449	0	180	19.6	59	373
Pioneer 39F06	MaximXL	31691	31818	0	180	19.7	59	374
Pioneer 39F06	MaximXL+Gaucho	32197	32070	1	180	19.6	59	374
Pioneer 39F06	Control	32070	31691	0	174	19.5	59	363
Mean		31742	31931	1	194	20.2	58	402
Probability (%)								
Hybrid (H)		42.6	83.6	10.6	0.0	0.0	0.0	0.0
Seed treatment (S)		42.0	64.7	12.4	19.6	67.9	96.6	19.2
S x H		72.6	62.2	40.7	2.6	86.8	48.0	2.8
LSD (0.10)								
Hybrid (H)		NS	NS	NS	5	0.2	1	9
Seed treatment (S)		NS	NS	NS	NS	NS	NS	NS
S x H		NS	NS	NS	10	NS	NS	21
CV (%)								
		3	3	137	4	1	1	4

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Seed Fungicide **Trial ID:** 2244 **Year:** 2001
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Marshfield, WI **County:** Wood
Supported By: Gustufson

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Loyal Silt Loam
Soil Test: **Date:** 11/1 /01 **pH** 7.2 **OM (%)** 3.0 **P (ppm)** 48 **K (ppm)** 147

Plot Management

Tillage Operations: Moldboard Plow Field Cultivator Cultivated

Fertilizer:		<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
	Preplant	N/A	N/A	N/A
	Starter	6-24-24	150	5 /18/01
	Post plant	34-0-0	350	N/A
	Manure:	None	N/A	

Herbicide: Harness 1.0 qt/A **Insecticide:** None
Hornet 2.4 oz/A

Irrigation: None **Hybrid:** See Factors

Planting Date: 5/18/01 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 11/5/01 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 23' x10' **Experiment Size:** 0.17 A
Harvest Plot Size: 23' x 5' **Harvest Plant Density:** 25000 plants per acre

Factors/Treatments:

Seed Treatments:

Control;
Maxim XL @ 0.167 fl oz/cwt;
Captan 400C @ 1.76 fl oz/cwt+CTS @ 1.0 oz/cwt;
LS274 @ 0.25 oz wt/cwt;
Maxim XL @ 0.167 fl oz/cwt+Gaucho @ 0.16 oz/cwt+CTS @ 1.0 oz/cwt;

Hybrids:

Pioneer 38P05
Pioneer 39F06

Results: TableC-32.

**Table C-32. Corn Seed Decay and Seedling Blight in Difficult Emergence Environr
Marshfield, WI - 2001**

Hybrid	Seed treatment	Population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu	Grower return \$/A
	Captan400C+CTC	27841	26136	4	151	22.9	53	306
	LS274	26894	26010	5	147	22.5	53	298
	MaximXL	25000	24810	3	142	22.5	53	289
	MaximXL+Gaucho	30176	29293	6	161	23.0	53	326
	Control	18560	18245	2	116	22.7	52	235
Pioneer 38P05		25757	24747	6	151	23.9	52	305
Pioneer 39F06		25631	25050	2	135	21.5	54	276
Pioneer 38P05	Captan400C+CTC	27146	24873	6	159	23.9	52	321
Pioneer 38P05	LS274	26389	25378	8	151	23.7	52	304
Pioneer 38P05	MaximXL	25631	25378	4	150	23.6	52	302
Pioneer 38P05	MaximXL+Gaucho	29924	29166	8	170	24.2	53	341
Pioneer 38P05	Control	19697	18939	3	128	24.1	51	258
Pioneer 39F06	Captan400C+CTC	28535	27399	2	143	21.8	54	292
Pioneer 39F06	LS274	27399	26641	2	143	21.4	54	292
Pioneer 39F06	MaximXL	24368	24242	2	135	21.3	53	276
Pioneer 39F06	MaximXL+Gaucho	30429	29419	4	152	21.7	53	310
Pioneer 39F06	Control	17424	17550	1	103	21.3	53	211
Mean		25694	24899	4	143	22.7	53	291
Probability (%)								
Hybrid (H)		91.9	80.1	0.7	0.8	0.0	0.0	2.2
Seed treatment (S)		0.0	0.0	13.5	0.1	34.6	25.6	0.1
S x H		85.8	81.7	72.2	90.3	71.7	26.9	90.3
LSD (0.10)								
Hybrid (H)		NS	NS	2	12	0.3	1	20
Seed treatment (S)		3383	3249	NS	15	NS	NS	31
S x H		NS	NS	NS	NS	NS	NS	NS
CV (%)								
		13	13	78	11	2	1	11

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Seed Fungicide **Trial ID:** 2245 **Year:** 2001
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Seymour, WI **County:** Outagamie
Supported By: Gustufson

Site Information

Field: **Previous Crop:** Corn **Soil Type:** Clay Loam
Soil Test: **Date:** N/A **pH** 7.1 **OM (%)** 3.7 **P (ppm)** 42 **K (ppm)** 210

Plot Management

Tillage Operations: Chisel Plow Soil Finisher Cultivated

Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	N/A	N/A	N/A
Starter	6-24-24	150	5 /15/01
Post plant	N/A	N/A	N/A
Manure:	Manure	9000gal/A	

Herbicide: Accent 0.33 oz/A Northstar 4.0 oz/A **Insecticide:** Lorsban @ 7 lbs/A

Irrigation: none **Hybrid:** See Factors

Planting Date: 5/15/01 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 10/29/01 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 23' x10' **Experiment Size:** 0.17 A
Harvest Plot Size: 23' x 5' **Harvest Plant Density:** 30000 plants per acre

Factors/Treatments:

Seed Treatments:

Control;
Maxim XL @ 0.167 fl oz/cwt;
Captan 400C @ 1.76 fl oz/cwt+CTS @ 1.0 oz/cwt;
LS274 @ 0.25 oz wt/cwt;
Maxim XL @ 0.167 fl oz/cwt+Gaucho @ 0.16 oz/cwt+CTS @ 1.0 oz/cwt;

Hybrids:

Pioneer 38P05
Pioneer 39F06

Results: TableC-33.

**Table C-33. Corn Seed Decay and Seedling Blight in Difficult Emergence Environr
Seymour, WI - 2001+D29**

Hybrid	Seed treatment	Population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu	Grower return \$/A
	Captan400C+CTC	29924	30113	3	140	20.1	55	289
	LS274	29734	30681	3	126	19.9	56	262
	MaximXL	29166	30303	4	149	20.3	55	307
	MaximXL+Gaucho	28977	29734	4	139	19.8	55	288
	Control	29229	29293	9	124	20.5	54	257
Pioneer 38P05		29091	29242	9	141	21.0	54	291
Pioneer 39F06		29722	30808	3	133	19.6	56	276
Pioneer 38P05	Captan400C+CTC	29545	30429	4	154	20.8	54	317
Pioneer 38P05	LS274	29671	29798					
Pioneer 38P05	MaximXL	28661	30176	6	159	21.1	54	326
Pioneer 38P05	MaximXL+Gaucho	27904	28156	11	127	20.4	54	261
Pioneer 38P05	Control	29671	27651	14	126	21.5	53	258
Pioneer 39F06	Captan400C+CTC	30303	29798	2	130	19.6	56	270
Pioneer 39F06	LS274	29798	31565	3	126	19.9	56	262
Pioneer 39F06	MaximXL	29671	30429	3	139	19.6	56	289
Pioneer 39F06	MaximXL+Gaucho	30050	31313	0	147	19.5	56	306
Pioneer 39F06	Control	28787	30934	5	123	19.6	56	256
Mean		29406	30025	5	136	20.2	55	282
Probability (%)								
Hybrid (H)		13.3	0.4	0.4	18.7	0.0	0.1	26.3
Seed treatment (S)		53.8	42.5	18.7	13.4	53.7	83.3	13.0
S x H		23.0	6.4	18.9	10.7	55.1	81.9	11.1
LSD (0.10)								
Hybrid (H)		NS	820	3	NS	0.3	1	NS
Seed treatment (S)		NS	NS	NS	NS	NS	NS	NS
S x H		NS	1834	NS	NS	NS	NS	NS
CV (%)								
		4	4	84	11	3	2	12

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Seed Fungicide **Trial ID:** 2246 **Year:** 2001
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:** Corn **Soil Type:** Kewanee Clay Loam
Soil Test: **Date:** 11/1 /01 **pH** 7.8 **OM (%)** 2.8 **P (ppm)** 40 **K (ppm)** 204

Plot Management

Tillage Operations: Moldboard Plow Field Cultivator Cultivated

Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	N/A	N/A	N/A
Starter	6-24-24	150	5 /2 /01
Post plant	N/A	N/A	N/A
Manure:	Manure	9000 gal/A	

Herbicide: Surpass 1.0 pt/A
Accent 0.33 oz/A
Distinct 4.0 oz/A **Insecticide:** Lorsban @ 7 lbs/A

Irrigation: None **Hybrid:** See Factors

Planting Date: 5/2/01 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 32000 plants per acre **Planting Method:** Kinze Plot Planter

Harvest Date: 11/1/01 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 23' x10' **Experiment Size:** 0.17 A
Harvest Plot Size: 23' x 5' **Harvest Plant Density:** 30000 plants per acre

Factors/Treatments:

Seed Treatments:

Control;
Maxim XL @ 0.167 fl oz/cwt;
Captan 400C @ 1.76 fl oz/cwt+CTS @ 1.0 oz/cwt;
LS274 @ 0.25 oz wt/cwt;
Maxim XL @ 0.167 fl oz/cwt+Gaucho @ 0.16 oz/cwt+CTS @ 1.0 oz/cwt;

Hybrids:

Pioneer 38P05
Pioneer 39F06

Results: TableC-34.

**Table C-34. Corn Seed Decay and Seedling Blight in Difficult Emergence Environr
Valders, WI - 2001**

Hybrid	Seed treatment	Population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu	Grower return \$/A
	Captan400C+CTC	29671	30113	0	91	23.5	55	183
	LS274	30239	30303	0	84	23.0	56	169
	MaximXL	30239	29924	0	69	24.2	55	138
	MaximXL+Gaucho	29987	30997	0	90	22.7	56	184
	Control	27146	27967	1	82	24.0	55	166
Pioneer 38P05		29343	29596	0	86	24.6	55	172
Pioneer 39F06		29570	30126	0	80	22.3	56	163
Pioneer 38P05	Captan400C+CTC	29924	30303	0	92	24.9	54	184
Pioneer 38P05	LS274	29924	29798	0	89	23.9	55	180
Pioneer 38P05	MaximXL	31060	30050	0	71	25.7	54	141
Pioneer 38P05	MaximXL+Gaucho	30303	30808	1	106	23.3	56	215
Pioneer 38P05	Control	25505	27020	0	78	24.9	55	157
Pioneer 39F06	Captan400C+CTC	29419	29924	0	90	22.6	56	183
Pioneer 39F06	LS274	30555	30808	0	78	22.1	56	159
Pioneer 39F06	MaximXL	29419	29798	0	65	21.9	56	133
Pioneer 39F06	MaximXL+Gaucho	29671	31186	0	75	22.2	57	152
Pioneer 39F06	Control	28787	28914	1	88	22.7	56	179
Mean		29457	29861	0	83	23.5	56	167
Probability (%)								
Hybrid (H)		70.3	10.9	56.3	44.4	0.0	0.5	37.3
Seed treatment (S)		1.7	0.0	52.5	60.7	65.9	96.9	67.2
S x H		12.8	17.3	69.5	85.8	53.5	59.2	85.6
LSD (0.10)								
Hybrid (H)		NS	NS	NS	NS	1.0	1	NS
Seed treatment (S)		1610	861	NS	NS	NS	NS	NS
S x H		NS	NS	NS	NS	NS	NS	NS
CV (%)								
		5	3	299	28	5	2	29