

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Seed Fungicide **Trial ID** 1460 **Year:** 2000
Personnel: J.G. Lauer, K.D. Kohn, P.J. Flannery, M. Kral, D. Weiersma
Location: Marshfield, WI **County:** Wood
Supported By: Gustufson

Site Information

Field: 3 **Previous Crop:** Corn **Soil Type:** Loyal
Soil Test: **Date:** N/A **pH** 7.1 **OM (%)** 3.1 **P (ppm)** 53 **K (ppm)** 168

Plot Management

Tillage Operations: Moldboard Plow Field Cultivator 1 Cultivation

Fertilizer:	Analysis	Rate	Date
Preplant	46-0-0	100	N/A
Starter	6-24-24	150	5 /1 /00
Post plant	N/A	N/A	N/A
Manure:	Dairy	30 Tons	

Herbicide: Harness @ 2 pt/A Insecticide: none
Hornet @ 3.2 oz/A

Irrigation: none **Hybrid:** See Factors

Planting Date: 5/1/00 **Planting Depth:** 1.5" **Row Width:** 30"

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

Harvest Date: 10/30/00 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 23' x 10' **Experiment Size:** 0.1 A
Harvest Plot Size: 23' x 5' **Harvest Plant Density:** 28003 plants per acre

Factors/Treatments:

Seed Treatments:

Captan 400C @ 1.75 oz+ Allegiance @ 0.1 oz+CTS @ 1.0 oz;
Control;
L1027-A1 @ 0.25 oz;
Maxim XL @ 0.167 fl oz;
Maxim XL @ 0.167 fl oz+ Barracuda @ 2.0 oz;
Maxim XL @ 0.167 fl oz+Gaucho @ 1.6 oz;
Maxim(4 FS) @ 0.08+Allegiance @ 0.01 oz

Hybrids:

Pioneer 38P05
Pioneer 39F06

Results: Table E-21.

**Table E-21. Corn Seed Decay and Seedling Blight in Difficult Emergence Environments
Marshfield, WI - 2000**

Seed treatment	Hybrid	Stand population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu
	Pioneer 38P05	30591	27940	1.7	190	22.0	56
	Pioneer 39F06	30411	28066	0.2	168	21.9	58
Captan 400C+Allegiance+CTS		30366	27020	0.9	178	22.1	57
Control		30113	28409	1.1	178	21.8	57
L1027-A1		30808	28787	0.9	181	21.9	58
Maxim XL		30681	27462	0.7	180	21.9	57
Maxim XL+Barracuda		30239	28409	1.3	179	22.0	58
Maxim XL+Gaucho		30997	27651	0.6	180	21.8	57
Maxim(4 FS)+Allegiance		30303	28282	1.2	178	22.0	57
Captan 400C+Allegiance+CTS	Pioneer 38P05	30808	28661	1.8	185	22.1	56
Captan 400C+Allegiance+CTS	Pioneer 39F06	29924	25378	0.0	171	22.1	58
Control	Pioneer 38P05	30176	28535	2.2	190	21.8	57
Control	Pioneer 39F06	30050	28282	0.0	165	21.8	58
L1027-A1	Pioneer 38P05	31186	28409	1.3	193	21.9	57
L1027-A1	Pioneer 39F06	30429	29166	0.4	168	22.0	58
Maxim XL	Pioneer 38P05	30808	27399	1.3	194	21.9	57
Maxim XL	Pioneer 39F06	30555	27525	0.0	166	22.0	57
Maxim XL+Barracuda	Pioneer 38P05	30050	28030	1.8	189	22.3	57
Maxim XL+Barracuda	Pioneer 39F06	30429	28787	0.9	169	21.7	58
Maxim XL+Gaucho	Pioneer 38P05	30934	26641	1.3	194	21.8	56
Maxim XL+Gaucho	Pioneer 39F06	31060	28661	0.0	165	21.8	58
Maxim(4 FS)+Allegiance	Pioneer 38P05	30176	27904	2.4	182	22.2	56
Maxim(4 FS)+Allegiance	Pioneer 39F06	30429	28661	0.0	174	21.9	58
Mean		30501	28003	1.0	179	21.9	57
Probability (%)							
Seed treatment (S)		43.2	75.3	91.4	98.1	22.5	33.0
Hybrid (H)		46.2	84.4	0.0	0.0	30.6	0.0
S x H		75.4	46.3	86.3	6.6	10.3	78.6
LSD (0.10)							
Seed treatment (S)		NS	NS	NS	NS	NS	NS
Hybrid (H)		NS	NS	0.6	3.4	NS	0.4
S x H		NS	NS	NS	8.9	NS	NS
CV (%)							
		3	7	120	4	1	1

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Seed Fungicide **Trial ID** 1461 **Year:** 2000
Personnel: J.G. Lauer, K.D. Kohn, P.J. Flannery, M. Kral
Location: Seymour, WI **County:** Outagamie
Supported By: Gustufson

Site Information

Field: **Previous Crop:** Corn **Soil Type:**
Soil Test: **Date:** N/A **pH** 7.1 **OM (%)** 4.0 **P (ppm)** 42 **K (ppm)** 210

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 /2 /00
Post plant	N/A	N/A	N/A
Manure:	Dairy	9000 gal	

Herbicide: Accent @ 0.33 oz/A **Insecticide:** Lorsban @ 7 lbs/A
Northstar @ 4 oz/A

Irrigation: none **Hybrid:** See Factors

Planting Date: 5/2/00 **Planting Depth:** 1.5" **Row Width:** 30"

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

Harvest Date: 10/16/00 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 23' x 10' **Experiment Size:** 0.1 A
Harvest Plot Size: 23' x 5' **Harvest Plant Density:** 29094 plants per acre

Factors/Treatments:

Seed Treatments:

Captan 400C @ 1.75 oz+ Allegiance @ 0.1 oz+CTS @ 1.0 oz;
Control;
L1027-A1 @ 0.25 oz;
Maxim XL @ 0.167 fl oz;
Maxim XL @ 0.167 fl oz+ Barracuda @ 2.0 oz;
Maxim XL @ 0.167 fl oz+Gaucho @ 1.6 oz;
Maxim(4 FS) @ 0.08+Allegiance @ 0.01 oz

Hybrids:

Pioneer 38P05
Pioneer 39F06

Results: Table E-22.

**Table E-22. Corn Seed Decay and Seedling Blight in Difficult Emergence Environments
Seymour, WI - 2000**

Seed treatment	Hybrid	Stand population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu
	Pioneer 38P05	31186	28842	3.4	178	21.9	56
	Pioneer 39F06	30862	29347	1.2	165	19.9	58
Captan 400C+Allegiance+CTS		30808	28409	1.6	178	21.1	58
Control		30618	29166	2.4	171	21.5	57
L1027-A1		31818	28787	3.4	173	20.8	57
Maxim XL		31060	30176	2.6	170	20.9	57
Maxim XL+Barracuda		31250	29040	2.4	168	21.0	57
Maxim XL+Gaucho		30555	29229	1.5	170	20.7	57
Maxim(4 FS)+Allegiance		31060	28851	2.2	171	20.5	57
Captan 400C+Allegiance+CTS	Pioneer 38P05	30808	28156	2.7	183	22.3	56
Captan 400C+Allegiance+CTS	Pioneer 39F06	30808	28661	0.4	174	19.9	59
Control	Pioneer 38P05	30555	28914	3.5	176	22.8	55
Control	Pioneer 39F06	30681	29419	1.3	166	20.1	58
L1027-A1	Pioneer 38P05	32197	28787	4.4	175	21.9	56
L1027-A1	Pioneer 39F06	31439	28787	2.5	170	19.8	59
Maxim XL	Pioneer 38P05	31313	29671	4.3	178	21.8	56
Maxim XL	Pioneer 39F06	30808	30681	0.8	162	20.0	58
Maxim XL+Barracuda	Pioneer 38P05	30808	28156	4.0	173	21.9	56
Maxim XL+Barracuda	Pioneer 39F06	31691	29924	0.9	163	20.1	58
Maxim XL+Gaucho	Pioneer 38P05	31060	29671	1.7	183	21.6	56
Maxim XL+Gaucho	Pioneer 39F06	30050	28787	1.3	157	19.7	58
Maxim(4 FS)+Allegiance	Pioneer 38P05	31565	28535	3.1	175	21.1	57
Maxim(4 FS)+Allegiance	Pioneer 39F06	30555	29166	1.3	167	19.8	58
Mean		31024	29094	2.3	172	20.9	57
Probability (%)							
Seed treatment (S)		33.1	41.6	45.5	27.3	33.0	27.6
Hybrid (H)		28.2	22.5	0.0	0.0	0.0	0.0
S x H		58.0	73.9	76.1	20.8	68.3	41.3
LSD (0.10)							
Seed treatment (S)		NS	NS	NS	NS	NS	NS
Hybrid (H)		NS	NS	0.9	3.7	0.4	0.4
S x H		NS	NS	NS	NS	NS	NS
CV (%)							
		3	5	71	4	3	1

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Seed Fungicide **Trial ID** 1462 **Year:** 2000
Personnel: J.G. Lauer, K.D. Kohn, P.J. Flannery, M. Kral, S. Hendrickson
Location: Valders, WI **County:** Manitowoc
Supported By: Gustufson

Site Information

Field: **Previous Crop:** Wheat **Soil Type:** Kewanee
Soil Test: **Date:** N/A **pH** 7.0 **OM (%)** 3.0 **P (ppm)** 53 **K (ppm)** 128

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 /2 /00
Post plant	N/A	N/A	N/A
Manure:	Dairy	9000 gal	

Herbicide: Accent @ 0.33 oz/A **Insecticide:** Lorsban @ 7 lbs/A
Northstar @ 4 oz/A

Irrigation: none **Hybrid:** See Factors

Planting Date: 5/2/00 **Planting Depth:** 1.5" **Row Width:** 30"

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

Harvest Date: 10/17/00 **Harvest Method:** Kincaid Plot Combine

Experimental Design

Design: RCB **Replications:** 3
Plot Size Seeded: 23' x 10' **Experiment Size:** 0.1 A
Harvest Plot Size: 23' x 5' **Harvest Plant Density:** 28472 plants per acre

Factors/Treatments:

Seed Treatments:

Captan 400C @ 1.75 oz+ Allegiance @ 0.1 oz+CTS @ 1.0 oz;
Control;
L1027-A1 @ 0.25 oz;
Maxim XL @ 0.167 fl oz;
Maxim XL @ 0.167 fl oz+ Barracuda @ 2.0 oz;
Maxim XL @ 0.167 fl oz+Gaucho @ 1.6 oz;
Maxim(4 FS) @ 0.08+Allegiance @ 0.01 oz

Hybrids:

Pioneer 38P05
Pioneer 39F06

Results: Table E-23.

**Table E-23. Corn Seed Decay and Seedling Blight in Difficult Emergence Environments
Valders, WI - 2000**

Seed treatment	Hybrid	Stand population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu
	Pioneer 38P05	30645	29040	2.0	172	23.1	53
	Pioneer 39F06	30140	28445	1.0	160	22.2	54
Captan 400C+Allegiance+CTS		30176	28409	1.8	162	22.7	53
Control		30618	28030	2.5	167	22.5	53
L1027-A1		30303	28219	2.9	166	22.8	54
Maxim XL		29734	28093	0.4	162	22.9	53
Maxim XL+Barracuda		30492	29671	1.0	166	22.4	53
Maxim XL+Gaucho		30934	29293	1.5	169	22.3	54
Maxim(4 FS)+Allegiance		30492	29482	0.4	169	22.8	53
Captan 400C+Allegiance+CTS	Pioneer 38P05	30429	28661	2.3	166	23.4	52
Captan 400C+Allegiance+CTS	Pioneer 39F06	29924	28156	1.3	158	21.9	54
Control	Pioneer 38P05	31060	29545	3.0	179	22.6	53
Control	Pioneer 39F06	30176	26515	2.0	155	22.4	54
L1027-A1	Pioneer 38P05	30681	28914	3.5	176	23.5	53
L1027-A1	Pioneer 39F06	29924	27525	2.3	156	22.2	55
Maxim XL	Pioneer 38P05	29419	27525	0.4	166	23.4	53
Maxim XL	Pioneer 39F06	30050	28661	0.4	157	22.4	54
Maxim XL+Barracuda	Pioneer 38P05	31186	29545	1.2	167	22.7	53
Maxim XL+Barracuda	Pioneer 39F06	29798	29798	0.8	164	22.0	53
Maxim XL+Gaucho	Pioneer 38P05	30808	29924	3.0	174	22.8	53
Maxim XL+Gaucho	Pioneer 39F06	31060	28661	0.0	165	21.7	54
Maxim(4 FS)+Allegiance	Pioneer 38P05	30934	29166	0.9	172	23.0	53
Maxim(4 FS)+Allegiance	Pioneer 39F06	30050	29798	0.0	167	22.5	54
Mean		30393	28742	1.5	166	22.6	53
Probability (%)							
Seed treatment (S)		69.2	54.4	7.7	79.1	64.4	54.8
Hybrid (H)		16.6	31.6	4.2	0.1	0.0	0.0
S x H		75.1	53.8	79.4	58.7	68.2	47.4
LSD (0.10)							
Seed treatment (S)		NS	NS	1.6	NS	NS	NS
Hybrid (H)		NS	NS	0.8	14.2	0.4	0.4
S x H		NS	NS	NS	NS	NS	NS
CV (%)							
		4	7	106	6	3	1