

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Syngenta Crop Protection **Trial ID:** 2247 **Year:** 2001
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Arlington, WI **County:** Columbia
Supported By: Syngenta Crop Protection

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 11/01/01 **pH** 6.9 **OM (%)** 2.9 **P (ppm)** 80 **K (ppm)** 193

Plot Management

Tillage Operations: Fall 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 pt/A
Permitt 0.66 oz/A **Insecticide:** None

Irrigation: None **Hybrid:** NK Brand N43-C4

Planting Date: 5/28/01 **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' x 10' **Experiment Size:** 0.18 A
Harvest Plot Size: 22' x 5' **Harvest Plant Density:** 30000 plants per acre

Factors/Treatments:

Treatments:

Apron XL (3LS) @ 1 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + CGA 301940 @ 0.25 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + CGA 301940 @ 0.50 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + CGA 301940 @ 1.0 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + CGA 301940 @ 2.0 GA/cwt;
CGA 301940 @ 1.0 GA/cwt;
Captan 4L @ 55 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + Apron XL 3 LS @ 1GA/cwt;
Untreated Check;

Results: TableC-37.

**Table C-35. Corn Seed Decay and Seedling Blight in Difficult Emergence Environn
Arlington, WI - 2001**

Seed treatment	Population on May 10 plants/A	Population at V3 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu	Grower return \$/A
ApronXL	26262	29924	25757	1	208	20.4	56	430
MaximXL	27399	31186	27525	2	211	20.2	56	436
MaximXL+CGA301940 @ 0.25	27399	30555	24242	2	213	20.5	56	439
MaximXL+CGA301940 @ 0.5	28661	31565	27525	1	221	20.2	56	458
MaximXL+CGA301940 @ 1.0	26767	30429	26010	2	213	20.4	56	440
MaximXL+CGA301940 @ 2.0	25883	30934	26136	3	212	20.5	56	438
CGA301940 @ 1.0	25505	31439	26389	2	217	20.2	56	449
Captan4L+AllegianceFL	28535	30808	25883	2	210	20.1	55	435
MaximXL+Apron	28282	31565	27020	2	219	20.1	55	454
Control	23990	29798	26136	1	209	20.2	55	432
Mean	26868	30820	26262	2	213	20.3	56	441
Probability (%)								
Seed treatment (S)	10.9	6.0	55.6	94.5	16.0	56.5	61.1	16.0
LSD (0.10)								
Seed treatment (S)	NS	1030	NS	NS	NS	NS	NS	NS
CV (%)								
	7	2	7	82	3	1	1	3

FIELD EXPERIMENT HISTORY

Title: Corn Seed Decay and Seedling Blight in Reduced Tillage Systems
Experiment: 08 Syngenta Crop Protection **Trial ID:** 2248 **Year:** 2001
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Fond du Lac, WI **County:** Fond du Lac
Supported By: Syngenta Crop Protection

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Virgil Silt Loam
Soil Test: **Date:** 11/01/01 **pH** 6.9 **OM (%)** 4.0 **P (ppm)** 50 **K (ppm)** 98

Plot Management

Tillage Operations: Moldboard Plow Field Cultivator Cultivated

Fertilizer:

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
Preplant	82-0-0	130	N/A
Starter	6-24-24	150	5 /20/01
Post plant	46-0-0	150	6 /29/01
Manure:	None	N/A	

Herbicide: Dual II Mag 0.75 pt/A
Accent Gold 2.9 oz/A
Atrazine 0.5 lb/A **Insecticide:** None

Irrigation: None **Hybrid:** NK Brand N43-C4

Planting Date: 5/20/01 **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' x 10' **Experiment Size:** 0.18 A
Harvest Plot Size: 22' x 5' **Harvest Plant Density:** 30000 plants per acre

Factors/Treatments:

Treatments:

Apron XL (3LS) @ 1 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + CGA 301940 @ 0.25 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + CGA 301940 @ 0.50 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + CGA 301940 @ 1.0 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + CGA 301940 @ 2.0 GA/cwt;
CGA 301940 @ 1.0 GA/cwt;
Captan 4L @ 55 GA/cwt;
Maxim XL (2.7 FS) @ 3.5 GA/cwt + Apron XL 3 LS @ 1GA/cwt;
Untreated Check;

Results: TableC-38.

**Table C-36. Corn Seed Decay and Seedling Blight in Difficult Emergence Environn
Fond du Lac, WI - 2001**

Seed treatment	Population at V3 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu	Grower return \$/A
ApronXL	26767	30429	0	165	25.8	49	328
MaximXL	30176	31313	1	164	26.8	49	323
MaximXL+CGA301940 @ 0.25	29293	30176	1	165	26.8	49	326
MaximXL+CGA301940 @ 0.5	29040	30808	2	168	26.1	49	333
MaximXL+CGA301940 @ 1.0	28156	28282	1	164	26.6	49	323
MaximXL+CGA301940 @ 2.0	25000	29671	1	154	26.5	49	305
CGA301940 @ 1.0	26262	30429	1	157	26.5	49	311
Captan4L+AllegianceFL	28661	30303	2	166	26.4	49	327
MaximXL+Apron	27525	29798	1	164	27.4	49	322
Control	25883	29545	1	159	26.3	49	315
Mean	27676	30075	1	163	26.5	49	321
<u>Probability (%)</u>							
Seed treatment (S)	1.9	16.0	70.6	87.3	77.6	53.3	89.6
<u>LSD (0.10)</u>							
Seed treatment (S)	2322	NS	NS	NS	NS	NS	NS
<u>CV (%)</u>							
	6	4	94	7	4	1	7

FIELD EXPERIMENT HISTORY

Title: Syngenta Seeds
Experiment: 08 Syngenta Seeds **Trial ID:** 2230 **Year:** 2001
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Arlington, WI **County:** Columbia
Supported By: Syngenta Seeds

Site Information

Field: 408 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 11/19/01 **pH** 6.8 **OM (%)** 2.6 **P (ppm)** 62 **K (ppm)** 153

Plot Management

Tillage Operations: Chisel Plow Soil Finisher 2x Cultivated
Fertilizer: **Preplant Analysis:** 46-0-0 **Rate lbs/A:** 325 **Date:** 4/18/01
Starter Analysis: 6-24-24 **Rate lbs/A:** 150 **Date:** 5/20/01
Post plant Analysis: N/A **Rate lbs/A:** N/A **Date:** N/A
Manure: None
Herbicide: Harness 2.5 oz/A **Insecticide:** See Treatments
Permit 0.66 oz/A **Hybrid:** See Treatments
Irrigation: None
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:** 4
Plot Size Seeded: 23.5' x 10' **Experiment Size:** 0.14 A
Harvest Plot Size: 23.5' x 5' **Harvest Plant Density:** 32000 plants per acre

Factors/Treatments:

Treatments:

Lorsban 15G @ 8 lb/A
ProShield w/Force
UTC

Hybrids:

NK Brand N2555
NK Brand N2555 Bt

Results: Table C-35.

**Table: C-37. Syngenta Seeds
Arlington, WI - 2001**

Hybrid	Treatment	Population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu	Grower return \$/A
	Lorsban 15G	31433	33017	4	199	20.4	60	410
	ProShield w/Force	32670	32720	4	193	20.3	60	400
	UTC	32819	33363	5	192	20.3	60	397
NK2555		32307	32802	6	192	20.2	60	398
NK2555Bt		32307	33264	2	197	20.4	60	407
NK2555	Lorsban 15G	31977	33264	6	198	20.2	60	410
NK2555	ProShield w/Force	32769	31878	6	191	20.2	60	396
NK2555	UTC	32175	33264	7	187	20.2	60	387
NK2555Bt	Lorsban 15G	30888	32769	1	199	20.5	60	410
NK2555Bt	ProShield w/Force	32571	33561	2	196	20.4	60	404
NK2555Bt	UTC	33462	33462	3	197	20.5	60	407
Mean		32307	33033	4	195	20.3	60	402
Probability (%)								
Hybrid (H)		100	15.5	0.8	24.3	1.6	33.8	27.3
Treatment (T)		25.8	26.5	62.9	39.5	71.1	52.2	40.0
T x H		41.9	3.3	87.4	62.7	88.5	53.9	62.8
LSD (0.10)								
Hybrid (H)		NS	NS	2	NS	0.2	NS	NS
Treatment (T)		NS	NS	NS	NS	NS	NS	NS
T x H		NS	937	NS	NS	NS	NS	NS
CV (%)								
		6	2	74	5	1	1	5

FIELD EXPERIMENT HISTORY

Title: Syngenta Seeds
Experiment: 08 Syngenta Seeds **Trial ID:** 2231 **Year:** 2001
Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn
Location: Marshfield, WI **County:** Wood
Supported By: Syngenta Seeds

Site Information

Field: **Previous Crop:** Corn **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: **Preplant Analysis:** N/A **Rate lbs/A:** N/A **Date:** N/A
Starter Analysis: 6-24-24 **Rate lbs/A:** 100 **Date:** 5 /18/01
Post plant Analysis: 34-0-0 **Rate lbs/A:** 350 **Date:** N/A
Manure: None

Herbicide: Harness 1.0 qt/A **Insecticide:** See Treatments
Hornet 2.4 oz/A **Hybrid:** See Treatments

Irrigation: None

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:** 4
Plot Size Seeded: 23.5' x 10' **Experiment Size:** 0.14 A
Harvest Plot Size: 23.5' x 5' **Harvest Plant Density:** 25500 plants per acre

Factors/Treatments:

Treatments:

Lorsban 15G @ 8 lb/A
ProShield w/Force
UTC

Hybrids:

NK Brand N2555
NK Brand N2555 Bt

Results: Table C-36.

**Table: C-38. Syngenta Seeds
Marshfield, WI - 2001**

Hybrid	Treatment	Population at V6 plants/A	Harvest population plants/A	Lodging %	Grain yield bu/A	Grain moisture %	Test weight lb/bu	Grower return \$/A
	Lorsban 15G	25740	25889	4	148	23.1	51	299
	ProShield w/Force	27522	27671	5	158	23.2	51	319
	UTC	22820	22820	3	138	23.9	51	279
NK2555		25113	24849	5	142	23.2	51	287
NK2555Bt		25608	26070	2	154	23.6	51	310
NK2555	Lorsban 15G	26136	25839	5	144	23.1	51	293
NK2555	ProShield w/Force	28215	28215	7	158	22.7	51	320
NK2555	UTC	20988	20493	4	124	23.9	51	249
NK2555Bt	Lorsban 15G	25344	25938	3	151	23.2	51	305
NK2555Bt	ProShield w/Force	26829	27126	3	158	23.7	51	318
NK2555Bt	UTC	24651	25146	2	153	23.9	51	308
Mean		25361	25460	4	148	23.4	51	299
Probability (%)								
Hybrid (H)		68.3	37.5	1.0	15.2	37.3	90.0	17.5
Treatment (T)		1.8	2.9	37.9	16.8	18.3	96.4	16.3
T x H		20.0	21.3	61.0	30.4	42.2	98.2	30.5
LSD (0.10)								
Hybrid (H)		NS	NS	2	NS	NS	NS	NS
Treatment (T)		2551	2868	NS	NS	NS	NS	NS
T x H		NS	NS	NS	NS	NS	NS	NS
CV (%)								
		11	13	60	13	4	2	13