FIELD EXPERIMENT HISTORY

Title: **The Evaluation of Early Applied Headline in Corn.**

Experiment: 10 The Evaluation of Early Applied Headline in Corn. **Year:** 2006

Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn **Trial ID:** 2904

Location: Arlington, WI **County:** Columbia

Supported By: BASF Corporation

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 /22/06
Starter Analysis:	none	**Rate lbs/A:** N/A	**Date:**	N/A
Post plant Analysis:	N/A	**Rate lbs/A:** N/A	**Date:**	N/A
Manure: N/A				

Herbicide: Outlook 20 oz/A
Hornet 4.0 oz/A
Roundup 22.0 oz/A

Insecticide: None

Hybrid: Dekalb DKC50-20(RR2YG)

Irrigation: None

Planting Date: 5/22/06 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 32000 **plants per acre** **Planting Method:** Kinze 2000 Inter-Row Planter

Harvest Date: 10/30/07 **Harvest Method:** Massey 8XP

Notes: Method of Application: CO2 Backpack sprayer, 10' boom, 15" spacing, TeeJet 8002VS nozzles, 30 lb pressure, 3.5 mph, 19.6 gal H2O/Acre.

Experimental Design

Design: RCB **Replications:** 4

Plot Size Seeded: 10' x 100' **Experiment Size:** 0.92 Acre

Harvest Plot Size: 5' x 100' **Harvest Plant Density:** 31975 **plants per acre**

Factors/Treatments:

Application:

1. Headline@ 3.0 oz/A; NIS @ 0.125 g/A @ 2 ft corn
2. Headline@ 6.0 oz/A; NIS @ 0.125 g/A @ 2 ft corn
3. Headline@ 3.0 oz/A; NIS @ 0.125 g/A @ 4 ft corn
4. Headline@ 6.0 oz/A; NIS @ 0.125 g/A @ 4 ft corn
5. Headline@ 3.0 oz/A; NIS @ 0.125 g/A @ 6 ft corn
6. Headline@ 6.0 oz/A; NIS @ 0.125 g/A @ 6 ft corn
7. Headline@ 6.0 oz/A ; NIS @ 0.125 g/A @VT corn
8. Headline@ 3.0 oz/A; NIS @ 0.125 g/A @ 2 ft corn fb Headline@ 6.0 oz/A; NIS @ 0.125 g/A @VT
9. Headline@ 3.0 oz/A; NIS @ 0.125 g/A @ 2 ft corn fb Headline@ 3.0 oz/A; NIS @ 0.125 g/A @ VT
10. UTC

Application Dates:

2 ft @ 6/27
4 ft @ 7/10
6 ft @ 7/14
VT @ 7/24

Observation Ratings:

Stay Green
1. Completely Brown
3. 25% Green
5. 50% Green
7. 75% Green
9. Completely Green

Disease (Based on leaf area affected).
1. Poor (diseased)
5. Moderate
9. Best (healthy)

Results: Table C-60.

Table C-60. Headline Evaluation Trial - Grain
Arlington, WI - 2006

							DOY 200		DOY 213		DOY 223		DOY 241	
Fungicide	Yield	Moisture	Test weight	Stalk lodging	Harvest population	Grower return	Stay Green rating	Disease rating	Stay Green rating	Disease rating	Stay Green rating	Disease rating	Stay Green rating	Disease rating
	bu/A	%	lbs/bu	%	plants/A	$/A	1-9	1-9	1-9	1-9	1-9	1-9	1-9	1-9
Headline@ 3.0 oz/A 2 ft corn	220	20.1	55.6	4.7	32000	653	9.0	9.0	9.0	9.0	8.8	8.8	8.0	7.8
Headline@ 3.0 oz/A 2 ft corn fb Headline@ 3.0 oz/A @VT	228	21.3	55.2	2.3	31250	670	9.0	9.0	9.0	9.0	8.5	8.8	8.0	7.8
Headline@ 3.0 oz/A 2 ft corn fb Headline@ 6.0 oz/A @VT	232	21.0	54.9	8.4	32000	684	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0
Headline@ 3.0 oz/A 4 ft corn	218	20.5	55.5	7.0	32500	647	9.0	9.0	9.0	9.0	8.8	8.5	8.0	7.5
Headline@ 3.0 oz/A 6 ft corn	218	20.9	55.5	7.5	32750	644	9.0	9.0	9.0	9.0	8.8	9.0	8.0	7.8
Headline@ 6.0 oz/A 2 ft corn	224	20.4	56.0	3.2	31000	663	9.0	9.0	9.0	9.0	8.5	8.8	8.0	7.5
Headline@ 6.0 oz/A 4 ft corn	230	20.8	55.5	11.7	31750	680	9.0	9.0	9.0	8.8	8.8	9.0	8.0	7.8
Headline@ 6.0 oz/A 6 ft corn	219	20.9	55.0	13.1	32750	648	9.0	9.0	9.0	9.0	9.0	9.0	8.3	8.3
Headline@ 6.0 oz/A VT corn	229	20.8	55.1	3.8	32500	677	9.0	9.0	9.0	9.0	9.0	8.8	8.0	7.5
UTC	226	20.3	56.0	5.6	31250	671	9.0	9.0	9.0	8.8	8.5	8.8	8.0	7.3
Mean	224	20.7	55.4	6.7	31975	664	9.0	9.0	9.0	9.0	8.8	8.8	8.0	7.7
Probability(%)														
Fungicide (F)	0.8	15.6	5.3	32.9	65.1	1.6	---	---	---	---	60.5	57.3	46.4	62.5
LSD(0.10)														
Fungicide (F)	7	0.7	0.5	NS	NS	21	NS	NS	NS	NS	NS	NS	NS	NS
CV(%)	3	3	1	97	5	3	---	---	---	---	5	3	2	4

FIELD EXPERIMENT HISTORY

Title: **Headline Evaluation and Hybrid Comparison Trial - Grain**

Experiment: 10 Headline Evaluation and Hybrid Comparison Trial - Grain **Year:** 2006

Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn **Trial ID:** 2903

Location: Arlington, WI **County:** Columbia

Supported By: BASF Corporation

Site Information

Field: ARS367 **Previous Crop:** Corn **Soil Type:** Plano Silt Loam

Soil Test: **Date:** 10/15/06 **pH** 7.2 **OM (%)** 3.2 **P (ppm)** 151 **K (ppm)** 327

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 /22/06
Starter Analysis:	9-23-30	**Rate lbs/A:** 150	**Date:**	5 /22/06
Post plant Analysis:	N/A	**Rate lbs/A:** N/A	**Date:**	N/A
Manure: N/A				

Herbicide: Outlook 20 oz/A
Hornet 4.0 oz/A

Insecticide: Force 3G @ 4.4 lbs/A

Hybrid: See Factors

Irrigation: None

Planting Date: 5/22/06 **Planting Depth:** 1.5" **Row Width** 30"

Target Plant Density: 30000 **plants per acre** **Planting Method:** Kinze Plot Planter

Harvest Date: 10/30/06 **Harvest Method:** Massey Ferguson 8XP

Notes: Method of Application: CO2 Backpack sprayer, 10' boom, 15" spacing, TeeJet 8002VS nozzles, 30 lb pressure, 3.5 mph, 19.6 gal H2O/Acre.

Experimental Design

Design: Split plot **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.31 Acre

Harvest Plot Size: 5' x 22' **Harvest Plant Density:** 30096 **plants per acre**

Factors/Treatments:

Hybrids

1. Dekalb DKC58-78(YGCB)
2. NK Brand N58-D1
3. Kruger K5504YGCB
4. High Cycle 7560Bt

Application:

1. UTC
2. Headline @ 6.0 g a.i. /A; NIS @ 0.125 g/A @ VT on 7/24/06

Observation Ratings:

Stay Green
1. Completely Brown
3. 25% Green
5. 50% Green
7. 75% Green
9. Completely Green

Disease (Based on leaf area affected).
1. Poor (diseased)
5. Moderate
9. Best (healthy)

Results: Table C-61.

Table C-61. Headline Evaluation and Hybrid Comparison Trial - Grain Arlington, WI - 2006

Hybrid	Fungicide	Yield	Moisture	Test weight	Stalk lodging	Harvest population	Grower return	Stay Green rating	Disease rating
		bu/A	%	lbs/bu	%	plants/A	$/A	1-9	1-9
	UTC	214	23.3	53.2	3	30344	622	7.6	7.8
	Headline	217	23.9	53.2	3	29849	629	7.7	7.9
Dekalb DKC58-78(YGCB)		223	25.3	51.8	3	29898	638	7.5	8.0
NK Brand N58-D1		212	25.2	53.4	4	30393	609	8.0	7.9
Kruger K5504YGCB		205	22.7	54.7	2	30294	599	7.1	7.8
High Cycle 7560Bt		223	21.2	52.9	3	29799	657	7.9	7.8
Dekalb DKC58-78(YGCB)	UTC	221	24.7	52.3	1	30294	636	7.5	8.0
Dekalb DKC58-78(YGCB)	Headline	224	25.8	51.4	4	29502	640	7.5	8.0
NK Brand N58-D1	UTC	215	25.0	53.3	5	30492	616	8.0	7.8
NK Brand N58-D1	Headline	210	25.3	53.6	4	30294	601	8.0	8.0
Kruger K5504YGCB	UTC	203	22.2	54.5	3	30492	595	7.0	7.8
Kruger K5504YGCB	Headline	207	23.3	54.9	1	30096	602	7.3	7.8
High Cycle 7560Bt	UTC	218	21.1	52.8	1	30096	642	7.8	7.5
High Cycle 7560Bt	Headline	228	21.2	53.1	4	29502	671	8.0	8.0
Mean		216	23.6	53.2	3	30096	626	7.6	7.8
Probability(%)									
Hybrid (H)		9.8	0.0	0.0	83.5	54.9	7.9	0.8	43.6
Fungicide (F)		62.5	1.8	96.3	67.3	10.6	73.1	37.3	20.5
H x F		86.6	31.1	41.0	76.2	89.2	86.0	83.5	55.2
LSD(0.10)									
Hybrid (H)		13	0.4	0.6	NS	NS	39	0.4	NS
Fungicide (F)		NS	0.4	NS	NS	NS	NS	NS	NS
H x F		NS	NS	NS	NS	NS	NS	NS	NS
CV(%)		8	3	1	125	3	8	5	5

FIELD EXPERIMENT HISTORY

Title: **Headline Evaluation and Hybrid Comparison Trial - Silage**

Experiment: 10 Headline Evaluation and Hybrid Comparison Trial - Silage **Year:** 2006

Personnel: J.G. Lauer, P.J. Flannery, and K.D. Kohn **Trial ID:** 2902

Location: Arlington, WI **County:** Columbia

Supported By: BASF Corporation

Site Information

Field: ARS367 **Previous Crop:** Corn **Soil Type:** Plano Silt Loam

Soil Test: **Date:** 10/15/06 **pH** 7.2 **OM (%)** 3.2 **P (ppm)** 151 **K (ppm)** 327

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 /22/06
Starter Analysis:	9-23-30	**Rate lbs/A:** 150	**Date:**	5 /22/06
Post plant Analysis:	N/A	**Rate lbs/A:** N/A	**Date:**	N/A
Manure: N/A				

Herbicide: Outlook 20 oz/A
Hornet 4.0 oz/A

Insecticide: Force 3G @ 4.4 lbs/A

Hybrid: See Factors

Irrigation: None

Planting Date: 5/22/06 **Planting Depth:** 1.5" **Row Width** 30"

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

Harvest Date: 10/3/06 **Harvest Method:** New Holland 707

Notes: Method of Application: CO2 Backpack sprayer, 10' boom, 15" spacing, TeeJet 8002VS nozzles, 30 lb pressure, 3.5 mph, 19.6 gal H2O/Acre.

Experimental Design

Design: Split plot **Replications:** 4

Plot Size Seeded: 10' x 25' **Experiment Size:** 0.36 Acre

Harvest Plot Size: 2.5' x 22' **Harvest Plant Density:** 31012 **plants per acre**

Factors/Treatments:

Hybrids

1. Dekalb DKC58-78(YGCB)
2. NK Brand N58-D1
3. NK Brand N48-V8
4. Mycogen F2F444

Application:

1. UTC
2. Headline @ 6.0 g a.i. /A; NIS @ 0.125 g/A @ VT on 7/24/06

Observation Ratings:

Stay Green
1. Completely Brown
3. 25% Green
5. 50% Green
7. 75% Green
9. Completely Green

Disease (Based on leaf area affected).
1. Poor (diseased)
5. Moderate
9. Best (healthy)

Results: Table C-62.

Table C-62. Headline Evaluation and Hybrid Comparison Trial - Silage
Arlington, WI - 2006

															DOY 241		DOY 276	
		Dry Matter		Root	Stalk	Harvest							Milk Per		Disease	Stay Green	Disease	Stay Green
Hybrid	Fungicide	Yield	Moisture	Lodging	Lodging	pop	CP	ADF	NDF	IVD	NDFD	Starch	Ton	Acre	rating	rating	rating	rating
		T/A	%	%	%	plants/A	%	%	%	%	%	%	lbs/T	lbs/A	1-9	1-9	1-9	1-9
	UTC	8.7	60.9	6	0	30888	6.8	24.0	47.7	78.9	55.6	29.5	3072	26752	7.6	7.8	3.9	5.9
	Headline	8.9	62.6	5	0	31136	6.8	24.0	47.6	79.4	56.7	28.8	3091	27431	7.6	7.6	4.3	5.9
Dekalb DKC58-78(YGCB)		9.9	60.5	2	0	31284	7.0	21.2	42.8	80.2	53.8	36.3	3197	31846	7.8	7.9	4.8	6.0
NK Brand N58-D1		9.1	61.9	9	0	31086	6.7	24.1	47.2	77.8	52.8	30.8	3020	27398	8.0	7.8	4.3	6.0
NK Brand N48-V8		8.5	63.6	5	0	30789	6.5	29.2	56.0	75.9	57.0	16.0	2797	24013	7.5	7.9	3.6	6.0
Mycogen F2F444		7.6	60.9	5	0	30888	6.9	21.5	44.5	82.6	60.9	33.5	3311	25108	7.3	7.4	3.6	5.6
Dekalb DKC58-78(YGCB)	UTC	10.0	59.5	1	0	31086	7.0	20.8	41.9	80.2	52.9	37.2	3206	32280	7.8	7.8	4.5	6.0
Dekalb DKC58-78(YGCB)	Headline	9.8	61.5	3	1	31482	7.0	21.7	43.7	80.2	54.7	35.4	3188	31413	7.8	8.0	5.0	6.0
NK Brand N58-D1	UTC	8.8	61.0	8	0	31284	6.8	24.4	48.3	77.5	53.3	29.8	2995	26280	8.0	8.0	4.0	6.0
NK Brand N58-D1	Headline	9.4	62.9	10	0	30888	6.6	23.7	46.2	78.0	52.4	31.7	3045	28517	8.0	7.5	4.5	6.0
NK Brand N48-V8	UTC	8.2	63.4	7	0	30492	6.7	29.1	55.8	75.9	56.8	16.4	2813	23357	7.8	8.0	4.0	6.0
NK Brand N48-V8	Headline	8.8	63.8	3	0	31086	6.4	29.3	56.2	76.0	57.2	15.6	2781	24670	7.3	7.8	3.3	6.0
Mycogen F2F444	UTC	7.7	59.8	7	0	30690	6.7	21.7	44.6	81.9	59.4	34.4	3273	25090	7.0	7.5	3.0	5.5
Mycogen F2F444	Headline	7.5	62.0	3	0	31086	7.1	21.3	44.5	83.3	62.3	32.5	3348	25125	7.5	7.3	4.3	5.8
Mean		8.8	61.8	5	0	31012	6.8	24.0	47.6	79.1	56.1	29.1	3081	27091	7.6	7.7	4.1	5.9
Probability(%)																		
Hybrid (H)		2.2	1.8	45.0	43.6	85.0	79.5	0.0	0.0	0.0	0.0	0.0	0.0	2.1	33.2	15.0	25.1	13.0
Fungicide (F)		60.3	14.0	42.0	33.7	42.7	97.1	99.7	98.5	18.3	18.6	64.5	58.3	62.0	100.0	17.5	35.8	33.7
H x F		75.8	92.1	18.9	42.6	66.9	45.7	84.7	71.3	47.2	36.9	76.1	61.7	85.1	42.6	27.4	38.0	42.6
LSD(0.10)																		
Hybrid (H)		1.1	1.5	NS	NS	NS	NS	2.3	3.4	1.7	1.7	2.9	136	3878	NS	NS	NS	NS
Fungicide (F)		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
H x F		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CV(%)		11	5	69	566	3	7	8	7	1	4	14	3	14	8	5	27	3