

FIELD EXPERIMENT HISTORY

Title: Corn Hybrid Interaction with Postemergence Herbicides.
Personnel: C.M. Boerboom, J.G. Lauer
Location: Arlington Research Station, Arlington, WI

Year: 1996

FIELD INFORMATION

Field: 372
Soil Type: Plano Silt Loam
Soil Test Results: Test Date: 7/95 pH: 6.3 P (ppm): 40 K (ppm): 255 OM (%): 3.1
Fertilizer: 25-Apr 100 lbs/a 6-24-24 starter
150 lbs/a 46-0-0 preplant
Tillage Operations: Chisel Plow, Field Cultivate
Previous Crop: Soybean
Irrigation: None

EXPERIMENTAL PROCEDURE

Exp. Design: RCB Split-Split Plot
Replicates: 3
Variables: Herbicide Treatment: Untreated
(Postemergence) at 6 inches - Banvel (0.5 lbs ai/a) + 28% (2.5% v/v)
at 14 inches - Banvel (0.5 lbs ai/a) + 28% (2.5% v/v)
at V2 - Basis (0.25 oz ai/a) + 28% (2.5% v/v) + NIS (0.25% v/v)
at V4 - Basis (0.25 oz ai/a) + 28% (2.5% v/v) + NIS (0.25% v/v)
at V5 - Accent (0.5 oz ai/a) + 28% (2.5% v/v) + NIS (0.25% v/v)
at V9 - Accent (0.5 oz ai/a) + 28% (2.5% v/v) + NIS (0.25% v/v)

Maturity and Hybrid within Maturity	80 Day:	Payco 151	Pioneer 3936
	85 Day:	Dekalb DK363	Pioneer 3921
	90 Day:	NK 2409	Dekalb DK401
	95 Day:	Pioneer 3769	Dekalb DK471
	100 Day:	Golden H2387	NK 4242
	105 Day:	Dairyland 1407	Pioneer 3578
	110 Day:	Lemke SL65	Pioneer 3417

Area Planted: 5' x 25'
Area Harvested: 5.0' x 22'
Row Spacing: 30"

Planting Date: 22-May
Planting Equip: Kinze Plot Planter w/seed cones
Planting Rate: 40,000 thinned to 28,000 plants/a

Harvesting Date: 8-Nov
Harvesting Equip: Gleaner Plot Combine

	<u>Material</u>	<u>Rate</u>	<u>Method</u>
Herbicides:	Bladex	2 qts/a	premerge
	Lasso	2 qts/a	premerge

Results: Tables E-53.

**Table E-53. Corn Hybrid Interaction with Postemergence Herbicides.
Arlington, WI - 1996**

Herbicide Treatment	Hybrid	Relative Maturity	Plant		Final Stand	Broken Stalks	Moist	Yield
			Height at day 211	cm				
	Payco 151	80 day			32168	14.5	23.3	121.4
	Pioneer 3936	80 day			33149	14.6	23.0	139.5
	Dekalb DK363	85 day			33300	10.7	24.1	130.8
	Pioneer 3921	85 day			32998	7.9	25.4	148.1
	Dekalb DK401	90 day			33941	7.7	24.2	158.4
	NK 2409	90 day			33168	9.9	25.7	133.5
	Dekalb DK471	95 day			33658	8.0	27.5	161.0
	Pioneer 3769	95 day			33243	13.2	27.6	167.9
	Golden H2387	100 day			33979	17.3	29.9	190.2
	NK 4242	100 day			34978	10.7	28.5	160.1
	Dairyland 1407	105 day			34469	9.9	32.8	176.2
	Pioneer 3578	105 day			34035	16.5	31.6	162.5
	Lemke SL65	110 day			34469	11.8	31.1	174.4
	Pioneer 3417	110 day			33432	10.1	33.1	134.2
Untreated			95		33309	10.0	28.0	158.9
Banvel 6in					33309	18.0	27.1	149.6
Banvel 14in					33592	15.4	27.2	145.4
Basis V2					33715	10.0	27.6	155.2
Basis V4					33809	11.8	27.4	153.2
Accent V5			94		33762	8.6	27.7	155.9
Accent V10			92		33997	7.6	29.1	161.6
Untreated	Payco 151	80 day	94		32602	11.1	23.9	122.4
Banvel 6in	Payco 151	80 day			30754	26.9	22.7	120.6
Banvel 14in	Payco 151	80 day			32338	9.3	22.2	131.8
Basis V2	Payco 151	80 day			31810	12.5	23.3	117.2
Basis V4	Payco 151	80 day			32998	13.4	24.1	105.6
Accent V5	Payco 151	80 day	94		32338	13.0	22.9	114.7
Accent V10	Payco 151	80 day	93		32338	15.3	24.2	146.0
Untreated	Pioneer 3936	80 day	99		32734	11.1	22.0	161.8
Banvel 6in	Pioneer 3936	80 day			31546	25.5	22.1	119.2
Banvel 14in	Pioneer 3936	80 day			33922	11.1	23.2	122.0
Basis V2	Pioneer 3936	80 day			33790	9.3	22.2	142.4
Basis V4	Pioneer 3936	80 day			33130	14.4	23.9	117.6
Accent V5	Pioneer 3936	80 day	98		33922	17.6	23.3	155.5
Accent V10	Pioneer 3936	80 day	94		32998	13.4	24.4	157.9
Untreated	Dekalb DK363	85 day	96		32470	9.3	24.0	124.0
Banvel 6in	Dekalb DK363	85 day			33922	22.7	23.7	126.4
Banvel 14in	Dekalb DK363	85 day			33262	4.6	22.8	150.4
Basis V2	Dekalb DK363	85 day			34846	7.4	25.0	117.6
Basis V4	Dekalb DK363	85 day			32206	12.5	23.5	135.8
Accent V5	Dekalb DK363	85 day	94		32866	13.0	24.3	124.1
Accent V10	Dekalb DK363	85 day	90		33526	5.6	25.6	137.2

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Herbicide Treatment	Hybrid	Relative Maturity	Plant		Broken Stalks %	Moist %	Yield bu/a
			Height at day 211	Final Stand plants/a			
Untreated	Pioneer 3921	85 day	98	32602	3.2	25.2	169.1
Banvel 6in	Pioneer 3921	85 day		32866	13.0	25.2	144.6
Banvel 14in	Pioneer 3921	85 day		33262	6.9	25.1	129.6
Basis V2	Pioneer 3921	85 day		32866	5.6	25.8	144.6
Basis V4	Pioneer 3921	85 day		32734	8.8	25.2	153.8
Accent V5	Pioneer 3921	85 day	97	33658	6.0	25.9	139.3
Accent V10	Pioneer 3921	85 day	93	32998	11.6	25.3	155.8
Untreated	Dekalb DK401	90 day	94	33658	8.3	23.4	173.9
Banvel 6in	Dekalb DK401	90 day		34054	8.3	23.6	135.5
Banvel 14in	Dekalb DK401	90 day		33262	9.7	24.0	148.2
Basis V2	Dekalb DK401	90 day		35374	5.6	24.5	175.3
Basis V4	Dekalb DK401	90 day		33526	9.3	24.3	150.8
Accent V5	Dekalb DK401	90 day	92	32734	8.3	24.4	163.3
Accent V10	Dekalb DK401	90 day	94	34978	4.2	25.2	161.7
Untreated	NK 2409	90 day	95	33130	6.5	25.5	144.6
Banvel 6in	NK 2409	90 day		33790	12.0	24.5	147.5
Banvel 14in	NK 2409	90 day		32602	8.3	27.2	114.3
Basis V2	NK 2409	90 day		33130	6.9	26.1	131.4
Basis V4	NK 2409	90 day		32734	21.8	24.6	131.9
Accent V5	NK 2409	90 day	96	32470	4.6	26.1	130.0
Accent V10	NK 2409	90 day	95	34318	8.8	26.3	134.9
Untreated	Dekalb DK471	95 day	93	32206	6.5	27.5	176.2
Banvel 6in	Dekalb DK471	95 day		34054	12.0	28.1	154.5
Banvel 14in	Dekalb DK471	95 day		33130	13.4	27.4	145.4
Basis V2	Dekalb DK471	95 day		32734	8.8	26.3	179.8
Basis V4	Dekalb DK471	95 day		34582	6.5	27.1	162.7
Accent V5	Dekalb DK471	95 day	92	34318	3.7	27.5	144.2
Accent V10	Dekalb DK471	95 day	88	34582	5.1	28.7	164.5
Untreated	Pioneer 3769	95 day	96	33262	17.6	27.8	159.7
Banvel 6in	Pioneer 3769	95 day		33130	21.8	26.7	163.3
Banvel 14in	Pioneer 3769	95 day		31942	14.4	26.8	149.8
Basis V2	Pioneer 3769	95 day		32998	10.7	27.2	173.9
Basis V4	Pioneer 3769	95 day		32998	8.8	26.8	176.4
Accent V5	Pioneer 3769	95 day	96	34846	9.7	27.1	176.6
Accent V10	Pioneer 3769	95 day	95	33526	9.3	30.7	176.0
Untreated	Golden H2387	100 day	99	33394	15.3	30.6	191.3
Banvel 6in	Golden H2387	100 day		33922	27.3	29.0	181.8
Banvel 14in	Golden H2387	100 day		33262	26.9	29.1	178.8
Basis V2	Golden H2387	100 day		33262	19.9	29.2	194.3
Basis V4	Golden H2387	100 day		33262	16.2	30.2	184.2
Accent V5	Golden H2387	100 day	94	34318	8.8	28.3	210.1
Accent V10	Golden H2387	100 day	96	36430	6.9	32.6	190.7