

FIELD EXPERIMENT HISTORY

Title: Monsanto Bt Systems Trial.
Experiment: 19 Monsanto Bt Systems **Trial ID:** 2932 **Year:** 2006
Personnel: J. G. Lauer, K.D. Kohn, P.J. Flannery
Location: Arlington, WI **County:** Columbia
Supported By: Monsanto

Site Information

Field: ARS368 North **Previous Crop:** Corn **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 10/15/05 **pH** 6.3 **OM (%)** 3.2 **P (ppm)** 30 **K (ppm)** 162

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Soil Finisher Cultivated 6/26/06
Fertilizer:

	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
Preplant :	28-0-0	165 Actual/A	N/A
Starter :	N/A	N/A	N/A
Post plant :	N/A	N/A	N/A
Manure:	N/A	N/A	N/A

Herbicide: Harness Xtra @ 1.2 qts/A fb **Insecticide:** Force 3G @ 4.4 lbs/A
 Roundup Weather Max 22.0 oz/A
 Lumax @ 2.5 qt/A

Irrigation: None **Hybrid:** See Factors

Planting Date: 5/22/06 **Planting Depth:** 1.5" **Row Width:** 30"
Target Plant Density: 30000 **Planting Method:** Kinze 2000 InterRow Planter
Harvest Date: 10/24/06 **Harvest Method:** Massey Ferguson 8XP

Experimental Design

Design: RCB Factorial **Replications:** 4
Plot Size Seeded: 10' x 100' **Experiment Size:** 0.65 Acre
Harvest Plot Size: 5' x 100' **Harvest Plant Density:** 31758

Factors/Treatments:

Hybrids:

Treatment:
 1) Dekalb DKC5145(RR2)
 2) Dekalb DKC5020(YGCBRR2))
 3 & 4) Dekalb DKC5139(YGPLRR2)
 5) Dekalb DKC5141(YGRWRR2)
 6) Pioneer 38H62(HXRWLLRR2)
 7) Pioneer 38H65(HXILLRR2)

Herbicide System:

Treatments 1,2, & 3:
 Roundup System- Harness Xtra fb Roundup
 Treatments 4,5,6 & 7:
 Conventional System- Lumax

Insecticide:

Treatments 1,3,4,5, & 6:
 None
 Treatments 2 & 7:
 Force 3G

Results: Table C-73.

**Table C-73. Monsanto Bt Systems Trial.
Arlington, WI - 2006.**

Hybrid	Herbicide	Insecticide	Yield	Moisture	Test Weight	Lodged			Harvest plants/A	Grower Return \$/A	Emerged plants/A	Root Sample		
						Total %	Stalk %	Root %				Plant population plants/A	Root lodged %	Injury rating 0 to 3
DeKalb DKC5145(RR2)	Harness fb Roundup	None	198	23.6	53.3	44	0	44	33046	595	33797	34297	0.6	1.4
DeKalb DKC5020(YGCB/RR2)	Harness fb Roundup	Force 3G	226	22.7	53.8	1	1	0	30792	683	31919	32044	0.0	0.1
DeKalb DKC5139(YGPL/RR2)	Harness fb Roundup	None	223	23.1	54.6	11	0	11	32044	670	32294	-	-	-
DeKalb DKC5139(YGPL/RR2)	Lumax	None	234	22.8	54.7	10	0	10	32795	706	31794	-	-	-
DeKalb DKC5141(YGRW/RR2)	Lumax	None	225	22.8	54.2	12	0	12	32545	677	33421	31543	0.4	0.1
Pioneer 38H62(HXRW/LL/RR2)	Lumax	None	214	21.4	54.4	10	1	10	32044	651	30918	29541	0.2	0.1
Pioneer 38H65(HXI/LL/RR2)	Lumax	Force 3G	214	21.9	53.9	2	0	2	29040	649	31293	-	-	-
Mean			219	22.6	54.1	13	0	13	31758	661	32205	31856	0.3	0.4
<u>Probability(%)</u>														
Treatment (T)			0.0	0.0	0.6	2.6	45.5	2.5	28.9	0.0	2.5	0.2	0.2	0.0
<u>LSD (0.10)</u>														
Treatment (T)			8	0.6	0.6	20	NS	20	NS	25	2896	1392	0.2	0.3
<u>CV(%)</u>														
			3	2	1	126	342	129	8	3	3.7	4	49	49