

FIELD EXPERIMENT HISTORY

Title: Effect of Mixing Corn Hybrids on grain yield

Experiment: 01Mix **Trial ID:** 3660 **Year:** 2012

Personnel: J. G. Lauer, T. H. Diallo, K. D. Kohn

Location: Arlington **County:** Columbia

Supported By: Hatch

Site Information

Field: ARS 336 **Previous Crop:** Corn **Soil Type:** Plano silt loam

Soil Test Date: 11/06/12 **pH:** 5.5 **OM (%)** 3.7 **P (ppm)** 24 **K (ppm)** 157

Plot Management

Tillage Operations: Field Cultivator Soil Finisher

Fertilizer:	Preplant :	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
		N/A	N/A	N/A
	Starter :	N/A	N/A	N/A
	Post plant :	C: 28-0-0	210	6 /12/12
	Manure:	N/A	N/A	N/A
Herbicide:	2.4-D: 16 oz/A 4/6/12 Roundup: 22 oz/A 4/6/12 Dual II Mag: 24oz/A 5/21/12 Roundup: 22 oz/A 6/19/12		Insecticide:	N/A
Irrigation:	None		Hybrid:	1) Dekalb DKC53-78 2) Pioneer 36V53
Planting Date:	5/24/12		Row Width:	30"
Target Plant Density:	Corn: 36000 ppa		Planting Depth:	C: 1.5"
Harvest Date:	Corn: 10/4/12		Planting Method:	Kinze 2000 Interplant planter
Notes:	2012 is first year of Trial in Arlington		Harvest Method:	C: Kincaid plot combine

Experimental Design

Design: RCB **Replications:** 2

Plot Size Seeded: MP: 5' x 35' **Experiment Size:** 0.06 A

Harvest Plot Size: 5' x 31

Factors/Treatments:

Tillage

- 1) NT
- 2) CT

Hybrid Mix

- 1) DKC53-78
- 2) Pioneer 36V53
- 3) DKC53-78 + Pioneer 36V53 (1Row each)
- 4) DKC53-78 + Pioneer 36V53 (Mixed evenly)

Results: Tables C-16

**Table C-16. Effect of Mixing Hybrids on Grain Yield - Com.
Arlington, WI - 2012.**

Tillage	Hybrids	Yield bu/A	Moisture %	Test weight lb/bu	Return 6.65/bu \$/A	Lodged		
						Total %	Stalk %	Root %
	DKC53-78	195	20.9	52.0	1231	1.4	1.4	0.0
	36V53	203	21.3	50.8	1283	6.5	5.8	0.7
	Mixed	186	22.0	50.6	1171	2.1	2.1	0.0
	1Row each	188	22.4	50.5	1183	6.3	6.3	0.0
CT		194	19.2	52.5	1233	5.6	5.6	0.0
NT		192	24.0	49.4	1201	2.5	2.2	0.4
CT	DKC53-78	194	18.4	53.5	1233	2.8	2.8	0.0
CT	36V53	205	19.6	51.9	1300	7.1	7.1	0.0
CT	Mixed	191	19.7	52.3	1213	2.9	2.9	0.0
CT	1Row each	187	19.4	52.3	1185	9.7	9.7	0.0
NT	DKC53-78	196	23.4	50.4	1228	0.0	0.0	0.0
NT	36V53	202	23.1	49.7	1266	5.9	4.4	1.5
NT	Mixed	181	24.3	48.9	1129	1.4	1.4	0.0
NT	1Row each	190	25.4	48.7	1181	2.9	2.9	0.0
Mean		193	21.6	51.0	1217	4.1	3.9	0.2
Probability(%)								
Tillage(T)		77.0	0.0	0.1	51.1	41.4	34.6	34.7
Hybrid(H)		36.9	59.4	35.0	36.0	65.3	67.8	44.1
T x H		89.7	73.4	83.7	91.7	94.3	95.3	44.1
LSD(0.10)								
Tillage(T)		NS	1.5	1.1	NS	NS	NS	NS
Hybrid(H)		NS	NS	NS	NS	NS	NS	NS
T x H		NS	NS	NS	NS	NS	NS	NS