

FIELD EXPERIMENT HISTORY

Title: Influence of Thinning Timing on Corn Grain Yield
Experiment: 16Thin **Trial ID:** 5954 **Year:** 2015
Personnel: Joe Lauer, Thierno Diallo, Kent Kohn
Location: Arlington, WI **County:** Columbia
Supported By: HATCH

Site Information

Field: ARS 411 **Previous Crop:** Alfalfa **Soil Type:** Plano Sil
Soil Test: **Date:** 11/1 /14 **pH:** 7.0 **OM (%)** 4.3 **P (ppm)** 65 **K (ppm)** 129

Plot Management

Tillage Operations: Disk chisel/Ripper + Field cultivator

	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
Fertilizer:			
Preplant :	46-0-0	150	4 /24/15
Starter :	N/A	N/A	N/A
Post plant :	N/A	N/A	N/A
Manure:	Dairy liquid	10815 gal	4 /03/15
Herbicide:	Dual II Mag 24 oz/A 5/1/15	Insecticide: Force 3G 4.4 lbs/A	
	Hornet 4.0 oz/A 5/1/15	Hybrid: NK Brand N45P-3011A	
	Dual II Mag 24 oz/A 5/15/15		
	Hornet 4.0 oz/A 5/15/15		
	Radar LV 16 oz/A 5/15/15		

Irrigation: None

Planting Date: 5/12/15 **Planting Depth:** 1.5" **Row Width:** 30"

Target Plant Density: 35000 plants per acre **Planting Method:** JD1700, RTK

Harvest Date: 11/03/15 **Harvest Method:** MF 8XP combine

Notes:

Experimental Design

Design: RCB Complete Factorial

Replications: 3

Plot Size Seeded: 10' x 25'

Experiment Size: 0.48 A

Harvest Plot Size: 5' x 21'

Harvest Plant Density: 36106 plants per acre

Factors/Treatments:

Growth Stage at Time of Thinning:

- 1) UTC
- 2) V2
- 3) V4
- 4) V6
- 5) V8
- 6) V10
- 7) V12
- 8) V14
- 9) V16
- 10) V18 or VT
- 11) R1
- 12) R2
- 13) R3
- 14) R4
- 15) R5
- 16) R6

Results: Table 1516-01

**Table:1516-01. Influence of Thinning on Corn Grain Yield.
Arlington, WI - 2015.**

Thin time	Grain yield bu/A	Grain moisture %	Test weight lb/bu	Lodging			AGI* \$3.44/b \$/A	Harvest density plants/A	Grain Yield Components			
				Total %	Stalk %	Root %			----- Kernel -----	rows/ear no.	per row no.	per ear no.
UTC	167	19.4	59.5	79.7	0.0	79.7	523	63888	13.2	23.5	311	318
V2	234	19.1	60.0	29.9	8.5	21.4	734	34253	14.5	35.0	510	347
V4	250	19.3	59.6	18.5	11.6	6.9	783	34253	14.3	33.2	473	340
V6	229	19.6	59.3	38.0	7.6	30.4	718	34253	14.1	32.1	453	341
V8	242	19.4	60.9	3.6	2.0	1.6	757	34253	14.3	32.0	457	342
V10	219	18.9	60.0	58.1	0.4	57.7	690	34253	13.9	31.1	432	312
V12	213	19.2	59.8	80.3	0.0	80.3	669	34253	13.6	29.4	401	323
V14	146	19.4	60.6	81.5	0.0	81.5	458	34253	13.9	34.4	478	343
V16	148	19.2	59.4	87.2	0.0	87.2	463	34253	13.1	30.2	394	348
VT	112	19.9	58.8	90.4	0.0	90.4	350	34253	13.6	28.7	390	343
R1	171	19.7	59.7	83.8	0.0	83.8	535	34253	14.5	28.6	418	358
R2	128	20.8	59.4	79.1	1.2	77.9	398	34253	12.7	25.9	330	313
R3	139	20.7	58.7	86.8	0.0	86.8	432	34253	12.2	26.7	330	348
R4	137	19.6	59.9	86.4	0.0	86.4	429	34253	13.7	26.7	369	311
R5	148	19.2	58.9	74.1	3.7	70.5	465	34253	12.1	21.6	264	290
R6	118	20.1	59.8	90.4	0.0	90.4	368	34253	13.7	26.9	372	333
Mean	175	19.6	59.6	66.7	2.2	64.6	548	36106	13.6	29.1	399	332
Probability(%)												
Treatment	0.0	15.6	81.3	0.0	0.8	0.0	0.0	0.0	4.9	0.0	0.1	2.3
LSD (0.10)												
Treatment	41	NS	NS	24.3	5.3	26.4	130	117	1.3	4.3	82	29

*AGI - Average Gross Income