

## FIELD EXPERIMENT HISTORY

**Title:** 16 Influence of Clipping Timing on Corn Grain Yield  
**Experiment:** 16 Influence of Clipping on Corn Grain **Trial ID** 2737 **Year:** 2005  
**Personnel:** J.G. Lauer, P.J. Flannery, and K.D. Kohn  
**Location:** Arlington, WI **County:** Columbia  
**Supported By:** HATCH

### Site Information

**Field:** ARS372 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam  
**Soil Test:** **Date:** 10/15/05 **pH:** 5.7 **OM (%)** 3.7 **P (ppm)** 35 **K (ppm)** 202

### Plot Management

**Tillage Operations:** Fall Chisel Plow      Field Cultivator      Soil Finisher      Cultivated  
**Fertilizer:**

	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
<b>Preplant :</b>	46-0-0	325	N/A
<b>Starter :</b>	N/A	N/A	N/A
<b>Post plant :</b>	N/A	N/A	N/A
<b>Manure:</b>	N/A	N/A	N/A

**Herbicide:** Outlook 20 oz/A      **Insecticide:** None  
                   Hornet 4.0 oz/A      **Hybrid:** NK Brand N50-P5  
**Irrigation:** None

**Planting Date:** 4/29/05      **Planting Depth:** 1.5"      **Row Width:** 30"  
**Target Plant Density:** 34000 plants per acre      **Planting Method:** Kinze Inter-Row Planter  
**Harvest Date:** 10/25/05      **Harvest Method:** Massey Ferguson 8XP

### Experimental Design

**Design:** RCB Factorial      **Replications:** 3  
**Plot Size Seeded** 10' x 25'      **Experiment Size:** 0.3 Acre  
**Harvest Plot Size:** 22' x 5'      **Harvest Plant Density:** 32868 plants per acre

### Factors/Treatments:

<u>Growth Stage at Time of Clipping:</u>		<u>Date of Clipping:</u>
V2 - 2 plant pattern	V6 - 2 plant pattern	V2 - May 31
V2 - 4 plant pattern	V6 - 4 plant pattern	V4 - June 10
V2 - 8 plant pattern	V6 - 8 plant pattern	V6 - June 20
V2 - All plants	V6 - All plants	
V4 - 2 plant pattern	Control	

**Results: Table C-70.**

**Table C-70. Influence of Clipping on Corn Grain Yield  
Arlington, WI - 2005**

Treatment	Grain yield bu/A	Grain moisture %	Test weight lbs/bu	Lodging %	Harvest pop plants/A	Grower return \$/A
V2 - 2 plant	228	19.3	58	2	32340	354
V2 - 4 plant	226	18.7	58	0	33660	354
V2 - 8 plant	218	18.6	58	1	32736	341
V2 - Clip entire plot	213	18.8	58	0	33264	333
V4 - 2 plant	205	19.2	57	1	33000	319
V4 - 4 plant	222	18.9	57	2	33396	346
V4 - 8 plant	207	19.3	57	4	32736	322
V4 - Clip entire plot	206	20.4	56	0	32868	315
V6 - 2 plant	204	18.8	58	0	32340	319
V6 - 4 plant	203	18.8	58	1	32604	318
V6 - 8 plant	204	18.6	58	2	32340	320
V6 - Clip entire plot	195	19.2	58	0	33000	303
Control A - UTC	222	18.8	57	0	32340	348
Control B - UTC	227	18.6	57	0	33528	356
Mean	213	19.0	57	1	32868	332
<b><u>Probability(%)</u></b>						
Treatment	0.3	0.0	14.7	80.8	89.2	0.2
<b><u>LSD(0.10)</u></b>						
Treatment	14	0.5	NS	NS	NS	22
<b><u>CV(%)</u></b>						
	5	2	1	245	3	5

## FIELD EXPERIMENT HISTORY

**Title:** 16 Corn Grain yield response to cohort emergence  
**Experiment:** 16 Cohorts **Trial ID:** 2738 **Year:** 2005  
**Personnel:** J.G. Lauer, P.J. Flannery and K.D. Kohn  
**Location:** Arlington, WI **County:** Columbia  
**Supported By:** HATCH

### Site Information

**Field:** ARS372 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam  
**Soil Test:** **Date:** 11/01/05 **pH** 5.7 **OM (%)** 3.7 **P (ppm)** 35 **K (ppm)** 202

### Plot Management

**Tillage Operations:** Fall Chisel Plow Field Cultivator Soil Finisher Cultivated  

	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
<b>Fertilizer:</b> <b>Preplant :</b>	46-0-0	325	4 /14/05
<b>Starter :</b>	N/A	N/A	N/A
<b>Post plant :</b>	N/A	N/A	N/A
<b>Manure:</b>	N/A	N/A	N/A

**Herbicide:** Outlook 20 oz/A **Insecticide:** None  
 Hornet 4.0 oz/A **Hybrid:** NK Brand N50-P5  
**Irrigation:** None  
**Planting Date:** 4/29/05 **Planting Depth:** 1.5" **Row Width:** 30"  
**Target Plant Density:** 32000 **plants per acre** **Planting Method:** Kinze Inter-Row Planter  
**Harvest Date:** 10/25/05 **Harvest Method:** Hand Harvest  
**Notes:** Grain moisture of 6.31% was derived using ten samples collected from entire bulk sample.

### Experimental Design

**Design:** RCB Factorial **Replications:** 3  
**Plot Size Seeded:** 25' x 10' **Experiment Size:** 0.57 Acre  
**Harvest Plot Size:** Single Plants  
**Factors/Treatments:**

#### Treatments:

A = Plant clipped completely at V3 on 6/6  
 B = Emerged leaves clipped at V3 on 6/6  
 C = Control - No clipping

**Results: Table C-71.**

**Table C-71. Corn Grain response to cohort emergence.  
Arlington, WI - 2005**

Treatment	Five Neighboring plants		Plant	Five Neighboring plants		Yield Components @ 0% Moisture		
	south			north		Kernels per ear no./ear	Yield per ear grams	100 Kernel weight grams
1	All leaves clipped	A	All leaves clipped		365	96	26.8	
2	All leaves clipped	B	All leaves clipped		576	142	24.8	
3	All leaves clipped	C	All leaves clipped		693	183	26.5	
4	All leaves clipped	A	Emerged leaves clipped		188	57	30.5	
5	All leaves clipped	B	Emerged leaves clipped		585	147	25.2	
6	All leaves clipped	C	Emerged leaves clipped		658	160	24.3	
7	All leaves clipped	A	Control		291	78	27.9	
8	All leaves clipped	B	Control		625	145	23.3	
9	All leaves clipped	C	Control		677	166	24.6	
10	Emerged leaves clipped	A	Emerged leaves clipped		202	56	28.2	
11	Emerged leaves clipped	B	Emerged leaves clipped		555	133	23.9	
12	Emerged leaves clipped	C	Emerged leaves clipped		493	132	26.7	
13	Emerged leaves clipped	A	Control		177	47	29.1	
14	Emerged leaves clipped	B	Control		546	128	23.5	
15	Emerged leaves clipped	C	Control		598	139	23.2	
16	Control	A	Control		131	37	28.5	
17	Control	B	Control		468	111	23.8	
18	Control	C	Control		431	115	26.7	
Mean					459	115	26.0	
<b>Probability(%)</b>								
Treatment					0.0	0.0	0.5	
<b>LSD(0.10)</b>								
Treatment					143	23	2.2	
<b>CV(%)</b>								
					23	20	9	

A = All leaves clipped

B = Emerged leaves clipped

C = Control