

FIELD EXPERIMENT HISTORY

Title: Influence of Clipping on Corn Grain Yield
Experiment: 16 Clip **Trial ID:** 3188 **Year:** 2008
Personnel: J.G. Lauer, K.D. Kohn and T. Diallo
Location: Arlington, WI **County:** Columbia
Supported By: HATCH

Site Information

Field: **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam
Soil Test: **Date:** 11/4 /08 **pH:** 7.2 **OM (%)** 2.1 **P (ppm)** 38 **K (ppm)** 175

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivated

	<u>Analysis:</u>	<u>Rate lbs/A:</u>	<u>Date:</u>
Fertilizer: Preplant :	46-0-0	325	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: Dual II Mag 1.5 pt/A **Insecticide:** None
 Hornet 4.0 oz/A **Hybrid:** Dekalb DKC50-20
Irrigation: None

Planting Date: 5/6/08 **Planting Depth:** 1.5" **Row Width:** 30"
Target Plant Density: 30000 plants per acre **Planting Method:** Kinze 3000 Row Planter
Harvest Date: 10/10/08 **Harvest Method:** Massey 8XP

Experimental Design

Design: RCB **Replications:** 4
Plot Size Seeded: 10' x 25' **Experiment Size:** 0.7 Acre
Harvest Plot Size: 5' x 23' **Harvest Plant Density:** 30031 plants per acre
Factors/Treatments:

<u>Growth Stage:</u>	<u>Percent Clipped:</u>
V1	0
V2	25
V3	50
V4	75
	100

Results: Table C-52.

**Table C-52. Influence of Clipping on Corn Grain Yield.
Arlington, WI - 2008.**

Growth stage	Percent clipped	Harvest population	Grain yield	Grain moisture	Test weight	Lodging			Grower return
						Total	Stalk	Root	
	%	plants/A	bu/A	%	lb/bu	%	%	%	\$/A
V1		29905	226	25.4	53	0	0	0	740
V2		30429	222	26.2	53	0	0	0	725
V3		30094	213	27.0	52	1	0	1	691
V4		29697	208	27.0	52	1	0	1	678
	0	29900	220	25.1	53	0	0	0	723
	25	29687	225	25.6	53	0	0	0	739
	50	29798	218	26.2	53	1	1	1	711
	75	30208	203	27.2	52	0	0	0	659
	100	30563	220	27.8	52	0	0	0	711
V1	0	29640	220	24.7	53	0	0	0	726
V1	25	30113	229	24.8	53	0	0	0	754
V1	50	30397	229	24.9	53	0	0	0	754
V1	75	29829	215	26.1	53	0	0	0	705
V1	100	29545	234	26.3	53	0	0	0	764
V2	0	30492	228	25.8	53	0	0	0	745
V2	25	30303	229	25.0	53	0	0	0	752
V2	50	29798	224	26.7	52	1	1	0	731
V2	75	30681	200	26.3	53	0	0	0	655
V2	100	30871	228	27.1	52	0	0	0	741
V3	0	29545	218	25.3	53	0	0	0	717
V3	25	29450	226	26.1	53	1	0	1	738
V3	50	29640	207	26.9	52	3	0	2	675
V3	75	30681	200	27.9	52	0	0	0	647
V3	100	31155	211	28.7	52	0	0	0	680
V4	0	29924	213	24.7	53	0	0	0	703
V4	25	28882	218	26.3	53	0	0	0	711
V4	50	29356	209	26.3	53	3	2	1	683
V4	75	29640	196	28.3	52	1	0	1	631
V4	100	30681	206	29.2	52	1	0	1	660
Mean		30031	217	26.4	53	1	0	0	709
Probability(%)									
Growth Stage (S)		11.3	0.5	0.0	21.1	6.8	14.4	4.6	0.2
Percent Clipped (C)		28.7	94.1	10.4	93.7	42.0	34.5	6.0	93.9
S x C		7.7	0.5	0.0	1.1	1.5	1.2	17.4	0.3
LSD (0.10)									
Growth Stage (S)		NS	8.7	0.5	NS	0.6	NS	0.4	29.6
Percent Clipped (C)		NS	NS	NS	NS	NS	NS	1.0	NS
S x C		565	9.8	0.6	0	0.7	0.3	NS	33.1