

## FIELD EXPERIMENT HISTORY

**Title:** Corn Silage Response to Hail Damage  
**Experiment:** 11 Hail **Trial ID** 2346 **Year:** 2002  
**Personnel:** J.G. Lauer, P.J. Flannery, and K.D. Kohn  
**Location:** Arlington, WI **County:** Columbia  
**Supported By:** National Crop Insurance Service

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### Site Information

**Field:** ARS 406 **Previous Crop:** Soybean **Soil Type:** Plano Silt Loam  
**Soil Test:** **Date:** 11/01/02 **pH** 6.2 **OM (%)** 3.3 **P (ppm)** 79 **K (ppm)** 247

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### Plot Management

**Tillage Operations:** Chisel Plow Field Cultivator Cultivated

**Fertilizer:**

	<u>Analysis</u>	<u>Rate</u>	<u>Date</u>
<b>Preplant</b>	46-0-0	325	N/A
<b>Starter</b>	6-24-24	150	4 /25/02
<b>Post plant</b>	N/A	N/A	N/A
<b>Manure:</b>	N/A	None	

**Herbicide:** Harness 2.5 pt/A  
Hornet 3.0 oz/A **Insecticide:** None

**Irrigation:** None **Hybrid:** Pioneer 34G82

**Planting Date:** 04/25/02 **Planting Depth:** 1.5" **Row Width:** 30"

**Target Plant Density:** 32000 plants per acre **Planting Method:** Kinze Plot Planter

**Harvest Date:** 9/19/02 **Harvest Method:** New Holland 707 Plot Chopper

**Notes:** V7 treatments conducted on 6/28/02  
V10 treatments conducted on 7/8/02  
R1 treatments conducted on 7/29/02  
R4 treatments conducted on 8/21/02

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### Experimental Design

**Design:** RCB **Replications:** 4  
**Plot Size Seeded:** 25' x 10' **Experiment Size:** 0.23 A  
**Harvest Plot Size:** 22' x 2.5' **Harvest Plant Density:** 27027 plants per acre

### Factors/Treatments:

#### Treatments

100% @ V7	100% @ R1
50% @ V10	25% @ R4
100% @ V10	50% @ R4
25% @ R1	100% @ R4
50% @ R1	Untreated Check

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**Results: Table C-46.**

**Table C-46. Corn Silage Response to Hail Damage  
Arlington, WI 2002.**

Leaf Removal treatment	Dry Matter yield	Moisture	Kernel milk	Plant population
	T/A	%	%	plants/A
100% @ V7	8.0	59.8	39	27918
50% @ V10	8.2	60.3	29	27126
100% @ V10	5.7	61.9	25	27522
25% @ R1	8.1	64.0	33	24750
50% @ R1	7.6	64.8	35	27522
100% @ R1	3.1	69.3	23	25542
25% @ R4	8.8	60.4	33	27324
50% @ R4	7.9	64.3	25	26730
100% @ R4	5.9	52.1	5	27918
Check	9.4	58.8	31	27918
Mean	7.3	61.6	28	27027
<u>Probability (%)</u>				
Treatment	0.0	0.0	0.0	49.7
<u>LSD (0.10)</u>				
Treatment	0.8	3.5	7.0	NS
<u>CV (%)</u>				
	9	5	22	8

## FIELD EXPERIMENT HISTORY

**Title:** Corn Silage Response to Hail Damage  
**Experiment:** 11Hail **Trial ID** 2370 **Year:** 2002  
**Personnel:** M.G. Bertram, J.G. Lauer, P.J. Flannery, and K.D. Kohn  
**Location:** Marshfield, WI **County:** Wood  
**Supported By:** National Crop Insurance Service

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### Site Information

**Field:** W5-02C57 **Previous Crop:** Corn **Soil Type:** Loyal Silt Loam  
**Soil Test:** **Date:** 10/25/00 **pH** 7.1 **OM (%)** 3.2 **P (ppm)** 24 **K (ppm)** 60

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### Plot Management

**Tillage Operations:** Chisel Plow Field Cultivator Cultivated

<b>Fertilizer:</b>	<b>Analysis</b>	<b>Rate</b>	<b>Date</b>
Preplant	N/A	N/A	N/A
Starter	17-17-17+S+Zn	142	5 /15/02
Post plant	46-0-0	250	7 /03/02
Manure:	N/A	None	

**Herbicide:** Harness 2.0 pt/A Insecticide: None  
Hornet 2.4 oz/A

**Irrigation:** None **Hybrid:** Pioneer 37J99

**Planting Date:** 5/15/02 **Planting Depth:** 1.5" **Row Width:** 30"

**Target Plant Density:** 33000 plants per acre **Planting Method:** John Deere 7000

**Harvest Date:** 9/24/02 **Harvest Method:** Hand Harvested

**Notes:** V7 treatments conducted on 7/9/02  
V10 treatments conducted on 7/16/02  
R1 treatments conducted on 8/8/02  
R4 treatments conducted on 8/28/02

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### Experimental Design

**Design:** RCB **Replications:** 4  
**Plot Size Seeded:** 25' x 10' **Experiment Size:** 0.25 A  
**Harvest Plot Size:** 22' x 2.5' **Harvest Plant Density:** 33125 plants per acre

#### **Factors/Treatments:**

##### Treatments

100% @ V7	100% @ R1
50% @ V10	25% @ R4
100% @ V10	50% @ R4
25% @ R1	100% @ R4
50% @ R1	Untreated Check

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**Results: Table C-47.**

**Table C-47. Corn Silage Response to Hail Damage  
Marshfield, WI 2002.**

Leaf Removal treatment	Dry Matter		Plant population
	yield	Moisture	
	T/A	%	plants/A
100% @ V7	6.3	69.8	34151
50% @ V10	6.8	69.0	33106
100% @ V10	4.4	71.5	33454
25% @ R1	8.4	68.2	33628
50% @ R1	7.2	69.4	32757
100% @ R1	2.8	77.9	32931
25% @ R4	8.5	67.8	33106
50% @ R4	7.5	69.0	33106
100% @ R4	4.9	66.0	32583
Check	8.6	66.8	32409
Mean	6.5	69.5	33123
<u>Probability (%)</u>			
Treatment	0.0	0.0	70.2
<u>LSD (0.10)</u>			
Treatment	0.5	1.7	NS
<u>CV (%)</u>			
	6	5	4