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

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

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivated

Fertilizer:

	Analysis	Rate	Date
Preplant	46-0-0	325	N/A
Starter	6-24-24	150	4 /25/02
Post plant	N/A	N/A	N/A
Manure:	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

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

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
Probability (%)				
Treatment	0.0	0.0	0.0	49.7
LSD (0.10)				
Treatment	0.8	3.5	7.0	NS
CV (%)	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

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

Plot Management

Tillage Operations: Chisel Plow Field Cultivator Cultivated

Fertilizer:

	Analysis	Rate	Date
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
Hornet 2.4 oz/A

Insecticide: None

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

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

Results: Table C-47.

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

Leaf Removal treatment	Dry Matter yield	Moisture	Plant population
	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
Probability (%)			
Treatment	0.0	0.0	70.2
LSD (0.10)			
Treatment	0.5	1.7	NS
CV (%)	6	5	4