

Storen Weed Control and Crop Safety Arlington, WI 2023

Trial Information

Trial Sponsor(s): Syngenta

Objective: Evaluate the residual weed control and crop safety of Storen compared to competitor corn herbicides

Crop: Corn

Hybrid: NK9653-5222-EZ1

Weed species (pressure): giant foxtail (high-very high)
woolly cupgrass (high-very high)

Herbicide Application(s): PRE – 4/28
POST – 5/30 (V2/V3 corn)

For the full report see trial #23-ARL-CN11 in the [2023 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

syngenta

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Trt #	Herbicide (rate acre ⁻¹)	Wolly Cupgrass (%)				Giant Foxtail (%)			Yield ^b bu acre ⁻¹
		5/30	6/13	6/28	10/19	5/30	6/13	6/28	
1	Untreated Check	0	0	0	0	0	0	0	9 g
One-Pass – PRE (4/28)									
2	Storen (2.1 qt)	86	-	59	43	93	-	73	151 bcd
3	Storen (2.4 qt)	90	-	58	46	93	-	67	152 bcd
4	Acuron Flexi (2.25 qt)	80	-	51	46	91	-	71	127 de
5	Resicore XL (2.5 qt)	93	-	63	49	97	-	79	166 bc
6	Resicore XL (3 qt)	94	-	70	51	98	-	86	176 ab
7	Trivolt SC (17.5 fl oz)	72	-	46	50	83	-	53	130 cde
8	Trivolt SC (20 fl oz)	79	-	51	52	87	-	61	149 bcd
9	Maverick (24 fl oz)	63	-	30	34	69	-	31	70 f
10	Maverick (32 fl oz)	68	-	60	38	76	-	38	100 e
One-Pass – POST (5/30)		POST				POST			
14	Acuron GT (3.75 pt) + NIS (0.25% v/v) + AMS ^d	0	99	99	84	0	99	99	203 a
Two-Pass – PRE (4/28) <i>fb</i> POST (5/30)		POST				POST			
11	Storen (1.05 qt) <i>fb</i> Storen (1.05 qt) + Roundup PM3 (28 fl oz) + AMS ^d	67	99	95	88	80	98	95	211 a
12	Storen (1.2 qt) <i>fb</i> Storen (1.2 qt) + Roundup PM3 (28 fl oz) + AMS ^d	64	99	96	90	84	99	95	211 a
13	Storen (1.2 qt) <i>fb</i> Halex GT (4 pt) + Status (5 oz) + NIS (0.25% v/v) + AMS ^d	73	99	95	91	85	99	95	206 a
15	Calibra (1.4 qt) <i>fb</i> Acuron GT (3.75 pt) + NIS (0.25% v/v) + AMS ^d	63	100	96	86	83	98	96	206 a
LSD (α=0.10)		10	ns	9	8	5	ns	11	25
p value		<.001	0.279	<.001	<.001	<.001	0.592	<.001	<0.001

^aVisual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

^bYield values with the same letter are not significantly different.

^c10/19 ratings were a combination of woolly cupgrass, giant foxtail, and other minor grass species present in the trial.

^dAMS liquid applied at 2.5% v/v

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Plot pictures taken on 5/30
32 days after the PRE application

The number in the upper right-hand corner is the
average % woolly cupgrass control of 4 replications



32 days after PRE (5/30)
PRE: 2.1 qt Storen

86%



32 days after PRE (5/30)
PRE: 2.4 qt Storen

90%



32 days after PRE (5/30)
PRE: 2.25 qt Acuron Flexi

80%



32 days after PRE (5/30)
PRE: 2.5 qt Resicore XL

93%



32 days after PRE (5/30)
PRE: 3 qt Resicore XL

94%





32 days after PRE (5/30)
PRE: 20 fl oz Trivolt SC

79%



32 days after PRE (5/30)
PRE: 24 fl oz Maverick

63%



32 days after PRE (5/30)
PRE: 32 fl oz Maverick

68%





32 days after PRE (5/30)

PRE: 1.2 qt Storen

69%



32 days after PRE (5/30)
PRE: 1.4 qt Calibra

63%



Storen Weed Control and Crop Safety

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Plot pictures taken on 6/13

46 days after the PRE application
13 days after the POST application

The number in the upper right-hand corner is the
average % woolly cupgrass control of 4 replications

46 days after PRE (6/13)

0%

Untreated Check



46 days after PRE (6/13)

PRE: 2.1 qt Storen



46 days after PRE (6/13)

PRE: 2.4 qt Storen



46 days after PRE (6/13)
PRE: 2.25 qt Acuron Flexi



46 days after PRE (6/13)
PRE: 2.5 qt Resicore XL



46 days after PRE (6/13)

PRE: 3 qt Resicore XL



46 days after PRE (6/13)
PRE: 17.5 fl oz Trivolt SC



46 days after PRE (6/13)

PRE: 20 fl oz Trivolt SC



46 days after PRE (6/13)

PRE: 24 fl oz Maverick



46 days after PRE (6/13)
PRE: 32 fl oz Maverick





13 days after POST (6/13)

PRE: 1.05 qt Storen *fb*

99%

POST: 1.05 qt Storen + 28 Roundup PowerMAX 3 + AMS



13 days after POST (6/13)

PRE: 1.2 qt Storen *fb*

99%

POST: 1.2 qt Storen + 28 Roundup PowerMAX 3 + AMS



13 days after POST (6/13)

PRE: 1.2 qt Storen *fb*

99%

POST: 4 pt Halex GT + 5 oz Status + NIS + AMS



13 days after POST (6/13)

PRE: 1.4 qt Calibra *fb*

POST: 3.75 pt Acuron GT + NIS + AMS

100%



Storen Weed Control and Crop Safety

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Plot pictures taken on 6/28

61 days after the PRE application

29 days after the POST application

The number in the upper right-hand corner is the average % woolly cupgrass control of 4 replications

61 days after PRE (6/28)
Untreated Check

0%



61 days after PRE (6/28)
PRE: 2.1 qt Storen

59%



61 days after PRE (6/28)

PRE: 2.4 qt Storen

58%



61 days after PRE (6/28)
PRE: 2.25 qt Acuron Flexi

51%



61 days after PRE (6/28)
PRE: 2.5 qt Resicore XL

63%



61 days after PRE (6/28)
PRE: 3 qt Resicore XL

70%



61 days after PRE (6/28)
PRE: 17.5 fl oz Trivolt SC

46%



61 days after PRE (6/28)

PRE: 20 fl oz Trivolt SC

51%



61 days after PRE (6/28)

PRE: 24 fl oz Maverick

30%



61 days after PRE (6/28)
PRE: 32 fl oz Maverick

60%



29 days after POST (6/28)
POST: 3.75 pt Acuron GT + NIS + AMS

99%



29 days after POST (6/28)

PRE: 1.05 qt Storen *fb*

95%

POST: 1.05 qt Storen + 28 Roundup PowerMAX 3 + AMS



29 days after POST (6/28)

PRE: 1.2 qt Storen *fb*

96%

POST: 1.2 qt Storen + 28 Roundup PowerMAX 3 + AMS



29 days after POST (6/28)

PRE: 1.2 qt Storen *fb*

95%

POST: 4 pt Halex GT + 5 oz Status + NIS + AMS



29 days after POST (6/28)

PRE: 1.4 qt Calibra *fb*

96%

POST: 3.75 pt Acuron GT + NIS + AMS



Storen Weed Control and Crop Safety

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Plot pictures taken on 10/19
Near time of corn harvest

The number in the upper right-hand corner is the
average % annual grass control of 4 replications







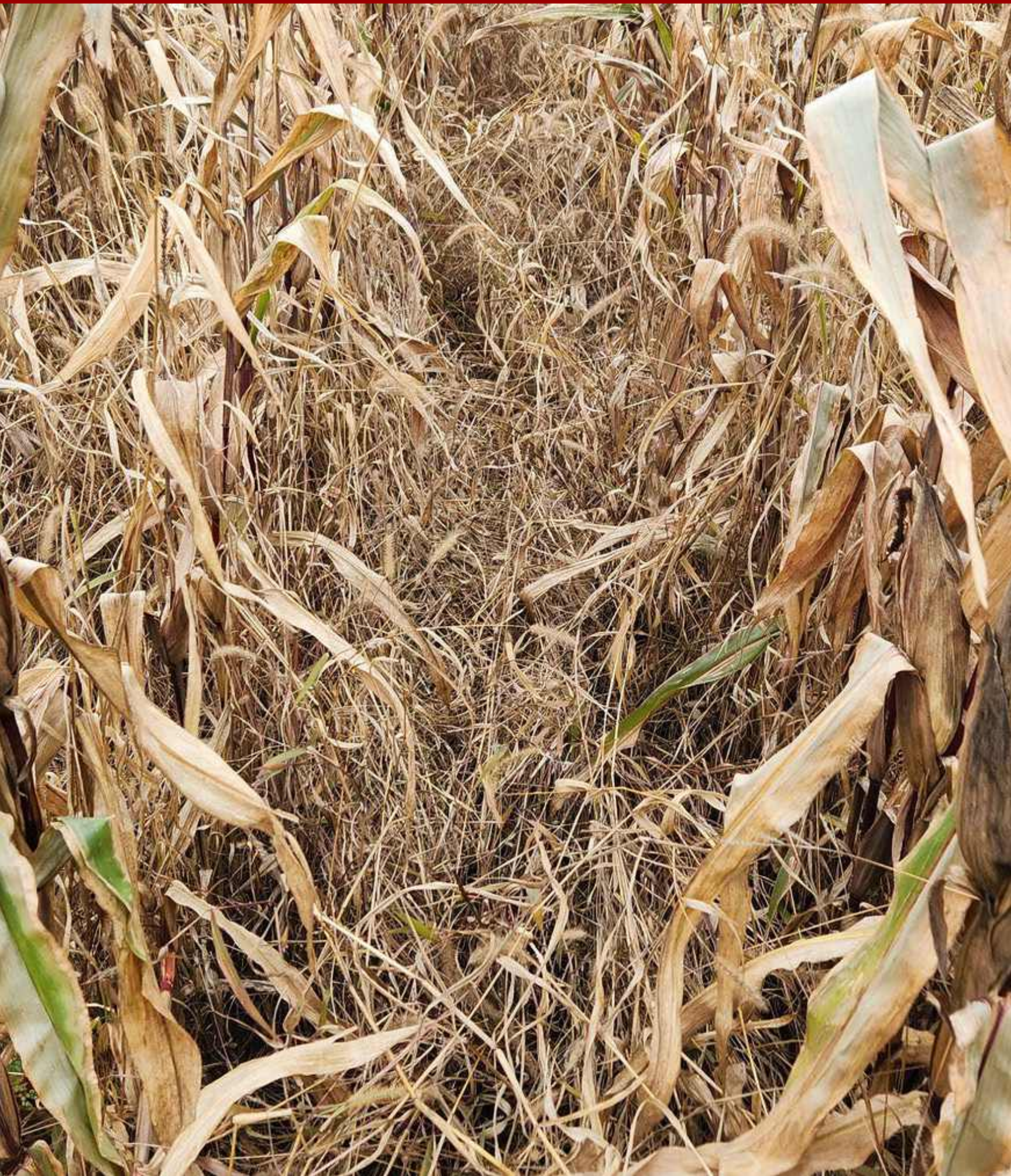
















Corn Harvest (10/19)

PRE: 1.05 qt Storen *fb*

88%

POST: 1.05 qt Storen + 28 Roundup PowerMAX 3 + AMS



Corn Harvest (10/19)

PRE: 1.2 qt Storen *fb*

90%

POST: 1.2 qt Storen + 28 Roundup PowerMAX 3 + AMS



Corn Harvest (10/19)

PRE: 1.2 qt Storen *fb*

91%

POST: 4 pt Halex GT + 5 oz Status + NIS + AMS



Corn Harvest (10/19)

PRE: 1.4 qt Calibra *fb*

86%

POST: 3.75 pt Acuron GT + NIS + AMS

