

Corn Herbicide Showcase: No Atrazine Arlington, WI 2022

Trial Information

Trial Sponsor(s): Syngenta, Summit Agro

Objective: Evaluate multiple 1- and 2-pass corn herbicide programs without atrazine for weed control and crop safety

Crop: Corn

Hybrid: NK9653-5222-EZ1

Weed species (pressure): common ragweed (moderate)
common lambsquarters (moderate)
giant foxtail (high-very high)
woolly cupgrass (moderate)

Herbicide Application(s): PRE – 4/29
EPOST – 6/2 (V4 corn)
POST – 6/9 (V5 corn)

For the full report see trial #22-ARL-CN05 in the [2022 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

syngenta

SummitAgroUSA

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Trt # Herbicide (rate acre ⁻¹)	Common Ragweed (%)				Lambsquarters (%)				Annual Grasses ^c (%)				Yield ^b bu acre ⁻¹
	5/20	6/9	6/23	10/20	5/20	6/9	6/23	10/20	5/20	6/9	6/23	10/20	
1 Untreated Check	0	0	0	0	0	0	0	0	0	0	0	0	18 e
One-Pass – PRE (4/29)													
2 Acuron Flexi (2.25 qt)	97	96	100	99	100	100	100	100	88	83	63	49	183 cd
3 Resicore (2.75 qt)	97	96	99	98	100	100	100	100	93	87	74	65	197 bc
4 TriVolt (20 fl oz)	95	93	100	98	100	99	100	100	77	83	72	68	196 bcd
5 Maverick (1 qt)	99	98	99	100	100	100	100	100	58	76	65	50	174 d
One-Pass – EPOST (6/2)													
6 Acuron GT (3.75 pt) + NIS (0.25% v/v) + AMS (2.5% v/v)	0	59	100	100	0	71	100	100	0	59	100	91	218 ab
7 Halex GT (3.8 pt) + NIS (0.25% v/v) + AMS (2.5% v/v)	0	57	100	99	0	70	100	100	0	58	97	90	221 a
8 Maverick (14 oz) + Roundup PM3 (25 oz) + AMS (2.5% v/v)	0	67	100	100	0	83	100	100	0	60	99	93	227 a
9 Resicore (1.25 qt) + Roundup PM3 (25 oz) +AMS (2.5% v/v)	0	63	100	100	0	78	100	100	0	59	93	85	221 a
Two-Pass – PRE (4/29) <i>fb</i> POST (6/9)													
10 Dual II Magnum (1.33 pt) <i>fb</i> Acuron GT (3.75 pt) + NIS (0.25% v/v) + AMS (2.5% v/v)	26	26	100	100	90	40	100	100	84	77	99	97	227 a
11 TripleFlex II (2 pt) <i>fb</i> Capreno (3 oz) + Roundup PM3 (30 oz) + AMS (2.5% v/v)	95	79	100	100	100	99	100	100	87	74	100	94	223 a
12 Restraint (30 oz) + Princep 4FL (1 qt) <i>fb</i> Shieldex (1 oz) +Status (2.5 oz) +COC (1 v/v%) +AMS (2.5%)	73	70	100	100	100	96	100	100	90	84	84	88	224 a
13 Restraint (30 oz) + Princep 4FL (1 qt) <i>fb</i> Restraint (18 oz) + COC (1 v/v%) + AMS (2.5% v/v)	91	66	100	100	100	98	100	100	89	84	88	89	216 ab
LSD (α=0.10)	9	6	ns	ns	0.2	8	ns	ns	8	6	8	7	22
p value	<.001	<.001	0.143	0.563	<.001	<.001	1.00	0.467	<.001	<.001	<.001	<.001	<.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.

^cAnnual grass species in the trial consisted of giant foxtail (predominant species) and woolly cupgrass.

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Plot pictures taken on 5/20
21 days after the PRE application

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



21 days after PRE (5/20)
PRE: 2.25 qt Acuron Flexi

88%



21 days after PRE (5/20)
PRE: 2.75 qt Resicore

93%



21 days after PRE (5/20)
PRE: 20 fl oz TriVolt

77%



21 days after PRE (5/20)
PRE: 1 qt Maverick

58%



21 days after PRE (5/20)
PRE: 1.33 pt Dual II Magnum

84%



21 days after PRE (5/20)
PRE: 2 pt TripleFlex II

87%



21 days after PRE (5/20)

PRE: 30 fl oz Restraint + 1 qt Princep 4FL

89%



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Plot pictures taken on 6/2
34 days after the PRE application
The day of the EPOST application

34 days after PRE (6/2)
Untreated Check



34 days after PRE (6/2)
PRE: 2.25 qt Acuron Flexi



34 days after PRE (6/2)
PRE: 2.75 qt Resicore



34 days after PRE (6/2)
PRE: 20 fl oz TriVolt



34 days after PRE (6/2)
PRE: 1 qt Maverick



34 days after PRE (6/2)
PRE: 1.33 pt Dual II Magnum



34 days after PRE (6/2)
PRE: 2 pt TripleFlex II



34 days after PRE (6/2)
PRE: 30 fl oz Restraint + 1 qt Princep 4FL



Corn Herbicide Showcase: No Atrazine Arlington, WI 2022

Plot pictures taken on 6/9
41 days after the PRE application
7 days after the EPOST application
The day of the POST application

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

41 days after PRE (6/9)
Untreated Check

0%



41 days after PRE (6/9)
PRE: 2.25 qt Acuron Flexi

83%



41 days after PRE (6/9)
PRE: 2.75 qt Resicore

87%



41 days after PRE (6/9)
PRE: 20 fl oz TriVolt

83%



41 days after PRE (6/9)
PRE: 1 qt Maverick

76%



7 days after EPOST (6/9)

EPOST: 3.75 pt Acuron GT + 0.25% NIS + 2.5% AMS

59%





7 days after EPOST (6/9)

EPOST: 14 fl oz Maverick + 25 fl oz Roundup PM3 + 2.5% AMS

60%



7 days after EPOST (6/9)

EPOST: 1.25 qt Resicore + 25 fl oz Roundup PM3 + 2.5% AMS

59%



41 days after PRE (6/9)
PRE: 1.33 pt Dual II Magnum

77%



41 days after PRE (6/9)
PRE: 2 pt TripleFlex II

74%





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Arlington, WI 2022

Plot pictures taken on 6/56

55 days after the PRE application

21 days after the EPOST application

14 days after the POST application

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

55 days after PRE (6/23)

0%

Untreated Check



55 days after PRE (6/23)
PRE: 2.25 qt Acuron Flexi

63%



55 days after PRE (6/23)

PRE: 2.75 qt Resicore

74%



55 days after PRE (6/23)

PRE: 20 fl oz TriVolt

72%



55 days after PRE (6/23)
PRE: 1 qt Maverick

65%



21 days after EPOST (6/23)

EPOST: 3.75 pt Acuron GT + 0.25% NIS + 2.5% AMS

100%



21 days after EPOST (6/23)

EPOST: 3.8 pt Halex GT + 0.25% NIS + 2.5% AMS

97%



21 days after EPOST (6/23)

EPOST: 14 fl oz Maverick + 25 fl oz Roundup PM3 + 2.5% AMS

99%



21 days after EPOST (6/23)

EPOST: 1.25 qt Resicore + 25 fl oz Roundup PM3 + 2.5% AMS

93%



14 days after POST (6/23)

PRE: 1.33 pt Dual II Magnum *fb*

99%

POST: 3.75 pt Acuron GT + 0.25% NIS + 2.5% AMS



14 days after POST (6/23)

PRE: 2 pt TripleFlex II *fb*

100%

POST: 3 fl oz Capreno + 30 fl oz Roundup PM3 + 2.5% AMS



14 days after POST (6/23)

PRE: 30 fl oz Restraint + 1 qt Princep 4FL *fb*

84%

POST: 1 fl oz Shieldex + 2.5 oz Status + 1% COC + 2.5% AMS



14 days after POST (6/23)

PRE: 30 fl oz Restraint + 1 qt Princep 4FL *fb*

88%

POST: 18 fl oz Restraint + 1% COC + 2.5% AMS

