

Herbicide Programs for Conventional Corn Brooklyn, WI 2023

Trial Information

Trial Sponsor: Wisconsin Cropping Systems Weed Science

Objective: Evaluate various corn herbicide programs for season long weed control in conventional corn

Crop: Corn

Hybrid: O'Brien Hybrids OB1105

Weed species (pressure): waterhemp (low-moderate)
velvetleaf (low-moderate)
woolly cupgrass (moderate)

Herbicide Application(s): PRE – 5/17
POST – 6/12 (V5 corn)

For the full report see trial #23-BRO-CN17 in the [2023 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON



BRIEN HYBRIDS

Herbicide Programs for Conventional Corn Janesville, WI 2023

Trt #	Herbicide (rate acre ⁻¹)	Waterhemp %			Velvetleaf %			Woolly Cupgrass %			Yield bu acre ⁻¹
		6/7	6/29	10/6	6/7	6/29	10/6	6/7	6/29	10/6	
1	Untreated Check	0	0	0	0	0	0	0	0	0	196.3
One-Pass – PRE (5/17)											
12	Acuron Flexi (2.25 qt) + Princep 4L (1 qt)	100	92	89	100	100	100	99	96	95	211.0
Two-Pass – PRE (5/17) fb POST (6/12)											
2	Harness Max (2 qt) fb Capreno (3 oz) + Superb HC (0.5% v/v) + AMS (2 lb)	100	99	99	100	100	100	98	96	96	221.2
3	Harness Max (2 qt) fb Diflexx Duo (28 oz) + COC (1% v/v) + AMS (2 lb)	100	100	100	100	100	100	98	96	97	207.3
4	Acuron Flexi (1.1 qt) + Princep 4L (1 qt) fb Acuron Flexi (1.1 qt) + Accent Q (0.9 oz) + NIS (0.25% v/v) + AMS (2 lb)	97	95	93	100	100	100	94	97	99	215.0
5	Verdict (16 oz) fb Armezon (1 oz) + Status (5 oz) + MSO (1% v/v) + AMS (2 lb)	94	91	91	96	100	100	96	96	94	210.5
6	Verdict (10 oz) + Callisto (3 oz) fb Armezon PRO (16 oz) + MSO (1% v/v) + AMS (2 lb)	96	89	92	100	100	100	92	87	90	203.7
7	Surestart II (2 pt) fb Accent Q (0.9 oz) + Status (5 oz) + COC (1% v/v) + AMS (2 lb)	99	96	95	93	100	100	95	94	94	209.0
8	Harness (2 pt) + Princep 4L (1 qt) fb Revulin Q (4 oz) + Status (5 oz) + COC (1% v/v) + AMS (2 lb)	99	100	99	90	100	100	99	99	95	194.0
9	Harness (2 pt) + Princep 4L (1 qt) fb Revulin Q (4 oz) + Status (5 oz) + Zidua SC (3 oz) + COC (1% v/v) + AMS (2 lb)	99	99	100	79	100	100	97	96	94	216.7
10	Surpass NXT (2 pt) fb Kyro (45 oz) + Accent Q (0.9 oz) + COC (1% v/v) + AMS (2 lb)	95	94	95	85	98	100	96	98	99	234.1
11	Maverick (24 oz) fb Laudis (3 oz) + Destiny HC (0.5% v/v) + AMS (2 lb)	99	94	95	100	100	100	97	95	97	205.9
LSD ($\alpha=0.10$)		3	6	6	6	1	ns	ns	ns	4	ns
p value		0.056	0.023	0.013	<.001	0.004	1.0	0.261	0.116	0.076	0.696

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

Herbicide Programs for Conventional Corn Brooklyn, WI 2023

Plot pictures taken on 6/7
21 days after the PRE application

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

21 days after PRE (6/7)
Untreated Check

0%



21 days after PRE (6/7)

PRE: 2.25 qt Acuron Flexi + 1 qt Princep 4L

100%



21 days after PRE (6/7)
PRE: 2 qt Harness MAX

100%



21 days after PRE (6/7)
PRE: 1.1 qt Acuron Flexi + 1 qt Princep 4L

97%



21 days after PRE (6/7)
PRE: 16 fl oz Verdict

94%



21 days after PRE (6/7)
PRE: 10 fl oz Verdict + 3 fl oz Callisto

96%



21 days after PRE (6/7)
PRE: 2 pt SureStart II

99%



21 days after PRE (6/7)
PRE: 2 pt Harness + 1 qt Princep 4L

99%



21 days after PRE (6/7)
PRE: 2 pt Surpass NXT

95%



21 days after PRE (6/7)
PRE: 24 oz Maverick

99%



Herbicide Programs for Conventional Corn Brooklyn, WI 2023

Plot pictures taken on 6/12
26 days after the PRE application
The day of the POST application

26 days after PRE (6/12)
Untreated Check



26 days after PRE (6/12)
PRE: 2 qt Harness MAX



26 days after PRE (6/12)
PRE: 1.1 qt Acuron Flexi + 1 qt Princep 4L



26 days after PRE (6/12)
PRE: 16 fl oz Verdict



26 days after PRE (6/12)
PRE: 10 fl oz Verdict + 3 fl oz Callisto



26 days after PRE (6/12)
PRE: 2 pt SureStart II



26 days after PRE (6/12)
PRE: 2 pt Harness + 1 qt Princep 4L



Herbicide Programs for Conventional Corn Brooklyn, WI 2023

Plot pictures taken on 6/29

43 days after the PRE application
17 days after the POST application

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

43 days after PRE (6/29)

0%

Untreated Check



43 days after PRE (6/29)
PRE: 2.25 qt Acuron Flexi + 1 qt Princep 4L

92%



17 days after POST (6/29)

PRE: 2 qt Harness MAX fb

POST: 3 oz Capreno + 0.5% v/v Superb HC + AMS

99%



17 days after POST (6/29)

PRE: 2 qt Harness MAX *fb*

POST: 28 oz Diflexx Duo + COC + AMS

100%



17 days after POST (6/29)

PRE: 1.1 qt Acuron Flexi + 1 qt Princep 4L *fb*

95%

POST: 1.1 qt Acuron Flexi + 0.9 oz Accent Q + NIS + AMS



17 days after POST (6/29)

PRE: 16 fl oz Verdict *fb*

91%

POST: 1 oz Armezon + 5 oz Status + MSO + AMS



17 days after POST (6/29)

PRE: 10 fl oz Verdict + 3 fl oz Callisto *fb*

89%

POST: 16 oz Armezon PRO + MSO + AMS



17 days after POST (6/29)

PRE: 2 pt SureStart II *fb*

96%

POST: 0.9 oz Accent Q + 5 oz Status + COC + AMS



17 days after POST (6/29)

PRE: 2 pt Harness + 1 qt Princep 4L fb

100%

POST: 4 oz Revulin Q + 5 oz Status + COC + AMS



17 days after POST (6/29)

PRE: 2 pt Harness + 1 qt Princep 4L *fb*

99%

POST: 4 oz Revulin Q + 5 oz Status + 3 oz Zidua SC + COC + AMS



17 days after POST (6/29)

PRE: 2 pt Surpass NXT fb

POST: 45 oz Kyro + 0.9 oz Accent Q + COC + AMS

94%



17 days after POST (6/29)

PRE: 24 oz Maverick *fb*

POST: 3 oz Laudis + 0.5% v/v Destiny HC + AMS

94%



Herbicide Programs for Conventional Corn Brooklyn, WI 2023

Plot pictures taken on 10/6
Near time of corn harvest

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



Corn Harvest (10/6)

89%

PRE: 2.25 qt Acuron Flexi + 1 qt Princep 4L



Corn Harvest (10/6)

PRE: 2 qt Harness MAX *fb*

POST: 3 oz Capreno + 0.5% v/v Superb HC + AMS

99%



Corn Harvest (10/6)

PRE: 2 qt Harness MAX *fb*

POST: 28 oz Diflexx Duo + COC + AMS

100%



Corn Harvest (10/6)

PRE: 1.1 qt Acuron Flexi + 1 qt Princep 4L *fb*

93%

POST: 1.1 qt Acuron Flexi + 0.9 oz Accent Q + NIS + AMS



Corn Harvest (10/6)

PRE: 16 fl oz Verdict *fb*

POST: 1 oz Armezon + 5 oz Status + MSO + AMS

91%



Corn Harvest (10/6)

PRE: 10 fl oz Verdict + 3 fl oz Callisto *fb*

92%

POST: 16 oz Armezon PRO + MSO + AMS



Corn Harvest (10/6)

PRE: 2 pt SureStart II *fb*

95%

POST: 0.9 oz Accent Q + 5 oz Status + COC + AMS



Corn Harvest (10/6)

PRE: 2 pt Harness + 1 qt Princep 4L *fb*

99%

POST: 4 oz Revulin Q + 5 oz Status + COC + AMS



Corn Harvest (10/6)

PRE: 2 pt Harness + 1 qt Princep 4L *fb*

100%

POST: 4 oz Revulin Q + 5 oz Status + 3 oz Zidua SC + COC + AMS



Corn Harvest (10/6)

PRE: 2 pt Surpass NXT *fb*

95%

POST: 45 oz Kyro + 0.9 oz Accent Q + COC + AMS



Corn Harvest (10/6)

PRE: 24 oz Maverick *fb*

95%

POST: 3 oz Laudis + 0.5% v/v Destiny HC + AMS

