

Herbicide Programs for Conventional Corn Arlington, WI 2022

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: Dekalb DKC 54-36

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

Herbicide Application(s): PRE – 5/10
POST – 6/2 (V4 corn)

For the full report see trial #22-ARL-CN12 in the [2022 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

Herbicide Programs for Conventional Corn Arlington, WI 2022

| Trt # | Herbicide (rate acre ⁻¹) | Annual Grasses ^c | | | | Yield ^b bu acre ⁻¹ |
|--|--|-----------------------------|-----------------|-----------------|--------------|---|
| | | 5/31 | 6/15 | 6/30 | 10/4 | |
| 1 | Untreated Check | 0 | 0 | 0 | 0 | 3 d |
| Two-Pass – PRE (5/10) fb POST (6/2) | | POST | | | | |
| 2 | Harness MAX (2 qt) fb Capreno (3 oz) + Superb HC 0.5% v/v + AMS (2 lb) | 39 | 77 | 63 | 64 | 83 bc |
| 3 | Harness MAX (2 qt) fb Diflexx Duo (28 oz) + COC 1% v/v + AMS (2 lb) | 50 | 78 | 70 | 68 | 93 ab |
| 4 | Acuron Flexi (1.1 qt) fb Acuron Flexi (1.1 qt) + NIS 0.25% v/v + AMS (2 lb) | 23 | 43 | 34 | 49 | 32 cd |
| 5 | Verdict (16 oz) fb Armezon (1 oz) + Status (5 oz) + MSO 1% v/v + AMS (2 lb) | 29 | 89 | 83 | 71 | 120 ab |
| 6 | Verdict (10 oz) + Callisto (3 oz) fb Armezon PRO (16 fl oz) + MSO 1% v/v + AMS (2 lb) | 23 | 73 | 66 | 67 | 62 bc |
| 7 | Surestart II (2 pt) fb Accent Q (0.9 oz) + Status (5 oz) + COC 1% v/v + AMS (2 lb) | 34 | 72 | 72 | 71 | 85 abc |
| 8 | Harness (2 pt) + Princep 4L (1 qt) fb Revulin Q (4 oz) + Status (5 oz) + COC 1% v/v + AMS (2 lb) | 51 | 87 | 78 | 68 | 119 ab |
| 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) | 49 | 82 | 77 | 71 | 115 ab |
| 10 | Harness (2 pt) + Princep 4L (1 qt) fb Shieldex (1 oz) + Accent Q (0.9 oz) + COC 1% v/v + AMS (2 lb) | 59 | 82 | 79 | 70 | 117 ab |
| 11 | Harness (2 pt) + Princep 4L (1 qt) fb Laudis (3 oz) + Warrant (48 oz) + MSO 1% v/v + AMS (2 lb) | 47 | 93 | 89 | 79 | 141 a |
| 12 | Dual II Magnum (1.67 pt) + Princep 4L (1 qt) fb Callisto (3 oz) + Status (5 oz) + COC 1% v/v + AMS (2 lb) | 35 | 64 | 57 | 55 | 56 bc |
| LSD ($\alpha=0.10$) | | 10 | 11 | 13 | ns | 37 |
| p value | | <.001 | <.001 | <.001 | 0.169 | <.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 woolly cupgrass (predominant species) and giant foxtail. Grass ratings most accurately reflect woolly cupgrass control.

Herbicide Programs for Conventional Corn Arlington, WI 2022

Plot pictures taken on 5/31
21 days after the PRE application
2 days before the POST application

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

21 days after PRE (5/31)
Untreated Check

0%



21 days after PRE (5/31)
PRE: 2 qt Harness MAX

45%



21 days after PRE (5/31)
PRE: 1.1 qt Acuron Flexi

23%



21 days after PRE (5/31)
PRE: 16 fl oz Verdict

29%



21 days after PRE (5/31)
PRE: 10 fl oz Verdict + 3 fl oz Callisto

23%



21 days after PRE (5/31)
PRE: 2 pt SureStart II

34%



21 days after PRE (5/31)
PRE: 2 pt Harness + 1 qt Princep 4L

52%



21 days after PRE (5/31)

PRE: 1.67 pt Dual II Magnum + 1 qt Princep 4L

35%



Herbicide Programs for Conventional Corn Arlington, WI 2022

Plot pictures taken on 6/15

36 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

36 days after PRE (6/15)
Untreated Check

0%



13 days after POST (6/15)

PRE: 2 qt Harness MAX *fb*

POST: 3 fl oz Capreno + 0.5% Superb HC + 2 lb AMS

77%



13 days after POST (6/15)

PRE: 2 qt Harness MAX *fb*

78%

POST: 28 fl oz Diflexx Duo + 1% COC + 2 lb AMS



13 days after POST (6/15)

PRE: 1.1 qt Acuron Flexi

43%

POST: 1.1 qt Acuron Flexi + 0.25% NIS + 2 lb AMS



13 days after POST (6/15)

PRE: 16 fl oz Verdict

89%

POST: 1 fl oz Armezon + 5 oz Status + 1% MSO + 2 lb AMS



13 days after POST (6/15)

PRE: 10 fl oz Verdict + 3 fl oz Callisto

73%

POST: 16 fl oz Armezon PRO + 1% MSO + 2 lb AMS



13 days after POST (6/15)

PRE: 2 pt SureStart II

72%

POST: 0.9 oz Accent Q + 5 oz Status + 1% COC + 2 lb AMS



13 days after POST (6/15)

PRE: 2 pt Harness + 1 qt Princep 4L

87%

POST: 4 oz Revulin Q + 5 oz Status + 1% COC + 2 lb AMS



13 days after POST (6/15)

PRE: 2 pt Harness + 1 qt Princep 4L

82%

POST: 4 oz Revulin Q + 5 oz Status + 3 fl oz Zidua SC + 1% COC + 2 lb AMS



13 days after POST (6/15)

PRE: 2 pt Harness + 1 qt Princep 4L

82%

POST: 1 fl oz Shieldex + 0.9 oz Accent Q + 1% COC + 2 lb AMS



13 days after POST (6/15)

PRE: 2 pt Harness + 1 qt Princep 4L

93%

POST: 3 fl oz Laudis + 48 fl oz Warrant+ 1% MSO + 2 lb AMS



13 days after POST (6/15)

PRE: 1.67 pt Dual II Magnum + 1 qt Princep 4L

64%

POST: 3 fl oz Callisto + 5 oz Status + 1% COC + 2 lb AMS



Herbicide Programs for Conventional Corn Arlington, WI 2022

Plot pictures taken on 6/30

51 days after the PRE application

28 days after the POST application

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

51 days after PRE (6/30)
Untreated Check

0%



28 days after POST (6/30)

PRE: 2 qt Harness MAX *fb*

POST: 3 fl oz Capreno + 0.5% Superb HC + 2 lb AMS

63%



28 days after POST (6/30)

PRE: 2 qt Harness MAX *fb*

POST: 28 fl oz Diflexx Duo + 1% COC + 2 lb AMS

70%



28 days after POST (6/30)

PRE: 1.1 qt Acuron Flexi

POST: 1.1 qt Acuron Flexi + 0.25% NIS + 2 lb AMS

34%



28 days after POST (6/30)

PRE: 16 fl oz Verdict

83%

POST: 1 fl oz Armezon + 5 oz Status + 1% MSO + 2 lb AMS



28 days after POST (6/30)

PRE: 10 fl oz Verdict + 3 fl oz Callisto

66%

POST: 16 fl oz Armezon PRO + 1% MSO + 2 lb AMS



28 days after POST (6/30)

PRE: 2 pt SureStart II

72%

POST: 0.9 oz Accent Q + 5 oz Status + 1% COC + 2 lb AMS



28 days after POST (6/30)

PRE: 2 pt Harness + 1 qt Princep 4L

78%

POST: 4 oz Revulin Q + 5 oz Status + 1% COC + 2 lb AMS



28 days after POST (6/30)

PRE: 2 pt Harness + 1 qt Princep 4L

77%

POST: 4 oz Revulin Q + 5 oz Status + 3 fl oz Zidua SC + 1% COC + 2 lb AMS



28 days after POST (6/30)

PRE: 2 pt Harness + 1 qt Princep 4L

79%

POST: 1 fl oz Shieldex + 0.9 oz Accent Q + 1% COC + 2 lb AMS



28 days after POST (6/30)

PRE: 2 pt Harness + 1 qt Princep 4L

89%

POST: 3 fl oz Laudis + 48 fl oz Warrant+ 1% MSO + 2 lb AMS



28 days after POST (6/30)

PRE: 1.67 pt Dual II Magnum + 1 qt Princep 4L

57%

POST: 3 fl oz Callisto + 5 oz Status + 1% COC + 2 lb AMS

