

# Burndown Control of Gly-Resistant Waterhemp

## Brooklyn, WI 2020

### Trial Information

Trial Sponsor: Wisconsin Cropping Systems Weed Science

Objective: Evaluate and demonstrate the effectiveness of multiple single active ingredient POST corn and soybean herbicides on waterhemp

Crop: none

Variety: -

Weed species (pressure): glyphosate-resistant waterhemp (very high)

Herbicide Application(s): POST – 6/17 (1-5" waterhemp; Avg = 2")

---

For the full report see trial #20-BRO-BG04 in the [2020 Wisconsin Weed Science Research Report](#)



**Cropping Systems Weed Science**  
UNIVERSITY OF WISCONSIN-MADISON

# Burndown Control of Gly-Resistant Waterhemp

## Brooklyn, WI 2020

### Key Take Home Points from 2020 Data:

- Few herbicides provided greater than 90% control of glyphosate-resistant waterhemp
- None of the group 2 or 6 herbicides controlled waterhemp
- Not all active ingredients within a given SOA group are equal (see groups 4, 14, and 27 data)
- POST herbicide programs containing multiple effective sites of action are recommended to broaden weed control spectrum and to lower potential of selection for additional herbicide resistance
- Using an effective PRE herbicide to reduce density and size of waterhemp can help improve POST weed control



Herbicide Treatment*	Glyphosate-Resistant Waterhemp Control %	
	7 DAT	14 DAT
4 fl oz Pursuit	18	3
0.75 oz Classic	9	1
0.3 oz FirstRate	5	0
1 oz Python	30	9
22 fl oz XtendiMax	77	87
32 fl oz Enlist One	76	90
6 fl oz Stinger	3	0
1.5 pt Buctril	14	6
1.6 pt Basagran	4	0
32 fl oz Roundup PMAX	69	61
32 fl oz Liberty	97	95
12.5 fl oz Cobra	82	80
1 pt Flexstar	91	82
0.9 fl oz Cadet	28	9
8 fl oz Resource	58	43
3 fl oz Callisto	71	87
3 fl oz Laudis	81	82
0.75 fl oz Armezon	74	77
5 fl oz Balance Flexx	80	89
LSD (0.10)	8	6
p-value	<0.01	<0.01

\*All treatments included the appropriate adjuvants

# Day of application (6/17)



# Burndown Control of Gly-Resistant Waterhemp Brooklyn, WI 2020

Plot pictures taken on 6/24  
7 days after application

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

7 days after POST (6/24)

POST: 4 fl oz Pursuit + 1.25% COC + 2 lb AMS

18%



**7 days after POST (6/24)**

**POST: 0.75 oz Classic + 1% COC + 2 lb AMS**

**9%**



**7 days after POST (6/24)**

**POST: 0.3 oz FirstRate + 1.2% COC + 2 lb AMS**

**5%**



**7 days after POST (6/24)**

**POST: 1 oz Python + 1% COC + 2 lb AMS**

**30%**



7 days after POST (6/24)

POST: 22 fl oz XtendiMax + 1% Class Act Ridion

77%



**7 days after POST (6/24)**

**POST: 32 fl oz Enlist One + 2 lb AMS**

**76%**



**7 days after POST (6/24)**  
**POST: 6 fl oz Stinger**

**3%**



7 days after POST (6/24)

POST: 1.5 pt Buctril

14%



7 days after POST (6/24)

POST: 1.6 pt Basagran + 1% COC + 2 lb AMS

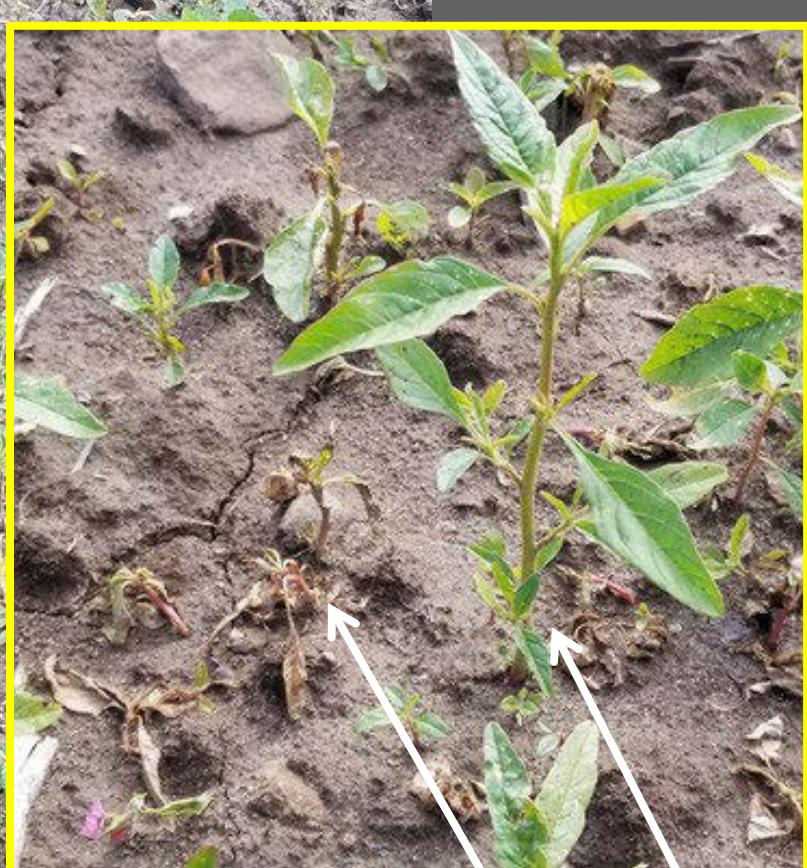
4%



7 days after POST (6/24)

POST: 32 fl oz Roundup PowerMAX + 2 lb AMS

69%



glyphosate-  
resistant

glyphosate-  
susceptible

**7 days after POST (6/24)  
POST: 32 fl oz Liberty + 2 lb AMS**

**97%**



7 days after POST (6/24)

82%

POST: 12.5 fl oz Cobra + 1.5 pt COC + 2 lb AMS



7 days after POST (6/24)

POST: 1 pt Flexstar + 1% COC + 2 lb AMS

91%



**7 days after POST (6/24)**

**POST: 0.9 fl oz Cadet + 1% COC + 2 lb AMS**

**28%**



**7 days after POST (6/24)**

**POST: 8 fl oz Resource + 1 qt COC + 2 lb AMS**

**58%**



7 days after POST (6/24)

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

71%



7 days after POST (6/24)

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

81%



7 days after POST (6/24)

POST: 0.75 fl oz Armezon + 1% MSO + 2 lb AMS

74%



7 days after POST (6/24)

80%

POST: 5 fl oz Balance Flexx + 1% MSO + 2 lb AMS



# Burndown Control of Gly-Resistant Waterhemp Brooklyn, WI 2020

Plot pictures taken on 7/1  
14 days after application

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

**14 days after POST (7/1)**

**POST: 4 fl oz Pursuit + 1.25% COC + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

**3%**

**POST: 4 fl oz Pursuit + 1.25% COC + 2 lb AMS**



**14 days after POST (7/1)**

**POST: 0.75 oz Classic + 1% COC + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

**POST: 0.75 oz Classic + 1% COC + 2 lb AMS**

**1%**



**14 days after POST (7/1)**

**POST: 0.3 oz FirstRate + 1.2% COC + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

**0%**

**POST: 0.3 oz FirstRate + 1.2% COC + 2 lb AMS**



**14 days after POST (7/1)**

**POST: 1 oz Python + 1% COC + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

**9%**

**POST: 1 oz Python + 1% COC + 2 lb AMS**



**14 days after POST (7/1)**

**POST: 22 fl oz XtendiMax + 1% Class Act Ridion**



**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**

14 days after POST (7/1)

POST: 22 fl oz XtendiMax + 1% Class Act Ridion

87%



**14 days after POST (7/1)**

**POST: 32 fl oz Enlist One + 2 lb AMS**



**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**

**14 days after POST (7/1)**

**POST: 32 fl oz Enlist One + 2 lb AMS**

**90%**



**14 days after POST (7/1)**

**POST: 6 fl oz Stinger**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**  
**POST: 6 fl oz Stinger**

**0%**



**14 days after POST (7/1)**

**POST: 1.5 pt Buctril**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



14 days after POST (7/1)

POST: 1.5 pt Buctril

6%



**14 days after POST (7/1)**

**POST: 1.6 pt Basagran + 1% COC + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

**0%**

**POST: 1.6 pt Basagran + 1% COC + 2 lb AMS**



**14 days after POST (7/1)**

**POST: 32 fl oz Roundup PowerMAX + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

**POST: 32 fl oz Roundup PowerMAX + 2 lb AMS**

**61%**



**14 days after POST (7/1)**  
**POST: 32 fl oz Liberty + 2 lb AMS**



**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**

**14 days after POST (7/1)  
POST: 32 fl oz Liberty + 2 lb AMS**

**95%**



**14 days after POST (7/1)**

**POST: 12.5 fl oz Cobra + 1.5 pt COC + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

**POST: 12.5 fl oz Cobra + 1.5 pt COC + 2 lb AMS**

**80%**



**14 days after POST (7/1)**

**POST: 1 pt Flexstar + 1% COC + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

**POST: 1 pt Flexstar + 1% COC + 2 lb AMS**

**82%**



**14 days after POST (7/1)**

**POST: 0.9 fl oz Cadet + 1% COC + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

**9%**

**POST: 0.9 fl oz Cadet + 1% COC + 2 lb AMS**



**14 days after POST (7/1)**

**POST: 8 fl oz Resource + 1 qt COC + 2 lb AMS**



**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**

**14 days after POST (7/1)**

**43%**

**POST: 8 fl oz Resource + 1 qt COC + 2 lb AMS**



**14 days after POST (7/1)**

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

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**



**14 days after POST (7/1)**

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

**87%**



**14 days after POST (7/1)**

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



**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**

**14 days after POST (7/1)**

**82%**

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



**14 days after POST (7/1)**

**POST: 0.75 fl oz Armezon + 1% MSO + 2 lb AMS**



**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**

**14 days after POST (7/1)**

**POST: 0.75 fl oz Armezon + 1% MSO + 2 lb AMS**

**77%**



**14 days after POST (7/1)**

**POST: 5 fl oz Balance Flexx + 1% MSO + 2 lb AMS**

**No  
PRE**

**PRE:  
Dual II  
Magnum  
@ 1 pt/a**

**14 days after POST (7/1)**

**89%**

**POST: 5 fl oz Balance Flexx + 1% MSO + 2 lb AMS**

