

**Comparison of burndown herbicides for horseweed control**

Trial ID: NC01-23 Study Dir.: Stiles, Sprague  
 Conducted: Campus, C-13 Investigator: Christy Sprague

**Planting Date:** \_\_\_\_\_ **Row Spacing:** \_\_\_\_\_  
**Variety:** \_\_\_\_\_ **No. of Reps:** 4  
**Population:** \_\_\_\_\_ **% OM:** 2.7  
**Soil Type:** CL clay loam **pH:** 7.0  
**Plot Size:** 10 X 25 FT **Study Design:** Randomized Complete Block (RCB)

**Tillage/Previous Crops:** \_\_\_\_\_  
**Fertilizer:** \_\_\_\_\_

**Crop and Weed Description**

Weed	Code	Common Name	Scientific Name
1	STEME	common chickweed	Stellaria media
2	CAPSS	shepherd's-purse	Capsella sp.
3	TAROF	dandelion	Taraxacum officinale
4	ERICA	horseweed	Erigeron (Conyza) canadensis
5	LACSE	annual sowthistle	Sonchus oleraceus
Crop	Code	Common Name	
1			

**Application Description**

**Application Timing:** A Burndown  
**Date Treated:** May-15-2023  
**Time Treated:** 11:40 AM  
**% Cloud Cover:** 0  
**Air Temp., Unit:** 61 F  
**% Relative Humidity:** 41  
**Wind Speed/Unit/Dir:** 2 MPH NNE  
**Soil Temp, Unit:** 63 F  
**Leaf Moist/Dew Presence (Y/N):** N  
**Soil Moist:** 5

**Crop Stage at Each Application**

A  
**Crop 1 Name:** \_\_\_\_\_  
**Height:** \_\_\_\_\_  
**Stage:** \_\_\_\_\_

**Weed Stage at Each Application**

A  
**Weed 1 Name:** STEME  
**Height:** 2-5 " (3)  
**Stage:** flower  
**Weed 2 Name:** CAPSS  
**Height:** 9-20 " (8)  
**Stage:** flower  
**Weed 3 Name:** TAROF  
**Height:** 4-7 " (5)  
**Stage:** 5L-8L (7L)  
**Weed 4 Name:** ERICA  
**Height:** 1-3 " (3)  
**Stage:** boltin  
**Weed 5 Name:** LACSE  
**Height:** 8-16 " (12)  
**Stage:** 12L

**Weed Density**

	1	2	3	4	5
<b>Date:</b>	May-15-2023	May-15-2023	May-15-2023	May-15-2023	May-15-2023
<b>Weed Name:</b>	STEME	CAPSS	TAROF	ERICA	LACSE
<b>Density:</b>	3 ft2	1 ft2	2 ft2	2 ft2	2 ft2

**Application Equipment**

Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	CUB	3.8 MPH	TTI	11003	18.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	27

**Comments:** \_\_\_\_\_

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 Project ID: Project ID 2: Project ID 3:  
 Study Director: Stiles, Sprague Sponsor Contact:  
 Investigator: Christy Sprague

Rating Date	May-22-2023	May-22-2023	May-22-2023	May-22-2023	May-29-2023	May-29-2023
Rating Type	control	control	control	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Pest Code	STEME	CAPBU	TAROF	ERICA	STEME	CAPBU
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A	14 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	May-22-2023 control	May-22-2023 control	May-22-2023 control	May-22-2023 control	May-29-2023 control	May-29-2023 control
1	Untreated					0	0	0	0	0	0
2	BAS 18336H	12.8 fl oz/a	A		BURNDOWN	13	23	24	73	20	23
	Induce	0.179 % v/v	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
3	Clarity	16 fl oz/a	A		BURNDOWN	25	15	19	74	20	23
	Induce	0.179 % v/v	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
4	2,4-D LV6	11.4 fl oz/a	A		BURNDOWN	16	21	29	73	25	20
	Induce	0.179 % v/v	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
5	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN	41	21	19	0	100	98
	AMSOL	1.78 % v/v	A		BURNDOWN						
6	BAS 18336H	12.8 fl oz/a	A		BURNDOWN	41	24	21	79	100	98
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
7	Clarity	16 fl oz/a	A		BURNDOWN	43	24	25	83	100	99
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
8	2,4-D LV6	11.4 fl oz/a	A		BURNDOWN	46	25	30	79	100	98
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
	LSD P=.05					8.5	5.3	6.4	3.8	3.0	5.2
	Standard Deviation					5.8	3.6	4.4	2.6	2.0	3.5
	CV					20.62	18.88	20.94	4.54	3.51	6.17

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 Investigator: Christy Sprague

Rating Date	May-29-2023	May-29-2023	May-29-2023	Jun-5-2023	Jun-5-2023	Jun-5-2023
Rating Type	control	control	control	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Pest Code	TAROF	ERICA	SONOL	STEME	CAPBU	TAROF
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	21 DA-A	21 DA-A	21 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	May-29-2023 control	May-29-2023 control	May-29-2023 control	Jun-5-2023 control	Jun-5-2023 control	Jun-5-2023 control
1	Untreated					0	0	0	0	0	0
2	BAS 18336H	12.8 fl oz/a	A		BURNDOWN	30	85	88	33	20	30
	Induce	0.179 % v/v	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
3	Clarity	16 fl oz/a	A		BURNDOWN	33	85	85	35	23	35
	Induce	0.179 % v/v	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
4	2,4-D LV6	11.4 fl oz/a	A		BURNDOWN	35	83	86	40	20	33
	Induce	0.179 % v/v	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
5	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN	91	0	100	100	100	93
	AMSOL	1.78 % v/v	A		BURNDOWN						
6	BAS 18336H	12.8 fl oz/a	A		BURNDOWN	93	99	100	100	100	91
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
7	Clarity	16 fl oz/a	A		BURNDOWN	91	91	99	100	99	91
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
8	2,4-D LV6	11.4 fl oz/a	A		BURNDOWN	88	89	96	100	100	82
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
	LSD P=.05					9.2	6.2	4.7	5.7	3.1	9.2
	Standard Deviation					6.3	4.2	3.2	3.9	2.1	6.3
	CV					10.94	6.35	3.87	6.11	3.62	11.01

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 Study Director: Stiles, Sprague Sponsor Contact:  
 Investigator: Christy Sprague

Rating Date	Jun-5-2023	Jun-5-2023	Jun-12-2023	Jun-12-2023	Jun-12-2023	Jun-26-2023
Rating Type	control	control	control	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Pest Code	ERICA	SONOL	TAROF	ERICA	SONOL	TAROF
Trt-Eval Interval	21 DA-A	21 DA-A	28 DA-A	28 DA-A	28 DA-A	42 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing	Jun-5-2023	Jun-5-2023	Jun-12-2023	Jun-12-2023	Jun-12-2023	Jun-26-2023
1	Untreated					0	0	0	0	0	0
2	BAS 18336H	12.8 fl oz/a	A		BURNDOWN	89	94	35	98	100	40
	Induce	0.179 % v/v	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
3	Clarity	16 fl oz/a	A		BURNDOWN	93	89	33	99	98	33
	Induce	0.179 % v/v	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
4	2,4-D LV6	11.4 fl oz/a	A		BURNDOWN	78	88	25	78	93	10
	Induce	0.179 % v/v	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
5	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN	0	100	94	28	98	85
	AMSOL	1.78 % v/v	A		BURNDOWN						
6	BAS 18336H	12.8 fl oz/a	A		BURNDOWN	100	100	93	99	100	89
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
7	Clarity	16 fl oz/a	A		BURNDOWN	91	100	91	95	100	86
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
8	2,4-D LV6	11.4 fl oz/a	A		BURNDOWN	89	100	81	88	100	72
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN						
	AMSOL	1.78 % v/v	A		BURNDOWN						
	LSD P=.05					5.3	4.7	8.2	5.4	5.3	7.1
	Standard Deviation					3.6	3.2	5.6	3.7	3.6	4.8
	CV					5.35	3.85	9.87	5.01	4.22	9.28

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 Project ID: Project ID 2: Project ID 3:  
 Study Director: Stiles, Sprague Sponsor Contact:  
 Investigator: Christy Sprague

Rating Date	Jun-26-2023	Jun-26-2023
Rating Type	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100
Pest Code	ERICA	SONOL
Trt-Eval Interval	42 DA-A	42 DA-A
Number of Decimals	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing		
1	Untreated					0	0
2	BAS 18336H	12.8 fl oz/a	A		BURNDOWN	100	96
	Induce	0.179 % v/v	A		BURNDOWN		
	AMSOL	1.78 % v/v	A		BURNDOWN		
3	Clarity	16 fl oz/a	A		BURNDOWN	100	100
	Induce	0.179 % v/v	A		BURNDOWN		
	AMSOL	1.78 % v/v	A		BURNDOWN		
4	2,4-D LV6	11.4 fl oz/a	A		BURNDOWN	64	91
	Induce	0.179 % v/v	A		BURNDOWN		
	AMSOL	1.78 % v/v	A		BURNDOWN		
5	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN	20	98
	AMSOL	1.78 % v/v	A		BURNDOWN		
6	BAS 18336H	12.8 fl oz/a	A		BURNDOWN	97	100
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN		
	AMSOL	1.78 % v/v	A		BURNDOWN		
7	Clarity	16 fl oz/a	A		BURNDOWN	100	100
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN		
	AMSOL	1.78 % v/v	A		BURNDOWN		
8	2,4-D LV6	11.4 fl oz/a	A		BURNDOWN	70	100
	Roundup PowerMax 3	30 fl oz/a	A		BURNDOWN		
	AMSOL	1.78 % v/v	A		BURNDOWN		
	LSD P=.05					5.0	6.8
	Standard Deviation					3.4	4.6
	CV					4.96	5.41