



## Purdue University

### Pest Description

**Pest 1 Type:** W **Code:** TAROF *Taraxacum officinale*  
**Common Name:** Common dandelion

**Pest 2 Type:** W **Code:** ALLVI *Allium vineale*  
**Common Name:** Wild garlic

**Pest 3 Type:** W **Code:** RANAB *Ranunculus abortivus*  
**Common Name:** Smallflower buttercup

**Pest 4 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest 5 Type:** W **Code:** PLAVI *Plantago virginica*  
**Common Name:** Paleseed plantain

**Pest 6 Type:** W **Code:** BROTE *Bromus tectorum*  
**Common Name:** Downy brome

**Pest 7 Type:** W **Code:** AMBEL *Ambrosia artemisiifolia*  
**Common Name:** Common ragweed

**Pest 8 Type:** W **Code:** CERVU *Cerastium fontanum vulgare*  
**Common Name:** Mouse-ear chickweed

**Pest 9 Type:** W **Code:** ARFSS *Arctium* sp.  
**Common Name:** Burdock

**Pest10 Type:** W **Code:** ALOCA *Alopecurus carolinianus*  
**Common Name:** Carolina foxtail

**Pest11 Type:** W **Code:** VERPG *Veronica peregrina*  
**Common Name:** Purslane speedwell

**Pest12 Type:** W **Code:** POAAN *Poa annua*  
**Common Name:** Annual bluegrass

**Pest13 Type:** W **Code:** ERIPH *Erigeron philadelphicus*  
**Common Name:** Daisy fleabane

**Pest14 Type:** W **Code:** VEBBR *Verbena bracteata*  
**Common Name:** Prostrate vervain

**Pest15 Type:** W **Code:** ERIBO *Conyza bonariensis*  
**Common Name:** Hairy fleabane

**Pest16 Type:** W **Code:** LAMPU *Lamium purpureum*  
**Common Name:** Purple deadnettel

**Pest17 Type:** W **Code:** PLAVI *Plantago virginica*  
**Common Name:** Paleseed plantain

**Pest18 Type:** W **Code:** SENGL *Senecio glabellus*  
**Common Name:** Cressleaf groundsel

**Pest19 Type:** W **Code:** VENSS *Vernonia* sp.  
**Common Name:** Ironweed

### Site and Design

<b>Plot Width, Unit:</b> 10 FT	<b>Site Type:</b> FIELD	field
<b>Plot Length, Unit:</b> 30 FT	<b>Experimental Unit:</b> 1	PLOT plot
<b>Plot Area, Unit:</b> 300 FT <sup>2</sup>	<b>Tillage Type:</b> NOTILL	no-till
<b>Replications:</b> 4	<b>Study Design:</b> RACOB	Randomized Complete Block (RCB)
	<b>Untreated Arrangement:</b> INCLUDED	single control randomized in each block

### Soil Description

**Description Name:** SEPAC Field U41-6  
**% OM:** 1.3    **Texture:** SIL silt loam  
**pH:** 6.5    **Soil Name:** Avonburg  
**CEC:** 5.7

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Application Description	
	A
Application Date:	5-6-2010
Time of Day:	1-1:30 PM
Application Method:	SPRAY
Application Timing:	PREPLAN
Application Placement:	FOLIAR
Applied By:	PM
Air Temperature, Unit:	66 F
% Relative Humidity:	38
Wind Velocity, Unit:	5 MPH
Wind Direction:	W
Dew Presence (Y/N):	N no
Soil Temperature, Unit:	70 F
Soil Moisture:	DRY
% Cloud Cover:	5

Crop Stage At Each Application	
	A
Crop 1 Code, BBCH Scale:	ZEAMX BCOR

Pest Stage At Each Application	
	A
Pest 1 Code, Type, Scale:	TAROF W
Stage Majority, Percent:	40 60
Stage Minimum, Percent:	40 60
Stage Maximum, Percent:	65 40
Height, Unit:	8 IN
Height Minimum, Maximum:	4 12
Density, Unit:	10 YD2
Pest 2 Code, Type, Scale:	ALLVI W
Stage Majority, Percent:	40 100
Height, Unit:	21 IN
Height Minimum, Maximum:	6 36
Density, Unit:	13 YD2
Pest 3 Code, Type, Scale:	RANAB W
Stage Majority, Percent:	65 100
Height, Unit:	9 IN
Height Minimum, Maximum:	6 12
Density, Unit:	1.5 YD2
Pest 4 Code, Type, Scale:	LAMPU W
Stage Majority, Percent:	65 100
Height, Unit:	5 IN
Height Minimum, Maximum:	4 6
Density, Unit:	0.5 YD2
Pest 5 Code, Type, Scale:	PLAVI W
Stage Majority, Percent:	40 100
Height, Unit:	6 IN

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<b>Height Minimum, Maximum:</b>	4 8
<b>Density, Unit:</b>	0.5 YD2
<b>Pest 6 Code, Type, Scale:</b>	BROTE W
<b>Stage Majority, Percent:</b>	24 100
<b>Height, Unit:</b>	12 IN
<b>Height Minimum, Maximum:</b>	6 18
<b>Density, Unit:</b>	50 YD2
<b>Pest 7 Code, Type, Scale:</b>	AMBEL W
<b>Stage Majority, Percent:</b>	32 100
<b>Height, Unit:</b>	2 IN
<b>Height Minimum, Maximum:</b>	1 3
<b>Density, Unit:</b>	0.5 YD2
<b>Pest 8 Code, Type, Scale:</b>	CERVU W
<b>Stage Majority, Percent:</b>	65 100
<b>Height, Unit:</b>	8 IN
<b>Height Minimum, Maximum:</b>	6 10
<b>Density, Unit:</b>	2 YD2
<b>Pest 9 Code, Type, Scale:</b>	ARFSS W
<b>Stage Majority, Percent:</b>	40 100
<b>Height, Unit:</b>	18 IN
<b>Height Minimum, Maximum:</b>	12 24
<b>Density, Unit:</b>	0.5 YD2
<b>Pest10 Code, Type, Scale:</b>	ALOCA W
<b>Stage Majority, Percent:</b>	65 100
<b>Height, Unit:</b>	7 in
<b>Height Minimum, Maximum:</b>	4 10
<b>Density, Unit:</b>	0.5 YD2
<b>Pest11 Code, Type, Scale:</b>	VERPG W
<b>Stage Majority, Percent:</b>	40 100
<b>Height, Unit:</b>	4 IN
<b>Height Minimum, Maximum:</b>	2 6
<b>Density, Unit:</b>	1.5 YD2
<b>Pest12 Code, Type, Scale:</b>	POAAN W
<b>Stage Majority, Percent:</b>	65 100
<b>Height, Unit:</b>	6 IN
<b>Height Minimum, Maximum:</b>	4 8
<b>Density, Unit:</b>	10 YD2
<b>Pest13 Code, Type, Scale:</b>	ERIPH W
<b>Stage Majority, Percent:</b>	65 100
<b>Height, Unit:</b>	48 IN
<b>Height Minimum, Maximum:</b>	18 30
<b>Density, Unit:</b>	1 YD2
<b>Pest14 Code, Type, Scale:</b>	VEBBR W
<b>Stage Majority, Percent:</b>	65 100
<b>Height, Unit:</b>	6 IN
<b>Height Minimum, Maximum:</b>	4 8
<b>Density, Unit:</b>	1.5 YD2
<b>Pest15 Code, Type, Scale:</b>	ERIBO W

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<b>Stage Majority, Percent:</b>	30	100
<b>Height, Unit:</b>	6	IN
<b>Height Minimum, Maximum:</b>	2	10
<b>Density, Unit:</b>	1.5	YD2
<b>Pest16 Code, Type, Scale:</b>	LAMPU W	
<b>Stage Majority, Percent:</b>	65	100
<b>Height, Unit:</b>	6	IN
<b>Height Minimum, Maximum:</b>	4	8
<b>Density, Unit:</b>	0.5	YD2
<b>Pest17 Code, Type, Scale:</b>	PLAVI W	
<b>Stage Majority, Percent:</b>	40	100
<b>Height, Unit:</b>	6	IN
<b>Height Minimum, Maximum:</b>	4	8
<b>Density, Unit:</b>	0.5	YD2
<b>Pest18 Code, Type, Scale:</b>	SENGL W	
<b>Stage Majority, Percent:</b>	65	100
<b>Height, Unit:</b>	25	IN
<b>Height Minimum, Maximum:</b>	6	48
<b>Density, Unit:</b>	25	YD2
<b>Pest19 Code, Type, Scale:</b>	VENSS W	
<b>Stage Majority, Percent:</b>	35	100
<b>Height, Unit:</b>	12	IN
<b>Height Minimum, Maximum:</b>	6	18
<b>Density, Unit:</b>	5	YD2

Application Equipment	
	A
<b>Appl. Equipment:</b>	CO2 Backpack
<b>Equipment Type:</b>	SPRBAC
<b>Operating Pressure, Unit:</b>	17 PSI
<b>Nozzle Type:</b>	Flat Fan
<b>Nozzle Size:</b>	XR11002
<b>Nozzle Spacing, Unit:</b>	15 IN
<b>Nozzles/Row:</b>	6
<b>Boom Length, Unit:</b>	7.5 FT
<b>Boom Height, Unit:</b>	18 IN
<b>Ground Speed, Unit:</b>	3 MPH
<b>Carrier:</b>	H2O
<b>Water Hardness (ppm CaCO3):</b>	150
<b>Spray Volume, Unit:</b>	15 GAL/AC
<b>Mix Size, Unit:</b>	1.8 Liters
<b>Propellant:</b>	CO2
<b>Tank Mix (Y/N):</b>	N no

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## Efficacy of Corvus and Capreno compared to competitors in a burndown situation

Trial ID: 10S-SEP-NTC-39      Protocol ID: 10S-SEP-NTC-39  
 Location: SEPAC                  Study Director: Paul Marquardt/Mike White  
 Project ID:                          Investigator: Dr. Bill Johnson  
    Sponsor Contact: Dave Lamore

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	SENGL	BROTE	TAROF	BROTE	TAROF	AMBEL			
Pest Scientific Name	Senecio label>	Bromus tectorum	Taraxacum offi>	Bromus tectorum	Taraxacum offi>	Ambrosia artem>			
Pest Name	Cressleaf grou>	Downy brome	Common dandeli>	Downy brome	Common dandeli>	Common ragweed			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn			
Crop Variety	P33W84	P33W84	P33W84	P33W84	P33W84	P33W84			
Description	VE, <1"	VE, <1"	VE, <1"	V4, 12-18"	V4, 12-18"	V4, 12-18"			
Rating Date	5-19-2010	5-19-2010	5-19-2010	6-4-2010	6-4-2010	6-4-2010			
Rating Type	EFF	EFF	EFF	EFF	EFF	EFF			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	VE	VE	VE	V4	V4	V4			
Pest Stage Majority	4-36"	5-18"	4-12"	5-18"	6-10"	2-8"			
Pest Density, Unit	13 YD2	26 YD2	3 YD2	27 YD2	8 YD2	2 YD2			
Assessed By	CB	CB	CB	PM	PM	PM			
Trt Treatment	Rate	Appl							
No. Name	Rate	Unit	Code	1	2	3	4	5	6
1 UNTREATED				0.0 c	0.0 b	0.0 d	0.0 c	0.0 b	0.0 b
2 Corvus	0.115 lb ai/a	A		74.8 a	30.0 ab	42.5 bcd	99.5 a	74.5 a	100.0 a
AAtrex	1 lb ai/a	A							
COC	1 % v/v	A							
N-PAK AMS	2 % v/v	A							
3 Corvus	0.115 lb ai/a	A		76.3 a	52.0 ab	58.0 abc	95.8 a	100.0 a	100.0 a
2,4-D Ester	0.5 lb ai/a	A							
COC	1 % v/v	A							
N-PAK AMS	2 % v/v	A							
4 Corvus	0.115 lb ai/a	A		70.0 a	89.5 a	56.3 abc	100.0 a	87.5 a	100.0 a
Roundup PowerMax	0.77 lb ae/a	A							
N-PAK AMS	2 % v/v	A							
5 Corvus	0.115 lb ai/a	A		95.3 a	71.3 a	8.8 cd	99.0 a	85.0 a	100.0 a
Laudis	0.0273 lb ai/a	A							
COC	1 % v/v	A							
N-PAK AMS	2 % v/v	A							
6 Corvus	0.115 lb ai/a	A		30.0 b	51.3 ab	43.8 bcd	96.3 a	90.0 a	100.0 a
Clarity	0.125 lb ai/a	A							
COC	1 % v/v	A							
N-PAK AMS	2 % v/v	A							
7 Corvus	0.115 lb ai/a	A		79.0 a	55.0 ab	78.5 ab	98.8 a	93.8 a	100.0 a
Cadet	0.00284 lb ai/a	A							
COC	1 % v/v	A							
N-PAK AMS	2 % v/v	A							
8 Capreno	0.081 lb ai/a	A		86.3 a	46.5 ab	15.0 cd	93.8 a	68.3 a	100.0 a
Roundup PowerMax	0.387 lb ae/a	A							
COC	1 % v/v	A							
N-PAK AMS	2 % v/v	A							

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SENGL	BROTE	TAROF	BROTE	TAROF	AMBEL				
Pest Scientific Name	Senecio glabel>	Bromus tectorum	Taraxacum offi>	Bromus tectorum	Taraxacum offi>	Ambrosia artem>				
Pest Name	Cressleaf grou>	Downy brome	Common dandel>	Downy brome	Common dandel>	Common ragweed				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX				
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays				
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn				
Crop Variety	P33W84	P33W84	P33W84	P33W84	P33W84	P33W84				
Description	VE, <1"	VE, <1"	VE, <1"	V4, 12-18"	V4, 12-18"	V4, 12-18"				
Rating Date	5-19-2010	5-19-2010	5-19-2010	6-4-2010	6-4-2010	6-4-2010				
Rating Type	EFF	EFF	EFF	EFF	EFF	EFF				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority	VE	VE	VE	V4	V4	V4				
Pest Stage Majority	4-36"	5-18"	4-12"	5-18"	6-10"	2-8"				
Pest Density, Unit	13 YD2	26 YD2	3 YD2	27 YD2	8 YD2	2 YD2				
Assessed By	CB	CB	CB	PM	PM	PM				
Trt No.	Treatment Name	Rate	Appl Unit	Code	1	2	3	4	5	6
9	Balance Flexx	0.0313 lb ai/a	A		63.3 a	45.8 ab	48.8 a-d	89.3 a	73.3 a	97.5 a
	Capreno	0.054 lb ai/a	A							
	COC	1 % v/v	A							
	N-PAK AMS	2 % v/v	A							
10	Corvus	0.115 lb ai/a	A		99.8 a	89.0 a	97.5 a	95.0 a	91.3 a	100.0 a
	Ignite 280 SL	0.402 lb ae/a	A							
	N-PAK AMS	2 % v/v	A							
11	Ignite 280 SL	0.402 lb ae/a	A		97.0 a	79.5 a	76.5 ab	57.0 b	49.0 a	99.5 a
	Sharpen	0.0223 lb ai/a	A							
	N-PAK AMS	2 % v/v	A							
12	Corvus	0.115 lb ai/a	A		99.5 a	25.0 ab	96.0 ab	99.5 a	90.8 a	100.0 a
	Sharpen	0.0223 lb ai/a	A							
	COC	1 % v/v	A							
	N-PAK AMS	2 % v/v	A							
LSD (P=.05)					26.83	40.65	33.84	18.42	33.19	2.14
Standard Deviation					18.58	28.16	23.43	12.76	22.99	1.48
CV					25.6	53.23	45.25	14.96	30.54	1.62
Bartlett's X2					47.476	10.14	32.304	60.142	20.793	5.655
P(Bartlett's X2)					0.001*	0.428	0.001*	0.001*	0.014*	0.017*
Replicate F					0.232	0.713	6.788	0.093	2.291	0.862
Replicate Prob(F)					0.8731	0.5511	0.0011	0.9632	0.0964	0.4706
Treatment F					10.523	3.618	7.598	21.165	5.725	1513.397
Treatment Prob(F)					0.0001	0.0020	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Column 1: Weed or volunteer crop; US; US; P33W84; EFF; percent; VE; 4-36"; per square yard; CB  
 Column 2: Weed or volunteer crop; US; US; P33W84; EFF; percent; VE; 5-18"; per square yard; CB  
 Column 3: Weed or volunteer crop; US; US; P33W84; EFF; percent; VE; 4-12"; per square yard; CB  
 Column 4: Weed or volunteer crop; US; US; P33W84; EFF; percent; V4; 5-18"; per square yard; PM  
 Column 5: Weed or volunteer crop; US; US; P33W84; EFF; percent; V4; 6-10"; per square yard; PM  
 Column 6: Weed or volunteer crop; US; US; P33W84; EFF; percent; V4; 2-8"; per square yard; PM  
 Column 7: Weed or volunteer crop; US; US; P33W84; EFF; percent; V4; 4-6"; per square yard; PM





