

Disclaimer:

This document is based on the results from an individual trial and may contain experimental use patterns that are currently off-label. **This document does not provide any interpretation and should not be taken as an endorsement of any unregistered use pattern.**

Professional advice should be sought for specific recommendations to ensure access to the most up to date information and knowledge.

Any product referred to in this document must be used strictly as directed, and in accordance with all label or permit instructions. Always consult the label prior to use.

Alternative 2nd Knocks for Broadleaf Weeds

Trial ID: **BD1903** Location: **Bective** Trial Year: **2019**
 Investigator: **Branko Duric**

Objective:	To evaluate 2 nd knock options for broadleaf weed control in fallow	
Application:	A	B
Application Date:	18/06/2019	26/06/2019
Application Timing:	Early post emergent	8 days after Application A
Nozzles:	AIXR110015	
Volume:	100 L/ha	
Pressure:	300 kPa	
Weed:	Common sowthistle	
Weed Population:	1.5 plants/m²	
Weed Stage at Application:	8 leaf	
Keywords:	Common sowthistle, knockdown, double knock, fallow	

The 1st knock treatment was Roundup CT 1L/ha + Tordon 75-D 1L/ha. It was applied to all plots.

Scientific Pest Name				<i>Sonchus oleraceus</i>	
Pest Name				Common Sowthistle	
Assessment Date				12/07/2019	7/08/2019
Assessment Type				BURNDOWN	COUNT
Assessment Unit				%	/m ²
Treatment-Evaluation Interval				16 DAB	42 DAB
Trt No.	Treatment	Product Rate	Appln. Code		
1	1 st Knock Only	-	-	98.3-	0.0-
2	Gramoxone	1600ml/ha	B	96.7-	0.0-
3	Gramoxone Hasten	1600ml/ha 1% v/v	B	96.7-	0.0-
4	Gramoxone	2400ml/ha	B	93.3-	0.0-
5	Sharpen	9g/ha	B	96.7-	0.0-
6	Sharpen Hasten	9g/ha 0.5% v/v	B	98.3-	0.0-
7	Sharpen Hasten	9g/ha 1% v/v	B	100.0-	0.0-
8	Sharpen Hasten	26g/ha 1% v/v	B	100.0-	0.0-
9	Gramoxone Sharpen Hasten	800ml/ha 9g/ha 1% v/v	B	100.0-	0.0-
10	Gramoxone Sharpen	1600ml/ha 9g/ha	B	96.7-	0.0-
11	Gramoxone Sharpen Hasten	1600ml/ha 9g/ha 1% v/v	B	98.3-	0.0-
12	Gramoxone Sharpen Hasten Liase	1600ml/ha 9g/ha 1% v/v 2% v/v	B	100.0-	0.0-
13	Basta	3750ml/ha	B	100.0-	0.0-
14	Basta	5000ml/ha	B	96.7-	0.0-
15	Experimental Hasten	100ml/ha 1% v/v	B	100.0-	0.0-
LSD P= .05				nsd	N/A
Treatment Prob.(F)=				0.3893	N/A

nsd = No significant difference

Alternative 2nd Knocks for Broadleaf Weeds

Trial ID: BD1903

Location:

Bective

Trial Year: 2019

Assessment Type

BURNDOWN = % Burndown/brown out

DAB = Days after Application B

Conclusions:

The trial was conducted to evaluate 2nd knock options for the knockdown control of Common Sowthistle at the early elongation stage (70% of weeds were 8 leaf, 10% had side shoots visible). A 1st knock of Roundup CT 1000 ml/ha + Tordon 75-D 1000 ml/ha was applied on 18 June with 2nd knock treatments applied 8 days later.

Burndown was assessed 16 days after 2nd knock application. Very high levels of burndown (~98%) had occurred from the 1st knock only treatment. There was no significant difference between any 2nd knock option and the 1st knock only treatment.

Assessment of control was assessed 42 days after the 2nd knock application. All common sowthistle plants died, in all treatments.

Under these conditions, complete weed control was achieved with the 1st knock application alone with no data generated on the relative efficacy of the 2nd knock alternatives.

Application Description		
	A	B
Application Date:	18/06/2019	26/06/2019
Application Start Time:	11:30 AM	8:30 AM
Application Stop Time:	1:00 PM	11:30 AM
Application Method:	SPRAY	
Application Placement:	FOLIAR	
Air Temperature, Unit:	17 C	10 C
% Relative Humidity:	64	77
Wind Velocity, Unit:	1.8 m/s	1.1 m/s
Wind Direction:	NW	SE
Dew Presence (Y/N):	No	
% Cloud Cover:	60	5

Pest Stage at Each Application				
	A		B	
Pest:	<i>Sonchus oleraceus</i> Common Sowthistle			
Stage Majority, %:	18	70%	18	70%
Stage Minimum, %:	12	20%	12	20%
Stage Maximum, %:	21	10%	21	10%
Density, Unit:	1.5	m ²	1.5	m ²

Application Equipment	
	A
Application Equipment:	Polaris
Equipment Type:	BOOM
Operation Pressure, Unit:	300 kPa
Nozzle Type:	AIXR110015
Nozzle Spacing, Unit:	50 cm
Boom Length, Unit:	4 m
Boom Height, Unit:	50 cm
Ground Speed, Unit:	7.2 km/h
Carrier:	WATER
Spray Volume, Unit:	100 L/ha