

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.

Alternatives to Paraquat in a Double Knock

Trial ID: **LB1731** Location: **Pittsworth** Trial Year: **2018**
 Investigator: **Linda Bailey**

Objective:	To evaluate alternative second knock options for broadleaf weed control
Situation:	Fallow
Application Code:	B
Application Date:	6/2/2018 (19 Days after first knock applied)
Weeds:	Flaxleaf fleabane (<i>Conyza bonariensis</i>)
Weed Stage:	End of flowering, Fruits had reached final size (95%)
Weed population:	0.5/m²
Keywords:	Flaxleaf fleabane, knockdown, fallow
NB: Application A was 1.5L/ha Roundup CT + 1L/ha Amine 625 + Hasten 1% on 18/1/2018, applied using small plot equipment over entire trial area.	

Pest Scientific Name Pest Name Assessment Date Assessment Type Assessment Unit Pest Stage Majority Treatment-Evaluation Interval ARM Action Codes				<i>Conyza bonariensis</i> Flaxleaf fleabane		
				22/02/2018 BURNDOWN % 89 16 DAB AA	2/03/2018 CONTROL % 93- 24 DAB AA	21/03/2018 CONTROL % 83- 43 DAB T2
Trt No.	Treatment	Product Rate	Appln. Code			
1	No second knock	-	-	55e	86-	87-
2	Gramoxone	800ml/ha	B	75de	100-	100-
3	Gramoxone	1600ml/ha	B	94a-d	88-	100-
4	Gramoxone Hasten	1600ml/ha 1% v/v	B	99ab	100-	100-
5	Gramoxone	2000ml/ha	B	85cd	98-	93-
6	Gramoxone	2400ml/ha	B	98abc	100-	100-
7	Sharpen Hasten	9g/ha 1% v/v	B	94a-d	85-	100-
8	Sharpen Hasten	17g/ha 1% v/v	B	95a-d	98-	100-
9	Sharpen Hasten	26g/ha 1% v/v	B	99ab	93-	83-
10	Sharpen Hasten	34g/ha 1% v/v	B	90bcd	76-	100-
11	Gramoxone Sharpen Hasten	800ml/ha 9g/ha 1% v/v	B	94a-d	99-	100-
12	Gramoxone Sharpen Hasten	1600ml/ha 9g/ha 1% v/v	B	100a	100-	100-
13	Gramoxone Sharpen Hasten	800ml/ha 17g/ha 1% v/v	B	98abc	100-	100-
14	Experimental Adigor	1600ml/ha 1% v/v	B	80de	83-	100-
LSD P=				17.4t	nsd	nsd
Treatment Prob.(F)=				0.0025	0.2292	0.6015

Means followed by same letter do not significantly differ (P=.05, LSD)

t=Mean descriptions are reported in transformed data units, and are not de-transformed.

Mean comparisons performed only when AOV Treatment P (F) is significant at mean comparison OSL.

nsd = No significant difference

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Pittsworth

Trial Year: 2018

Assessment Type

BURNDOWN = % Burndown/brown out

Pest Stage Majority

89 = Fully ripe

ARM Action Codes

AA = Automatic arcsine square root % transformation

T2 = $(([2]-[7]) / [2]) * 100$

DAB = Days after Application B

Application Description		
	A	B
Application Date:	18/01/2018	6/02/2018
Application Start Time:	12:00 PM	07:35 AM
Application Stop Time:	12:30 PM	9:15 AM
Application Method:	SPRAY	
Application Timing:	LATE POST-EM	
Application Placement:	FOLIAR	
Air Temperature, Unit:	30 C	23 C
% Relative Humidity:	32	60
Wind Velocity, Unit:	5 km/h	5 km/h
Wind Direction:	S	E
Dew Presence (Y/N):	No	No
Soil Moisture:	DRY	SLIWET
% Cloud Cover:	20	5
Next Moisture Occurred On:	28/01/2018	13/02/2018

Application Equipment		
	A	B
Application Equipment:	Quad Bike	
Equipment Type:	Boom	
Operation Pressure, Unit:	300 kPa	
Nozzle Type:	AIXR	
Nozzle Size:	110015	
Nozzle Spacing, Unit:	50 cm	
Nozzles/Row:	8	
Boom Length, Unit:	4 m	
Boom Height, Unit:	50 cm	
Ground Speed, Unit:	7.2 km/h	
Spray Volume, Unit:	100 L/ha	

Pest Stage at Each Application				
	A		B	
Pest:	Flaxleaf fleabane			
Stage Majority, Percent:	79	95%	79	95%
Stage Minimum, Percent:	14	5%		
Stage Maximum, Percent:	79	95%		
Density, Unit:	0.5	m ²	0.5	m ²

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Conclusions:

This trial was designed to screen options for potential use as second knock applications on Flaxleaf fleabane in fallow.

The first knock (Roundup CT + Amine 625) alone provided excellent levels of control when assessed 9 weeks after application, with complete control in 3 of the 4 replicates.

Under these conditions, complete weed control was obtained from most double knock combinations with no significant difference between treatments.