

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.

Residual Control of Awnless Barnyard Grass in Fallow

Trial ID: **LB1924** Location: **Pittsworth** Trial Year: **2019**
Investigator: **Linda Bailey**

Objective:	To screen options for residual weed control in fallow
Situation:	Fallow
Application Date:	3/12/2019
Nozzles:	AIXR110015
Volume:	100 L/ha
Weed:	Awnless barnyard grass, Australian bindweed
Weed Stage at Application:	Pre-emergence
Keywords:	Awnless barnyard grass, Australian bindweed, residual, fallow

Pest Scientific Name			<i>Echinochloa colona</i>	<i>Convolvulus erubescens</i>
Pest Name			Awnless Barnyard Grass	Australian Bindweed
Assessment Date			26/02/2020	26/02/2020
Assessment Type			COUNT	COUNT
Assessment Unit			/m ²	/m ²
Treatment-Evaluation Interval			34 DAA	34 DAA
ARM Action Codes			AA	
Trt No.	Treatment	Product Rate		
1	Untreated	-	0.17a	0.8a
2	Dual Gold	2000ml/ha	0.00c	0.8ab
3	Impose	150ml/ha	0.07ab	0.3def
4	Impose	200ml/ha	0.03bc	0.4de
5	Balance	100g/ha	0.01bc	0.7abc
6	Rifle 440	3400ml/ha	0.01bc	0.7abc
7	Terbyne Xtreme	1200g/ha	0.01bc	0.4cde
8	Valor	210g/ha	0.00c	0.2ef
9	Valor	280g/ha	0.00c	0.2ef
10	Impose	150ml/ha	0.00c	0.3def
	Balance	100g/ha		
11	Impose	150ml/ha	0.00c	0.1f
	Valor	210g/ha		
12	Impose	150ml/ha	0.01bc	0.5bcd
	Group C D	1000g/ha		
13	Valor	210g/ha	0.00c	0.1f
	Balance	100g/ha		
14	Valor	210g/ha	0.00c	0.4def
	Dual Gold	2000ml/ha		
15	Balance	100g/ha	0.00c	0.5bcd
	Terbyne Xtreme	1200g/ha		
LSD P=			1.039t	0.27
Treatment Prob.(F)=			0.0013	0.0001

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.

2019

AA = Automatic arcsine square root % transformation

Application Description	
Application Date:	23/01/2020
Application Start Time:	12:25 PM
Application Stop Time:	2:45 PM
Application Method:	SPRAY
Application Timing:	PRE-EMERGENT
Application Placement:	SOIL
Air Temperature, Unit:	31.1 C
% Relative Humidity:	62.5
Wind Velocity, Unit:	13.8 km/h
Wind Direction:	NE
Dew Presence (Y/N):	No
Soil Moisture:	SLIWET
% Cloud Cover:	90
Next Moisture Occurred On:	23/01/2020

Pest Stage at Each Application	
Pest 1:	<i>Echinochloa colona</i> Awnless Barnyard grass
Stage Majority, %	Pre-emergent
Pest 2:	<i>Convolvulus erubescens</i> Australian Bindweed
Stage Majority, %	Pre-emergent

Application Equipment	
Application Equipment:	Polaris
Equipment Type:	BOOM
Operation Pressure, Unit:	300 kPa
Nozzle Type:	AIXR
Nozzle Size:	110015
Nozzle Spacing, Unit:	50 cm
Boom Length, Unit:	4 m
Boom Height, Unit:	50 cm
Ground Speed, Unit:	7.2 km/h
Spray Volume, Unit:	100 L/ha

Residual Control of Awnless Barnyard Grass in Fallow

Trial ID: LB1924

Location: Pittsworth

Trial Year: 2019

Conclusions:

This trial was established to evaluate herbicides for the residual control of weeds in fallow. The herbicides were applied on 23/01/2020. Approximately 2 weeks after the treatments were applied, the site received 148 mm rain over ~12 days. At 34 days after application (DAA), awnless barnyard grass (ABYG) and Australian bindweed counts were undertaken, although the populations were low.

At 34 DAA, ABYG populations of ~0.2 /m² were present in the untreated. Two distinct cohorts were evident with ~55% of population at pre tillering and 2-4 cm diameter with the remainder tillering and elongating at ~10-60 cm diameter. All treatments except Impose alone provided >90% residual control of ABYG. Valor 280 g/ha alone or in mixture with Balance, Dual Gold or Impose, together with Balance in mixture with Impose or Terbyne Xtreme provided complete control. ABYG control from Impose was disappointing on both cohorts.

Australian bindweed populations averaged ~0.8 /m² in the untreated. Two distinct cohorts were also evident with ~40% of population at a small rosette stage and 2-4 cm diameter with the remainder at ~10-20 cm diameter. Complete control was not achieved by any of the treatments. Valor mixtures with Impose or Balance provided the highest level of activity but only reached ~85% control.

In this trial, all treatments other than Impose alone provided effective levels of ABYG control. However only useful levels of suppression were obtained on Australian bindweed.