#### 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.

### **Chickpea Desiccation - Product Evaluation**

Trial ID: LB1808 Location: Evanslea Trial Year: 2018

Investigator: Linda Bailey

Objective:	To evaluate the efficacy of Chickpea desiccation options		
Planting:	15/06/2018 with Commercial Tyne Planter on 50cm row spacing at 15cm depth		
Application Date:	30/11/2018 (~14 days prior to expected harvest)		
Growth Stage at Application:	91% of pods physically mature (yellow/golden pod)		
Application Volume:	100 L/ha		
Application Nozzles:	AIXR110015		
Harvest Date:	11/12/2018		
Harvest Equipment:	Small Plot Harvester		
Keywords:	Chickpea, desiccation		

NB: Sharpen is registered for chickpea desiccation at 34 g/ha when mixed with registered rates of glyphosate or paraquat plus crop oil. Sharpen at 34 g/ha plus crop oil was evaluated alone to evaluate the performance without the mixing partners.

Crop Name		Chickpea					
Crop Variety			PBA HatTrick				
	ment Date		7/12/2018	7/12/2018	7/12/2018	11/11/2018	
	ment Type		DISCOLOUR	LEAF DROP	STEM SNAP	YIELD	
	ment Unit		%	%	%	t/ha	
	nent-Evaluation Interval		7 DAA	7 DAA	7 DAA	11 DAA	
	Action Codes					TY1	
Trt	Treatment	Product					
No.		Rate					
1	Untreated	-	85-	70-	78-	2.27-	
2	Weedmaster Argo	1100ml/ha	83-	70-	70-	2.25-	
3	Weedmaster Argo	1800ml/ha	89-	75-	78-	2.40-	
4	Weedmaster Argo	1100ml/ha	88-	73-	75-	2.27-	
	Ally	5g/ha					
5	Weedmaster Argo	1100ml/ha	89-	83-	70-	2.14-	
	Experimental	25g/ha					
6	Weedmaster Argo	1100ml/ha	89-	74-	88-	2.43-	
	Sharpen	9g/ha					
	Hasten	1% v/v					
7	Weedmaster Argo	1100ml/ha	90-	79-	80-	1.95-	
	Sharpen	34g/ha					
	Hasten	1% v/v					
8	Sharpen	34g/ha	85-	69-	80-	2.13-	
	Hasten	1% v/v					
9	Gramoxone	800ml/ha	94-	80-	75-	2.19-	
10	Gramoxone	800ml/ha	90-	74-	85-	2.12-	
	Sharpen	9g/ha					
	Hasten	1% v/v					
11	Gramoxone	800ml/ha	89-	73-	78-	2.06-	
	Sharpen	34g/ha					
	Hasten	1% v/v					
12	Reglone	3000ml/ha	91-	76-	75-	2.05-	
	Chemwet 1000	0.2% v/v					
		LSD P=	nsd	nsd	nsd	nsd	
	Treat	ment Prob.(F)=	0.2039	0.4300	0.7890	0.4284	

Grain Yield cv= 12.6%

## **Chickpea Desiccation - Product Evaluation**

Trial ID: LB1808 Location: Evanslea Trial Year: 2018

Crop Name Crop Variety Assessment Date Assessment Type			Chickpea PBA HatTrick				
			13/12/2018 13/12/2018 13/12/2018 13/12/2018				
			PROTEIN	MOISTURE	TEST WEIGHT	SCREENING	
	ment Unit		PROTEIN %	WIOISTORE	kg/hL	%	
Trt	ment ont	Product	70	70	Kg/IIL	70	
No.	Treatment	Rate					
1	Untreated	-	25.3ab	9.8-	77-	4.0-	
2	Weedmaster Argo	1100ml/ha	24.5e	9.9-	77-	3.6-	
3	Weedmaster Argo	1800ml/ha	24.7cde	9.7-	76-	3.0-	
4	Weedmaster Argo Ally	1100ml/ha 5g/ha	25.3a-d	9.6-	76-	3.3-	
5	Weedmaster Argo Experimental	1100ml/ha 25g/ha	25.3abc	9.8-	76-	3.9-	
6	Weedmaster Argo Sharpen Hasten	1100ml/ha 9g/ha 1% v/v	24.7cde	9.9-	76-	3.1-	
7	Weedmaster Argo Sharpen Hasten	1100ml/ha 34g/ha 1% v/v	24.8b-e	9.8-	77-	3.8-	
8	Sharpen Hasten	34g/ha 1% v/v	25.2a-d	9.7-	76-	3.6-	
9	Gramoxone	800ml/ha	24.7de	9.7-	77-	3.5-	
10	Gramoxone Sharpen Hasten	800ml/ha 9g/ha 1% v/v	24.9a-e	9.8-	76-	3.2-	
11	Gramoxone Sharpen Hasten	800ml/ha 34g/ha 1% v/v	25.4a	9.6-	77-	3.5-	
12	Regione Chemwet 1000	3000ml/ha 0.2% v/v	25.2a-d	9.7-	77-	3.0-	
	Treatr	LSD P= ment Prob.(F)=	0.61 0.0386	nsd 0.8057	nsd 0.7453	1.15 0.6740	

#### Assessment Type

STEM SNAP = Measurement of stem dry down as indicator of harvest readiness. 10 plants/plot were twisted and evaluated. The % of plants were recorded where all stems had snapped in 2 twists.

LEAF DROP = Estimate of % of leaves dropped from plant

DISCOLOUR = Phytotoxicity - % discoloration

SCREENING = Grain screenings 4 mm screen - % defective grains

ARM Action Codes

TY1 = 0.3703704\*[C4]

DAA = Days after Application

# **Chickpea Desiccation - Product Evaluation**

Trial ID: LB1808 Location: Evanslea Trial Year: 2018

#### Objective:

To evaluate efficacy of chickpea desiccation options

#### **Conclusions:**

Treatments were applied when ~91% of the grain were physiologically mature (yellow beak stage).

Leaf discolouration, leaf drop and stem 'snappiness' were assessed at 7 days after application with no significant differences found between any treatment and the Untreated.

The trial was harvested 11 days after application with grain quality testing undertaken 2 days later. There were no significant differences between the treatments for yield, moisture, test weight or screenings. Significant differences were found for protein levels, but with all treatments recording between 24.5% and 25.4% protein.

Applied at a crop stage of ~91% mature pods, there were no clear differences between desiccation treatments and the Untreated in yield or grain quality.

Application Description			
Application Date:	30/11/2018		
Application Start Time:	7:15 AM		
Application Stop Time:	10:15 AM		
Application Method:	SPRAY		
Application Timing:	PRE HARVEST		
Application Placement:	FOLIAR		
Air Temperature, Unit:	23 C		
% Relative Humidity:	64		
Wind Velocity, Unit:	6.4 km/h		
Wind Direction:	Е		
Dew Presence (Y/N):	No		
% Cloud Cover:	20		
Next Moisture Occurred On:	18/11/2018		

Crop Stage at Application			
Crop:	Chickpea		
Stage Scale Used:	GRDC		
Stage Majority, %:	19 R12 90%		
Stage Minimum, %:	18 R11 10%		
Stage Maximum, %:	19 R12 90%		
Height, Unit:	40 cm		

Application Equipment		
Application Equipment:	Quad Bike	
Operation Pressure, Unit:	350 kPa	
Nozzle Type:	AIXR	
Nozzle Size:	110015	
Nozzle Spacing, Unit:	50 cm	
Boom Length, Unit:	4 m	
Boom Height, Unit:	90 cm	
Ground Speed, Unit:	7.2 km/h	
Carrier:	Water	
Spray Volume, Unit:	100 L/ha	