

**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.**

## Faba Bean Disease Management

Trial ID: **LB1710**      Location: **Cecil Plains**      Trial Year: **2017**  
Investigator: **Linda Bailey**

Objective:	To compare fungicides for control of Faba bean rust
Application Date:	18/07/2017
Application Timing:	First Sign of Disease
Crop Stage Majority at Application:	Flowering
Planting Date:	25/03/2017
Planting Equipment:	Commercial Double Disc Planter
Harvest Date:	28/09/2017
Harvest Equipment:	Small Plot Header
Keywords:	Faba bean, rust

Pest Scientific Name Pest Name Crop Name Crop Variety Description Part Assessed Assessment Date Assessment Type Assessment Unit Crop Stage Majority Treatment-Evaluation Interval ARM Action Codes			<i>Uromyces viciae-fabae</i>				Faba bean PBA Nasma	
			Rust					
			Faba bean					
			PBA Nasma					
			Severity	Incidence	Severity	Incidence		Yield
			Leaf 7	Leaf 7	Leaf 4	Leaf 4		
			8/08/2017	8/08/2017	30/08/2017	30/08/2017		28/09/2017
			LEAF AREA	PRESENCE	LEAF AREA	PRESENCE		YIELD
			%	%	%	%		t/ha
			78	78	86	86		
21 DAA	21 DAA	43 DAA	43 DAA	72 DAA				
AA	AA	AA	AA	TY1				
Trt No.	Treatment	Product Rate						
1	Untreated	-	18.1a	100.0a	15.1ab	100.0a	0.87a	
2	Penncozeb 750 WG	1000g/ha	15.3a	98.9a	12.4ab	100.0a	0.87a	
3	Penncozeb 750 WG	2200g/ha	19.3a	100.0a	18.8a	100.0a	0.92a	
4	Sumisclex Broadacre	500ml/ha	12.3ab	98.9a	15.3ab	98.9a	0.79a	
5	Tri-Base Blue	2970ml/ha	13.1ab	100.0a	18.0a	100.0a	0.64b	
6	Unite	1400ml/ha	18.6a	100.0a	22.5a	100.0a	0.86a	
7	Folicur	290ml/ha	8.0bc	83.3b	8.8b	83.3b	0.92a	
8	Spin Flo	250ml/ha	13.4ab	100.0a	15.7ab	100.0a	0.85a	
9	Spin Flo	500ml/ha	15.5a	98.9a	17.2ab	100.0a	0.79a	
10	Aviator Xpro	500ml/ha	3.7cd	56.8c	2.1c	42.7c	0.85a	
LSD P=			5.63t	16.83t	7.91t	14.08t	0.143	
Treatment Prob.(F)=			0.0001	0.0001	0.0002	0.0001	0.0215	
CV=							14.6	

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.

## Faba Bean Disease Management

Trial ID: LB1710

Location: Cecil Plains

Trial Year: 2017

### Assessment Type

LEAF AREA = % Leaf area diseased

PRESENCE = % of Leaves infected

### Part Assessed

Leaf 7 = 7<sup>th</sup> Leaf from top of plantLeaf 4 = 4<sup>th</sup> Leaf from top of plant

### Crop Stage Majority

78 = 80% of Pods have reached final length

86 = 60% of Pods ripe and dark, seeds dry and hard

### ARM Action Codes

AA = Automatic arcsine square root % transformation

TY1 =  $0.5555555 \times [5]$ 

DAA = Days after Application

### Conclusions:

Treatments were applied at the first sign of disease (less than 10% leaf area affected).

The severity (leaf area affected) and incidence (presence) of rust was assessed on leaf 7 (3 weeks after treatment application) and leaf 4 (6 weeks after treatment application). Aviator Xpro provided the highest level of rust suppression at both assessments. Compared to the Untreated, rust severity was reduced by ~80-85% and incidence was reduced by ~45-55%.

Despite the level of disease suppression provided by Aviator Xpro, there was no impact on yield. No treatment significantly improved yield compared to the Untreated with the copper based fungicide (Tri-Base Blue) resulting in significantly lower yield than the Untreated and all other treatments.

Application Description	
Application Date:	18/07/2017
Application Start Time:	11:15 AM
Application Stop Time:	1:15 PM
Application Method:	SPRAY
Application Timing:	DISEASE ONSET
Application Placement:	FOLIAR
Air Temperature, Unit:	22 C
% Relative Humidity:	55
Wind Velocity, Unit:	14 km/h
Wind Direction:	N
Dew Presence (Y/N):	No
Soil Moisture:	DRY
% Cloud Cover:	0
Next Moisture Occurred On:	4/08/2017

Application Equipment	
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
Carrier:	Water
Spray Volume, Unit:	100 L/ha