



Lupin Foliar Spray Trial

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Location: Craig Simkin - Binu

Plot Size: 14m x 100m

Soil Type: sand

Sowing Date: 20/5/15

Seeding Rate: 70kg/ha

Aim: To investigate if Bravo, Sumisclex and Blackjak foliar sprays have an effect on Tanjil Lupin yield in lupins that were under pressure with a number of diseases.

Background: The Tanjil Lupins had a significant amount of Powdery Mildew throughout the crop, as well as low levels of Brown Spot and Sclerotinia.

- Sumisclex is a group B fungicide with the active constituent procymidone at 500g/L.
- Bravo is a suspension concentrate formulation containing 500g/L of chlorothalonil.
- Blackjak is a concentrated suspension of Humic, Fulvic and Ulmic Acids (18%), Humic organic matter (25%) and Trace Elements.

Trial Details and Design

<u>Treatment</u>	<u>Rate</u>
Sumisclex	1L/ha
Bravo	2L/ha
BlackJak	1L/ha

All treatments were applied with 100L/ha water.
 Each treatment was sprayed in a 14m by 100m plot (0.14 ha)

Results and Discussion

<u>Treatment</u>	<u>Plot size</u>	<u>Tonnes</u>	<u>Tonnes/ha</u>
Control	0.14 ha	0.320	2.286
Sumisclex	0.14 ha	0.334	2.386
Bravo	0.14 ha	0.328	2.343
Blackjak	0.14 ha	0.345	2.464

Each foliar spray plot had a yield higher than the control.

Blackjak yielded highest followed by Sumisclex, then Bravo.



Location:

Karl & Craig Suckling -
Ogilvie, Andrew Royce
& Geoff Howieson -
Corringle Farms

Plot Size:

2.5m X 20m (3 reps)

Soil Type:

K. Suckling – Loam
Corringle – Loamy Sand

Sowing Date:

K. Suckling –
Corringle – 22/5/15

Seeding Rate:

K. Suckling – 80kg/ha White
Amira
Corringle – 80kg/ha White
Amira

Growing Season

Rainfall:

K. Suckling –
Corringle –

Albus Lupin Fungicide Timing Trials

Catrina Matheson, Agronomist, Great Northern Rural Services, Geraldton

Aim

- To assess the efficacy of Sumisclax and Bravo fungicides when sprayed at different stages of Albus Lupin crop growth.
- To assess the efficacy of Aviator, Custodia, 1404, Switch and Amistar Top at preventing disease on Albus Lupins at 100% flowering stage.

Background

Albus Lupins are known to be attacked by different fungi. Sclerotinia and Anthracnose are two of the most abundant fungi present in lupin crops. Fungicides are commonly used to reduce vulnerability of the crop being infected. This trial was carried out to find at what growth stage the crop most benefited from a foliar fungicide (Bravo and Sumisclax) spray to fight off disease. Along with the timing trial, a product trial was performed at T2 stage of crops. Aviator, Custodia, 1404, Switch and Amistar Top were applied to see their efficacy on fighting off disease.

Discussion and Results

Ogilvie Fungicide Variety and Timing Trial
Anthracnose Lesion ratings 0-5 of 10 plants at 3 sites in plot

Bank 1

Plot	Main Stem	Branch Stems	Main Pods	Branch Pods	Extra notes
1	1 0 0	3 0 0	1 3 1	5 2 1	
2	0 0 0	0 0 0	0 0 1	0 1 2	
3	0 1 0	0 0 0	0 0 3	2 1 3	1 sclerolesion
4	1 0 0	1 0 0	3 1 0	2 1 1	
5	0 0 0	1 0 0	1 1 0	1 2 1	
6	2 0 0	2 0 1	3 0 1	3 1 1	
7	0 0 0	0 0 0	0 2 1	1 0 2	Phomopsis
8	0 0 1	0 0 0	1 0 2	3 1 1	
9	0 0 0	0 1 0	1 0 0	1 1 1	Phomopsis
10	0 0 0	0 0 0	1 1 2	1 1 2	
11	0 0 0	1 1 0	0 1 0	1 2 3	Phomopsis
12	0 0 0	0 0 0	0 1 0	1 1 1	Phomopsis
13	0 0 0	0 0 0	1 2 1	2 1 2	Phomopsis
14	0 0 0	0 0 0	1 1 0	2 2 1	Phomopsis

Bank 2

Plot					
1	0 0 0	0 0 0	0 1 2	1 1 2	Phomopsis
2	0 0 0	0 0 0	1 1 2	2 1 2	
3	0 0 0	0 2 0	1 1 1	1 2 3	
4	0 1 0	0 0 0	2 1 1	1 1 2	
5	0 0 0	0 0 0	0 0 2	1 2 1	
6	0 0 0	0 0 0	0 0 1	1 1 2	Phomopsis
7	0 0 0	1 0 0	1 2 1	1 1 0	Phomopsis
8	0 0 0	0 0 0	2 0 1	3 1 3	
9	1 0 0	1 0 0	0 2 0	2 1 1	
10	0 0 1	0 1 0	1 2 1	2 3 1	
11	0 0 0	0 0 0	1 2 1	1 2 1	
12	0 0 0	0 0 0	0 0 1	1 2 2	Phomopsis
13	0 0 0	1 0 0	1 0 1	2 1 2	
14	0 0 0	1 0 0	2 1 0	3 2 1	Phomopsis

Bank 3

Plot					
1	0 0 1	0 0 0	0 1 1	1 2 3	Phomopsis
2	0 0 0	0 0 0	0 0 0	1 1 0	
3	0 0 0	0 0 0	1 0 0	3 1 1	
4	0 0 0	0 0 1	1 1 1	1 2 1	Phomopsis
5	0 0 0	0 0 0	0 0 1	1 1 2	Phomopsis
6	0 0 0	0 1 0	0 1 1	1 3 3	
7	0 0 0	0 0 0	0 0 0	1 0 1	Phomopsis
8	0 0 0	1 0 0	1 2 1	1 1 1	
9	0 0 0	0 0 0	0 1 1	0 1 2	Phomopsis
10	0 0 0	0 1 0	1 2 1	2 1 1	
11	0 0 0	1 0 0	2 1 0	2 1 1	
12	0 0 0	1 1 0	1 1 0	2 2 1	
13	0 0 0	0 0 0	0 0 1	1 1 1	Phomopsis
14	0 0 0	0 0 0	0 0 0	0 1 1	

Corringle Results

The trial at Corringle, did show signs of anthracnose seed infection with a couple of plants in the entire trial showing signs of anthracnose. Unfortunately the disease pressure was not strong enough to distinguish efficacy between timing and products. This was due to lack of rain which helps spread the disease.

There were no phytotoxic effects noted in any plots.

Random, sporadic events of Phomopsis and Sclerotinia were also noted in this trial however no relation was correlated with timing or type of fungicide used.

Corringle Trial Yield Results and Statistics.

Treatment	Mean	
NIL	2.717	a
BRAVO4	2.483	a
Aviator	2.574	a
Syn-Amt / Azoxystrobin + Difenoconazole (AMISTAR top)	2.584	a
1404	2.59	a

SUMISCLEX1	2.59	a
SUMISCLEX24	2.595	a
Syn-Cuf 19 / Cyprodinal + Fludioxonil (SWITCH)	2.61	a
BRAVO1	2.615	a
BRAVO24	2.62	a
BRAVO2	2.635	a
BRAVO3	2.646	a
Custodia	2.646	a
SUMISCLEX3	2.661	a
lsd	ns (0.348)	

No significant difference in any of the treatments.

Ogilvie

The trial at Ogilvie, did show greater signs of disease infection with more plants with anthracnose signs. Once again the disease pressure was not strong enough to distinguish efficacy between timing and products.

No phytotoxic effects were also noted in any plots.

Random, sporadic events of Phomopsis and Sclerotinia were also noted in this trial however no relation was correlated with timing or type of fungicide used.

A level of Heliothis damage was also evident at this trial site.

Ogilvie Trial Yield Results and Statistics

Treatment	Mean	
NIL	2.05	a
SUMISCLEX T4	2.02	a
1404	2.073	a
BRAVO T2	2.073	a
BRAVO T4	2.113	a
BRAVO T5	2.127	a
BRAVO T3	2.13	a
Syn-Amt	2.133	a
SUMISCLEX T2	2.137	a
Aviator	2.147	a
SUMISCLEX T3	2.167	a
SUMISCLEX T5	2.197	a
Custodia	2.203	a
Syn-Cuf 19	2.21	a
lsd	ns (0.1947)	

No significant difference in any of the treatments

Seed infection Testing.

Untreated plots had ~0.1% infection on samples taken from DAFWA sites. This resulted in no chance of determining any fungicide response at that level of infection without going to the DNA test. However GNRS are conducting further research on harvested seed from these trials to investigate if our findings are similar.