

Field Pea, Blackspot management for the southern low rainfall zone, LRZ Eyre Peninsula (Kimba), South Australia

Authors

Sarah Day, Penny Roberts

Aim

To evaluate the effectiveness of different fungicide strategies for the management of blackspot disease infection in field pea to determine the most appropriate strategy for the southern low rainfall zone.

Treatments

Fungicide strategies

Treatments	Details
Nil	Fungicide are not applied
P-Pickel T (PPT) + Mancozeb	PPT seed dressing and Mancozeb applied 6-8 weeks after sowing at 2 kg/ha
PPT + Apron + Mancozeb	PPT and Apron seed dressing and Mancozeb applied 6-8 weeks after sowing at 2 kg/ha
Aviator	Aviator applied 6-8 weeks after sowing at 600 mL/ha
PPT + Aviator	PPT seed dressing and Aviator applied 6-8 weeks after sowing at 600 mL/ha
PPT + Apron + Aviator	PPT and Apron seed dressing and Aviator applied 6-8 weeks after sowing at 600 mL/ha
Veritas	Veritas applied 6-8 weeks after sowing at 1000 mL/ha
PPT + Veritas	PPT seed dressing and Veritas applied 6-8 weeks after sowing at 1000 mL/ha

Table 2. Trial site details

Kimba	
Variety	PBA Oura
Sowing date	22 May
Sowing density (plants/m²)	55
Row spacing	27 cm
Fungicides	Fungicides applied after 6-8 weeks from sowing before the rains commencing on 4 July
Harvest date	14 October

Results and Interpretation

- Key Messages: Grain yield of PBA Oura field pea was 400 kg/ha at Kimba, 2019, due to dry seasonal conditions. A foliar fungicide strategy is only recommended for crops that have a potential yield of at least 1.5 t/ha. However, it is not economic to apply fungicides in crops with grain yields below 1.5 t/ha.
- Grain yield: No natural blackspot disease infection occurred at Kimba in 2019 due to dry seasonal conditions. Hence, there were no differences between fungicide treatments for grain yield (data not shown). The average grain yield of PBA Oura was 400 kg/ha. A foliar fungicide strategy is recommended for crops that have a potential yield of at least 1.5 t/ha. However, it is not economic to apply fungicides in crops with grain yields below 1.5 t/ha.

Acknowledgements

The research undertaken as part of the GRDC-funded Southern Pulse Agronomy project is made possible by the significant contributions of growers through both trial cooperation and the support of the GRDC and the authors would like to thank them for their continued support. The continued assistance in trial management from SARDI Agronomy groups at Clare, Minnipa, Struan and Port Lincoln is gratefully acknowledged and appreciated. The authors would also like to gratefully acknowledge SARDI Plant Pathology and Soil Biology groups for their scientific input and assistance, as well as advisors and grower groups involved in the project.