Field Pea, Disease Management, LRZ Northern Mallee (Werrimull), Victoria

Aim

To evaluate fungicide strategies to manage blackspot in field pea in the low rainfall Mallee environment.

Treatments

Eight fungicide strategies were compared to a nil control and full control (fortnightly Chlorothalonil @ 1.5 L/ha). Treatments combined fungicides applied to either the seed (P Pickel T) or fertiliser (Uniform @ 400 ml/ha) with foliar applied fungicides (Aviator Xpro @ 600 ml/ha or Amistar @ 600 ml/ha) (**Table**). All treatments were sown to PBA Twilight field peas at 99 kg/ha.

Table 1. Fungicide treatments for the blackspot management in field pea trial at Werrimull in 2018.

| Fungicide Strategy | Seed Treatment | Fertiliser Treatment | In-crop Fungicide |
|--|-----------------------|----------------------|-------------------|
| 1. Nil | Nil | Nil | Nil |
| 2. PPT | PPT | Nil | Nil |
| 3. Uniform | Nil | Uniform | Nil |
| 4. Aviator Xpro | Nil | Nil | Aviator Xpro |
| 5. Amistar | Nil | Nil | Amistar |
| 6. PPT + Aviator Xpro | PPT | Nil | Aviator Xpro |
| 7. PPT + Amistar | PPT | Nil | Amistar |
| 8. Uniform + Aviator Xpro | Nil | Uniform | Aviator Xpro |
| 9. Uniform + Amistar | Nil | Uniform | Amistar |
| 10. Full Control - Clothoronil (Fortnightly) | PPT | Nil | Chlothoronil |

Table 2. Other Site Details

| Sowing Date | 15 May 2018 | |
|--------------------------|----------------------|--|
| Plant Density (plant/m²) | 45 | |
| Stubble (height cm) | 5 | |
| Row Spacing (cm) | 28 | |
| Fertiliser | 50 kg/ha Granulock Z | |

Results and Interpretation

• Well below average growing season rainfall did not provide favourable conditions for the development of blackspot, therefore there were no significant differences in grain yield between any treatments. The mean yield across all varieties was 0.64 t/ha (**Table**).

Table 3. Field pea grain yield at Werrimull in 2018 for each fungicide strategy.

| Treatment | Grain Yield (t/ha) |
|---|-----------------------|
| 1. Nil | 0.65 |
| 2. PPT | 0.60 |
| 3. Uniform | 0.60 |
| 4. Aviator Xpro | 0.44 |
| 5. Amistar | 0.74 |
| 6. PPT + Aviator Xpro | 0.58 |
| 7. PPT + Amistar | 0.69 |
| 8. Uniform + Aviator Xpro | 0.65 |
| 9. Uniform + Amistar | 0.67 |
| 10. Full Control – Chlorothalonil (Fortnightly) | 0.83 |
| LSD (P<0.05) | NS |