

L6 Disease Management (Green Lentils), MRZ Wimmera (Pimpinio), Victoria

Aim

To investigate the impact of crop-topping and harvest timing on the yield and quality on new green lentil lines.

Treatments

Varieties: Boomer, PBA Greenfield, PBA Giant, CIPAL0708 (Novel line), red lentil controls: Nipper, PBA Ace.

Treatments:

Treatment	Detail
Nil	No fungicides applied
Fortnightly	Apply chlorothalonil 720 fortnightly @ 2L/ha from 6-8 weeks after emergence (see table below). Continue application until mid-late podding. Include carbendazim 500ml/ha at canopy closure fortnightly following with the chlorothalonil spray
Canopy Closure	Apply carbendazim 500 @ 500ml/ha at canopy closure
Early Podding	Apply chlorothalonil 720 @ 2L/ha at early podding

Other Details

Sowing date: 13 May
Row Spacing: 30cm
Stubble: Standing, approximately 30 cm (sown inter-row)
Fertiliser: MAP + Zn @ 80 kg/ha at sowing.
Plant Density: 120 plants/m²

Results and Interpretation

- Key Message: Combined results from the sowing date and disease management trials indicated PBA Blitz and PBA Greenfield were more severely affected by ascochyta blight than previously observed relative to other varieties. This has resulted in a drop in their disease ratings relative to other varieties.
- Growth, Disease and Grain Yield – Similar to the time of sowing trial, early plant growth was excellent due to the early rainfall and mild temperatures in late autumn and early winter. These conditions were also conducive to early Ascochyta blight development with similar varietal differences in Ascochyta infection observed (see trial L2). Despite the early incursion of Ascochyta Blight, symptoms did not progress throughout spring due to the extremely dry conditions. Growth also slowed during this period and the dry conditions combined with many frosts caused significant flower and pod abortion during the reproductive phase resulting in no effect of disease management treatments. The mean grain yield of green lentils (Boomer, PBA Greenfield and PBA Giant was 0.4 t/ha), compared with CIPAL0708 (0.25t/ha), Nipper (0.5 t/ha) and PBA Ace (0.8 t/ha).

Key Findings and Comments

- Combined results from the sowing date and disease management trials indicated PBA Blitz and PBA Greenfield were more severely affected by ascochyta blight than previously observed relative to other varieties. This has resulted in a drop in their disease ratings relative to other varieties. Research will continue in 2015