C3 Disease Management, MRZ Wimmera (Pimpinio), Victoria

Aim

To investigate optimum disease management strategies across a range of chickpea varieties, differing in ascochyta blight susceptibility.

Experimental Treatments

Varieties: Resistant - Genesis090, Ambar, Neelam, PBA Slasher; Moderately resistant - PBA Striker, PBA Maiden, CICA1016, CICA1156; Moderately susceptible - PBA Monarch, Kalkee, Almaz.

Fungicide Regimes:

Regime	Chemical & Application Rate[1]	Timing
Fortnightly	chlorothalonil 500 @ 2 L/ha	Fortnightly starting 6 weeks after emergence. Total = 8 applications.
Strategically	chlorothalonil 500 @ 2 L/ha	Strategically from vegetatively through to podding. Total = 3 applications.
Podding	chlorothalonil 500 @ 2 L/ha	Podding. Total = 1 application.
Nil	Nil	Nil

1. Refers to application rate of the product

Ascochyta Blight inoculant applied 18th July

Other Details

Sowing date: 14 May.
Row Spacing: 30cm
Stubble: Standing (approx. 30cm tall), sown inter-row
Fertiliser: MAP + Zn @ 80 kg/ha at sowing
Plant Density: 35 plants/m^2
Soil Type: Alkaline Black cracking clay (Table 1 in Trial L2 above)

Results and Interpretation

- Key Message: Due to extreme weather events there was no major effect of disease management in 2014.
- Ascochyta Blight Damage and Grain Yield: No damage was seen from acochyta blight in 2014. All results need to be treated with caution due to the extreme climatic conditions during spring (low rainfall and frost, see above). The were no major differences in yield between disease management treatments. Overall grain yield was higher than the sowing time trial and ranged between 0.50t/ha for CICA1156 and 0.37t/ha for Genesis090. Grain weights and size distribution were not calculated due to low yields.

Table 1. The main effect of chickpea variety on grain yield in the disease management trial at Kalkee in 2013.

Variety	Grain Yield (t/ha)
CICA1156	0.50
CICA1016	0.48
PBA Striker	0.47
Ambar	0.47
Kalkee	0.45
PBA Maiden	0.43
Almaz	0.40
PBA Slasher	0.40
Naleem	0.39
Howzat	0.38
PBA Monarch	0.38
Genesis090	0.37
lsd	*0.07*

Key Findings and Comments

- Yields were generally too low to draw specific conclusions about varieties.