

Summary of pulse variety demonstrations



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Background

Lentil variety and chickpea variety demonstrations were established on Russell Dunlop's property at Rupanyup to investigate the suitability of some emerging and current varieties for the region. A northern chickpea variety trial was also established at Brim. These demonstrations were not fully replicated and reflect performance only for the 2003 season at each site. Therefore, consider long-term variety trial data before selecting a new variety.

Lentils

Nugget and CIPAL 206 were the highest yielding varieties in this demonstration. They also performed well in the DPI stage 4 trials. Nugget has yielded consistently above Cassab in the last few seasons, in part due to its earlier maturity. CIPAL 206 is an earlier maturing variety which may be adapted to northern Wimmera and southern Mallee as well as being more suited to crop topping for resistant ryegrass control. Northfield also performed well in this demonstration and is still a viable option provided the risk of botrytis grey mould is managed with fungicide applications.

CIPAL 203 was the better yielding variety of the three dual resistance (botrytis grey mould and ascochyta blight) lines. CIPAL 204 and CIPAL 205 are later flowering than CIPAL 203 and did not perform well with the warm, dry finish of 2004. CIPAL 203 leads the race as the most likely of these three to be released. CIPAL 203 is a reliable yielder and will require less fungicide inputs than the current varieties and the risk of crop failure due to disease will be much lower. This variety should outclass Northfield.

Chickpeas

Chickpea yields were low at both sites due to late sowing and a warm dry finish, causing a sudden end to the growing season. Yields were around 1t/ha at Rupanyup. At Brim, Howzat, ICCV96836 and Sona yielded 0.8-0.9t/ha and FLIP 94-508C, Kaniva and Bumper yielded 0.5- 0.6t/ha. Despite yielding as well as Howzat, ICCV96836 will not be released due to sub-standard ascochyta resistance.

FLIP 94-508C is an ascochyta resistant desi chickpea, available for seed production in 2004 and commercial release in 2005. This variety has been yielding similar to Tyson in DPI trials. It is late flowering and therefore not suited to Mallee environments. This was illustrated with a poor performance at Brim in 2003. It has lower yield potential and smaller seed size than Howzat. However, it should only require a single fungicide application at early pod fill to prevent seed staining. This should significantly reduce input costs and allow earlier sowing, thus increasing yield potential. The risk of crop failure due to ascochyta is also vastly reduced. There are also a number of promising Desi and small seeded Kabuli lines with ascochyta resistance and good yield potential in the pipeline. It looks like a return to the glory days of chickpeas is not too far away!

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