

# Focus Paddock Report

## Southern Growers Grazing Canola Variety Demo

Prepared By

Irrigation Discussion Group

Acknowledgements

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### Focus Paddock Summary

Growers in this environment have been hesitant to graze canola due to the long season traditional grazing varieties and the suspected heat stress in late spring/ early summer. The hope was that a series 5 spring variety would mature earlier and require one less irrigation in spring. The growers were accepting that a yield decrease would occur however it would save them an irrigation.

The growers were very impressed with the 30% increase in yield over the traditional winter variety.

Additional resources captured for this growers - <https://grdc.com.au/news-and-media/audio/podcast/grower-insights-on-grazing-crops-under-irrigation>

### Background & Paddock Aims

Looking at variety selection in dual purpose grazing canola under surface irrigation.

The growers would like to be able to graze canola but feel the traditional grazing varieties finish too late in our environment. They believed that a spring variety over a traditional winter canola would require one less irrigation and finish earlier avoiding the heat stress in late spring/early summer.

Farmers normally choose a traditional winter canola variety. With the guidance of Pioneer we introduce a series 5 spring variety Canola. The grower will plant a small section of two Clearfield varieties that are spring varieties compared to Edimax a traditional grazing winter canola.

### Focus Paddock Details

Location	Tocumwal	35°41'47"S 145°23'18"E
Crop type	Grazing Canola	
Irrigation system	Surface	

### Methodology including:

#### Variety Selection

Grazing Canola Winter – Edimax

Series 5 Spring Variety – 45Y91CI & 45Y95CL

Sown early March at 2kg per/ha with 100kg MAP – this is inline with district practice.

Top Dress with Urea – 250kg in total season.

Yield Data at end of season.

Agronomic results

Sown 9/03/2021, 2kg seed, 100kg MAP, top dressed 250kg.

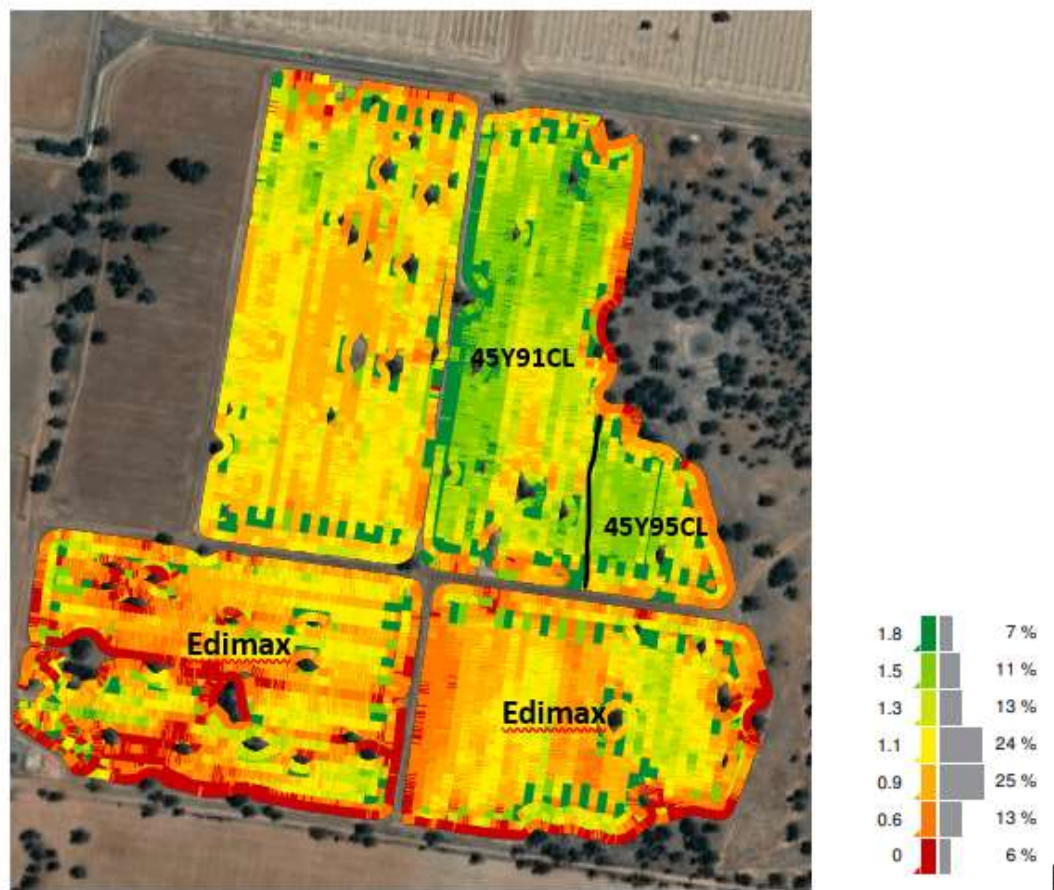
Irrigation - 11/03/2021 & 21/04/2021 & 11/09/2021

Grazed – Sheep 15/04/2021-15/06/2021

Flowering - 45Y91CL & 45Y95CL 06/07/2021     Edimax 20/07/2021

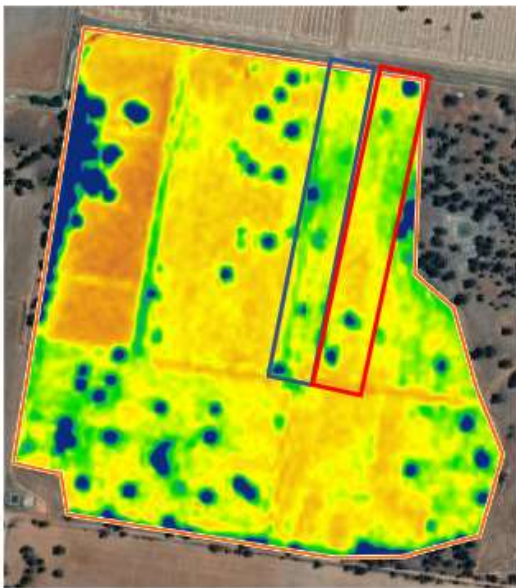
Yield

Canola							
		Start: 29 Dec 2021 14:22					
		End: 30 Dec 2021 13:47					
Varieties	Area Harvested	Average Moisture	Average Dry Yield	Total Dry Yield	Average Wet Weight	Total Wet Weight	Average Speed
45Y91CL	7.1 ha	5.1 %	2.3 m³/ha	16.2 m³	1.5 t/ha	10.9 t	
45Y95CL	7.5 ha	4.7 %	2.1 m³/ha	15.6 m³	1.4 t/ha	10.4 t	
EDIMAX	46.0 ha	5.0 %	1.6 m³/ha	72.8 m³	1.1 t/ha	48.7 t	
Totals/Averages	60.7 ha	5.0 %	1.7 m³/ha	104.6 m³	1.2 t/ha	70.0 t	6.8 km/hr
Bush Paddock	60.7 ha	5.0 %	1.7 m³/ha	104.6 m³	1.2 t/ha	70.0 t	6.8 km/hr
Totals/Averages							

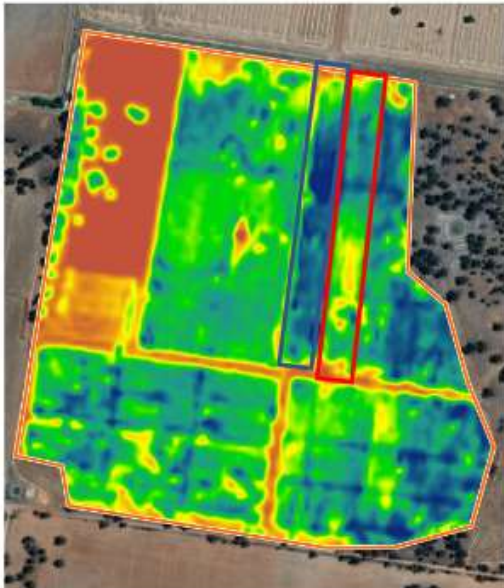


NDVI Imagery

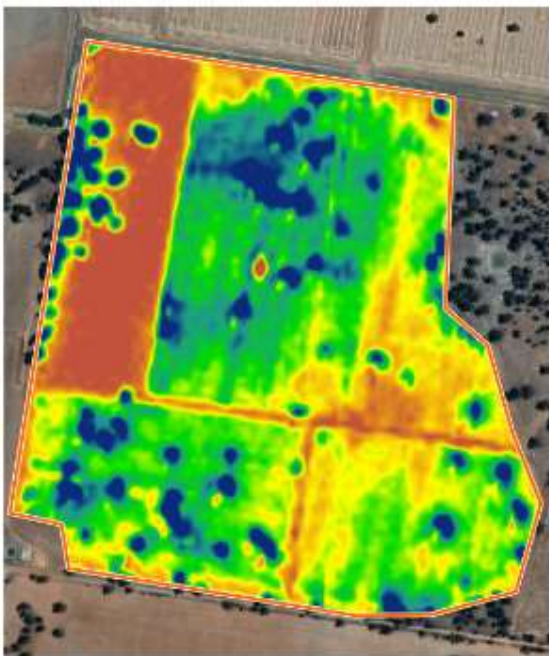
31<sup>st</sup> March 2021



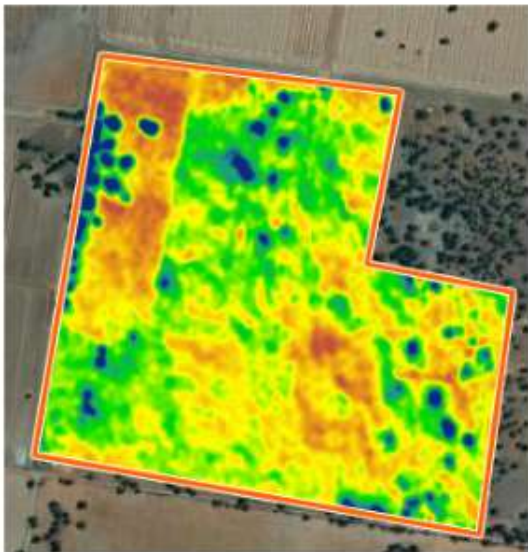
30<sup>th</sup> April 2021



30<sup>th</sup> May 2021

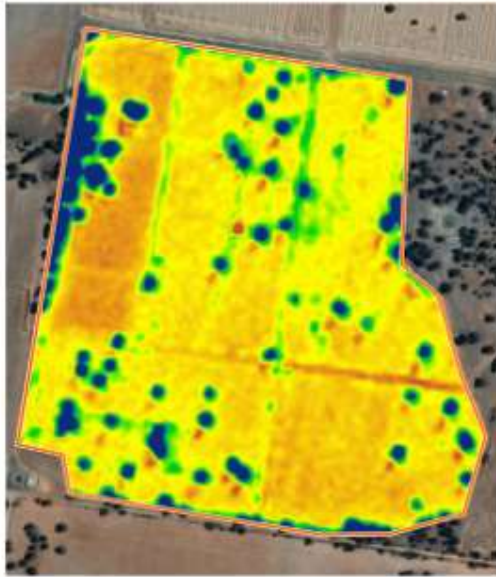


4<sup>th</sup> June





21<sup>st</sup> June 2021



1<sup>st</sup> July



### Grower Season Comments

Autumn was very dry in 2021 resulting in two waterings to establish the canola, the second watering is not common practice in the region however due to forecast and sandy soil the grower decided a second watering was vital.

Growing side by side traditional grazing canola and a series 5 spring variety allowed the grower to visually compare through out the whole season. The sheep did not show a preference to with variety and grazed consistently. Weed control was an issue post grazing due to weed competition.

Saw a 30% increase in yield on the series 5 varieties, no significant difference between the series 5 chosen.

### Key learnings & recommendations

Spring hybrids will be flowering in more conducive conditions, one of the biggest risk in that region is heat during flowering, a heat event will terminate flowering, significantly impacting yield, so if you have a crop that has only started flowering and has a heat event, that is going to significantly impact yield.

Spring hybrids will reach maturity earlier and be harvested in a more traditional canola harvest period, therefore there is a lower requirement to irrigate multiple times compared to a winter canola, so less cost.

Roundup Ready would be a better fit in the grazing system for this farmer due to increased weed pressure created from grazing.