

“Canola Agronomy 2012 Trial Results”

Lou Flohr, Agrilink Agricultural Consultants Pty Ltd, flohrlouise@gmail.com

Key Outcomes:

- Zircon was the highest yielding variety in the trial
- Highest yields were obtained in all varieties other than Crusher TT when high nitrogen rates were applied at bolting as compared to seeding.
- Crusher TT appears to be more responsive to early Nitrogen application compared to applications at bolting
- Hyola 676 CL and Garnet were responsive to applied Nitrogen but timing did not matter
- 43C80 is an outclassed variety in high rainfall zones

Trial Objectives: To determine yield response of various canola varieties to different nitrogen management strategies.

Trial Duration: 2012

Location: Navan

Farmer Co-operators: Pat & Mary Connell

Soil Type: Black Cracking Clay

Paddock History: 2010 Wheat
2011 Oats Hay

Monthly Rainfall:

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
18	11	55	16	42.5	76.5	38	46.5	29	21.5	4.5	10

Yield Limiting Factors: Dry Spring

Type of Trial: Replicated small plot trial

Trial Design: Randomised Complete Block Design

Treatments:

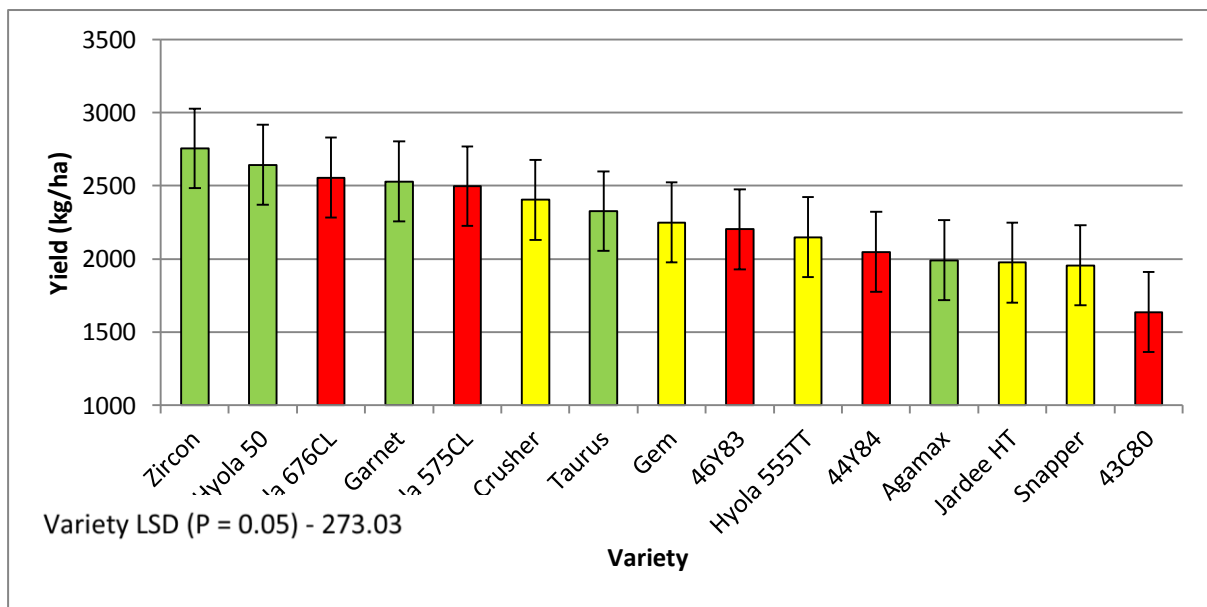
15 canola varieties (5 x conventional, 5 x Clearfield and 5x Triazine Tolerant) were tested in the trial (See **Table 1**). All plots were sown on 28/04/2012 at 5 kg/ha with 80 kg/ha Triple Superphosphate. All plots were windrowed on 6/11/2012. At the time of writing, oil and protein analysis have not been performed on the samples. Nitrogen applications were applied in the form of urea.

Table 1: Canola varieties tested in the MNHRZ Canola Agronomy Trial, 2012

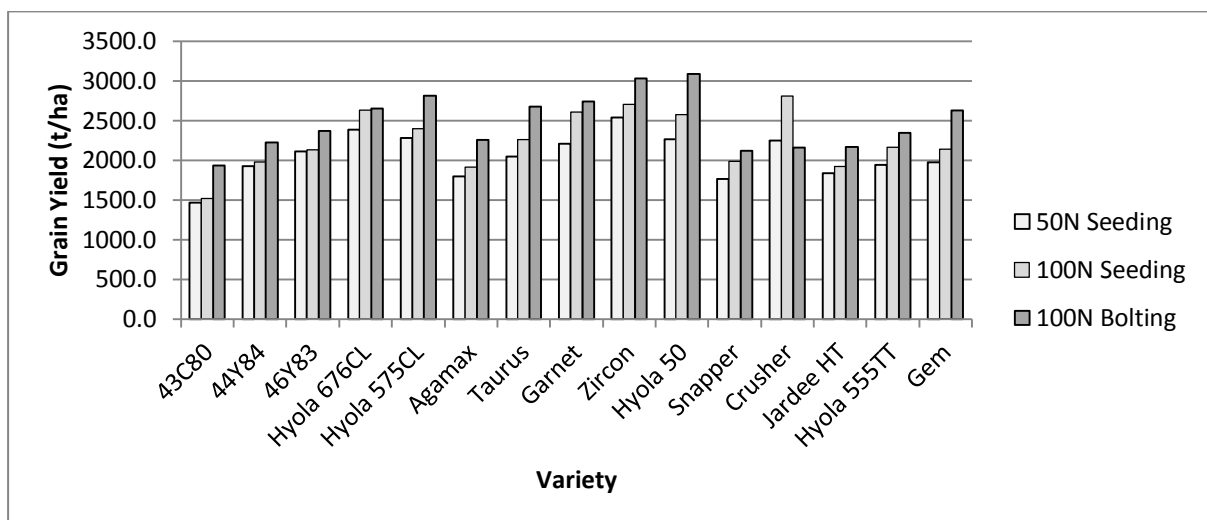
Garnet	Hyola 575CL	Snapper TT
Taurus	43C80	ATR Gem
Hyola 50	44Y84	Hyola 555TT
Agamax	46Y83	Jardee HT
Zircon	Hyola 676CL	Crusher

Results:

Graph 1: The average yield of varieties across the three Nitrogen treatments



Graph 2: Grain Yields for different Nitrogen treatments



Comments:

Zircon and Hyola 50 topped the yield in this trial, followed closely by Hyola 676CL and Garnet. There was no significant yield difference between the top 4 performers. 43C80 performed poorly across all fertiliser treatments. Snapper TT yielded significantly higher than 43C80 (318.1kg/ha). Three out of the top four varieties are not herbicide tolerant varieties, suggesting that there is still a gap between conventional varieties and varieties with herbicide traits. TT varieties particularly appeared more frequently on the lower yielding end of the trial.

Conclusions and into the paddock:

43C80 was the lowest yielding variety regardless of timing or rate of Nitrogen applied. This variety, and Snapper TT are outclassed in high rainfall zones. Crusher TT yielded best when Nitrogen was applied at seeding compared to at bolting, suggesting that this variety is more responsive to applied Nitrogen earlier, rather than later in the season. This could be considered when developing future fertiliser strategies. Very little difference between yields was observed for Hyola 676CL and Garnet when Nitrogen was applied at seeding or bolting, suggesting these varieties don't differ in their response to the timing of Nitrogen application.

Acknowledgements

Pat & Mary Connell for the use of their land for the trials

Pioneer Seeds, Pacific Seeds, Nuseed and Canola Breeders for supplying seed for the trials

Agrilink Agricultural Consultants for management of the trial