

HARVEST YIELD RESULTS

Canola Spring G.E.M. Trial

2021 SA Crop Technology Centre

Hyper Yielding Crops Project (FAR2004-002SAX)

A Grains Research & Development Corporation (GRDC) investment

Sown: 7 May 2021

Harvested: 12-13 December 2021

Rotation position: 2020 Wheat, 2019 Faba Beans, 2018 Carrots

Soil type & Management: Neutral-slightly alkaline Organosol (Peat soil) – high organic matter (0-30cm)

Key Messages:

- Clearfield canola varieties were the standout for grain yield with 45Y95 CL averaging 6.26 t/ha across three management strategies.
- There was no effect of increasing input of nitrogen and fungicide on grain yield. See accompanying report on the SA canola nutrition trial for more details on optimum nutrition for Hyper Yielding Canola.
- Winter canola and quality data pending

Treatments: Three management levels (combination of nitrogen and fungicide) applied to 6 canola varieties.

Table 1. Influence of management strategy and variety on grain yield (t/ha).

	Management Level			
	Low Input]	Medium Input	High input	Mean
Cultivar	Yield t/ha	Yield t/ha	Yield t/ha	Yield t/ha
HyTTec Trifecta (TT)	4.35 -	5.03 -	5.09 -	4.82 d
ATR Wahoo (TT)	3.33 -	3.78 -	3.92 -	3.67 e
45Y28 RR	5.11 -	5.05 -	5.37 -	5.18 c
Condor TF	5.12 -	5.33 -	5.17 -	5.20 c
45Y95 CL	6.37 -	6.20 -	6.22 -	6.26 a
45Y93 CL	5.73 -	5.75 -	5.75 -	5.74 b
Mean	5.00 -	5.19 -	5.25 -	5.15
LSD Cultivar p = 0.05	0.34		P val	<0.001
LSD Management p=0.05	0.34		P val	0.252
LSD Cultivar x Man. P=0.05	0.58		P val	0.448

Table 2. Details of the management levels.

Sowing date:		7 May		
Plant population:		45 plants/m ²		
Basal Fertiliser:		130 kg/ha MAP (15 kg/ha N)		
		150 kg/ha SOA (31 kg/ha N)		
Nitrogen:	6-leaf	Low Input 75 kg N/ha	Medium Input 112.5 kg N/ha	High Input 112.5 kg/ha
	Bud visible	75 kg N/ha	112.5 kg N/ha	112.5 kg/ha
Total N Applied:		150 kg N /ha	225 kg N/ha	225 kg/ha
Fungicide:	Seed trt:	Maxim XL	Maxim XL	Saltro Duo
	6 - Leaf	Nil	Nil	Prosaro 450mL/ha
	20% Bloom	Aviator Xpro 800mL/ha	Aviator Xpro 800mL/ha	Aviator Xpro 800mL/ha

All inputs of insecticides and herbicides were standard across the trial

Meteorological Data – South Australian Crop Technology Centre

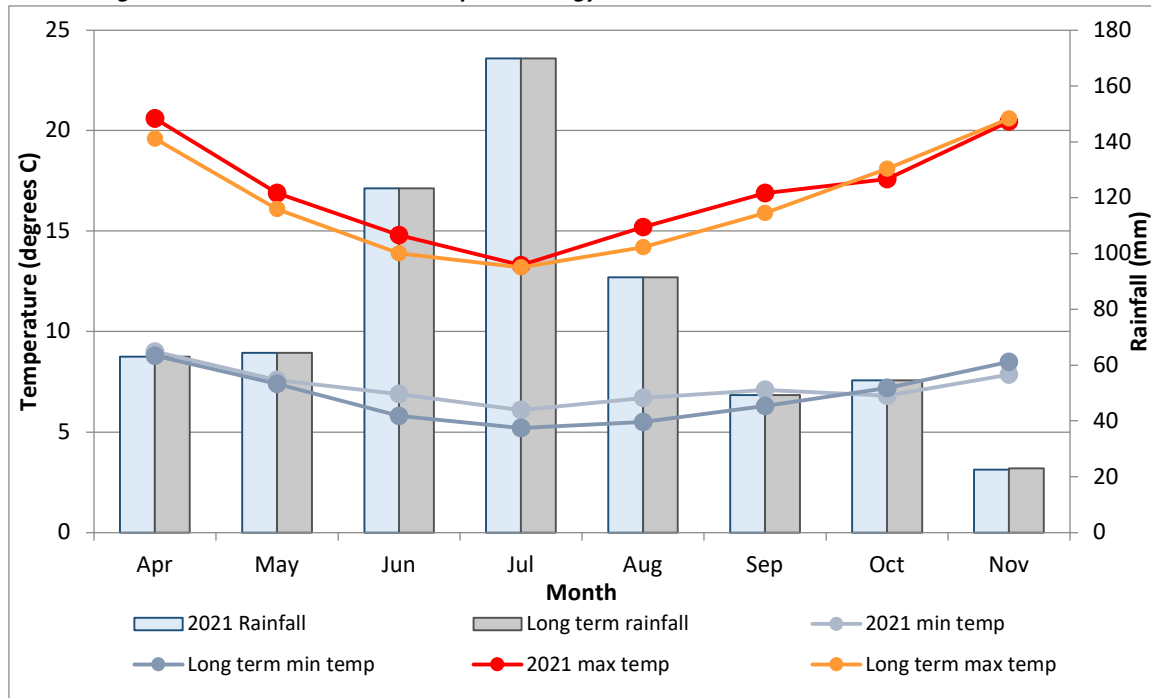


Figure 1. 2021 growing season rainfall and long-term rainfall, 2021 min and max temperatures recorded at Millicent (1877-2021) and long-term min and max temperatures recorded at Mount Gambier Aero (1941 to 2021) for the growing season (April to October). *Rainfall April to November= 638.5mm.*

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