

Trial 3. Canola Plant Density (Winter) (FAR VIC C22-03-W)

Objectives:

To determine optimum plant density for hyper-yielding canola.

Table 1. Yield of the variety evaluation trial (t/ha, % site mean) and grain quality results.

Target plant density	Establishment	Yield		Grain Quality		
	Plants/m ²	Yield		Oil	Test wt	Protein
		(t/ha)		%	kg/HL	%
15 plants/m ²	4.2 d	2.53 c		42.5 -	68.3 -	18.2 -
30 plants/m ²	10.0 c	2.94 bc		43.1 -	66.2 -	17.9 -
50 plants/m ²	14.7 b	3.73 a		42.7 -	67.5 -	19.3 -
75 plants/m ²	20.3 a	3.51 ab		43.0 -	69.0 -	18.3 -
Mean	12.3	3.18		42.8	67.8	18.4
LSD 0.05	3.4	0.72		ns	ns	ns
P Val	<0.001	0.024		0.972	0.223	0.621

Table 2. Yield of the variety evaluation trial (t/ha, % site mean) and grain quality results.

Target plant density	Lodging		
	Lodge severity	Lodge severity	Lodge index
	0-5	0-5	0-500
15 plants/m ²	1.8 -	43.8 -	93.8 -
30 plants/m ²	2.3 -	52.5 -	157.5 -
50 plants/m ²	0.8 -	75.0 -	37.5 -
75 plants/m ²	2.0 -	90.0 -	170.0 -
Mean	1.7	65.3	114.7
LSD 0.05	ns	ns	ns
P Val	0.286	0.198	0.376

Table 3. Trial management details.

Sowing Date	8 April 2022	
Sowing Rate:	As per treatment list	
Seed Treatment:	Saltro Duo	
Basal Fertiliser:	11 May	145 kg/ha MAP
Nitrogen:	25 May	17kg N/ha & 20kg S/ha
	14 Jun	110kg N/ha
	5 Sep	113kg N/ha
Fungicide:	6 Leaf	Prosaro 0.45 L/ha
	20% Flower	Aviator Xpro 0.80 L/ha