

Seeding rates for hybrid triazine tolerant canola

Key findings

- The grain yield of hybrid triazine tolerant canola (CB Mallee) was not affected by reduced crop emergence compared to an open pollinated variety (Tawriffic TT).

Why do the trial?

To measure the effect of improved early vigour and production of hybrid triazine tolerant canola, compared to a standard open pollinated variety, on grain yield and quality.

How was it done?

Plot size	1.4m x 10m	Fertiliser	DAP @ 75 kg/ha
Seeding date	24 th May 2010	Variety	CB Mallee Tawriffic TT

The trial was a randomised complete block design with 3 replicates and 12 treatments.

An early maturing hybrid triazine tolerant canola (CB Mallee) and an open pollinated triazine tolerant canola (Tawriffic TT) were compared over 6 seeding rates (0.6, 1.2, 1.8, 2.4, 3.0 or 4.5 kg/ha).

Plots were assessed for grain yield and oil content.

Results

The canola grain yields ranged between 1.38 t/ha (CB Mallee) and 2.09 t/ha (Tawriffic TT). Tawriffic TT produced the highest grain yield (1.85 t/ha) compared to CB Mallee (1.62 t/ha).

The grain yield of CB Mallee was not significantly different between 17 to 110 plants per square metre. The grain yield for Tawriffic TT was significantly reduced at the lowest crop emergence (9 plants per square metre) and increased with more plants. Although the lowest level of emergence for Tawriffic TT was less than CB Mallee (9 versus 17 plants per square metre), the hybrid variety (CB Mallee) was still able to produce maximum grain yield at the lower plant densities.

The oil content for CB Mallee was significantly higher 43.9%, compared to Tawriffic TT 42.5%, across all seeding rates.

Table 1: Grain yield (t/ha) and oil content (%) results for hybrid and open pollinated triazine tolerant canola over 6 seeding rates at Hart in 2010.

Variety	Emergence (plants per sq m)	Grain yield (t/ha)	Oil content (%)
CB Mallee	17	1.62	43.8
	26	1.73	44.1
	46	1.59	43.7
	45	1.63	44.0
	65	1.38	43.8
	110	1.75	43.8
Tawriffic TT	9	1.43	42.5
	31	1.84	42.7
	40	1.82	42.4
	71	1.86	42.5
	81	2.09	42.6
	104	2.06	42.4
LSD (0.05)			
Variety	ns	0.13	0.1
Density	5	0.23	ns
Variety * Density	ns	0.33	ns

