Gippsland's canola - should we sow early?

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Key messages

- Sowing winter habit canola early in the autumn can provide grazing and grain yield.
- Garnet sown early can still produce good results.
- In mild weather aphids are a problem longer into the season and possibly sowing a spring variety earlier gives the potential to develop before succumbing to viruses.

Background

Evaluation of the conventional, Clearfield and TT varieties that are available.

In Gippsland grazing of canola is common, and with new varieties long season available, it increases the potential for greater dry matter production before shutting the paddock up.

Method

The trials were sown at the Bairnsdale trial site using the sites cone seeder on 200 mm spacing. The fertiliser applications as listed below, were based on the soil test, a predicted yield estimate and district practice.

Table 1. Sowing details and fertiliser applications for the three sowing times.

	Sowing one – 7/4/14		Sowing	two - 16/4/14	Sowing three – 22/5/14		
Previous crop	Wheat		Wheat		Wheat		
Fertiliser applications	7/4/14	150 kg/ha DAP	16/4/14	150 kg/ha DAP	22/5/14	150 kg/ha DAP	
	14/5/14	150 kg/ha SOA	14/5/14	150 kg/ha SOA	6/8/14	100 kg/ha SOP	
	13/6/14	100 kg/ha Urea	13/6/14	100 kg/ha Urea	6/8/15	100 kg/ha SOA	
	7/7/14	100 kg/ha Urea	7/7/14	100 kg/ha Urea	6/8/16	100 kg/ha Urea	
	2/8/14	100 kg/ha SOP	6/8/14	100 kg/ha SOP			

Results

The beginning of the year had been relatively dry but the first sowing, 7 April 2014, was sown on 16 mm of rain and had ideal growing conditions until May when a warm dry spell hit. The third sowing coincided with this dry spell, resulting in poor establishment (average 1 plant/m²) and development. The consequences of the difficult start were felt for the remainder of the season. The second sowing, sown 16 April 2014, had the highest yield mean for the season.

Overall production was average, with 2 t/ha dry matter grown and plants deteriorating from mid June and never recovering. Aphids were a constant battle, especially in sowing one, although they were not always at levels that warranted spraying. Other canola at the same site tested positive to beet western yellow virus (BWYV). Tissues tests indicated that nutrient status was not an issue so it may be that this trial was also affected by BWYV.



Figure 1. First time of sowing of canola, prior to certain plots being grazed. Photo taken in June, 2014.

Table 2. Yield and oil content of the Gippsland canola trials.

Sowing one – 7/4/14						
Yield (t/h	Yield (t/ha) Oil (%)		Maturity			
2.19	а	No data		Mid		
1.84	а	44.6	b	Long		
1.26	b	46.2	а	Late		
1.24	b	44.4	b	Late		
1.63		45.1				
0.64		1.02				
Sowing two – 16/4/14						
Yield (t/ha)		Oil (%)		Maturity		
	2.19 1.84 1.26 1.24 1.63 0.64	Yield (t/ha) 2.19 a 1.84 a 1.26 b 1.24 b 1.63 0.64 Sowing t	Yield (t/ha) Oil (%) 2.19 a No data 1.84 a 44.6 1.26 b 46.2 1.24 b 44.4 1.63 45.1 0.64 1.02 Sowing two – 16/4/14	Yield (t/ha) Oil (%) 2.19 a No data 1.84 a 44.6 b 1.26 b 46.2 a 1.24 b 44.4 b 1.63 45.1 0.64 1.02 Sowing two – 16/4/14		

Sowing two – 16/4/14							
Variety	Yield (t/ha)		Oil (%)		Maturity		
45Y86 CL	2.69	а	44.4	bc	Mid		
45Y88 CL	2.55	а	43.0	d	Mid		
Wahoo	2.47	а	44.4	bcd	Mid		
577 CL	2.36	а	44.7	abc	Mid		
575 CL	2.04	а	43.8	cd	Early-Mid		
Bonito	1.97	а	45.9	а	Early-Mid		
559 TT	1.88	а	45.5	ab	Mid		
Mean	2.28		44.5				
LSD(p=0.05)	0.64		1.43				

Sowing three – 22/5/14						
Variety	Yield (t/ha)		Oil (%)		Maturity	
45Y88 CL	0.82	а	19.6	а	Mid	
Garnet	0.76	а	18.6	а	Mid	
45Y86 CL	0.54	а	19.4	а	Mid	
Sensation	0.51	а	20.2	а	Late	
Hyola 971 CL	0.43	а	19.4	а	Long	
Brazzil	0.31	а	19.5	а	Late	
Mean	0.56		19.4			
LSD(p=0.05)	0.49		1.27			

Means followed by the same letter do not significantly differ (p=0.05).

Discussion

Again, the birds did enjoy the first sowing of canola (more than the other sowings), but not to the same extent that they enjoyed the cereals last year. Different species attacked at different times and this possibly would have affected the yield, although this is hard to quantify.

Garnet was included in the first sowing, which was outside its recommended sowing time and therefore developed early. It was noted that it did not regress as much as the other varieties and therefore possibly was not as affected by BWYV.