Summary of canola variety demonstrations

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Selection of canola varieties is difficult because of the number of varieties in the market place and the limited availability of trial information. In 2004, the source of blackleg resistance also needs to be considered. Canola variety demonstration sites were established at Minyip and Lubeck in the Wimmera to investigate the suitability of some emerging and current canola varieties for the region. These demonstrations were not fully replicated and reflect performance only for the 2003 season at each site. Therefore, consider as much data as possible before selecting a variety.

Yields ranged from 1.5-2.1t/ha at Minyip and 2.3 to 2.7t/ha at Lubeck. Oil contents ranged from 38-43% with no clear varietal trends. Table 1 summarises the yields grown and the source and level of blackleg resistance. Hyola 60 and Surpass 603CL had the highest mean yields, followed by [AV]Sapphire and [ATR]Beacon. The yields of [ATR]Stubby were comparable to the other triazine tolerant varieties. [ATR]Stubby is an early maturing variety and would be more suited to Mallee environments. Pioneer 45C05 and Pioneer 44C11 were sown at Minyip and performed well. These varieties are suited to the northern Wimmera and southern Mallee.

Table 1: Comparison of canola varieties sown at Minyip and Lubeck

Variety	Herbicide tolerance	Blackleg rating and source[1]		Yield		
				Minyip (t/ha)	Lubeck (t/ha)	Mean of sites as a % of 501TT
Hyola 60	Conventional Hybrid	9[2]	B. s	2.1	2.7	115
[AV]Sapphire	Conventional	7	C	1.8	2.6	104
[AG]Castle	Conventional	7	C	1.5	2.5	95
Pioneer 45C05	Conventional	7	C	1.9	-	-
Pioneer 44C11	Conventional	6.5	C	2.0	-	-
Surpass 603CL	Clearfield	8.5[2]	B. s	1.9	2.7	110
[ATR]Beacon	Triazine Tolerant	6	C	2.0	2.3	105
[ATR]Stubby	Triazine Tolerant	6.5	C	1.8	2.4	101
Surpass 501TT	Triazine Tolerant	8.5[2]	B. s	1.8	2.4	100
		LSD (5%)		**0.1**	**0.2**	**6**
		CV %		**2**	**2**	**-**

[1] Blackleg resistance source: B.s = *Brassica sylvestris* major gene; C = Conventional multi-gene. Blackleg ratings are indicative only and are yet to be confirmed for 2004.

[2] Blackleg ratings of B. s varieties will change to 1 in the presence of the new blackleg isolate

Blackleg resistance needs to be considered when choosing a canola variety in 2004. Hyola 60, Surpass 603CL and Surpass 501TT could be susceptible to a blackleg isolate that has overcome the *B. sylvestris* resistance. The breakdown of resistance has caused up to 50% yield loss in some crops on the Eyre Peninsula in 2003. This strain has built up significantly in two seasons in SA. It is spreading further east and has been identified in the Wimmera but did not cause yield loss in 2003. Based on the SA experience, there is a strong possibility of the isolate causing severe yield loss in 2004. Growing these varieties in 2004 in the Wimmera would be high risk. Choose a variety with a conventional source of resistance. Variety selection is only one part of blackleg management. Paddock selection and stubble management are also important**.**

Suggested best bets (with conventional blackleg resistance) for the Wimmera are listed below. Varieties with blackleg ratings 6.5 or less (marked **J**) should be treated with Jockey® to increase protection against blackleg.

Conventional: [AV]Sapphire, Pioneer 45C05, Pioneer 46C04, [AG]Castle
Triazine tolerant: [ATR]Beacon **J,** [ATR]Grace **J**
Clearfield: Pioneer 45C75 **J**, Pioneer 46C76 **J**

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