**Table 2.** Influence of management strategy on winter canola grain quality (%, kg/hl & g).

Trt.	Oil (%)	Protein (%)	Test Weight (kg/hl)	TSW (g)
1	45.8 -	16.8 -	63.1 -	4.5 -
2	46.9 -	18.7 -	63.1 -	4.5 -
3	46.3 -	18.1 -	62.8 -	4.2 -
4	46.9 -	17.4 -	62.6 -	4.4 -
5	47.0 -	17.1 -	62.9 -	4.3 -
6	46.2 -	18.4 -	63.2 -	4.5 -
Mean	46.5	17.7	63.0	4.4
LSD 0.05	ns	ns	ns	ns
P Val	0.315	0.141	0.774	0.259

**Table 3.** Trial management details.

Sowing date:		9 April			
Variety:		Hyola Feast CL			
Target plant					
density:		45 plants/m <sup>2</sup>			
Sowing Fertiliser:		150kg MAP & 125kg SOA			
Nitrogen:	6 Leaf	113kg N/ha			
	Bud Visible	113kg N/ha			
Fungicide:		As per Table 1			

Trial 10: Disease management for hyper yielding spring canola

**Objectives**: To determine optimum foliar fungicide management for hyper-yielding spring canola. Determine the effect of fungicide management strategies on disease control (upper canopy blackleg and sclerotinia), grain yield and profitability.

## **Key Messages:**

- Grain yield increased by 0.78t/ha from nil fungicide to where an intensive fungicide program was applied, including Saltro Duo on seed, Prosaro at 6-leaf, Aviator Xpro at 20% bloom and Veritas at 50% bloom.
- Highest yields were generally achieved with Seed and 6-leaf fungicide (Maxim XL f.b. Aviator Xpro of Saltro Duo f.b. Prosaro) followed by an application of fungicide (either Prosaro or Aviator Xpro) at 20% bloom. This suggests the response was due to the control of multiple diseases.
- All treatments (except for Maxim XL followed by Miravis Star) were higher yielding than the untreated control.
- There was no effect of fungicide treatment on oil concentration.
- It was difficult to ascertain the reasons for the yield response to fungicide as blackleg (upper canopy and crown) and sclerotinia infection levels were low.

**Treatments:** Nine Fungicide strategies applied to 45Y28 RR (moderately resistant to blackleg, Group BC).

**Table 1.** Influence of management strategy on 45Y28 RR canola grain yield (t/ha).

Trt.	Seed	6 Leaf	20% Bloom	50%	Yield (t/ha)		% Site mean	
	Jeeu	o Leai	20% 5100111	Bloom				
1					4.54	е	91.6	
2			Aviator Xpro 800					
	Maxim XL		mL/ha		4.95	bc	100.0	
3			Miravis Star 1					
•	Maxim XL		L/ha		4.67	de	94.4	
4	Maxim XL		Revystar 1 L/ha		4.97	bc	100.4	
5			Prosaro 450					
•	Saltro Duo		mL/ha		4.87	cd	98.4	
6		Aviator Xpro 650	Prosaro 450					
	Maxim XL	mL/ha	mL/ha		5.07	abc	102.5	
7			Aviator Xpro 800					
•			mL/ha		5.00	bc	101.1	
8		Prosaro	Aviator Xpro 800					
	Saltro Duo	450ml/ha	mL/ha		5.15	ab	104.0	
9		Prosaro	Aviator Xpro 800	Veritas 1				
	Saltro Duo	450ml/ha	mL/ha	L/ha	5.32	a	107.5	
				Mean	4.9	95	100.0	
				LSD 0.05	0.2	26	5.2	
				P Val	<0.0	001	<0.001	

**Table 2.** Disease severity measured at 7 leaf and crop maturity (%LAI, %).

	Blackleg Leaf Blackleg infection (7 leaf) Canker infection
Treatment	%LAI <b>%</b>
1	4.4 b 1.3 -
2	6.8 a 0.5 -
3	3.1 bcd 2.3 -
4	2.6 cde 1.5 -
5	3.6 bc 2.5 -
6	1.1 e 0.8 -
7	4.4 b 2.8 -
8	1.7 de 2.3 -
9	1.0 e 2.0 -
Mean	3.2 1.8
LSD 0.05	1.7 ns
P Val	<0.001 0.495

**Table 3.** Influence of management strategy on spring canola grain quality (%, kg/hl & g).

Trt.	Oil (%)	Protein	(%)	Test Weight (	kg/hl)	TSW	(g)
1	44.5 -	20.6	abc	62.8	-	4.3	b
2	43.6 -	21.0	ab	63.2	-	4.5	ab
3	45.3 -	20.1	bc	63.3	-	4.7	а
4	44.7 -	21.6	a	63.5	-	4.4	b
5	45.4 -	19.6	С	63.2	-	4.3	b
6	44.5 -	20.2	bc	63.9	-	4.3	b

7	44.9 -	21.7	а	63.7	-	4.5	ab
8	44.5 -	20.7	abc	63.9	-	4.4	b
9	44.7 -	20.6	abc	63.6	-	4.4	b
Mean	44.7	20.7		63.5		4.4	
LSD 0.05	ns	1.3		ns		0.2	
P Val	0.146	0.050		0.056		0.04	9

## Table 4. Trial management details.

Sowing date:		25 April
Variety:		45Y28RR
Target plant		
density:		45 plants/m <sup>2</sup>
Sowing Fertiliser:		150kg MAP & 125kg SOA
Nitrogen:	6 Leaf	113kg N/ha
	Bud Visible	113kg N/ha
Fungicide:		As per treatment list