

Mean	6.7 a	6.9 a	3.3 b
LSD Cultivar p = 0.05	0.6	P val	<0.001
LSD Management p = 0.05	1.6	P val	<0.001
LSD Cultivar x Man. P = 0.05	1.6	P val	0.006

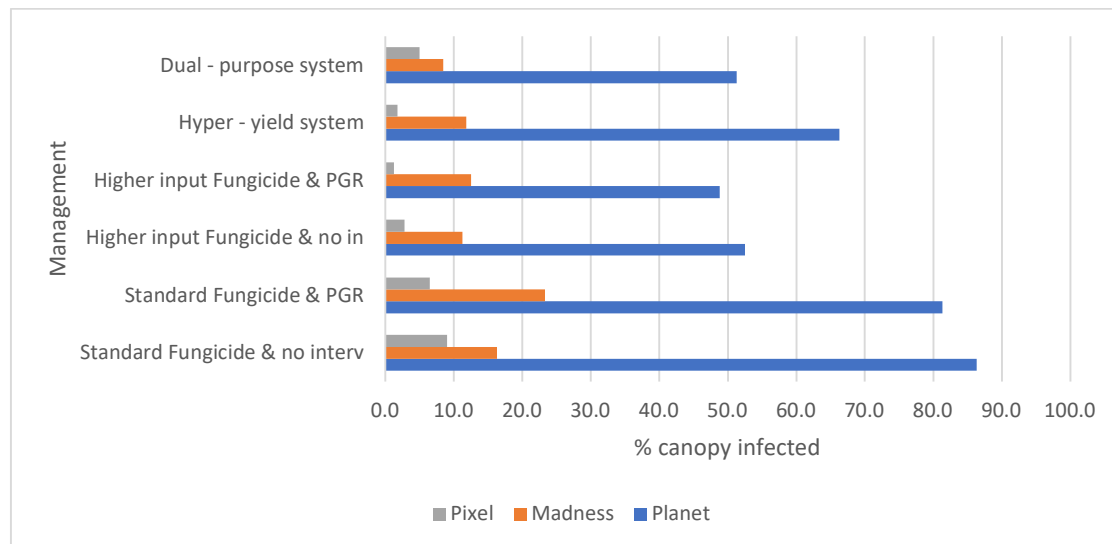


Figure 1. Influence of management strategy and cultivar on net form of net blotch infection (% canopy infected), 22 October 2021. LSD (p = 0.05) = 12.6, P value = 0.004 for the 2-way interaction between management and cultivar.

Trial 4. HYC Disease Management germplasm interaction

Objective: To develop profitable and sustainable approaches to disease management in HRZ barley.

Key messages:

- Yields ranged from 2.75 to 6.16t/ha under different disease management strategies.
- The addition of an SDHI to fungicide program had the largest impact on yield in Planet.
- The application of Systiva on the seed under high disease pressure in this example suggests it is still having good efficacy in the lower SE.
- Quality results also were affected, disease managed plots had higher grain screenings than unmanaged plots.

Treatments: 16 fungicide management levels applied to Planet.

Table 1. Fungicide treatments applied to Planet sowing date 1 at Millicent 2021.

Target application timing and product					
	Sow	GS31	GS39-49	GS59	Grain Yield t/ha
1	---	---	---	---	2.75 g
2	Systiva	Prosaro 300 mL/ha	Radial 840 mL/ha	---	5.47 a
3	Systiva	Prosaro 300 mL/ha	Radial 840 mL/ha	Opus 500 mL/ha	4.93 bc

4	---	Prosaro 300 mL/ha	Aviator Xpro 420 mL/ha	---	4.42	cd
5	---	---	Aviator Xpro 420 mL/ha	---	3.95	d e
6	---	---	FAR F1-19 750ml/ha	---	4.02	d e
7	---	---	Radial 840 mL/ha	---	3.10	fg
8	---	Prosaro 300 mL/ha	---	---	4.01	d e
9	---	Tilt 500 250 mL/ha	---	---	3.11	fg
10	Systiva	---	Radial 840 mL/ha	---	5.15	bc
11	---	Prosaro 300 mL/ha	Radial 840 mL/ha	---	4.04	d e
12	---	Prosaro 300 mL/ha	Aviator Xpro 420 mL/ha	Opus 500 mL/ha	4.58	cd
13	---	Aviator Xpro 420 mL/ha	Radial 840 mL/ha	---	4.90	bc
14	---	Prosaro 300 mL/ha	Radial 420 mL/ha	---	3.61	ef
15	Systiva	Prosaro 300 mL/ha	Aviator Xpro 420 mL/ha	Opus 500 mL/ha	6.16	a
Mean					4.20	
LSD					0.76	
P Val					<0.001	

Table 2. Grain yield and quality (protein (%), test weight (kg/hL), retention (%) and screenings (%))

		Protein		Test weight		Retention		Screenings	
Fungicide Management		%		Kg/hL		%>2.2mm		%<2.2mm	
1.	Untreated	11.1	-	62.7	-	70.7	bc	10.2	ab
2.		12.1	-	67.1	-	83.5	ab	5.3	ef
3.		12.0	-	66.6	-	82.6	ab	5.5	ef
4.		11.8	-	65.4	-	81.1	ab	6.3	de
5.		8.9	-	46.6	-	58.9	c	5.6	ef
6.		12.2	-	61.2	-	80.9	ab	6.5	de
7.		11.6	-	61.9	-	74.7	ab	9.1	abc
8.		11.5	-	65.5	-	72.1	abc	9.3	abc
9.		12.5	-	65.6	-	73.3	abc	9.0	bc
10.		11.8	-	67.3	-	84.3	ab	4.8	ef
11.		11.8	-	65.3	-	75.7	ab	8.1	cd
12.		11.9	-	66.0	-	81.7	ab	5.9	ef
13.		11.8	-	65.7	-	80.8	ab	6.4	de
14.		12.3	-	65.5	-	75.0	ab	8.5	bc
15.		11.3	-	66.4	-	86.5	a	4.3	f
Mean		11.6		63.8		77.0		7.2	
LSD		2.4		11.2		14.6		1.8	
P Val		0.472		0.109		0.049		<0.001	