Trial 4. HYC Disease Management germplasm interaction

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

Key Points:

- There was limited visual disease symptoms at this site in 2020, however a significant yield response to fungicide was measured. Untreated achieved an average yield of 5.51t/ha.
- A single application of Folicur at GS31 increased yield by 0.35t/ha, and an additional application of Opus at GS39 – 49 did not offer any additional yield benefit.
- The treatment combining Systiva seed dressing, Folicur at GS31 and Radial at GS39-49 yielding 0.58t/ha higher than the untreated control but not significantly greater than the single application.
- The benefits of maintaining a green leaf during grain fill even in the absence of significant disease required further investigation.
- Later fungicide timings are consistently influencing grain quality in malting barley across the high rainfall zone and even in the absence of a yield response should not be overlooked.

Treatments: 4 fungicide management levels applied to 2 varieties

Table 4. Influence of management strategy and variety of wheat grain yield (t/ha).

Treatment			RGT Planet		HV8 Nitro		Mean	
GS00	**GS31**	**GS39-49**	Yield (t/ha)		Yield (t/ha)		Yield (t/ha)	
---	---	---	5.54	-	5.48	-	**5.51**	**c**
---	Folicur 290ml/ha	---	5.97	-	5.76	-	**5.86**	**ab**
---	Folicur 290ml/ha	Opus 500ml/ha	5.75	-	5.40	-	**5.57**	**bc**
Systiva	Folicur 290ml/ha	Radial 840ml/ha	6.02	-	6.17	-	**6.09**	**a**
Mean			**5.82**	**-**	**5.70**	**-**	**5.76**	
LSD Variety P=0.05			0.14		***P Value***		0.090	
LSD Fungicide P=0.05			0.32		***P Value***		0.008	
LSD Variety x Fungicide P=0.05			0.28		***P Value***		0.088	
CV			3.18					