

Trial 4. HYC Disease Management germplasm interaction

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

Key Points:

- Disease pressure in spring sown barley is less than previous experience with autumn planted barley, this has implications for the fungicide management strategy. In this experiment scald was the main disease being controlled, and while all diseases were present including NFNB they did not cause significant defoliation in the untreated control
- The expensive and high input fungicide strategy which combined systiva seed dressing, and two fungicide applications yielded similar to all other cheaper and reduced input strategies.
- Lower application label rates achieved similar yield responses as rates on the higher end of the rate range
- Fungicide applications had little influence on grain quality at this site

Treatments: 6 fungicide management levels applied to 2 varieties

Table 5. Influence of management strategy and variety of wheat grain yield (t/ha).

Treatment			RGT Planet	HV8 Nitro	Mean
GS00	GS30	GS39-49	Yield (t/ha)	Yield (t/ha)	Yield (t/ha)
---	---	---	9.41 -	8.87 -	9.14 c
---	Prosaro 300ml/ha	---	9.10 -	9.20 -	9.15 bc
---	Prosaro 300ml/ha	Radial 840ml/ha	9.39 -	9.34 -	9.37 abc
Systiva	Prosaro 300ml/ha	Radial 840ml/ha	9.72 -	9.15 -	9.43 a
		Aviator Xpro			
---	Radial 840ml/ha	417ml/ha	9.65 -	9.20 -	9.42 ab
---	Prosaro 150ml/ha	Radial 420ml/ha	9.80 -	9.25 -	9.52 a
Mean			9.51 -	9.17 -	9.34
LSD Variety P=0.05			ns	P val	0.200
LSD Fungicide P=0.05			0.28	P val	0.041
LSD Variety x Fungicide P=0.05			ns	P val	0.076
CV					2.96

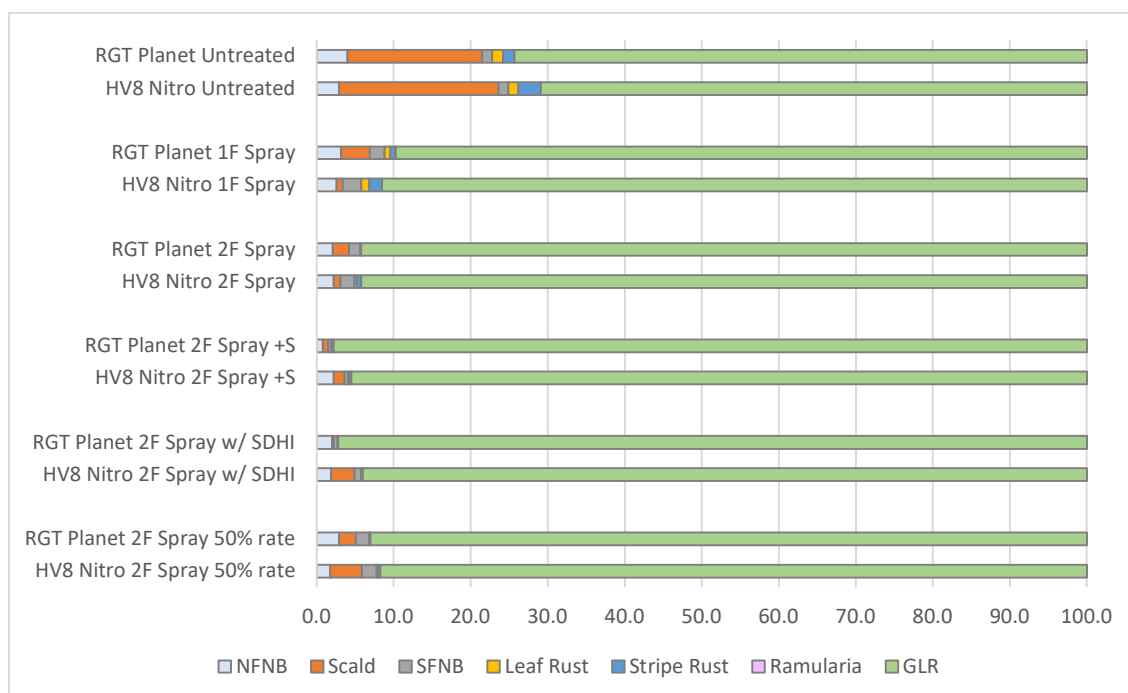


Figure 1. Disease severity and green leaf retention of the flag-1 leaf, assessed 7 January, GS80.

Table 3. Details of the management levels (kg, g, ml/ha).

Varieties:		RGT Planet & HV8 Nitro
Sowing date:		1-September
Seed Rate:		300 seeds/m ²
Sowing Fertiliser:		100kg/ha MAP
Seed Treatment:		Vibrance & Gaucho ± treatment list
Nitrogen:	2 Oct	115kg N/ha
Fungicide:		As per treatment list
Irrigation:		17 Sep 12.5mm, 14 Nov 20.0mm, 20 Nov 18.0mm, 27 Nov 20mm, 17 Dec 10.0mm = Total 80.5mm

Trial 5. HYC Spring Barley PGR Evaluation

Objective: To assess the value of PGRs with spring sown barley in HRZ regions

Key Points:

- RGT Planet achieved a grain yield of 9.57 t/ha significantly higher than Rosalind at 8.37t/ha
- Delaying harvest had little impact on grain yield and were similar to crops harvested on time
- Despite a lack of response to a harvest delay, plant growth regulators still had a positive influence on yield but only when they were applied in a split treatment at GS31 and either GS37 or GS49. PGR applied at GS31 achieved a yield of 8.8t/ha and when applied in a split treatment achieved yields of 9.2t/ha