AGT-Spirit

- Carries a novel distilling quality trait (non-glycosidic nitrile) desirable in discerning markets
- Elite malting quality
- Agronomically very similar to RGT Planet$^{\Phi}$, with slightly slower maturity
- Yield very similar to RGT Planet$^{\Phi}$ particularly in higher yielding environments
- Opportunity for growers in SA/Vic to produce under contract for maltsters
- Official malt quality classification pending - outcome expected 2026

Breeder's comments

AGT-Spirit$^{\Phi}$ offers a novel malting quality package conferring suitability to barley malt whiskey distilling, carrying the non-GN (non-glycosidic nitrile) trait; a trait that is increasingly sought after by discerning distillers around the globe; and one that, at this time, is rare in Australian barley varieties.

The non-GN trait is matched with elite malting quality, offering opportunities for additive free (reduced or no Gibberellic acid) malting; desired by some high value malt markets.

AGT-Spirit$^{\Phi}$ has an agronomic package very similar to RGT Planet$^{\Phi}$, with similar grain yield potential and adaptation.

The physical grain quality package of AGT-Spirit$^{\Phi}$ offers small improvements in screenings and retentions relative to RGT Planet$^{\Phi}$, but test weight can be a little lower in some environments.

The disease package of AGT-Spirit$^{\Phi}$ offers improved net-form and spot-form net blotch relative to RGT Planet$^{\Phi}$, with comparable scald and leaf rust resistance.

Opportunities exist for growers in higher yielding environments of SA and Victoria to grow parcels of AGT-Spirit$^{\Phi}$ under contract for selected maltsters. Please contact the AGT Variety Support Manager in your region to register interest.

AGT-Spirit

Table 1. Specifications

Background

Tested as	AGTB0318
Released	2025
EPR rate	$4.10/tonne + GST

Disease

Leaf Rust resistance* (SA)	MS
Leaf Rust resistance* (VIC)	MSS
Powdery Mildew resistance*	R
Net Blotch (Net Form) resistance*	MSS
Net Blotch (Spot Form) resistance*	S
Scald resistance*	SVS
Barley Yellow Dwarf Virus resistance*	MRMS
CCN resistance*	R
Pratylenchus Neglectus resistance*	MRMS
Pratylenchus Neglectus tolerance*	NA
Pratylenchus Thornei resistance*	MRMS
Pratylenchus Thornei tolerance*	MTMI
Crown Rot resistance*	MS

Plant Characteristics

Maturity speed^	Slow
Maturity habit^	Spring
Sowing window^	Main
Novel herbicide tolerance^	None (conventional tolerance)
Head type^	Awned
Early growth habit^	Semi-prostrate
Plant height^	Moderate
Coleoptile length^	Moderate
Rachilla hair length^	Short
Lodging tolerance^	MTMI

Grain Quality

Quality classification	Potential MALT
Screenings level^	Moderate
Retentions level^	Moderately high
Test weight^	Very low
Sprouting tolerance^°	MTMI
Black Point resistance*	NA

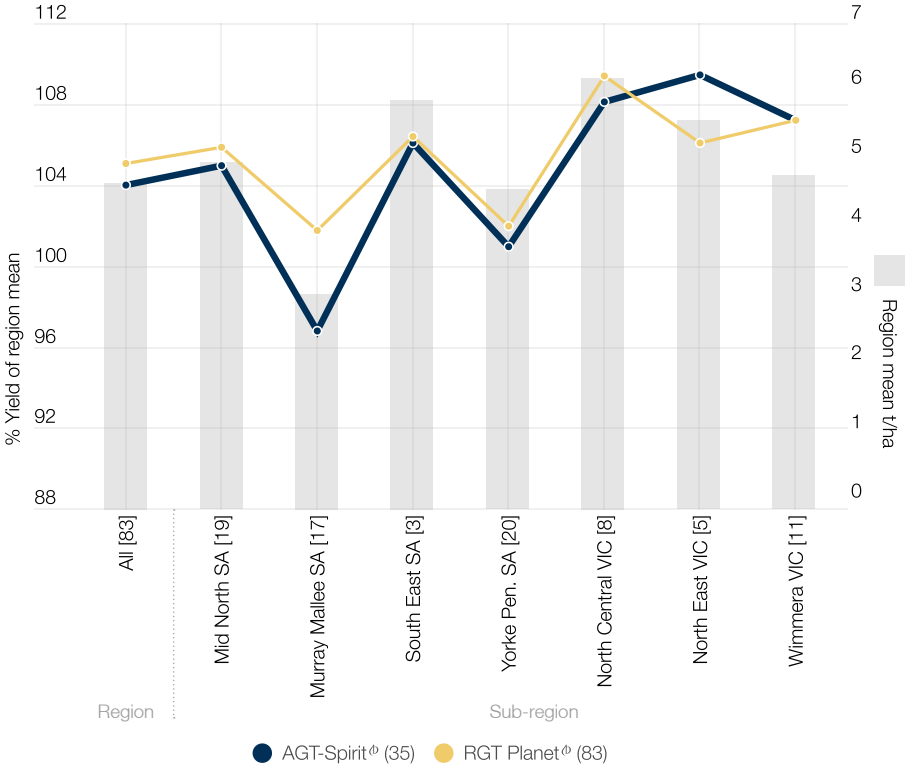
Legend

R	Resistant
MR	Moderately Resistant
MS	Moderately Susceptible
S	Susceptible
VS	Very Susceptible
T	Tolerant
MT	Moderately Tolerant
MI	Moderately Intolerant
I	Intolerant
VI	Very Intolerant
(P)	Provisional rating
NA	Not Available
/	Pathotype differences
-	Range
,	Mixed phenotype
#	May be more susceptible to alternate pathotypes
*	NVT consensus ratings 2025
°	Rating based on Germination Index Values
^	AGT ratings/data interpretation. Comprehensive AGT agronomic trait ratings and data can be found at: https://bit.ly/TraitRatings

Grain yield

In NVT long term testing, AGT-Spirit$^{\Phi}$ has recorded yields very similar to RGT Planet$^{\Phi}$, yielding 1% lower over-all (Figure 1).

Figure 1. Predicted grain yield of AGT-Spirit$^{\Phi}$ versus RGT Planet$^{\Phi}$ across SA/Vic regions



Source: NVT long term MET analysis, main season barley trials 2020-2024. AGT-Spirit$^{\Phi}$ was not included in SA EP or VIC Mallee, and therefore no data is presented from these regions.

[ ] : Total number of trials per region

( ) : Number of trials that each variety was present in across the dataset

Variety comparisons

AGT-Spirit$^{\phi}$ offers improved net-form and spot-form net blotch resistance over RGT Planet$^{\phi}$, with slightly better grain size and lower test weight (Table 2.)

Table 2. Variety comparisons

		AGT-Spirit$^{\phi}$	RGT Planet$^{\phi}$
Disease	Leaf Rust resistance* (SA)	MS	MS
	Leaf Rust resistance* (VIC)	MSS	MRMS
	Powdery Mildew resistance*	R	RMR
	Net Blotch (Net Form) resistance* (SA)	MSS	MSS-SVS
	Net Blotch (Net Form) resistance* (VIC)	MSS	SVS
	Net Blotch (Spot Form) resistance*	S	SVS
	Scald resistance* (SA)	SVS	R-SVS
	Scald resistance* (VIC)	SVS	SVS
	Barley Yellow Dwarf Virus resistance*	MRMS	MRMS
	CCN resistance*	R	R
	Pratylenchus Neglectus resistance*	MRMS	MRMS
	Pratylenchus Neglectus tolerance*	NA	MT
	Pratylenchus Thornei resistance*	MRMS	MR
	Pratylenchus Thornei tolerance*	MTMI	MI
	Crown Rot resistance*	MS	MSS
Plant Characteristics	Maturity speed^	Slow	Mid
	Maturity habit^	Spring	Spring
	Sowing window^	Main	Main
	Novel herbicide tolerance^	None (conventional tolerance)	None (conventional tolerance)
	Head type^	Awned	Awned
	Early growth habit^	Semi-prostrate	Semi-prostrate
	Plant height^	Moderate	Moderate
	Coleoptile length^	Moderate	Moderate
	Rachilla hair length^	Short	Short
	Lodging tolerance^	MTMI	MTMI
Grain Quality	Quality classification	Potential MALT	MALT
	Screenings level^	Moderate	High
	Retentions level^	Moderately high	Low
	Test weight^	Very low	Moderately low
	Sprouting tolerance^°	MTMI	MI
	Black Point resistance*	MS	MRMS

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Seed Availability

Please contact an AGT Affiliate or your local retailer for seed. Consult the AGT website for AGT Affiliate contact details (www.agtbreeding.com.au/affiliates). AGT varieties can be traded between growers upon the completion of a License Agreement as part of AGT's Seed Sharing ™ initiative (www.agtbreeding.com.au/seedsharing)

PBR and EPR

Varieties denoted by the ᵠ symbol are protected by Plant Breeders Rights (PBR) and all production (except seed saved for planting) is liable to an End Point Royalty (EPR), which funds future plant breeding. Growers of PBR protected varieties will be subject to a Grower License Agreement that acknowledges that an EPR must be paid on all production other than seed saved for planting.

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