AGT-Rio

- Good disease resistance package for higher yielding environments
- Excellent stripe rust and powdery mildew resistance
- Very high yields in medium-high rainfall or disease-pressured environments
- An improved alternative to RockStar$^{\Phi}$ and Catapult$^{\Phi}$
- Moderately short plant height with good lodging tolerance
- APW quality classification in SA/Vic with an excellent physical grain quality package

Breeder's comments

Varieties suited to the traditional 'early sowing' window of late April to early May are consistently used by growers to help maximise over-all farm yield. AGT-Rio$^{\Phi}$ fits this sowing window, and offers improvements over varieties such as RockStar$^{\Phi}$ and Catapult$^{\Phi}$ which have been used for this purpose.

AGT-Rio$^{\Phi}$ has a maturity similar to RockStar$^{\Phi}$ and Catapult$^{\Phi}$, and is particularly well suited to medium-high rainfall situations.

A key requirement for success in higher rainfall environments is disease resistance, and AGT-Rio$^{\Phi}$ holds excellent stripe rust and powdery mildew resistance in particular.

Compared with RockStar$^{\Phi}$, AGT-Rio$^{\Phi}$ offers vast improvements in stripe rust resistance, better sprouting tolerance, higher levels of powdery mildew and septoria tritici resistance, higher test weights and higher grain yield in early sown, high yield potential trials.

Versus Catapult$^{\Phi}$, AGT-Rio$^{\Phi}$ is much higher yielding, has better lodging tolerance, and offers much higher stripe rust and powdery mildew resistance.

AGT-Rio$^{\Phi}$ exhibits a compact plant type with good tolerance to lodging which is a key trait for success in higher yielding environments.

AGT-Rio$^{\Phi}$ has an APW quality classification in SA/Vic and produces grain with low screenings losses and high test weights.

AGT-Rio$^{\Phi}$

Table 1. Specifications

Background

Tested as	V15019-88
Released	2025
EPR rate	$3.90/tonne + GST

Disease

Stem Rust resistance*	MS (P)
Stripe Rust resistance*	MR (P)
Leaf Rust resistance*	S (P)
Yellow Leaf Spot resistance*	MRMS (P)
Powdery Mildew resistance*	MRMS (P)
Septoria Tritici Blotch resistance*	MSS (P)
CCN resistance^	MRMS (P)
Pratylenchus Neglectus resistance*	NA
Pratylenchus Neglectus tolerance*	NA
Eyespot resistance*	NA
Crown Rot resistance*	NA

Plant Characteristics

Maturity speed^	Mid
Maturity habit^	Spring
Sowing window^	Early & Main
Novel herbicide tolerance^	None (conventional tolerance)
Head type^	Awned
Plant height^	Moderately short
Coleoptile length^	Short
Lodging tolerance^	MTMI

Abiotic Stress

Boron tolerance^	Does not carry tolerance gene
Acid/aluminium tolerance^	Carries tolerance gene

Grain Quality

Quality classification	APW
Grain colour	White
Screenings level^	Low
Test weight^	High
Sprouting tolerance^°	MII
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

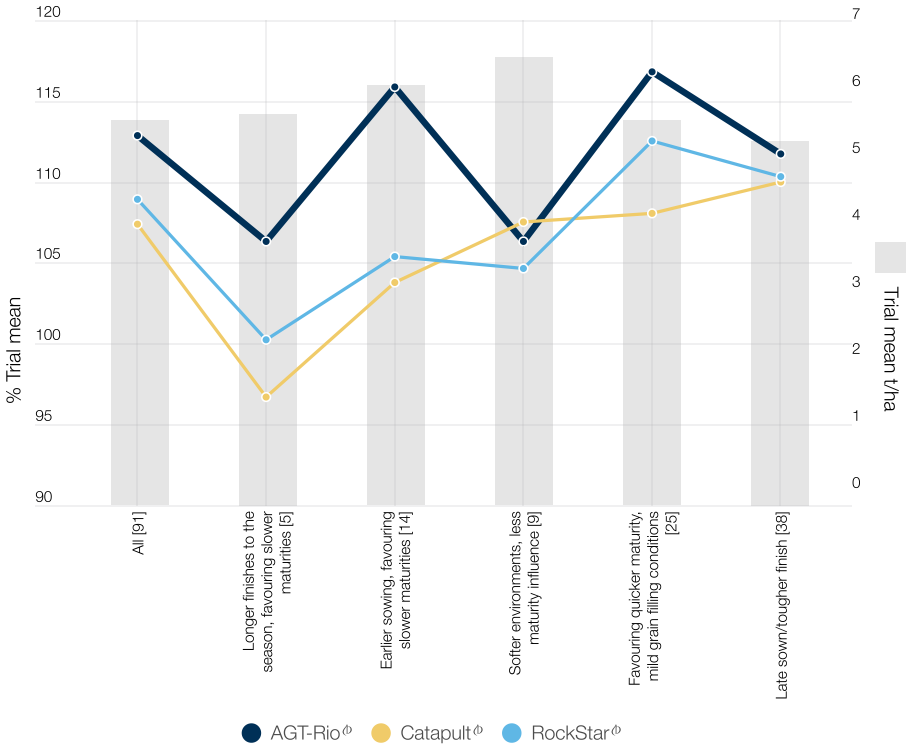
Grain yield

Long term AGT data has shown that AGT-Rio$^{\Phi}$ performs exceptionally well relative to comparator varieties under many different situations (Figure 1).

AGT-Rio$^{\Phi}$ has been present in limited NVT trials, and has recorded similar yields to RockStar over-all in early sown trials, but higher than RockStar$^{\Phi}$ in the high rainfall environments of South-East SA and South-West Vic (Figure 2).

In main season NVT trials, AGT-Rio$^{\Phi}$ has recorded its best performance in the medium-high yielding regions of Lower Eyre Peninsula, Mid North, Yorke Peninsula and Wimmera (Figure 3).

Figure 1. Predicted grain yield of AGT-Rio$^{\Phi}$ versus comparators - AGT early sown data

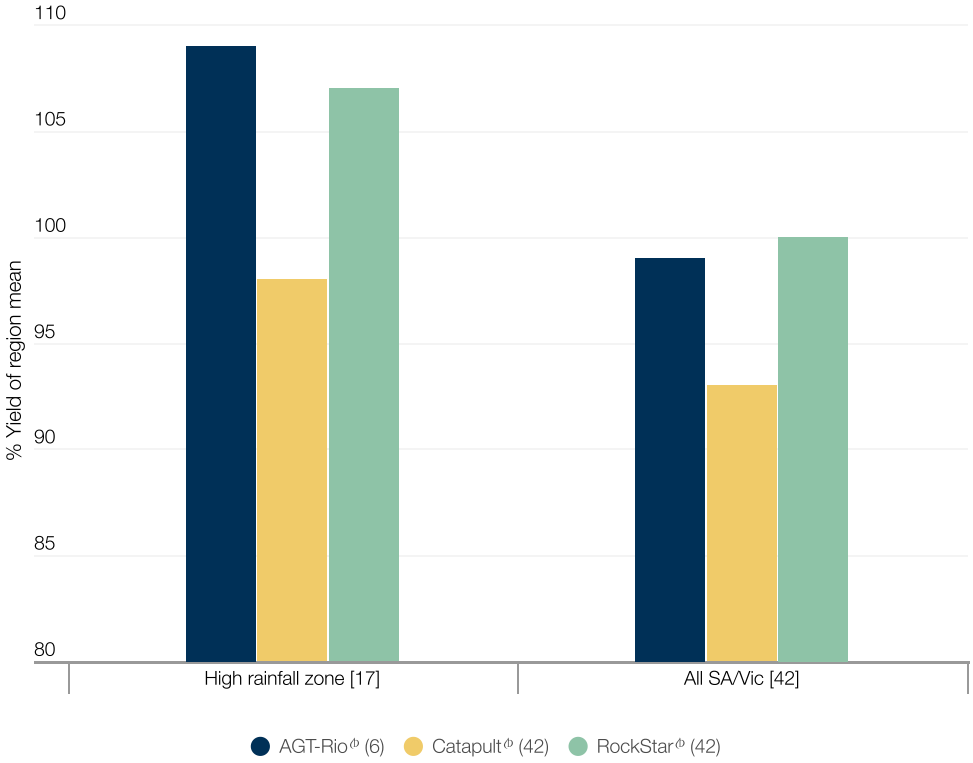


Source: AGT long term MET analysis, early sown trials 2021-2024 (91 trials)

[ ] : Total number of trials per region

Grain yield

Figure 2. Predicted grain yield of AGT-Rio$^{\Phi}$ versus comparators - NVT early sown data



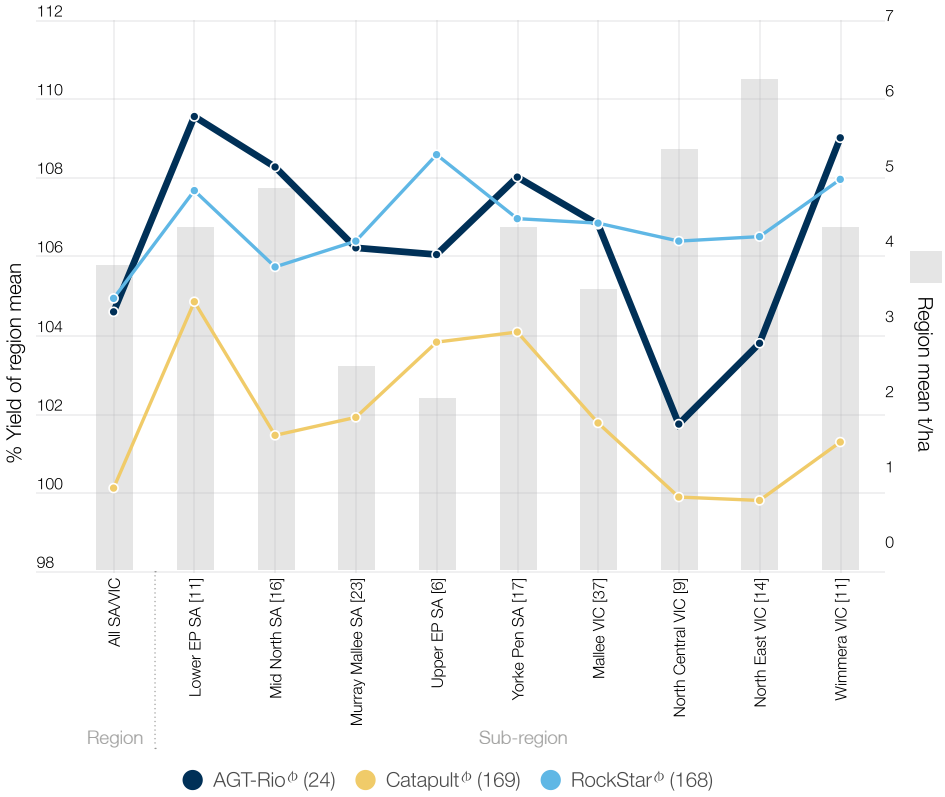
Source: NVT long term MET analysis, early sown trial series 2020-2024

[ ] : Total number of trials per region

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

Note: 'High rainfall zone' includes South-East SA and South-West Vic.

Figure 3. Predicted grain yield of AGT-Rio$^{\Phi}$ versus comparators across SA/Vic - NVT main season data



Source: NVT long term MET analysis, early sown trial series 2020-2024

[ ] : Total number of trials per region

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

Note: AGT-Rio$^{\Phi}$ was not present in South-East SA trials and therefore that region has been omitted from this analysis.

Variety comparisons

AGT-Rio$^{\Phi}$ has an APW quality classification in SA/Vic, and produces grain with low screenings levels and high test weight. AGT-Rio$^{\Phi}$ offers improvements in test weight and sprouting tolerance over RockStar$^{\Phi}$.

Disease resistance is a strength of AGT-Rio$^{\Phi}$, importantly holding very good stripe rust resistance, a large improvement over Catapult$^{\Phi}$ and RockStar$^{\Phi}$, and excellent powdery mildew resistance.

AGT-Rio$^{\Phi}$ reaches head emergence slightly quicker than Catapult$^{\Phi}$ and RockStar$^{\Phi}$.

Table 2. Variety comparisons

		AGT-Rio$^{\Phi}$	Catapult$^{\Phi}$	RockStar$^{\Phi}$
Disease	Stem Rust resistance*	MS (P)	MR	MRMS
	Stripe Rust resistance*	MR (P)	S	S
	Leaf Rust resistance*	S (P)	S	S
	Yellow Leaf Spot resistance*	MRMS (P)	MRMS	MRMS
	Powdery Mildew resistance*	MRMS (P)	S	SVS
	Septoria Tritici Blotch resistance*	MSS (P)	MSS	S
	CCN resistance^	MRMS (P)	R	MSS
	Pratylenchus Neglectus resistance*	NA	S	MRMS
	Pratylenchus Neglectus tolerance*	NA	MII	I
	Eyespot resistance*	NA	S	S
	Crown Rot resistance*	NA	MSS	S
Plant Characteristics	Maturity speed^	Mid	Mid-slow	Mid-slow
	Maturity habit^	Spring	Spring	Spring
	Sowing window^	Early & Main	Early & Main	Early & Main
	Novel herbicide tolerance^	None (conventional tolerance)	None (conventional tolerance)	None (conventional tolerance)
	Head type^	Awned	Awned	Awned
	Plant height^	Moderately short	Moderate	Moderately short
	Coleoptile length^	Short	Short	Short
	Lodging tolerance^	MTMI	MI	MTMI
Abiotic Stress	Boron tolerance^	Does not carry tolerance gene	Carries tolerance gene	Does not carry tolerance gene
	Acid/aluminium tolerance^	Carries tolerance gene	Carries tolerance gene	Carries tolerance gene
Grain Quality	Quality classification	APW	AH	AH
	Grain colour	White	White	White
	Screenings level^	Low	Low	Low
	Test weight^	High	High	Moderate
	Sprouting tolerance^°	MII	MII	I
	Black Point resistance*	NA	S	MSS

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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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