Avoca^(b)



- Ideally suited to the high rainfall zones of Victoria
- Slow-very slow maturity, over a week slower than Rockstar^b
- AH quality classification in Vic/SA
- Very high top-end yield potential
- Relatively compact plant canopy
- Good physical grain quality characteristics
- Improved stripe rust resistance over Rockstar^b and LRPB Trojan^b
- Good powdery mildew resistance and useful level of septoria tritici blotch resistance

Breeder's comments

Avoca[®] has been released in recognition of the growing need for slower maturing milling wheat varieties suited to higher rainfall environments, offering growers in Victoria's western district and north-east, and SA's lower south-east more marketing flexibility at harvest, combined with highly competitive yields and a good disease resistance package.

Avoca[®] is a slow-very slow maturing AH quality variety, reaching head emergence over a week later than Rockstar[®] and almost a week earlier than Stockade[®], and is well suited to high yield potential environments characterised by longer seasons. Both AGT and NVT data have shown that in early season trials, Avoca[®] has produced competitive yields relative to mid-slow maturing milling grade varieties like Rockstar[®], Genie[®] and LRPB Trojan[®], while offering disease resistance advantages over these varieties (better powdery mildew and septoria tritici versus Genie[®], better stripe rust, powdery mildew and septoria tritici versus LRPB Trojan[®], better stripe rust and powdery mildew over Rockstar[®]). Generally, Avoca has yielded the same or less than the feed quality variety LRPB Beaufort[®], however if price premiums associated with milling grades are of interest then Avoca[®] is a great alternative.

Avoca^(b) has a relatively compact plant canopy, which may be of value in high yield potential environments, where taller varieties can be more prone to lodging.

Avoca⁽⁾

Table 1. Specifications

Background

Disease

Tested as	L14049-044
Released	2024
EPR rate	\$3.90/tonne + GST

Plant Characteristics

Maturity^	Slow-Very Slow
Maturity habit^	Spring
Sowing window^	Early
Novel herbicide tolerance^	None (conventional tolerance)
Head type^	Awned

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

Grain Quality

Quality classification	AH
Grain colour^	White
Black Point resistance*	NA

Grain yield

Avoca $^{\circ}$ is better suited to high rainfall, high yield potential environments where its slower maturity can take advantage of extended growing conditons (Figures 1 & 2).



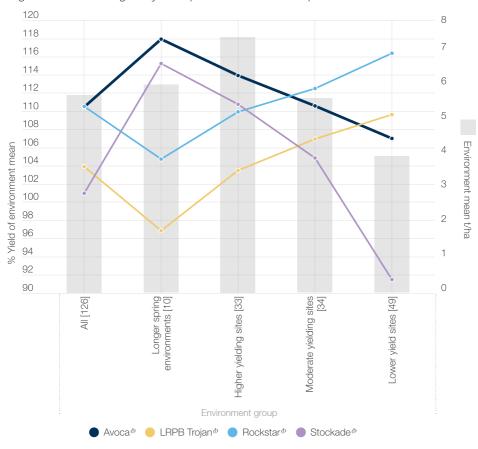
Figure 1. Predicted grain yield of Avoca^(b) versus comparators across Vic/SA regions - NVT data

Source: NVT long term MET analysis, early sown trial series 2019-2023

[]: Total number of trials per region

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

Grain yield





Source: AGT long term MET analysis, early sown trial series 2018-2023 (126 trials across Australia)

[]: Total number of trials per environment type

Environment group: A statistical correlation of performance across trial sites and seasons where single experiments are grouped based on relative performance of varieties within those trials.

Maturity

Avoca^{*\phi*} is a slow-very slow maturing variety well suited to longer season environments and early planting opportunities. Avoca^{*\phi*} reaches head emergence over a week later than Rockstar^{*\phi*} and LRPB Trojan^{*\phi*}, and almost a week quicker than Stockade^{*\phi*} (Figure 3).

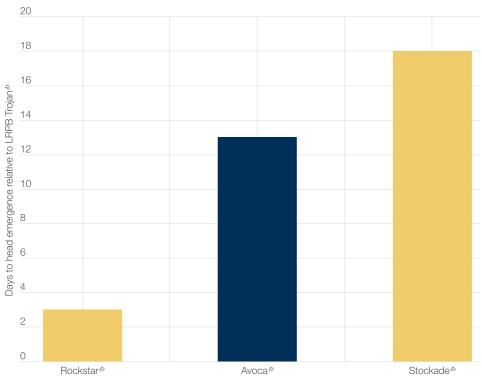


Figure 3. Head emergence of Avoca[®] versus comparators

Source: AGT trials 2023 - Toolondo Vic, Collinguile NSW (average of 2 trials)

Grain quality

Avoca^{*Φ*} has an AH quality classification in Vic/SA. In 2023 NVT trials, Avoca's^{*Φ*} test weight and screenings levels were comparable to Rockstar^{*Φ*} (Figures 4 & 5).

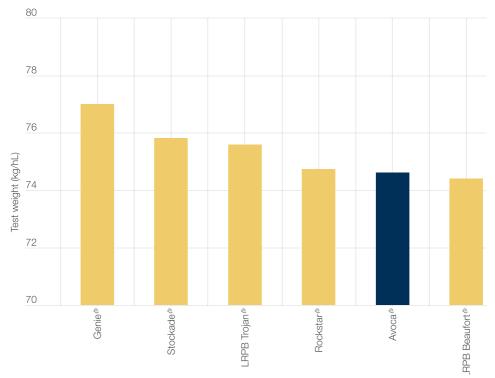


Figure 4. Test weight of Avoca^(h) versus comparators

Source: NVT early sown trial series 2023, average of 6 sites in Vic/SA where all varieties were present

Grain quality

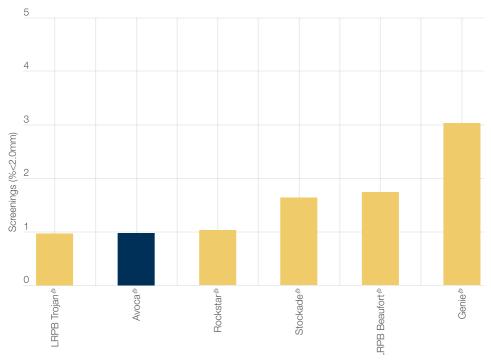


Figure 5. Screenings of Avoca^(h) versus comparators

Source: NVT early sown trial series 2023, average of 6 sites in Vic/SA where all varieties were present

Disease

Avoca^{*Φ*} offers an improvement in stripe rust resistance over popular varieties LRPB Trojan^{*Φ*} and Rockstar^{*Φ*}, with good preliminary ratings for powdery mildew and septoria tritici blotch resistance.

Table 2. Variety comparisons

	Avoca [®]	Genie¢	LRPB Beaufort [⊕]	LRPB Trojan∲	Rockstar⁰	Stockade∞
Quality Classification	АН	АН	FEED	APW	AH	APW
Maturity^	Slow-very slow	Mid-slow	Very slow	Mid-slow	Mid-slow	Very slow
Stem Rust resistance*	MRMS (P)	MS (P)	SVS	MRMS	MRMS	MS
Stripe Rust resistance*	MRMS (P)	MRMS (P)	RMR	S	S	MR
Leaf Rust resistance*	S (P)	S (P)	MSS	MR#	S	MR
Yellow Leaf Spot resistance*	MSS (P)	MRMS (P)	MRMS	MSS	MRMS	MRMS
Powdery Mildew resistance*	MRMS (P)	SVS (P)	RMR	S	SVS	SVS
Septoria Tritici Blotch resistance*	MSS (P)	S (P)	S	S	S	MS
CCN resistance*	NA	NA	MS	MS	MSS	MRMS
Pratylenchus Neglectus resistance*	NA	NA	MS	MSS	MRMS	S
Pratylenchus Neglectus tolerance*	NA	NA	MI	MT	l	MT
Crown Rot resistance*	NA	NA	S	MS	S	S
Black Point resistance*	NA	NA	MRMS	MS	MSS	MRMS

Legend

- R Resistant
- MR Moderately Resistant
- MS Moderately Susceptible
- S Susceptible
- VS Very Susceptible
- T Tolerant
- MT Moderatly Tolerant

- MI Moderately Intolerant
- l 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 2024
- ^ AGT ratings/data interpretation

Published August 2024

Seed Availability

Please contact an AGT Affiliate or your local retailer for seed. Consult the AGT website for AGT Affiliate contact details (agtbreeding.com.au/sourcing-seed/agt-affiliates).

AGT varieties can be traded between growers upon the completion of a License Agreement as part of AGT's Seed Sharing[™] initiative (agtbreeding.com.au/sourcing-seed/seed-sharing).

PRB and EPR

Varieties denoted by the ^(b) 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.

Contact

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The information contained in this brochure is based on knowledge and understanding at the time of writing. Growers should be aware of the need to regularly consult with their advisors on local conditions and currency of information. Wherever possible, independent NVT data has been used in this publication. In the absense of NVT data, Predicted grain yield has been provided.