Variety snapshot

- Very unique ‘slow-very slow’ spring maturity
- Best suited to mid and late April sowings
- Highly competitive yield when sown early
- Wide adaptation, suits most regions of SA/Victoria
- APW quality classification
Breeder’s comments

We have had great success working with a germplasm pool that heavily features the famous variety Wyalkatchem\textsuperscript{b}, delivering Mace\textsuperscript{b}, and then Scepter\textsuperscript{b} to growers. Through the success of these landmark varieties we have been able to increase our investment into breeding, with the intention to round out our portfolio of varieties to provide an offering for all unique wheat growing regions and use patterns in Australia.

Denison\textsuperscript{b} (tested as WAGT734) has emerged out of a Mace\textsuperscript{b}/Corack\textsuperscript{b} cross, and caught our attention with its very unique maturity relative to other commonly grown varieties. Up until now, there has been a gap in suitable wheat varieties for the sowing opportunity between early April (winter wheats) and late April (mid-slow spring wheats) in most regions of SA and Victoria.

Denison\textsuperscript{b} is a slow-very slow spring wheat, a maturity that is very uncommon, but fits the sowing window of mid April that traditionally has been un-catered for. Although the mid April planting opportunity may only account for a small percentage of the total sowing programme, we are very proud to offer a well adapted and suitable variety for this purpose.

Denison\textsuperscript{b} also offers good physical grain quality, and has an APW quality classification in SA/Victoria.

Seed availability

Commercial quantities of Denison\textsuperscript{b} may be available through AGT Affiliates, or your local retailer. Please consult the AGT website for AGT Affiliate contact details. Denison\textsuperscript{b} is able to be traded between growers upon the completion of a License Agreement as part of AGT’s Seed Sharing\textsuperscript{TM} initiative.

PBR and EPR

Denison\textsuperscript{b} is 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. Denison\textsuperscript{b} growers will be subject to a Growers License Agreement that acknowledges that an EPR of $3.40/tonne + GST has to be paid on all production other than seed saved for planting.
Maturity & sowing window
Denison is a slow-very slow variety, a maturity that is very uncommon amongst varieties adapted to most regions of SA and Victoria. While Denison has a wide and flexible sowing window, it may be best suited to mid April sowing, filling the gap between the use of winter wheats (early April) and mid-slow maturing spring varieties (late April/early May).

Figure 1  Head emergence of Denison and comparator varieties relative to Scepter, when sown in AGT early trials

Disease resistance
Denison provides a good level of resistance to stem rust, stripe rust and yellow leaf spot, while offering an improvement in resistance to septoria tritici blotch over its parents Mace and Corack, similar to the resistance of LRPB Trojan.

Figure 2  Disease resistance ratings for Denison

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<td>Stem rust</td>
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<td>Stripe rust</td>
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<td>Leaf rust</td>
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<td>Yellow leaf spot</td>
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<td>Septoria tritici blotch</td>
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Source  NVT and AGT data
# Rated S to some alternate stem rust strains that may be present  * Provisional ratings
Grain yield
Denison® has excelled in early sown AGT trials, yielding just as well as quicker maturing varieties planted at the same time. Sown mid-late April, Denison® has convincingly out-yielded winter wheat comparators in these trials. Denison® was tested in a limited amount of NVT early sown trials across Australia in 2019, with wider testing being carried out in 2020.

Figure 3  AGT early sown trials: Grain yield of Denison® across all southern/western sites

Source: AGT long term MET analysis, early sown trial series 2015-2019 [23 trials across WA/SA/Vic]
() Number of trials that each variety was present in across the dataset
Dan Vater, Marketing Manager, SA
0427 188 919
Rob Harris, Marketing Manager, Vic
0429 576 044
James Edwards, Wheat Breeder
0427 055 659
Adam Norman, Wheat Breeder
0400 656 012
End Point Royalty Office
(08) 7111 0201
agtbreeding.com.au

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