

Variety Snapshot

- ✓ DBA Artemis has a small yield potential advantage over DBA Aurora (but region dependent)
- ✓ Screenings levels and disease profile are comparable to both DBA Aurora and DBA Spes
- ✓ Well suited to early-sowing (early May) or mid-sowing (mid-late May)
- ✓ Is tolerant to a range of common grass and broadleaf herbicides
- ✓ Is WQA approved and is classified ADR in Southern Australia (SA & Vic)
- ✓ DBA Artemis is well adapted for production in the southern wheat growing areas of Australia (SA & Vic)

Breeder Comments

Trial data to date suggests that DBA Artemis will be at least comparable or slightly better than DBA Aurora in SA's Yorke Peninsula and Victoria's West Wimmera, respectively. There does not appear to be any significant yield advantage for the broad area of SA's Mid North with this new variety, when compared to DBA Aurora, based on long-term NVT data (Table 1).

The origin of DBA Artemis is from the combination of two fixed lines. The maternal parent of these is Menshia54/2*Kalka/Worrakatta//Tamaroi/Kalka/Kalka/Tamaroi, which was crossed to the paternal parent Kalka*4/Tamaroi.

Risk Factors

Yield vs Protein: As with very high yielding varieties such as DBA Aurora, DBA Artemis may also result in lower levels of protein due to its high yielding performance. Therefore an N management strategy should be implemented by growers that focuses on both grain yield and protein.

Table 1. DBA Artemis yield performance in southern national variety trials (NVT) averaged across three years of trials (2016-2018). Data for each variety is expressed as a % above or below the area mean. Where * is data from 2017-2018 only.

	MN	YP	VIC	
DBA	100	106 106		
Artemis				
DBA Spes	102	105	103	
DBA Aurora	104	107	102	
WID802	103*	105*	104	
Tjilkuri	101	102	97	
Hyperno	99	98	101	
Saintly	103	94	99	

Table 2. DBA Artemis disease resistance ratings compared to current commercial varieties in the southern region. Abbreviations as follows: YLS (Yellow Leaf Spot), Prn (*P. neglectus*), Prt (*P. thornei*), CCN (Cereal Cyst Nematode); CRR (Common Root Rot), CR (Crown Rot). This is the 2018 consensus ratings from NVT. Subscript P stands for a provisional rating.

	DBA Aurora	DBA Spes	DBA Artemis	
Leaf	RMR	RMR	RMR	
Stem	RMR		MR P	
Stripe	RMR	RMR	RMR	
YLS	MRMS	MRMS	MRMS	
Prn*	MRMS	MRMS	MRMS	
Prt*	RMR	RMR	MR	
CCN*	MSS	MRMS	MS P	
CRR	MSS	MSS	MSS	
CR	VS	VS	SVS	



Table 3. DBA Artemis screenings levels in southern NVT averaged across three years (2016-2018, where available) when compared to other commercially grown durum varieties.

	DBA Artemis	DBA Spes	DBA Aurora	WID802	Tjilkuri	Saintly
Mintaro	4.5	5.6	4.8	5.2	5.5	2.6
Spalding	0.9	1.1	1.0	1.7	0.9	0.9
Turretfield	7.8	7.1	5.3	12.2	8.6	5.7
Paskeville	1.2	1.4	1.2	3.3	1.3	1.3
Wokurna	1.0	1.4	1.7	2.2	1.2	1.0
Urania	2.0	1.2	1.4	3.5	2.6	1.2
Kaniva	3.0	3.0	3.9	4.1	3.4	3.4

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- (b) to distribute seed to growers for the purpose of producing a commercial crop for sale in accordance with this agreement;
- (c) to market and sell seed and grain in accordance with the agreement.

Seed Availability

DBA Artemis is **NOT** to be traded **BETWEEN** growers.

Seed availability is through SADGA by contacting <u>SADGAsecretary@gmail.com</u> or downloading the purchase order form from http://durumgrowerssa.org.au/

PBR & EPR

DBA Artemis 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. DBA Artemis growers will be subject to a Growers License Agreement that acknowledges that an EPR of \$3.00/tonne (GST exc) has to be paid on all production other than seed saved for planting.

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