

DBA Bindaroi

Durum Wheat

VARIETY SUMMARY

- High yielding quick maturing durum wheat
- Higher grain yield than Caparoi
- Grain, semolina and pasta making quality comparable to Caparoi with improved colour and brightness
- Low screenings similar to Jandaroi
- Good resistance to all three rusts
- Improved crown rot resistance rating compared with all current durum varieties; precautions are still needed to avoid high risk CR situations .



BREEDING

DBA Bindaroi was bred by NSW DPI under Durum Breeding Australia (DBA) at the Tamworth Agricultural Institute. DBA Bindaroi was trialled as breeder code 190873.

Pedigree: Caparoi x 261102.



AREA OF ADAPTATION

DBA Bindaroi is adapted to the dryland durum production areas of New South Wales, including western NSW and Queensland.

DBA Bindaroi is currently not recommended for high input irrigated cropping systems without appropriate management .



DISEASE RESISTANCE RATINGS

DBA Bindaroi has a resistance rating of “S” for crown rot, which is an improvement over all current varieties. However, it is still necessary for good agronomic practice, such as good rotations involving canola and grain legumes to reduce the risk of crown rot. DBA Bindaroi also has good resistance to all three rusts .

Disease ratings for DBA Bindaroi compared with current durum varieties (Source: acasvt.com.au, 6 August, 2017).

Variety	Rust Resistance			RLN (<i>P. thorneii</i>) Resistance / Tolerance	RLN (<i>P. neglectus</i>) Resistance / Tolerance	Yellow Leaf Spot	<i>Septoria tritici</i>	Crown Rot	Common Root Rot	Black point
	Stem rust	Leaf rust	Stripe rust							
DBA Bindaroi	R-MR	R-MR	R-MR	MR/-	MR-MS/-	MR-MS	S	S	MS	MS-S
Caparoi	R-MR	R-MR	MR	MR/MI	MS-S/MI-I	MR	MR	VS	MR-MS	MS-S
Jandaroi	MR	MR-MS	MR	MR-MS/MI-I	MS/MI	MR-MS	MR-MS	VS	MR	MS
EGA Bellaroi	MR	MR-MS	MR	MR/MT	MS/MI-I	MR-MS	MR-MS	VS	MR	R-MR
DBA Lillaroi	R-MR	R	R-MR	R-MR/MI-I	MR-MS/-	MR-MS	MS-S	S-VS	MS-S	MS



MATURITY

DBA Bindaroi is an early-mid maturing durum. Its heading maturity is approximately 6 days earlier than Caparoi at Tamworth.

Suggested sowing time in the northern region is late May to the end of June. DBA Bindaroi is also suitable for late sowing (e.g. after a cotton crop). It has performed better than other varieties, including Jandaroi, in delayed sowing treatments in NSW DPI and GRDC agronomy trials .



PLANT TYPE

DBA Bindaroi has erect plant growth. It is shorter in stature compared with Caparoi with better straw strength .



GRAIN QUALITY

DBA Bindaroi produces grain of similar size to Caparoi and has shown consistently low screenings similar to Jandaroi and superior to Caparoi and EGA Bellaroi.

DBA Bindaroi shows similar grain protein compared with Caparoi but lower than Jandaroi. It readily achieves 13% grain protein and has better semolina yellowness than Jandaroi, Caparoi and EGA Bellaroi.

DBA Bindaroi has been classified ADR by Wheat Quality Australia for northern and southern NSW and QLD .

 **GRAIN YIELD AND QUALITY DATA**

DBA Bindaroi performed consistently better than Caparoi and Jandaroi in NVT trials across northern NSW and Queensland in 2014 and 2015. Yield performance in 2016 was not consistent with the previous two years, most likely due to excessively wet conditions and therefore results are presented separately.

Yield performance of DBA Bindaroi compared with northern durum check varieties in NVT 2014 and 2015 NVT summary (%Caparoi).

	NEW SOUTH WALES			QUEENSLAND			TGW	Screenings	Protein
	N/E	N/W	S/W	SEQ	SWQ	CQ	g	%	%
DBA Bindaroi	104	107	99	107	109	124	38.7	3.7	13.8
Caparoi	100	100	100	100	100	100	39.1	4.9	13.7
Jandaroi	99	102	95	101	66	126	39.3	3.2	14.3
EGA Bellaroi	92	92	100	90	93	-	38.8	5.7	14.8
DBA Lillaroi	102	102	100	110	110	131	42.1	3.3	14.1

2016 NVT summary (% Caparoi)

	NEW SOUTH WALES			QUEENSLAND			TGW	Screenings	Protein
	N/E	N/W	S/W	SEQ	SWQ	CQ	g	%	%
DBA Bindaroi	100	101	98	98	98	105	49.7	0.6	12.3
Caparoi	100	100	100	100	100	100	52.9	0.6	12.6
Jandaroi	94	90	87	85	88	108	48.9	0.4	13.0
EGA Bellaroi	98	95	99	98	99	96	51.6	0.5	12.6
DBA Lillaroi	98	96	93	91	91	110	52.9	0.4	12.8

DBA Bindaroi quality compared with check durum varieties in 2012-2014 DBA trials.

	Grain Quality						Milling Quality			Dough Quality	Pasta Quality		
	TW	TG W	HV K	G P	WG	SKH I	Ash	SY	b*		Texture	Cooking	Colour
DBA Bindaroi													
DBA Lillaroi													
Caparoi													
Jandaroi													

TW = test weight, TGW = 1000 grain weight, HVK = hard vitreous kernels (%), GP = grain protein at 11% mb, WG = wet gluten, SKHI = single kernel hardness index, Ash = semolina ash 14% m, SY = semolina yield, b* = yellow index, Cooking = cooking time and loss.

Excellent

Good

Fair

 **AGRONOMIC GUIDELINES****Sowing**

Aim to achieve plant densities of 75-120 plants/m². Lower densities are recommended in areas of lower rainfall. Good paddock selection as well as integrated disease management may help to minimise the impact of crown rot and maximise yield.

Nutrition

Whilst DBA Bindaroi readily achieves 13% grain protein, nitrogen management is still critical to achieving target grain protein levels required for premium durum grades.

Weed Control

DBA Bindaroi has no known sensitivities to herbicides registered for durum wheat.

 **PLANT BREEDER RIGHTS AND END POINT ROYALTIES**

DBA Bindaroi is protected by Plant Breeder Rights, any unauthorised commercial propagation or any sale, conditioning, export, import or stocking of propagating material of this variety is an infringement under the Plant Breeder's Rights Act, 1994.

Growers are allowed to retain seed from production of this variety for their own use as seed only.

An End Point Royalty of \$3.85 per tonne (GST inclusive), which includes breeder royalties, applies to this variety.

ACKNOWLEDGEMENTS

DBA Bindaroi was bred by the NSW Department of Primary Industries at the Tamworth Agricultural Institute, with support from growers through the Grains Research and Development Corporation under Durum Breeding Australia.

For more information call **Seednet** on **1300 799 246** or visit **www.seednet.com.au**

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