

DBA Lillaroi

Version September 2015

Durum Wheat

VARIETY SUMMARY

- Early - Medium maturity
- Higher grain yield than Jandaroi
- Excellent durum quality with the largest grain size and highest test milling yield together with improved semolina colour compared with current varieties
- Low screenings similar to Jandaroi
- Good resistance to all three rusts
- Improved Crown rot resistance rating compared with Caparoi, Jandaroi and EGA Bellaroi

BREEDING

DBA Lillaroi was bred by the Northern Node of Durum Breeding Australia (DBA) at the Tamworth Agricultural Institute, NSW DPI.

Pedigree: 960273/980596, both the parent lines are experimental breeding lines from Tamworth DBA program.

AREA OF ADAPTATION

DBA Lillaroi is adapted to the rainfed durum producing areas of New South Wales and Queensland. DBA Lillaroi is not recommended for high input irrigation systems without appropriate management

DISEASE RESISTANCE RATINGS

DBA Lillaroi has good resistance to all three rusts and it has a Crown rot resistance rating of S-VS, which is a small improvement over Jandaroi, Caparoi and EGA Bellaroi that are rated VS.

Table 1. Disease ratings for DBA Lillaroi compared with other durum varieties (Source: acasnvt.com.au, 23 July 2015).

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

MATURITY

DBA Lillaroi is an early to medium maturing durum wheat. It has a heading maturity approximately 3 days later than Jandaroi and 3 days earlier than Caparoi.

Suggested sowing time in the northern region is late May to end of June. DBA Lillaroi is also suitable for late sowing (e.g. after a cotton crop). It has performed better than Jandaroi at late sowing times in VSAP trials in 2013 and 2014.

PLANT TYPE

DBA Lillaroi has strong seedling vigour and erect plant growth. It is of similar height to Caparoi with straw strength slightly less than Caparoi.

GRAIN QUALITY

DBA Lillaroi produces large sized grain and low screenings similar to Jandaroi and is superior to Caparoi and EGA Bellaroi.

DBA Lillaroi has significantly higher grain protein than Caparoi but lower than Jandaroi. It readily achieves 13% grain protein and has better semolina colour than Jandaroi, Caparoi and EGA Bellaroi.

DBA Lillaroi has been classified ADR by Wheat Quality Australia for the Northern and South Eastern zones (Northern and Southern NSW and QLD).

GRAIN YIELD AND QUALITY DATA

DBA Lillaroi has performed consistently better than Jandaroi in trials across northern NSW and Queensland over four years in NVT and has shown superior quality for key traits.

Table 2. Long term yield performance (2011-2014) of DBA Lillaroi compared with other northern durum varieties in NVT (predicted yield averages from main season trials are expressed as a percentage of Jandaroi)

Variety	NE NSW	NW NSW	SE NSW	SW NSW	SW QLD	SE QLD	CQ
DBA Lillaroi	103	104	100	104	96	103	102
Jandaroi	100	100	100	100	100	100	100
Caparoi	104	105	97	107	94	99	97
EGA Bellaroi	93	90	94	100	86	92	86

Table 3. Grain quality results for DBA Lillaroi compared with other northern durum varieties in NSW NVT (b* data is from DBA S4 trials)

Variety	Screenings %			1000 grain weight (g)			Grain protein %			b* (Minolta yellow hue)
	2014	2013	2012	2014	2013	2012	2014	2013	2012	
DBA Lillaroi	3.1	4.1	3.0	43.2	43.8	42.4	14.0	13.4	11.9	33.7
Jandaroi	3.3	5.3	3.2	39.4	42.5	41.8	14.6	13.9	12.1	29.9
Caparoi	4.2	6.3	3.7	39.7	40.5	40.4	13.4	13.1	11.3	31.9
EGA Bellaroi	5.5	5.7	4.4	40.2	40.4	40.2	14.5	14.0	12.1	32.0

AGRONOMIC GUIDELINES

Sowing

Aim to achieve plant densities of 75-120 plants/m². The lower densities are recommended in areas of lower rainfall.

Seed treatments should be applied to the seed prior to sowing for the control of smuts and other seed-borne diseases. Good paddock selection as well as integrated disease management may help to minimise the impact of crown rot and maximise yield.

Nutrition

Whilst DBA Lillaroi readily achieves 13% grain protein, nitrogen (N) management is still critical to achieving grain protein levels required for high quality durum. The rate of N application will depend on the amount of N already present in the soil and the anticipated level of uptake by the crop.

Weed Control

Controlling weeds in the early stages of crop growth will remove competition and reduce yield loss. A range of pre and post-emergent herbicides are available. DBA Lillaroi has no known sensitivities to herbicides registered for durum wheat.

PLANT BREEDER RIGHTS AND ROYALTIES

DBA Lillaroi 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 \$3.63 per tonne (GST inclusive), which includes breeder royalties to support ongoing investment in durum breeding, applies to this variety.

ACKNOWLEDGEMENTS

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