



# DURUM BREEDING AUSTRALIA (DBA)

## VARIETY FACT SHEET: WID802

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<b>Release date:</b>	16 <sup>th</sup> October 2012
<b>Variety name:</b>	WID802
<b>Pedigree:</b>	Syrca-1/Yallaroi//Tamaroi/Lingzhi/Yallaroi*2///RAC875/Kalka//Tamaroi///Lingzhi/Yallaroi//Tamaroi///Lingzhi/Yallaroi
<b>Breeding:</b>	The origin of WID802 is from the combination of a cross which was made between the fixed line 'SyrYTLYD' (pedigree Syrca-1/Yallaroi//Tamaroi/Lingzhi/Yallaroi*2) as the maternal parent and the fixed line 'R875LYT' (pedigree RAC875/Kalka//Tamaroi) as the paternal parent. In September 2003, an F1 plant from the above-mentioned cross (that is, pedigree Syrca-1/Yallaroi//Tamaroi/Lingzhi/Yallaroi*2///RAC875/Kalka//Tamaroi) was used as the maternal parent in a top-cross with the fixed line 'LY#Tm' (pedigree Lingzhi/Yallaroi//Tamaroi///Lingzhi/Yallaroi) as the paternal parent.
<b>Breeding program and NVT evaluation:</b>	<p>Evaluation of this line has been staged over several years both within the Southern node of Durum Breeding Australia (DBA) at the University of Adelaide and the National Variety Trials (NVT) that are managed by the Australian Crop Accreditation System (ACAS). WID802 has been evaluated in 48 Advanced Yield Trials (S4) during the period 2006 - 2011. A total of eight agriculturally and edaphically diverse sites across South Australia were used in the S4 experiments each year. WID802 has also been evaluated in NVT since 2008, predominantly in SA (six sites per year) but also Victoria and NSW.</p> <p>Based on the yield results of this line over several years through these two trial programs mentioned above and, more recently, quality data that has been obtained from San Remo and Dr Mike Sissons, WID802 has been identified as a variety for release.</p>
<b>Variety attributes:</b>	<p>WID802 is a well adapted, high yielding durum wheat suitable for production in most areas of southern Australia.</p> <ul style="list-style-type: none"> <li>• Adaptation &amp; Yield:</li> </ul> <p>WID802 has a yield advantage over the majority of durum varieties (with the exception of Yawa) based on the long term yield trends from the NVT in the Southern Region (see Table 1).</p> <ul style="list-style-type: none"> <li>• Grain Quality:</li> </ul> <p>WID802 has been classified as APDR by Wheat Quality Australia (South Australia only). WID802 has similar levels of sprouting tolerance to Tjilkuri and Hyperno. The test weight of WID802 is acceptable (see Table 2).</p> <ul style="list-style-type: none"> <li>• Disease Profile:</li> </ul> <p>WID802 has a similar disease profile when compared to other durum varieties such as the recently released varieties Tjilkuri and Yawa. Levels of resistance to leaf, stem and stripe rust are MR (leaf and stripe), and R (stem). WID802 is susceptible to crown rot.</p>

<b>Risk factors:</b>	The following considerations should be taken into account before sowing WID802: <ul style="list-style-type: none"> <li>• WID802 has been classified as APDR for South Australia. Growers who choose to grow this variety in other states and deliver within those states will therefore have the grain treated automatically as feed grade.</li> <li>• WID802 may result in lower levels of protein as a consequence of its high yielding performance, so it is important to ensure that growers have suitable strategies in place for nitrogen management.</li> </ul>
<b>Sowing time:</b>	WID802 appears well suited to early-sowing (early May) or mid-sowing (late May/early June). Sowing later may increase the likelihood of an inferior test weight (<74 HLW), and will increase the likelihood of higher screenings. Sowing later may therefore result in quality downgrades.
<b>Herbicide reaction:</b>	WID802 has tolerance to a range of common grass and broadleaf herbicides. Further evaluation for WID802 will be undertaken in 2012-2014 as part of the SARDI/DGA/UA 'A new approach to grass weed control in durum' project funded through SAGIT.
<b>Seed availability:</b>	Seed is available from the SA Durum Growers Association. For further information or seed, contact: Neville Sharpe on (08) 8338 7339. WID802 is PBR protected.
<b>Disclaimer:</b>	The information in this fact sheet is current as of October 2012. Continuing agronomic, disease, and quality testing will make it necessary for growers to source updated information from time to time.
<b>Acknowledgements:</b>	Thanks to the GRDC for funding DBA. NVT data was used to compile this fact sheet and the GRDC is acknowledged for its use. Thanks to Rob Wheeler and Kenton Porker (SARDI) for information on WID802.

**TABLE 1. A SUMMARY OF THE LONG TERM YIELD TRENDS (2005-2011) FROM THE NATIONAL VARIETY TRIAL (NVT) DATA FOR THE MID-NORTH, YORKE PENINSULA AND WIMMERA REGIONS. PREDICTED YIELD DATA IS EXPRESSED AS TONNES PER HECTARES. TRIAL NUMBERS VARY ACROSS REGIONS WITH THE WIMMERA BEING REPRESENTATIVE OF FOUR ONLY. NOT ALL VARIETIES AND BREEDER'S LINES THAT WERE IN THE NVT ACROSS THIS PERIOD ARE SHOWN. THE % DIFFERENCE IN YIELD WHEN COMPARED WITH THE YIELD OF WID802 (HIGHLIGHTED) IS SHOWN IN BRACKETS. YAWA (ALL REGIONS), SAINTLY AND HYPERNO (WIMMERA ONLY) WERE THE ONLY VARIETIES TO HAVE GREATER LONG TERM YIELD THAN WID802.**

	MID-NORTH	YORKE PENINSULA	WIMMERA
BELLAROI	3.25 (-10.5)	2.98 (-9.7)	2.65 (-5.6)
CAPAROI	3.29 (-9.1)	3.06 (-6.9)	2.71 (-3.3)
HYPERNO	3.53 (-1.7)	3.20 (-2.2)	2.90 (3.4)
KALKA	3.29 (-9.1)	3.02 (-8.3)	2.67 (-4.9)
SAINTLY	3.52 (-2.0)	3.18 (-2.8)	2.96 (5.4)
TAMAROI	3.28 (-9.5)	3.04 (-7.6)	-
TJILKURI	3.44 (-4.4)	3.21 (-1.9)	2.70 (-3.7)
YAWA	3.78 (5.0)	3.47 (5.7)	3.07 (8.8)
<b>WID802</b>	<b>3.59</b>	<b>3.27</b>	<b>2.80</b>

**TABLE 2. SUMMARY OF THE NATIONAL VARIETY TRIALS (NVT) THOUSAND GRAIN WEIGHT (TGW – G/1000 SEEDS) AND HECTOLITRE WEIGHT (HLW – KG/HECTOLITRE) FOR THE PERIOD 2008 TO 2011 (AVERAGE ACROSS THE FOUR YEARS IS PRESENTED). WIMMERA DATA NOT SHOWN AS TGW ONLY RECORDED IN 2011.**

	MID-NORTH MINTARO		MID-NORTH SPALDING		MID-NORTH TURRETFIELD		YORKE P. PASKEVILLE		YORKE P. WOKURNA		YORKE P. URANIA	
	TGW	HLW	TGW	HLW	TGW	HLW	TGW	HLW	TGW	HLW	TGW	HLW
CAPAROI	43.1	79.9	48.0	80.4	39.5	79.2	48.6	81.9	45.4	78.6	44.9	81.6
HYPERNO	40.5	79.0	44.2	78.0	34.9	77.7	45.1	79.7	42.0	76.5	39.1	78.7
KALKA	39.9	80.2	44.7	80.3	36.5	79.2	44.4	81.5	41.1	77.9	41.5	81.2
SAINTLY	39.2	78.3	40.3	77.5	36.7	77.3	45.5	79.7	42.7	77.8	40.8	79.2
TAMAROI	47.0	79.4	49.6	78.9	43.1	78.4	49.1	80.4	44.9	78.6	44.7	79.8
TJILKURI	39.4	77.8	43.4	78.4	35.8	77.4	43.8	78.6	40.5	75.6	38.7	78.4
YAWA	33.9	78.3	38.8	78.0	29.1	77.6	39.8	79.2	35.4	76.6	34.5	79.1
<b>WID802</b>	<b>37.1</b>	<b>76.4</b>	<b>40.1</b>	<b>77.0</b>	<b>33.0</b>	<b>75.3</b>	<b>41.0</b>	<b>78.0</b>	<b>36.8</b>	<b>74.5</b>	<b>37.2</b>	<b>77.9</b>

**TABLE 3. SUMMARY OF THE NATIONAL VARIETY TRIALS (NVT) % SCREENINGS DATA (2.0 MM SIEVE) FOR THE PERIOD 2008 TO 2011 (AVERAGE ACROSS THE FOUR YEARS IS PRESENTED). KANIVA 2009 NVT DATA EXCLUDED DUE TO FROST DAMAGE. NVT DATA FOR SOME VARIETIES (\*) IN KANIVA IS LIMITED TO ONE OR TWO TRIALS. WID802 IS HIGHLIGHTED AND SHOWS VARIATION ACROSS SITES AND WITHIN REGIONS (AS IS THE CASE FOR THE MAJORITY OF VARIETIES LISTED).**

	MID-NORTH MINTARO	MID-NORTH SPALDING	MID-NORTH TURRETFIELD	YORKE P PASKEVILLE	YORKE P WOKURNA	YORKE P URANIA	WIMMERA KANIVA
CAPAROI	0.7	0.9	1.3	0.8	1.7	1.2	0.6
HYPERNO	1.3	1.3	4.0	1.7	3.7	4.4	1.1
KALKA	1.0	0.8	2.2	0.7	2.3	1.6	1.1*
SAINTLY	1.6	2.2	1.4	1.2	2.4	3.0	1.7*
TAMAROI	1.3	1.2	2.0	1.3	1.8	2.1	0.8*
TJILKURI	1.2	0.9	2.8	1.6	2.9	2.2	1.3
YAWA	2.4	1.5	6.0	2.8	5.1	5.3	1.4
<b>WID802</b>	<b>1.8</b>	<b>2.2</b>	<b>4.6</b>	<b>2.1</b>	<b>5.1</b>	<b>3.4</b>	<b>1.6</b>