Seednet 7

# **Factsheet**

Version Aug 2013



### **Dual Purpose Oat**

### **VARIETY SUMMARY**

- Dual purpose medium-tall premium milling and domestic hay oat
- Premium milling grain quality Uncle Tobys tick of approval
- Early-mid maturity and suited to growing in low medium/high rainfall zones
- Resistant to Stem and Leaf rust
- Strong grain yield performance in medium-low rainfall areas
- Good early vigour that could provide an opportunity for grazing
- Yallara produces high quality domestic hay (WSC/ Digestibility)
- Marginally taller than Euro, has slightly earlier maturity and similar resistance to lodging
- Good physical grain quality—low screenings, a high groat percentage and good hectolitre weight
- Bright grain (high Minolta L) and high grain digestibility for the livestock and horse feed industry
- Yallara has low grain oil content and moderate-high hull lignin
- Resistant to CCN and intermediate resistance to bacterial blight



### **BREEDING**

Yallara was developed by the National Oat Breeding program and collaborators. Yallara was bred from the cross Euro\*2/ND931075 and was evaluated as SV97001-13-4. The name Yallara was selected from Australian marsupials native to southern Australia.

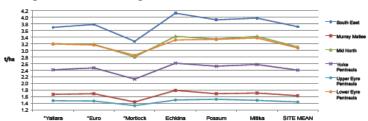


# **Yearly Rainfall**

	Low <380	Méd 380-480	High >480
	Yallara	Yallara	Yallara
Time of sowing	early May	early-mid May	mid-late May

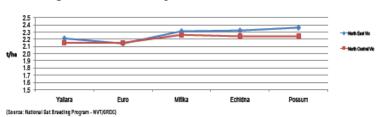


#### SA Long Term (2000-2009) Mean Regional Grain Yield - t/ha



Monotos tall variety. NVT & SARDI Stes Across Nears: South East - Bordertown, Mandulla, Kjoyboltia, Moyhalf, Murray Mallae - Lowbank, Walkaris; Mid North - Crystal Brook, Pineny, Rivertor, Tarradiatd, Kingstord; YP - Pastawills; Lower EP - Greenpatch ; Upper EP - Minnipa, Nunjbornptia

#### Victoria Long Term (2000-2009) Mean Regional Grain Yield - t/ha





### **GRAIN HARVESTING**

As with any tall milling variety, harvest should occur in a timely manner to limit losses from lodging and shattering due to adverse weather conditions. Care is needed when harvesting premium milling varieties which can dehull during the harvest process.



Trait	Variety	% DMD	% Wintaroo
Digestibility (%DM)	Yallara	65.1	102
	Wintaroo	63.9	100
WSC (%DM)	Yallara	28.5	112
	Wintaroo	25.4	100
Metabolisable	Yallara	9.4	102
Energy MJ/kg DM	Wintaroo	9.2	100
NDF (%DM)	Yallara	47.4	93
	Wintaroo	50.8	100

DMD=Dry Matter Digestibility; WSC=Water Soluble Carbohydrate;NDF=Neutral Detergent Fibre. (Note: Yallara has a lower dry matter yield compared to Wintaroo) (Source: National Oat Breeding program CVT & NVT 2005-2008)





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## **PLANT PROFILE**

Variety	Early Viguor	Height (cm)	Heading days from Mitika	Maturity	Lodging (%)	Standing Ability	Strawangle <sup>3</sup>	Shattering (grains per m <sup>2</sup> )	Shatter Resistance
Yallara	3.4	81	+1	EM	3.3	R	6.3	36	MR
Euro	3.7	79	+3	EM	1.7	R	7.3	28	R
Mortlock	4.6	84	-1	EM	0.0	R	6.8	40	MR
Mitika	3.8	56	0	E	1.7	R	8.5	23	R
Possum	3.0	63	+3	EM	1.7	R	8.0	17	R
Echidna	3.8	63	+6	EM	0.0	R	8.5	4	R
No. of Trials	11	13	6		3	R	4	6	

(1)= 1-9 scale where 1=fast & 9=slow (2)= Zadoks decimal growth stage for plant growth (3)= 3-8 scale where 3=flat & 8=erect
Maturity: E=early, EM=early-mid, M=mid season, ML=mid-late. Shatter & Standibility: R=resistant, S=susceptible, MR=moderately resistant, MS= moderately susceptible.

(Source: National Oat Breeding Program combined SA/VIC mean data 2003-2006)



### **GRAIN QUALITY**

Variety	Hectolitre weight (kg/hl)	1000 Grain Weight (g)	Screenings (%<2mm)	Protein (%)	Oil (%)	Groat (%)	Minolta-L	Digestibility (%DDM) <sup>1</sup>	B-glucan (dry basis) <sup>2</sup>
Yallara	51.1	33.1	10.2	11.7	4.9	79.8	62.7	73.3	4.3
Euro	50.0	35.4	10.3	12.1	5.1	76.2	60.7	72.8	4.2
Mortlock	49.1	33.4	13.5	13.8	5.9	74.8	60.1	72.4	4.9
Mitika	49.8	32.8	12.1	12.8	6.6	76.0	59.7	73.1	5.0
Possum	48.9	30.5	11.0	13.0	5.7	76.2	60.0	72.0	4.7
Echidna	47.5	30.7	19.4	11.9	5.8	74.4	62.3	72.2	4.7

<sup>1-</sup>Digestibility based on data from 2003-2006; 2-Beta-glucan based on data from 2004-2007 (Source: National Oat Breeding Program combined SA/VIC composite mean data 2005-2009)

Variety	Hectolitre weight (kg/hl)		Screenings (%<2mm)	NIR Protein % dry basis		NIR Groat %	No. trials
Yallara	50.6	32.3	4.7	12.7	4.7	78.3	30.0
Wintaroo	47.0	32.2	19.7	13.2	6.7	73.4	30.0

(Source: National Oat Breeding Program CVT & NVT 2005-2008)



### **DISEASE PROFILE**

					Bacterial	CCN	CCN	Stem	Red
Variety	Stem Rust	Leaf Rust	BYDV	Septoria	blight	R	T	Nematode	leather leaf
Yallara	MR	R	MS	MS	MR-MS	R	1	I	MS
Euro	VS	S	MR-MS	MS	MS	R	1	1	MS
Mortlock	MS	S	MS	MS	MR	MS	1	1	MS
Mitika	MR	R	S	S	MR	VS	1	1	S
Possum	MS	MS	S	MS	S	VS	1	1	MS-S
Echidna	S	S	MS	S	S	S	1	MT	MS

R - Resistant; MR - Moderately Resistant; MS - Moderately Susceptible; S- Susceptible; VS - Very Susceptible, T - Tolerant, MT - Moderately Tolerant, MI - Moderately Intolerant, I - Intolerant (Rust reactions may vary in different regions depending on the prevalent pathotype) (Source: National Oat Breeding Program SA/VIC)



## PLANT BREEDER RIGHTS AND ROYALTIES

Yallara 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 \$2.00 per tonne (plus GST), which includes breeder royalties, applies to this variety.

### **ACKNOWLEDGMENTS**

Yallara was developed by the National Oat Breeding Program and collaborators with support from GRDC.









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

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