

# Sunguard<sup>®</sup>



- ✓ Main season wheat, with high yield potential
- ✓ Crown rot tolerance as good as EGA Wylie<sup>®</sup>
- ✓ High level of RLN (*P. thornei*) tolerance
- ✓ Excellent stem and leaf rust resistance
- ✓ Good stripe rust resistance
- ✓ AH quality classification in NSW and Queensland



## Breeding

Sunguard<sup>®</sup> was tested as SUN440H, and is derived from a cross involving Janz and a 'SUN' breeding line with excellent rust resistance and good tolerance to crown rot and root lesion nematode.

## Grain Quality

Sunguard<sup>®</sup> has an AH quality classification in the Northern Zone (nNSW/Qld) and the South Eastern Zone (sNSW). Sunguard<sup>®</sup> is moderately resistant to black point.

## Plant Characteristics

Sunguard<sup>®</sup> is a main season spring wheat with white chaff and fully awned ears. It is semi-dwarf in height with medium straw strength. It matures slightly quicker than EGA Wylie<sup>®</sup> and Baxter<sup>®</sup>, similar to Sunco and Lang<sup>®</sup>.

## Disease Profile

Sunguard<sup>®</sup> is resistant to the current field strains of stem and leaf rust, while being moderately resistant to the current field strains of stripe rust (including Yr27, WA+Yr17 and Jackie strains). Stripe rust resistance is based on multiple minor adult plant resistance (APR) genes which generally provides more robust resistance, but crops should be monitored for stripe rust during the more susceptible early growth stages. Sunguard<sup>®</sup> is moderately tolerant to root lesion nematode (*P. thornei*) and has a similar level of crown rot tolerance to EGA Wylie<sup>®</sup>. Sunguard<sup>®</sup> is moderately susceptible/susceptible to yellow leaf spot and *Septoria tritici* blotch. See Table 2 for detailed disease ratings.

## Adaptation and Fit

Sunguard<sup>®</sup> is well adapted to northern NSW and Queensland, achieving highly competitive long term yields in these regions. Sunguard<sup>®</sup> is also competitive in the medium rainfall zones of southern NSW. Sunguard<sup>®</sup> has a disease resistance package that makes it a low risk option for growers in these areas.

Table 1. Predicted yields of Sunguard<sup>®</sup> and control varieties (yield % of EGA Wylie<sup>®</sup>) in NSW and Queensland regions from NVT long term MET analysis (2008-2012).

Variety	North East NSW	North West NSW	South East NSW	South West NSW	Central QLD	South East QLD	South West QLD
<b>Sunguard<sup>®</sup></b>	<b>114</b>	<b>112</b>	<b>117</b>	<b>123</b>	<b>109</b>	<b>102</b>	<b>107</b>
Baxter <sup>®</sup>	100	100	-	-	106	99	99
Crusader <sup>®</sup>	100	100	106	107	104	99	99
Dart <sup>®</sup>	110	105	107	117	98	98	104
EGA Gregory <sup>®</sup>	113	114	119	124	121	106	111
EGA Wylie <sup>®</sup>	100	100	100	100	100	100	100
Livingston <sup>®</sup>	114	109	115	123	103	101	106
Spitfire <sup>®</sup>	112	109	114	120	107	100	105
Suntop <sup>®</sup>	123	118	125	136	115	110	117
Sunvale <sup>®</sup>	108	105	111	115	105	99	103
Ventura <sup>®</sup>	106	107	112	115	116	103	107

Table 2. Disease ratings for Sunguard<sup>®</sup> and control varieties.

Variety	Stem Rust	Stripe Rust	Leaf Rust	Yellow Leaf Spot	Septoria tritici Blotch	Crown Rot	RLN ( <i>P. thornei</i> )	Black Point	Acid Soils Tolerance
<b>Sunguard<sup>®</sup></b>	<b>R</b>	<b>MR</b>	<b>R-MR</b>	<b>MS-S</b>	<b>MS-S</b>	<b>MR-MS</b>	<b>MT</b>	<b>MR</b>	<b>I</b>
Baxter <sup>®</sup>	R,MS	MS-S	MR	S	S	MS	MT-MI	MS	MT
Crusader <sup>®</sup>	R-MR	MS	R	MS	S	S	MI-I	R-MR	MT
Dart <sup>®</sup>	MR	MR	R-MR	MS	MS	MS-S	MI	MR-MS	MT
EGA Gregory <sup>®</sup>	MR	MR	MR	MS-S	MS	S	MT	MS	T
EGA Wylie <sup>®</sup>	R	MS	R	MS-S	S-VS	MR-MS	MT	MR	-
Livingston <sup>®</sup>	MR-MS	MR-MS	R	MS	S	S	MT-MI	MR-MS	I
Spitfire <sup>®</sup>	MR	MR	MS	MS-S	MS-S	MS	MT-MI	S	MT-MI
Suntop <sup>®</sup>	MR	R-MR	R	MS-S	MS	MS	MT	MR	MT
Sunvale <sup>®</sup>	R	MR	MR-MS	MS-S	MR-MS	MS-S	MT-MI	R-MR	I
Ventura <sup>®</sup>	R-MR	MS	R	S	MS	MS-S	MT-MI	MR-MS	T

R=Resistant, MR=Moderately Resistant, MS=Moderately Susceptible, S=Susceptible, VS=Very Susceptible, T=Tolerant, MT=Moderately Tolerant, MI=Moderately Intolerant, I=Intolerant, VI=Very Intolerant, -=Insufficient Data. Source: NSW DPI Winter Crop Variety Sowing Guide 2013.



## Seed Availability

Commercial quantities of Sunguard<sup>®</sup> may be available through AGT Affiliates, or your local retailer. Please consult the AGT website for AGT Affiliate contact details.



## Acknowledgements

Sunguard<sup>®</sup> was bred and selected by AGT's Narrabri wheat breeding programme.



## PBR and EPR

Sunguard<sup>®</sup> 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. Sunguard<sup>®</sup> growers will be subject to a Growers Licence Agreement that acknowledges that an EPR of \$3.00/tonne + GST has to be paid on all production other than seed saved for planting.



## More Information

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