Coolah

- APH quality classification
- Suited to end of April – beginning of May plantings
- EGA Gregory[Ⓑ] alternative
- Highly competitive grain yield and broad adaptation
- Excellent stem and leaf rust resistance
- Good tolerance to acid soils
- Improved lodging tolerance over EGA Gregory[Ⓑ]

Breeder's comments

Coolah® is a higher yielding alternative to the popular variety EGA Gregory®. It is well adapted to NSW and Queensland and backs up this adaptation with a solid disease package of resistance to each of the rusts and intermediate resistance to yellow leaf spot.

Coolah's® current stripe rust resistance rating (RMR) is based on the commonly occurring stripe rust pathotype. However, a new stripe rust pathotype with virulence for the *Yr33* resistance gene (which Coolah® carries) was detected in 2017. The impact of this new pathotype on Coolah® is yet unknown, so growers are urged to monitor crops of Coolah® for stripe rust this season.

With tolerance to acid soils, Coolah® has performed well across acidic, neutral and alkaline soils. Coolah® is also slightly shorter in stature than EGA Gregory®, resulting in a lower susceptibility to lodging.

In early sown NVT's across NSW and Queensland, Coolah® has shown a 3-9% yield advantage over EGA Gregory®, depending on region. Its maturity is driven by moderate photoperiod and vernalisation requirements and matches EGA Gregory® in most environments, however, Coolah® can be slightly later maturing than EGA Gregory® in southern NSW, whilst being slightly quicker than EGA Gregory® in central Queensland. Sown at the end of April into early May, Coolah® will maximise early moisture availability whilst still avoiding most of the frost risk of mid spring.

Seed Availability

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

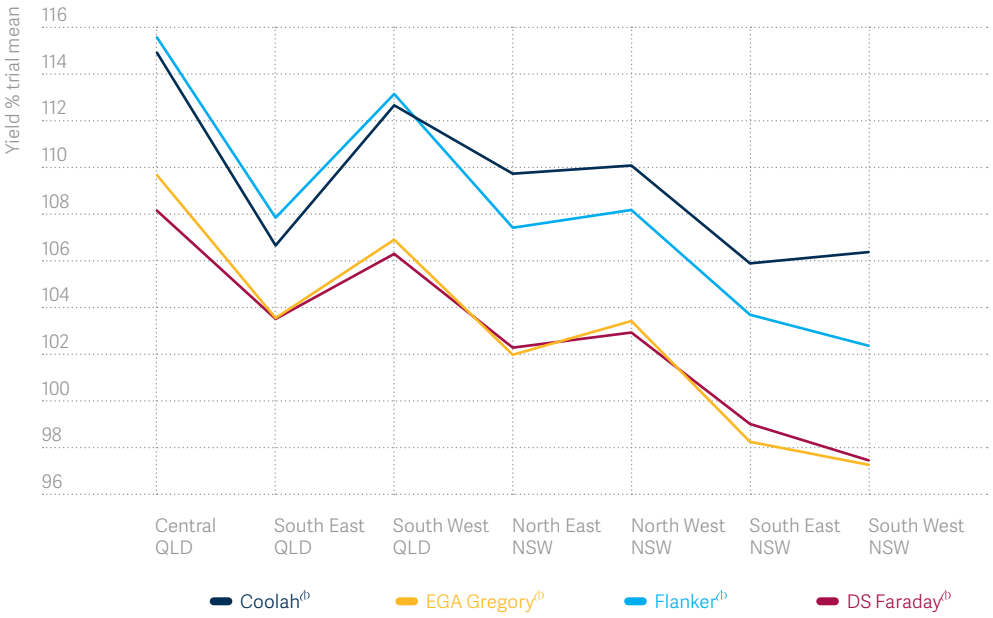
Coolah® is able to be traded between growers upon the completion of a License Agreement as part of AGT's Seed Sharing™ initiative.

PBR and EPR

Coolah is protected by Plant Breeders Rights (PBR) and all production (except seed saved for sowing) is liable to an End Point Royalty (EPR), which funds future plant breeding. Coolah® growers will be subject to a Growers License Agreement that acknowledges that an EPR of $3.50/tonne + GST has to be paid on all production other than seed saved for planting.

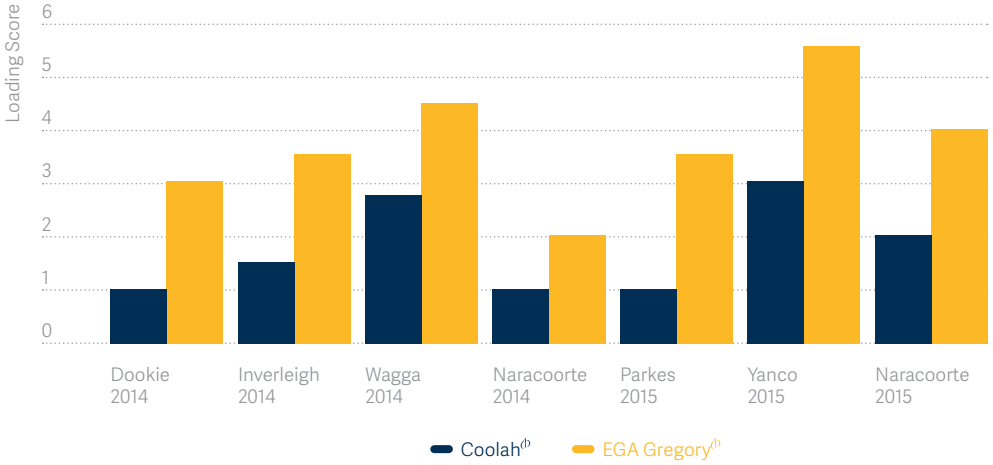
Predicted yield of Coolah® versus control varieties: **Early season NVT series**

Grain yield as % of region average (NVT long term MET analysis 2013-2017)



Standability of Coolah® and EGA Gregory® in AGT trials where lodging was evident, 2014 -2015.

Scale 1 = Standing vertically, 9 = Fully lodged on the ground



Disease, agronomic and grain quality ratings for Coolah[Ⓑ] and control varieties

	Coolah[Ⓑ]	EGA Gregory[Ⓑ]	Flanker[Ⓑ]	DS Faraday[Ⓑ]
Stem Rust	MR	MR	MR#	MR
Stripe Rust	RMR*	MR*	RMR*	RMR
Leaf Rust	MR	MR	MR	MR
Yellow Leaf Spot	MSS	S	MSS	MSS
RLN (P. *thornei*) Resistance	MRMS#	MSS	MSS#	MSS#
RLN (P. *thornei*) Tolerance	TMT	TMT	TMT	MT
Crown Rot	S#	S	MSS#	S#
Acid Soil Tolerance	MT	T	-	-
Maturity	Mid-Late	Mid-Late	Mid-Late	Mid-Late
Plant Height	Tall	Very Tall	Very Tall	Tall
Lodging Resistance	MRMS	MS	MS	—
Quality Classification	APH	APH	APH	APH
Sprouting Tolerance	S	S	S	—
Black Point Resistance	S	MSS	MS	MSS
Screening Risk	Moderate	Moderate	Moderate	—
Test Weight	Moderate	Moderate	Moderate	—

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
* Rating may change due to the detection of a new stripe rust pathotype
\# Provisional ratings, to be used with caution

Source / NSW DPI Winter Crop Variety Sowing Guide 2018, NVT and AGT data.

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