Sunchaser



Variety snapshot

- A lower risk Suntop^(b) and Spitfire^(b) alternative
- Excellent grain size, reduced levels of screenings
- One of the best performing APH varieties for main season planting
- > APH quality classification (NSW)
- Slightly faster maturity than Suntop
- Improved level of crown rot resistance over Suntop[®]
- Moderately long coleoptile

Breeder's comments

Since its release, Suntop[®] has become one of the dominant wheat varieties for main season planting in New South Wales due to a combination of high and consistent yield, wide adaptation, and tolerance to sodic soils. However, grower experience has shown that in drier/sharper finishes to the season, Suntop[®] can express higher than acceptable levels of screenings.

One of our major breeding objectives has been to improve Suntop's[®] grain size whilst retaining its very wide adaptation, yield and agronomic suitability. We believe that we have realised that goal with Sunchaser[®].

Sunchaser^(b) (tested as SUN843E) may be viewed as a 'safer Suntop^(f), offering not only a yield improvement but most importantly a much lower risk of screenings. Elevated levels of screenings is a major factor contributing to downgrades at point of sale. Therefore this feature of Sunchaser^(b) has the potential to improve grower's profitability over Suntop^(h), among other varieties.

As a Suntop[®] alternative, NVT MET data demonstrates Sunchaser[®] has yielded 3% higher whilst exhibiting improved grain size and a much longer coleoptile length. Compared to Spitfire[®], Sunchaser[®] has demonstrated 9% higher grain yield, whilst also offering a lower risk of screenings and a longer coleoptile.

Sunchaser^{ϕ} fits the main season sowing window with a maturity slightly quicker than Suntop^{ϕ} and a little slower than Spitfire^{ϕ}.

There are a number of variables to consider when deciding what wheat variety to include in your farming system. In southern NSW main season NVT MET data, AH varieties like Beckom[®] and Scepter[®] have set the yield benchmark yielding over 5-6% higher than the leading APH varieties. This yield gap needs to be considered when deciding to grow an APH variety.

Seed Availability

Commercial quantities of Sunchaser^(*) will be available through AGT Affiliates, or your local retailer. Please consult the AGT website for AGT Affiliate contact details.

Sunchaser[⊕] will be able to be traded between growers upon the completion of a License Agreement as part of AGT's Seed Sharing[™] Initiative.

PBR and EPR

Sunchaser^(h) will be protected by Plant Breeders Rights (PBR) and all production (except seed saved for planting) will be liable to an End Point Royalty (EPR), which funds future plant breeding. Sunchaser^(h) 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. Yield

Across southern NSW, Sunchaser[¢] has displayed a yield improvement over Suntop[¢] and Spitfire[¢] (Figure 1). Although Sunchaser[¢] is one of the highest yielding APH varieties in this maturity group, it is still below the high yielding AH benchmarks Scepter[¢] and Beckom[¢] (Table 1).

Figure 1 MAIN SEASON TRIALS: Predicted yield of Sunchaser⁽⁾ across southern NSW



Physical Grain Quality

Over three years of testing, Sunchaser^(h) has produced grain with lower screenings levels of its main competitor Suntop^(h) (Figure 2).

We believe that Sunchaser's^(*) ability to maintain grain size over a range of conditions is one of its most important features and contributes highly to its value proposition for grain growers.

Figure 2 SCREENINGS of Sunchaser^(h) versus comparators



Source / NVT (4 sites) and AGT (13 sites) MAIN SEASON TRIALS 2016-2018 (NSW sites)

Coleoptile Length

Three years of testing has shown that Sunchaser⁽⁾ has a longer coleoptile than Suntop⁽⁾ and Spitfire⁽⁾ (Figure 3). In regions where moisture seeking planting is a regular occurrence, the longer coleoptile of Sunchaser⁽⁾ should be valued by growers.

Figure 3 COLEOPTILE LENGTH of Sunchaser[®] versus comparators



Source / AGT coleoptile length experiments, Wagga 2017-2019

Disease Resistance & Agronomics

Sunchaser^(h) offers an improved disease resistance package against major comparator Suntop^(h), with greater levels of resistance against stem rust, leaf rust, yellow leaf spot and crown rot.

Figure 4 Disease resistance ratings for Sunchaser^(b) versus Suntop^(b)



Table 1 Variety comparisons

	Sunchaser ^{®*}	Spitfire [®]	Suntop [⊕]	Beckom [⊕]	Scepter
Quality Classification	APH	APH	APH	AH	AH
Stem Rust	MR	MR	MRMS	MRMS	MRMS
Stripe Rust	MRMS	MR	MRMS	MRMS	MSS
Leaf Rust	R	MSS	MRMS	MSS	MSS
Yellow Leaf Spot	MS	S	MSS	MSS	MRMS
Crown Rot (resistance)	MS	MS	MSS	S	S
RLN (P. thornei) tolerance	MT	MTMI	TMT	TMT	MT
South West NSW Yield (4.5t/ha)	103	95	101	108	110
South East NSW Yield (4.2t/ha)	102	92	99	109	109

- R Resistant
- MR Moderately Resistant
- MS Moderately Susceptible
- S Susceptible

- VS Very Susceptible
- T Tolerant
- MT Moderately Tolerant
- MI Moderately Intolerant
- Intolerant
- VI Very Intolerant
- * Provisional ratings
- Source / NVT and AGT data

James Whiteley, Marketing Manager, Southern NSW Russell Eastwood, Wheat Breeder End Point Royalty Office 0419 840 589 0427 716 632 (08) 7111 0201 agtbreeding.com.au

Disclaimer / The information contained in this brochure is based on knowledge and understanding at the time of writing. Growers should be aware of the need to regularly consult with their advisors on local conditions and currency of information.