

# Sunchaser<sup>®</sup>



- A lower risk alternative to Suntop<sup>Ⓟ</sup>, Reliant<sup>Ⓟ</sup> and Spitfire<sup>Ⓟ</sup>
- Excellent grain size, reduced levels of screenings
- APH quality classification
- Suited to the main season planting window
- Slightly faster maturity than Suntop<sup>Ⓟ</sup> and Reliant<sup>Ⓟ</sup>
- Moderately long coleoptile

## Breeder's comments

Since its release, Suntop<sup>®</sup> has become one of the dominant wheat varieties for main season planting in the northern region 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<sup>®</sup> can express higher than acceptable levels of screenings.

One of our major breeding objectives has been to improve Suntop's<sup>®</sup> grain size and disease resistance package whilst retaining its very wide adaptation, yield and agronomic suitability for the northern growing region. We believe that we have realised that goal with Sunchaser<sup>®</sup>.

Sunchaser<sup>®</sup> (tested as SUN843E) may be viewed as a 'safer Suntop'<sup>®</sup>, offering similar yields and 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<sup>®</sup> has the potential to improve grower's profitability over Suntop<sup>®</sup>, among other varieties.

As a Reliant<sup>®</sup> alternative, Sunchaser<sup>®</sup> has produced slightly lower yields, but improved grain size and a much longer coleoptile. Compared to Spitfire<sup>®</sup>, Sunchaser<sup>®</sup> has demonstrated higher grain yield, also with lower risk of screenings and a longer coleoptile.

Sunchaser<sup>®</sup> fits the main season sowing window in northern growing regions, with a maturity slightly quicker than Suntop<sup>®</sup> and Reliant<sup>®</sup>, and a little slower than Spitfire<sup>®</sup>.

## Seed availability

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

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

## PBR and EPR

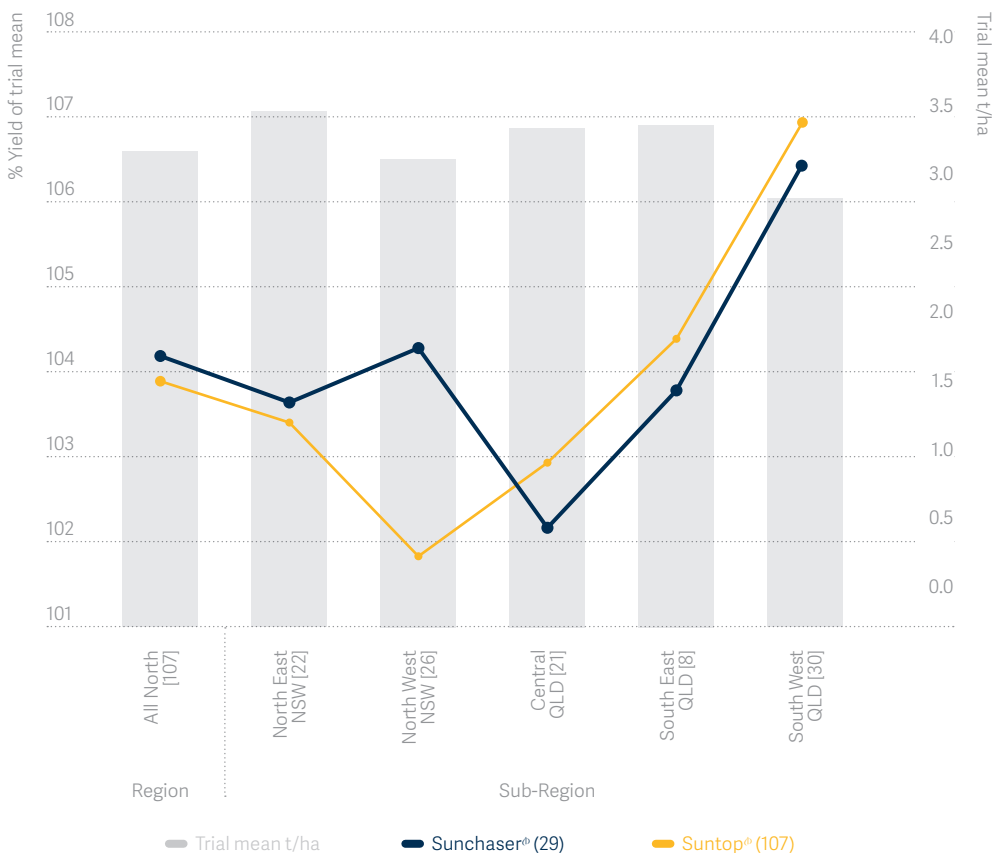
Sunchaser<sup>®</sup> is protected by Plant Breeders Rights (PBR) and all production (except seed saved for planting) will be liable to an End Point Royalty (EPR), which funds future plant breeding. Sunchaser<sup>®</sup> growers will be subject to a Growers License Agreement that acknowledges that an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



## Grain yield

Across the northern region, Sunchaser<sup>®</sup> has displayed a similar yield to Suntop<sup>®</sup> (Figure 1) with a particular advantage in north west NSW.

**Figure 1** Grain yield of Sunchaser<sup>®</sup> versus Suntop<sup>®</sup> across northern NSW/QLD regions



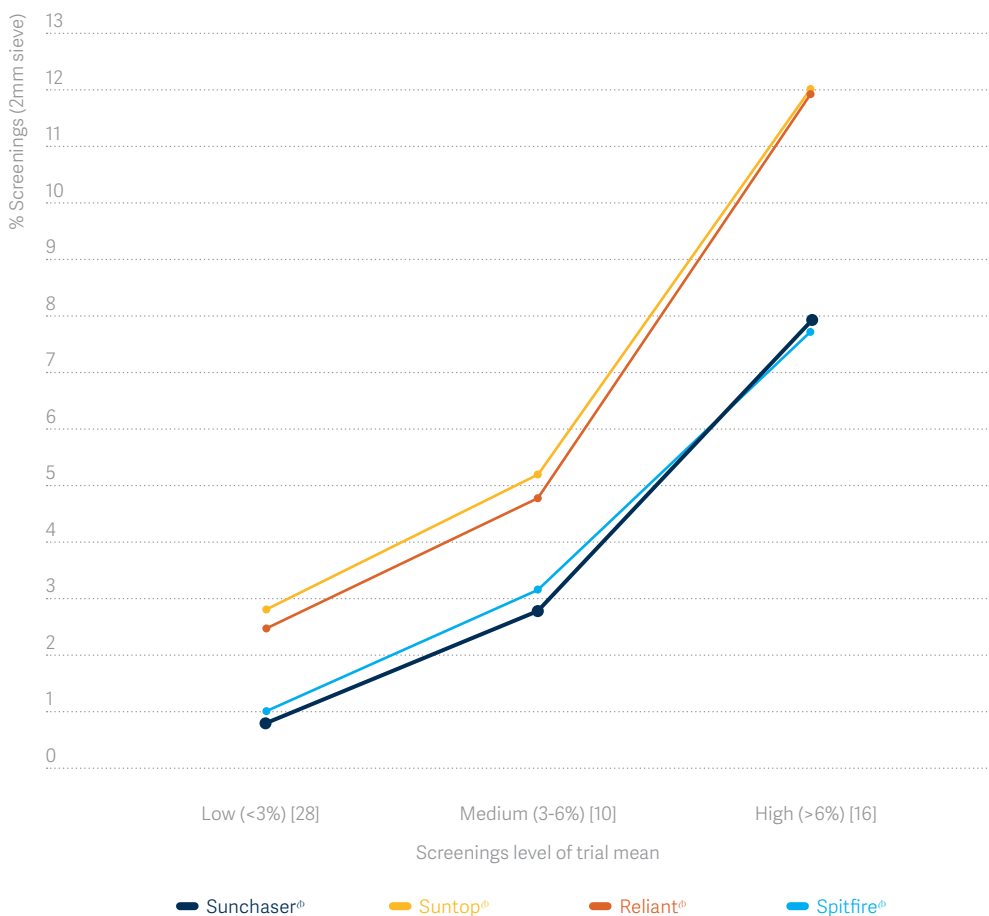
Source NVT long term MET analysis, main season trial series 2015-2019  
 [ ] Total number of trials per region  
 ( ) Number of trials that each variety was present in across the QLD/northern NSW dataset [107]

## Physical grain quality

Sunchaser<sup>®</sup> has produced grain with lower screenings levels than its main competitors, Suntop<sup>®</sup> and Reliant<sup>®</sup> and similar to Spitfire<sup>®</sup> (Figure 2).

We believe that Sunchaser's<sup>®</sup> 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 northern grain growers.

Figure 2 Screenings of Sunchaser<sup>®</sup> versus comparators

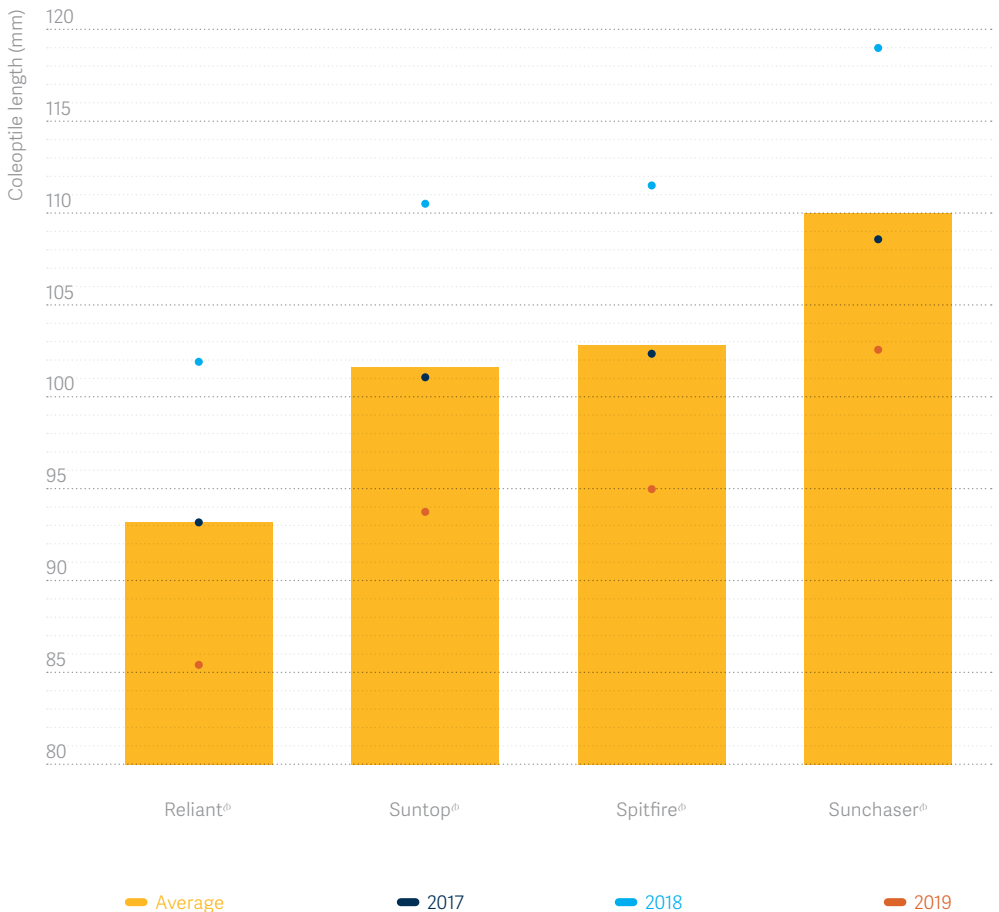


Source NVT (30 sites) and AGT (24 sites), main season trials 2018-2019  
[] Total number of trials per screenings level

## Coleoptile length

Three years of testing has shown that Sunchaser<sup>®</sup> has a longer coleoptile than Suntop<sup>®</sup>, Spitfire<sup>®</sup> and Reliant<sup>®</sup> (Figure 3). In a region where deeper planting for improved moisture seeking is a regular occurrence, the longer coleoptile of Sunchaser<sup>®</sup> should be valued by growers.

Figure 3 Coleoptile length of Sunchaser<sup>®</sup> versus comparators



## Disease resistance & agronomics

Sunchaser<sup>®</sup> offers an improved disease resistance package against major comparator Suntop<sup>®</sup>, with greater levels of resistance against stem rust, stripe rust, leaf rust and yellow leaf spot.

Figure 4 Disease resistance ratings for Sunchaser<sup>®</sup> versus Suntop<sup>®</sup>

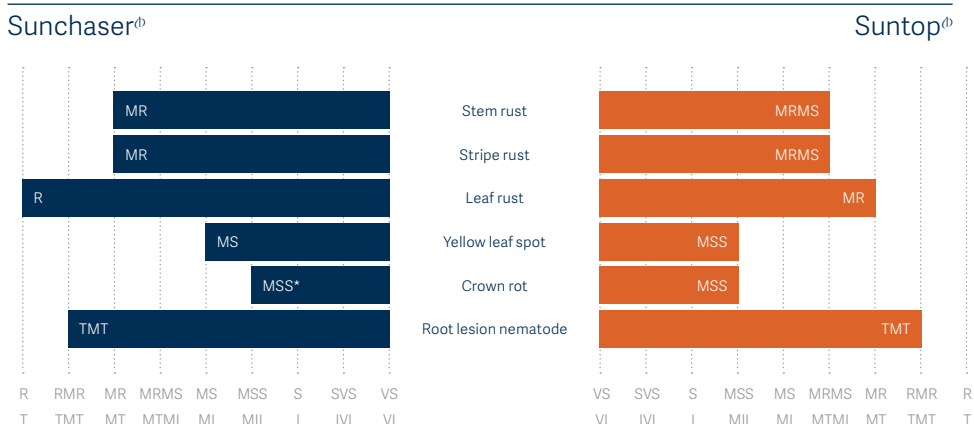


Table 1 Variety comparisons

|                                      | Sunchaser <sup>®</sup> | Suntop <sup>®</sup> | Reliant <sup>®</sup> | Spitfire <sup>®</sup> |
|--------------------------------------|------------------------|---------------------|----------------------|-----------------------|
| Quality classification               | APH                    | APH                 | APH                  | APH                   |
| Stem rust                            | MR                     | MRMS                | R                    | MR                    |
| Stripe rust                          | MR                     | MRMS                | MR                   | MR                    |
| Leaf rust                            | R                      | MR                  | RMR                  | MSS                   |
| Yellow leaf spot                     | MS                     | MSS                 | S                    | S                     |
| Crown rot resistance                 | MSS*                   | MSS                 | MS                   | MS                    |
| RLN ( <i>P. thornei</i> ) tolerance  | TMT                    | TMT                 | TMT                  | MTMI                  |
| RLN ( <i>P. thornei</i> ) resistance | MSS                    | MRMS                | MSS                  | MS                    |
| Black point                          | MS                     | MSS                 | MS                   | S                     |
| Lodging tolerance                    | MRMS                   | MRMS                | MS                   | MRMS                  |

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

\* Provisional rating  
 Source / NSW DPI Winter Crop  
 Variety Sowing Guide 2020,  
 NVT and AGT data



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