

Sundancer[®]



- An ideal replacement for LRPB Lancer[Ⓛ]
- Very high yielding, with excellent yield stability
- Suits late April/early May plantings
- Excellent rust resistance
- Medium-short plant type with better straw strength than LRPB Lancer[Ⓛ]
- Longer coleoptile than LRPB Lancer[Ⓛ] and other early season varieties
- APH quality classification for the Northern Zone
- Quality classification for the South Eastern Zone in October 2023

Breeder's comments

For many years LRPB Lancer[®] has been the favoured variety for growers in NSW and Queensland for planting opportunities in the last week of April through to mid May. Not so much for its yield performance, but more for its yield stability, disease resistance, adaptability and short plant type. Sundancer[®] combines this dependability with substantial increases in grain yield.

Sundancer[®] (tested as SUN1161A) has delivered excellent yield performance in AGT trials for the past five years. Its performance compared with its main parent LRPB Lancer[®] has been a standout, delivering consistently higher yields. This performance jump was reflected in the early season 2022 NVT results, where Sundancer[®] delivered over 15% more grain yield than LRPB Lancer[®] across NSW and Queensland.

Sundancer[®] provides a solid disease resistance package for growers, with strong stripe rust resistance a huge benefit in a high disease pressure year like 2022.

Sundancer[®] is a mid-slow maturing variety suited to late April and early May plantings, with a relative maturity very similar to LRPB Lancer[®] in this planting window. When sown later into May, Sundancer[®] is slightly quicker to reach head emergence than LRPB Lancer[®]. The plant type is not quite as short as LRPB Lancer[®] but it has shown better straw strength. Sundancer[®] also has a longer coleoptile than LRPB Lancer[®] and other early season varieties.

AGT is proud to be able to offer Sundancer[®] to growers in New South Wales and Queensland, providing an exciting combination of elite yield, APH quality, robust disease resistance, good lodging tolerance and a longer coleoptile in a slower maturing variety.

Seed availability

Commercial quantities of Sundancer[®] may be available through AGT Affiliates, or your local retailer.

Please consult the AGT website for AGT Affiliate contact details.

Sundancer[®] can be traded between growers upon the completion of a License Agreement as part of AGT's Seed Sharing™ initiative.

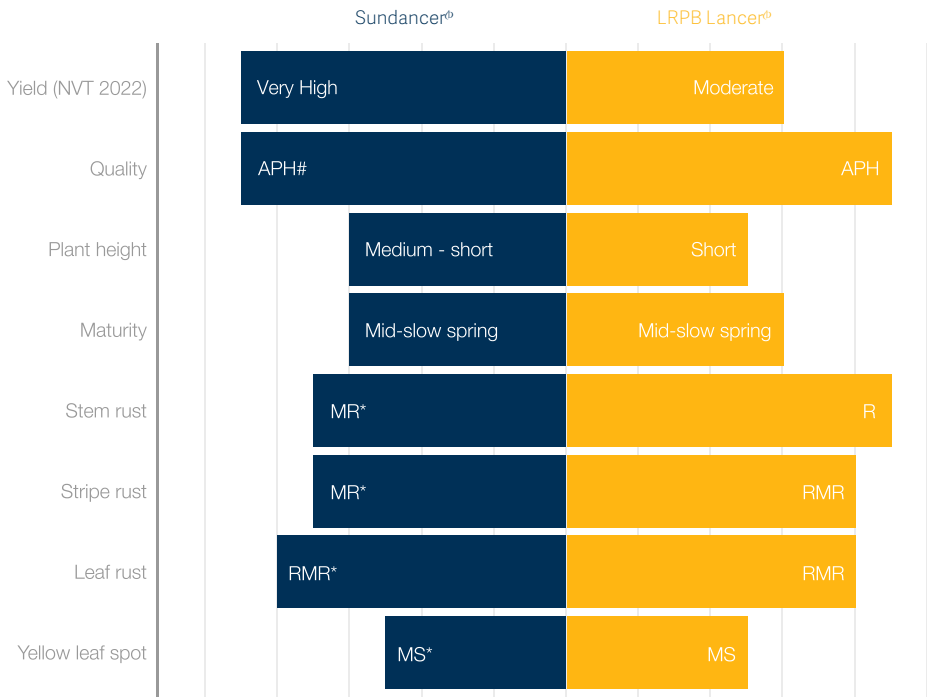
PBR and EPR

Sundancer[®] is protected by Plant Breeders Rights (PBR) (denoted by the [®] symbol) and all production (except seed saved for planting) is liable to an End Point Royalty (EPR), which funds future plant breeding. Sundancer[®] growers will be subject to a Growers License Agreement that acknowledges that an EPR of \$4.00/tonne + GST must be paid on all production other than seed saved for planting.

Sundancer[®] versus LRPB Lancer[®]: Head-to-head

Sundancer[®] is an ideal replacement for popular variety LRPB Lancer[®], offering similar agronomic characteristics and vastly improved yield.

Figure 1. Sundancer[®] v LRPB Lancer[®]



Source: NVT 2022 consensus ratings and AGT

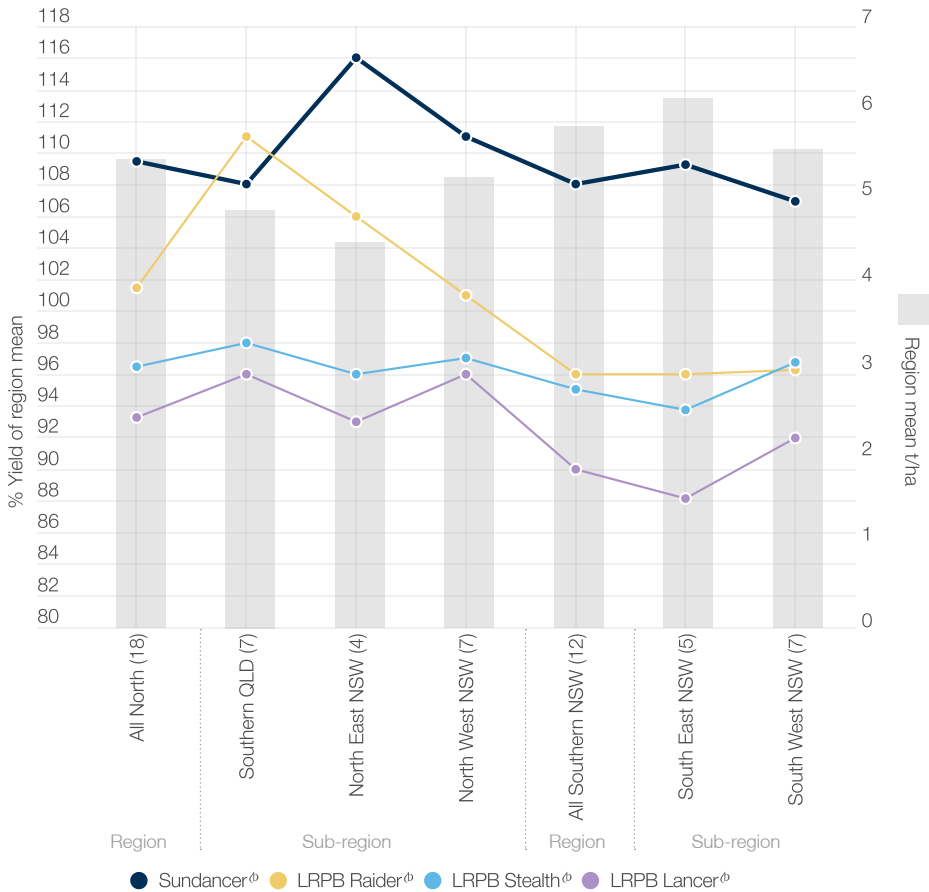
* Provisional rating

APH quality classification in the Northern Zone, South Eastern Zone classification to be gained in October 2023

Grain yield

Data from the 2022 NVT early season series has shown that Sundancer[®] is an exceptionally high yielding variety across NSW and Queensland environments, outyielding main comparator LRPB Lancer[®] by 12% to 21% depending on region (Figure 2).

Figure 2. Predicted grain yield of Sundancer[®] versus comparators



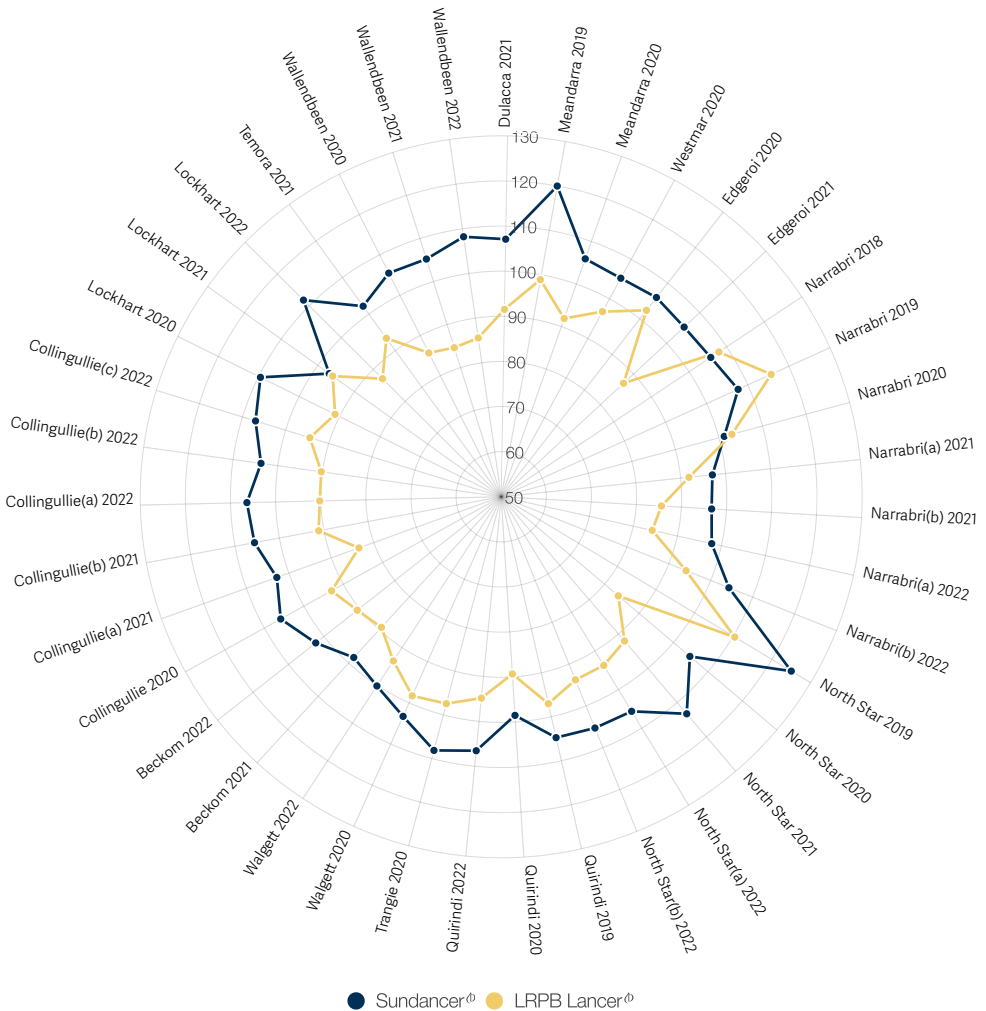
Source: NVT Long Term Yield Reporter, 2022 early season trial series region results

() Total number of trials per region

Note: Sundancer[®] was not entered into Central QLD NVT trials in 2022

Figure 3. Grain yield comparison between Sundancer[®] and LRPB Lancer[®] - AGT individual site analysis

Data from five years of AGT trials, across a range of locations in NSW and Queensland has demonstrated the superiority of Sundancer[®] over LRPB Lancer[®] for yield, with Sundancer[®] achieving a higher yield than LRPB Lancer[®] in 36 out of the 39 trials that were analysed.



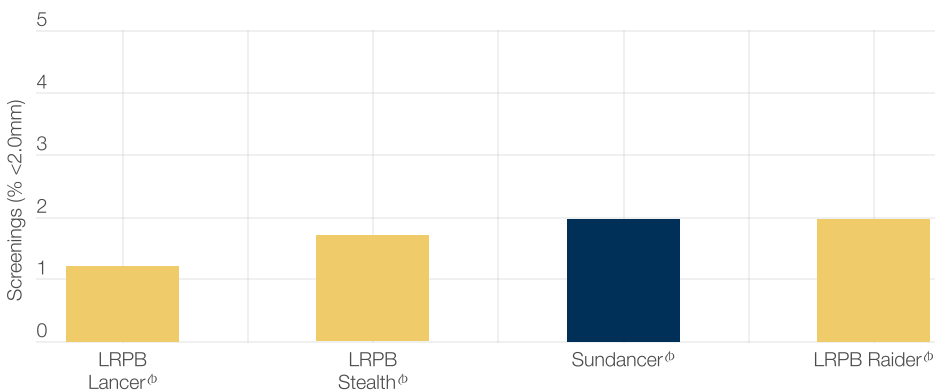
Source: AGT individual site analysis, 39 sites in NSW and Queensland from 2018 to 2022

Physical grain quality

Sundancer[®] has an APH quality classification in the Northern Zone, with a quality classification expected to be gained for the South Eastern Zone in October 2023.

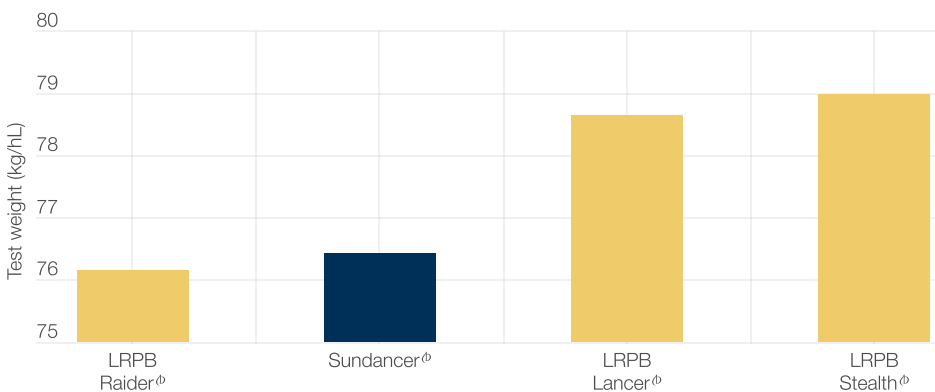
NVT data from NSW and Queensland trials in 2022 shows that Sundancer[®] produced grain with similar levels of screenings and slightly lower test weight compared with LRPB Lancer[®] (Figures 4 & 5).

Figure 4. Screenings comparisons



Source: NVT early season trial series 2022 (30 sites across NSW/QLD)

Figure 5. Test weight comparisons

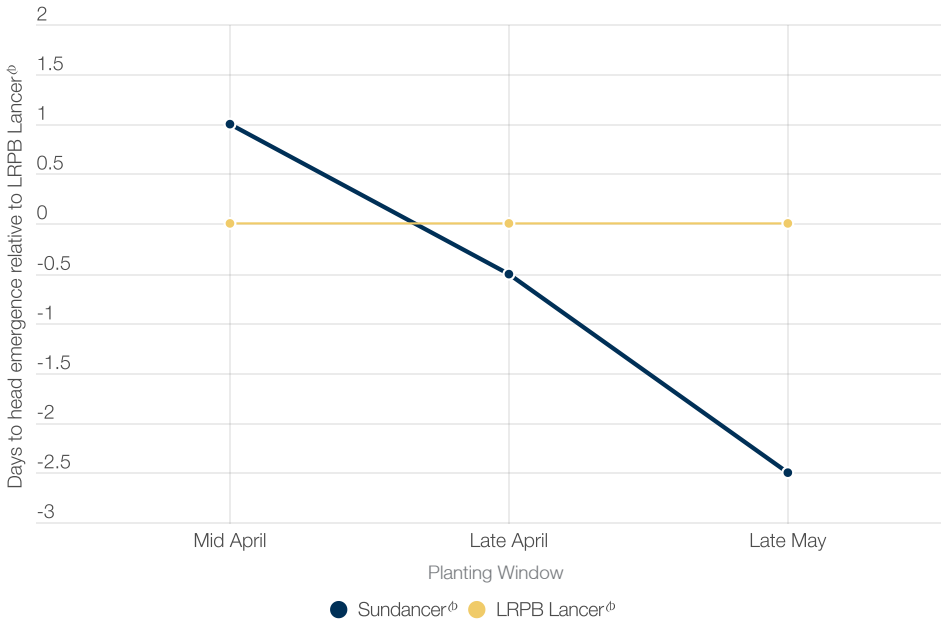


Source: NVT early season trial series 2022 (29 sites across NSW/QLD). Note. North Star grain assessment has been removed from this analysis due to data inconsistency

Maturity

Sundancer[®] is a mid-slow maturing spring wheat. Tested at Narrabri, NSW, Sundancer[®] has progressed to head emergence at a similar time to LRPB Lancer[®] when planted in its optimal window of late April, but slightly quicker than LRPB Lancer[®] when sown into late May.

Figure 6. Days to head emergence of Sundancer[®] relative to LRPB Lancer[®]

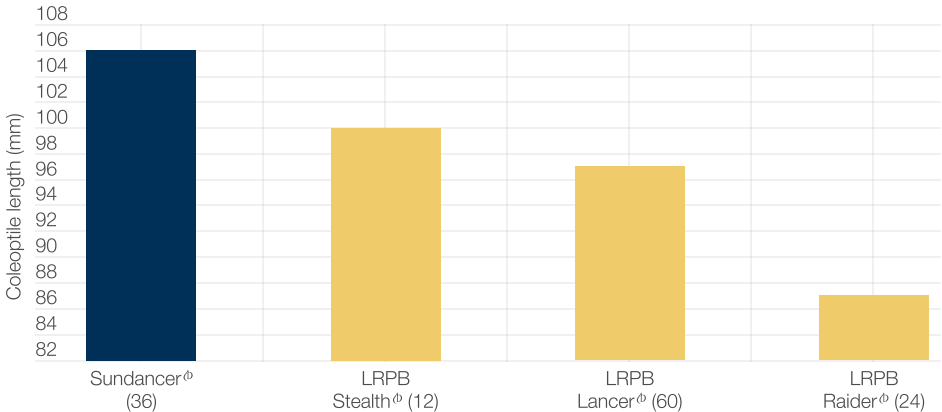


Source: AGT Narrabri phenology observation trials, 2021 and 2022

Coleoptile length

Sundancer[®] has a longer coleoptile than LRPB Lancer[®] and LRPB Lancer[®] alternatives, which may prove beneficial in some situations (Figure 7).

Figure 7. Coleoptile length of Sundancer[®] versus comparators

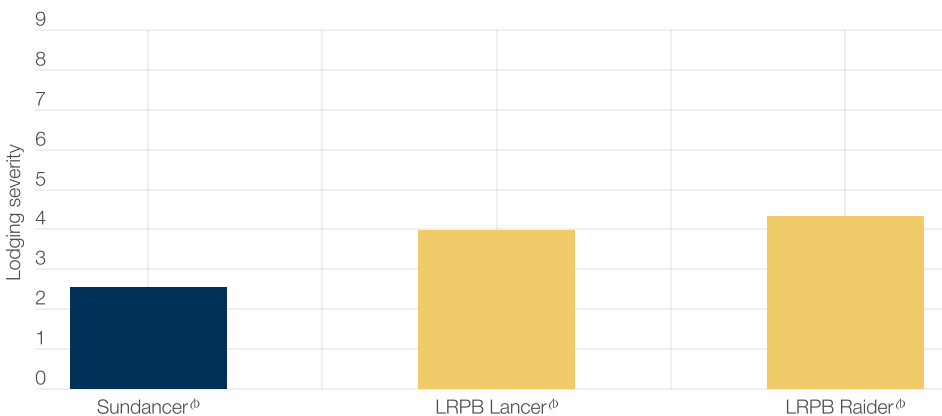


Source: AGT coleoptile MET analysis, 2018 to 2023
() number of replicates tested

Lodging & plant height

Although Sundancer[®] is slightly taller than LRPB Lancer[®] and LRPB Raider[®], it has shown better resistance to lodging. Figure 9 shows that Sundancer[®] (Figure 8).

Figure 8. Standability of Sundancer[®] versus comparators



Source: AGT yearly season trials, 10 sites in 2022 (0 = erect, 9 = fully lodged)

Disease ratings:

Sundancer[®] offers excellent levels of resistance to stem, stripe and leaf rust, similar to LRPB Lancer[®] and other LRPB Lancer[®] alternatives.

Table 1. Disease ratings for selected varieties.

	Sundancer [®]	LRPB Lancer [®]	LRPB Raider [®]	LRPB Stealth [®]
Stem Rust	MR*	R	RMR	R
Stripe Rust	MR*	RMR	MR	RMR
Leaf Rust	RMR*	RMR	RMR	RMR#
Yellow Leaf Spot	MS*	MS	MSS	MS
Septoria <i>Tritici</i> Blotch	S*	MS	S	MSS
Crown Rot	NA	MSS	S	MSS
RLN (<i>P. thornei</i>) tolerance	NA	TMT	MT	MTMI

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

May be more susceptible to alternate pathotypes

Source: NVT consensus ratings 2022 and AGT



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