# Brighton®



- Dual purpose winter wheat, suitable for grazing and grain production
- A higher yielding alternative to Illabo<sup>®</sup>, EGA Wedgetail<sup>®</sup> and LRPB Kittyhawk<sup>®</sup>
- Mid winter maturity, slightly quicker than Illabo
- Improved test weight compared with Illabo

  and EGA Wedgetail
- Improved yellow leaf spot resistance over Illabo

  and EGA Wedgetail
- APH quality classification in southern NSW

#### Breeder's comments

Dual purpose, graze and grain wheat varieties have traditionally been very valuable to mixed farmers, providing more than one opportunity to generate income throughout the season. The use of dual purpose varieties has continued to gain in popularity, perhaps due to a shift in earlier sowing of grain-only crops.

We started a winter wheat breeding program at Wagga Wagga in 2014 in acknowledgement of the need for better performing long season and dual purpose varieties, with Illabo<sup>©</sup> being a popular release from this program. Illabo<sup>©</sup> has been a success story, offering mixed farmers a large step up in performance over the mainstay variety EGA Wedgetail<sup>©</sup>.

Our newest variety in this space, Brighton<sup>®</sup>, is poised to offer even more advancements in productivity, offering improvements in yield and physical grain quality over Illabo<sup>®</sup>.

Brighton<sup>®</sup> also offers improved yellow leaf spot resistance over Illabo<sup>®</sup>, however is more susceptible to powdery mildew and septoria tritici blotch.

Brighton<sup>®</sup> is a mid maturing winter wheat, reaching head emergence slightly faster than Illabo<sup>®</sup> across a range of sowing dates.

Brighton<sup>®</sup> is derived from popular main season wheat variety Beckom<sup>®</sup>, and has inherited Beckom's<sup>®</sup> shorter plant height and aluminium (acid soils) tolerance genes. Like Beckom<sup>®</sup> and many other varieties, Brighton<sup>®</sup> may express physiological leaf yellowing throughout winter; however will grow out of these symptoms in spring.

To maximise grain only yield, Brighton<sup>®</sup> appears ideally suited to mid-late April sowing in high yield environments, and mid April in lower yielding environments. To maximise the length of safe grazing time, Brighton<sup>®</sup> may be sown from mid March through to mid April.

# Brighton<sup>®</sup>

## Table 1. Specifications

#### Background

Tested as	V14051-172	
Released	2024	
EPR rate	\$4.10/tonne + GST	

#### Disease

Stem Rust resistance*	MRMS
Stripe Rust resistance*	MRMS
Leaf Rust resistance*	S
Yellow Leaf Spot resistance*	MRMS
Powdery Mildew resistance*	SVS
Septoria Tritici Blotch resistance*	S
CCN resistance*	R
Pratylenchus Neglectus resistance*	S
Pratylenchus Neglectus tolerance*	VI (P)
Pratylenchus Thornei resistance*	MS
Pratylenchus Thornei tolerance*	MTMI
Crown Rot resistance*	S

#### Plant Characteristics

Maturity speed^	Mid
Maturity habit^	Winter
Sowing window^	Early
Novel herbicide tolerance^	None (conventional tolerance)
Head type^	Awned
Head type^ Plant height^	Awned Short to moderately short
	Short to moderately

#### Abiotic Stress

Boron tolerance^	Does not carry tolerance gene
Acid/aluminium tolerance^	Carries tolerance gene

## Grain Quality

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Quality classification	APH
Grain colour	White
Screenings level^	Low
Test weight^	High
Sprouting tolerance^o	1
Black Point resistance*	MS

#### Legend

- R Resistant
- MR Moderately Resistant
- MS Moderately Susceptible
- S Susceptible
- VS Very Susceptible
- T Tolerant
- MT Moderately Tolerant
- MI Moderately Intolerant
- I Intolerant

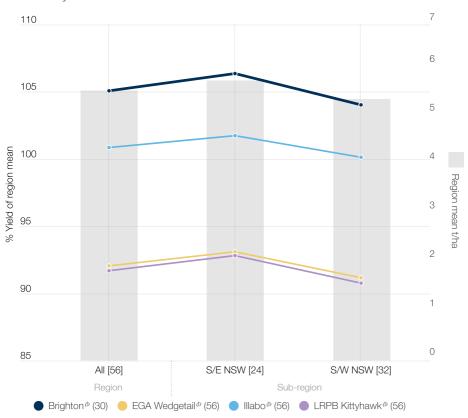
- VI Very Intolerant
- (P) Provisional rating
- NA Not Available
- / Pathotype differences
- Range
- , Mixed phenotype
- # May be more susceptible to alternate pathotypes
- \* NVT consensus ratings 2025

- Rating based on Germination Index Values
- AGT ratings/data interpretation. Comprehensive AGT agronomic trait ratings and data can be found at: https://bit.ly/ TraitRatings

# Grain yield

In early sown NVT trials across southern NSW, Brighton<sup>®</sup> has out-yielded Illabo<sup>®</sup> by 4%, whilst yielding a huge 14% more than both EGA Wedgetail<sup>®</sup> and LRPB Kittyhawk<sup>®</sup> (Figure 1).

Figure 1. Predicted grain yield of Brighton  $^{\rm o}$  versus comparators across southern NSW - early sown NVT



Source: NVT long term MET analysis, early sown trial series 2020-2024

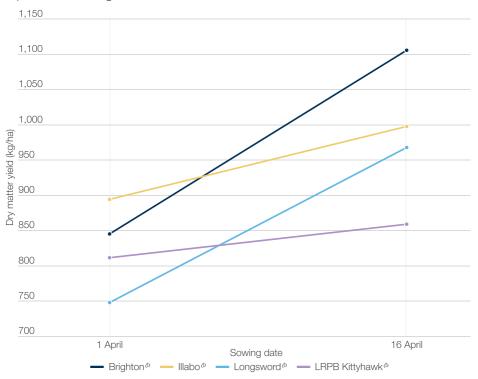
<sup>[]:</sup> Total number of trials per region

<sup>( ):</sup> Number of trials that each variety was present in across the dataset  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right$ 

# Early dry matter production

AGT grazing trial data has demonstrated that up to the appearance of first node, Brighton<sup>®</sup> produced similar amounts of dry matter as Illabo<sup>®</sup>, and more than LRPB Kittyhawk<sup>®</sup> and Longsword<sup>®</sup> (Figure 2).

Figure 2. Early dry matter production of Brighton $^{\rm o}$  versus comparators in response to sowing date



Source: AGT grazing trial 2022, Collingullie NSW

#### Variety comparisons

Brighton $^{\phi}$  is a mid maturing winter wheat, reaching head emergence a little quicker than Illabo $^{\phi}$ .

Brighton<sup>®</sup> has an APH quality classification in southern NSW with an excellent physical grain quality package, offering low screenings levels and a significant test weight improvement over main comparator Illabo<sup>®</sup>.

Brighton  $^{\phi}$  offers a good disease resistance package, including good stripe rust resistance and an improvement in yellow leaf spot compared with Illabo $^{\phi}$ . Brighton's  $^{\phi}$  powdery mildew and septoria Tritici blotch resistance is lower than Illabo $^{\phi}$ .

Table 2. Variety comparisons

		Brighton <sup>®</sup>	EGA Wedgetail®	Illabo <sup>©</sup>	LRPB Kittyhawk <sup>⊕</sup>
	Stem Rust resistance*	MRMS	MRMS	MR	MRMS
	Stripe Rust resistance*	MRMS	MS	MRMS	MR
	Leaf Rust resistance*	S	MSS	S	MR
	Yellow Leaf Spot resistance*	MRMS	MSS	MS	MRMS
	Powdery Mildew resistance*	SVS	MSS (P)	RMR	MS
0	Septoria Tritici Blotch resistance*	S	MSS	MSS	MRMS
Disease	CCN resistance*	R	S	MRMS	S
Ä	Pratylenchus Neglectus resistance*	S	S	MSS	S
	Pratylenchus Neglectus tolerance*	VI (P)	MII	MI	MI
	Pratylenchus Thornei resistance*	MS	VS	MSS	S
	Pratylenchus Thornei tolerance*	MTMI	MII	MII	I
	Crown Rot resistance*	S	S	S	SVS
	Maturity speed^	Mid	Mid	Mid	Mid
	Maturity habit^	Winter	Winter	Winter	Winter
tics	Sowing window <sup>^</sup>	Early	Early	Early	Early
Plant Characteristics	Novel herbicide tolerance^	None (conventional tolerance)	None (conventional tolerance)	None (conventional tolerance)	None (conventional tolerance)
Char.	Head type^	Awned	Awned	Awned	Awned
Plant (	Plant height^	Short to moderately short	Moderately short	Short to moderately short	Moderately short
	Coleoptile length^	Moderate	Short	Short	Short
	Lodging tolerance^	MT	MTMI	MT	MT
Abiotic Stress	Boron tolerance^	Does not carry tolerance gene	Does not carry tolerance gene	Does not carry tolerance gene	Does not carry tolerance gene
Abic	Acid/aluminium tolerance^	Carries tolerance gene	Carries tolerance gene	Does not carry tolerance gene	Does not carry tolerance gene
	Quality classification	APH	APH	APH	APH
Ţ	Grain colour	White	White	White	White
Grain Quality	Screenings level^	Low	Low	Very low	Low
ain (	Test weight^	High	Very low	Very low	Very high
ō	Sprouting tolerance^o	I	MII	MII	I
	Black Point resistance*	MS	MS	MRMS	MRMS



Please contact an AGT Affiliate or your local retailer for seed. Consult the AGT website for AGT Affiliate contact details (www.agtbreeding.com.au/affiliates). AGT varieties can be traded between growers upon the completion of a License Agreement as part of AGT's Seed Sharing™ initiative (www.agtbreeding.com.au/seedsharing)

#### PBR and EPR

Varieties denoted by the <sup>®</sup> symbol are 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. Growers of PBR protected varieties will be subject to a Grower License Agreement that acknowledges that an EPR must be paid on all production other than seed saved for planting.

#### Contact

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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. Wherever possible, independent NVT data has been used in this publication. In the absense of NVT data, AGT data has been provided.