

Brighton[®]



- Dual purpose winter wheat, suitable for grazing and grain production
- A higher yielding alternative to Illabo^Φ, EGA Wedgetail^Φ and LRPB Kittyhawk^Φ
- Mid winter maturity, slightly quicker than Illabo^Φ
- Improved test weight compared with Illabo^Φ and EGA Wedgetail^Φ
- Improved yellow leaf spot resistance over Illabo^Φ and EGA Wedgetail^Φ
- AH quality classification in Vic/SA

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[®] being a popular release from this program. Illabo[®] has been a success story, offering mixed farmers a large step up in performance over the mainstay variety EGA Wedgetail[®].

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

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

Brighton[®] is a mid maturing winter wheat, reaching head emergence slightly faster than Illabo[®] across a range of sowing dates.

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

To maximise grain only yield, Brighton[®] 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[®] may be sown from mid March through to mid April.

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)
Eyespot resistance*	MSS
Crown Rot resistance*	S

Plant Characteristics

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

Abiotic Stress

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

Grain Quality

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

Legend

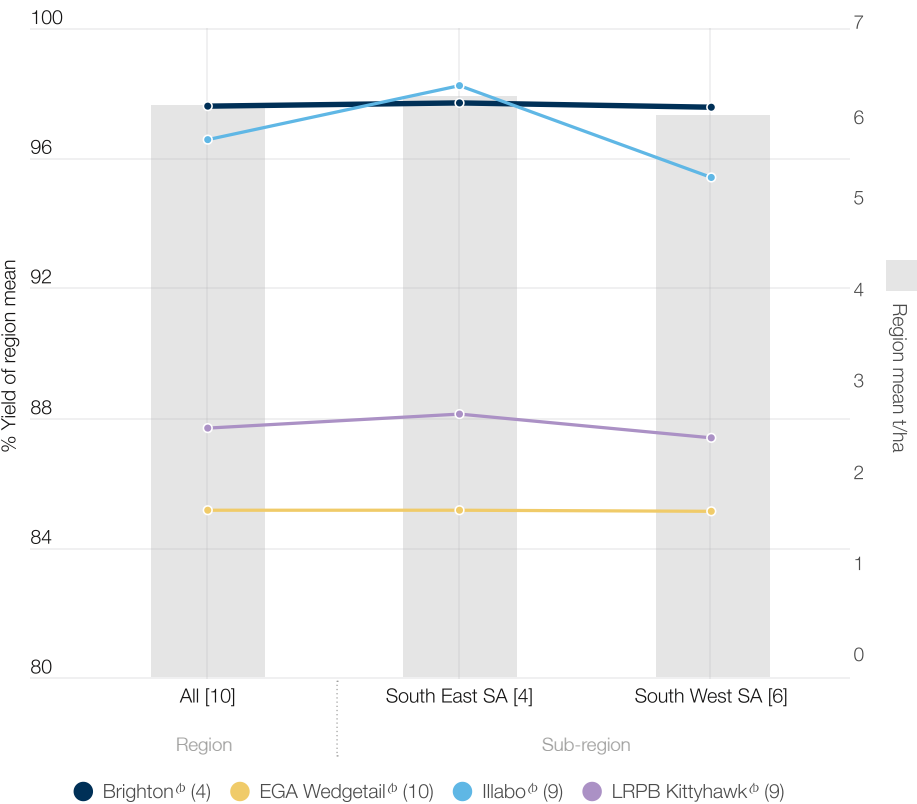
R	Resistant	VI	Very Intolerant	o	Rating based on Germination Index Values
MR	Moderately Resistant	(P)	Provisional rating	^	AGT ratings/data interpretation. Comprehensive AGT agronomic trait ratings and data can be found at: https://bit.ly/TraitRatings
MS	Moderately Susceptible	NA	Not Available		
S	Susceptible	/	Pathotype differences		
VS	Very Susceptible	-	Range		
T	Tolerant	,	Mixed phenotype		
MT	Moderately Tolerant	#	May be more susceptible to alternate pathotypes		
MI	Moderately Intolerant	*	NVT consensus ratings 2025		
I	Intolerant				

Grain yield

In both long season NVT trials (Figure 1) and early sown NVT trials (Figure 2) across higher rainfall zones of SA/Vic, Brighton^ϕ has produced slightly higher yields than Illabo^ϕ, and much higher yields than EGA Wedgetail^ϕ and LRPB Kittyhawk^ϕ.

NVT long season trials are generally sown in April, in areas that experience softer, elongated springs. NVT early sown trials are generally sown in late April/early May.

Figure 1. Predicted grain yield of Brighton^ϕ versus comparators across long season trials



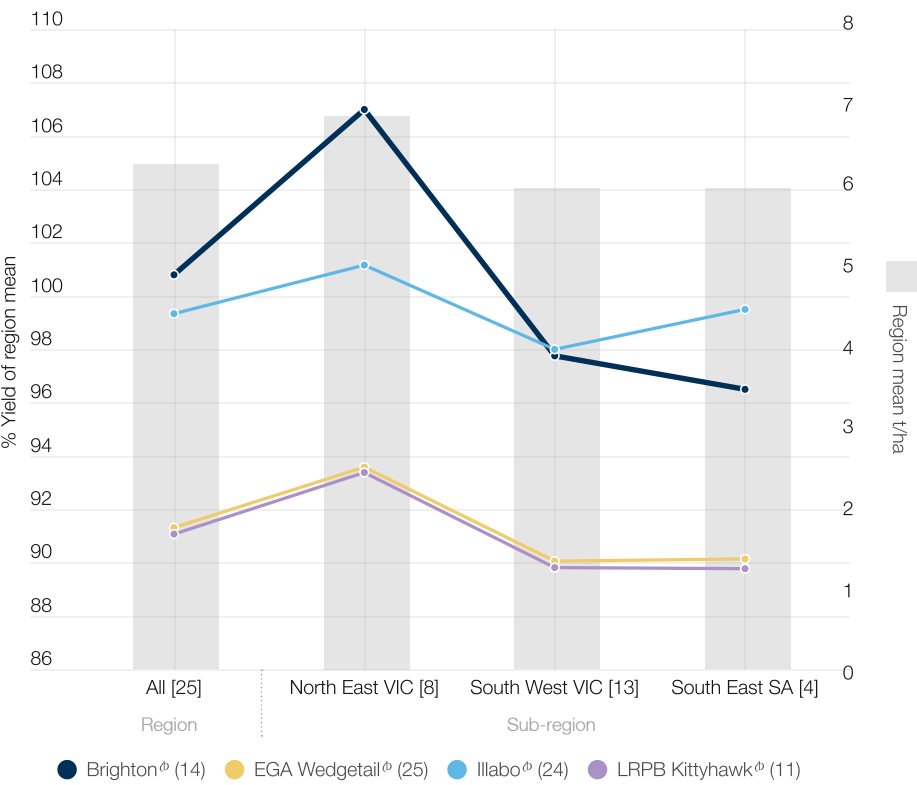
Source: NVT long term MET analysis, main season trial series 2020-2024

[] : Total number of trials per region

() : Number of trials that each variety was present in across the dataset

Grain yield

Figure 2. Predicted grain yield of Brighton^ϕ versus comparators across early sown trials



Source: NVT long term MET analysis, main season trial series 2020-2024

[] : Total number of trials per region

() : Number of trials that each variety was present in across the dataset

Variety comparisons

Brighton^ϕ has an AH quality classification in SA/Vic, and offers low screenings levels and a test weight improvement over main competitor Illabo^ϕ.

Brighton^ϕ offers a good disease resistance package, including good stripe rust resistance and an improvement in yellow leaf spot resistance compared with Illabo^ϕ.

Brighton's^ϕ powdery mildew and septorial tritici blotch resistance is lower than Illabo^ϕ.

Table 2. Variety comparisons

	Brighton ^ϕ	EGA Wedgetail ^ϕ	Illabo ^ϕ	LRPB Kittyhawk ^ϕ
Disease	Stem Rust resistance*	MRMS	MRMS	MR
	Stripe Rust resistance*	MRMS	MS	MRMS
	Leaf Rust resistance*	S	MSS	S
	Yellow Leaf Spot resistance*	MRMS	MSS	MS
	Powdery Mildew resistance*	SVS	MSS (P)	RMR
	Septoria Tritici Blotch resistance*	S	MSS	MSS
	CCN resistance*	R	S	MRMS
	Pratylenchus Neglectus resistance*	S	S	MSS
	Pratylenchus Neglectus tolerance*	VI (P)	MII	MI
	Eyespot resistance*	MSS	NA	S
	Crown Rot resistance*	S	S	S
				SVS
Plant Characteristics	Maturity speed^	Mid	Mid	Mid
	Maturity habit^	Winter	Winter	Winter
	Sowing window^	Early	Early	Early
	Novel herbicide tolerance^	None (conventional tolerance)	None (conventional tolerance)	None (conventional tolerance)
	Head type^	Awned	Awned	Awned
	Plant height^	Short to moderately short	Moderately short	Short to moderately short
	Coleoptile length^	Moderate	Short	Short
	Lodging tolerance^	MT	MTMI	MT
Abiotic Stress	Boron tolerance^	Does not carry tolerance gene	Does not carry tolerance gene	Does not carry tolerance gene
	Acid/aluminium tolerance^	Carries tolerance gene	Carries tolerance gene	Does not carry tolerance gene
Grain Quality	Quality classification	AH	APW	AH
	Grain colour	White	White	White
	Screenings level^	Low	Low	Very low
	Test weight^	High	Very low	Very low
	Sprouting tolerance^	I	MII	MI
	Black Point resistance*	MS	MS	MRMS



Seed Availability

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 ® 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.

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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.