Variety fact sheet – South Australia, Victoria & southern NSW

Bigfoot CL

AGT

Clearfield® Production System

- A higher yielding alternative to Maximus$^{\Phi}$ CL and Commodus$^{\Phi}$ CL, with better standability than Commodus$^{\Phi}$ CL
- Tolerant to Clearfield® Intervix® herbicide
- Good grain size and test weight
- A Compass$^{\Phi}$ style plant type, but shorter and lower risk of lodging
- FEED quality only

Breeder's comments

Barley varieties carrying the Clearfield® tolerance trait have become the most widely grown across SA, Victoria and southern NSW, with the herbicide tolerance trait being of great value to growers in the battle against weeds.

We are proud to release Bigfoot CL$^{\Phi}$ as our first Clearfield® barley variety, in a plant type that will suit a wide range of environments.

Bigfoot CL$^{\Phi}$ is closely related to the taller varieties that offer good early vigour such as Compass$^{\Phi}$ and Commodus$^{\Phi}$ CL (likely to be an important trait in an optimised integrated weed management system), however Bigfoot CL$^{\Phi}$ has reduced height and lower risk of lodging than other Compass$^{\Phi}$ style varieties.

Whilst being a feed quality variety, Bigfoot CL$^{\Phi}$ offers very high yields, particularly in low to medium rainfall environments.

Like other varieties in its family, Bigfoot CL$^{\Phi}$ offers a very good physical grain quality package, producing low levels of screenings, high retentions, and high test weights.

Clearfield® System

Bigfoot CL$^{\Phi}$ has been specifically developed to carry tolerance to Clearfield® Intervix® herbicide. Intervix® is a member of the imidazolinone chemical family with Group 2 (formerly Group B) mode of action, offering one-pass post-emergent knockdown and residual control of many major grass and broadleaf weeds. Intervix® herbicide is available via the Clearfield® Agricentre Agency system, administered by BASF.

For more information visit crop-solutions.basf.com.au/products/intervix or Toll Free 1800 558 399.

Bigfoot CL

Table 1. Specifications

Background

Tested as	AGTB0669
Released	2024
EPR rate	$4.35/tonne + GST

Disease	NSW	SA	Vic
Leaf Rust resistance*	SVS (P)	S (P)	S (P)
Powdery Mildew resistance*	S (P)	S (P)	S (P)
Net Blotch (Net Form) resistance*	NA	MRMS (P)	MRMS (P)
Net Blotch (Spot Form) resistance*	MRMS (P)	MS (P)	MRMS (P)
Scald resistance*	SVS (P)	VS (P)	VS (P)
Barley Yellow Dwarf Virus resistance*	MS (P)	MS (P)	MS (P)
CCN resistance*	R	R	R
Pratylenchus Neglectus resistance*	RMR (P)	RMR (P)	RMR (P)
Pratylenchus Neglectus tolerance*	NA	NA	NA
Pratylenchus Thornei resistance*	RMR (P)	RMR (P)	RMR (P)
Pratylenchus Thornei tolerance*	NA	NA	NA
Crown Rot resistance*	NA	NA	NA

Plant Characteristics

Maturity^	Quick-Mid
Maturity habit^	Spring
Sowing window^	Main & Late
Novel herbicide tolerance^	Clearfield® (Intervix® herbicide)
Head type^	Awned
Early growth habit^	Semi-erect
Rachilla hair^	Long

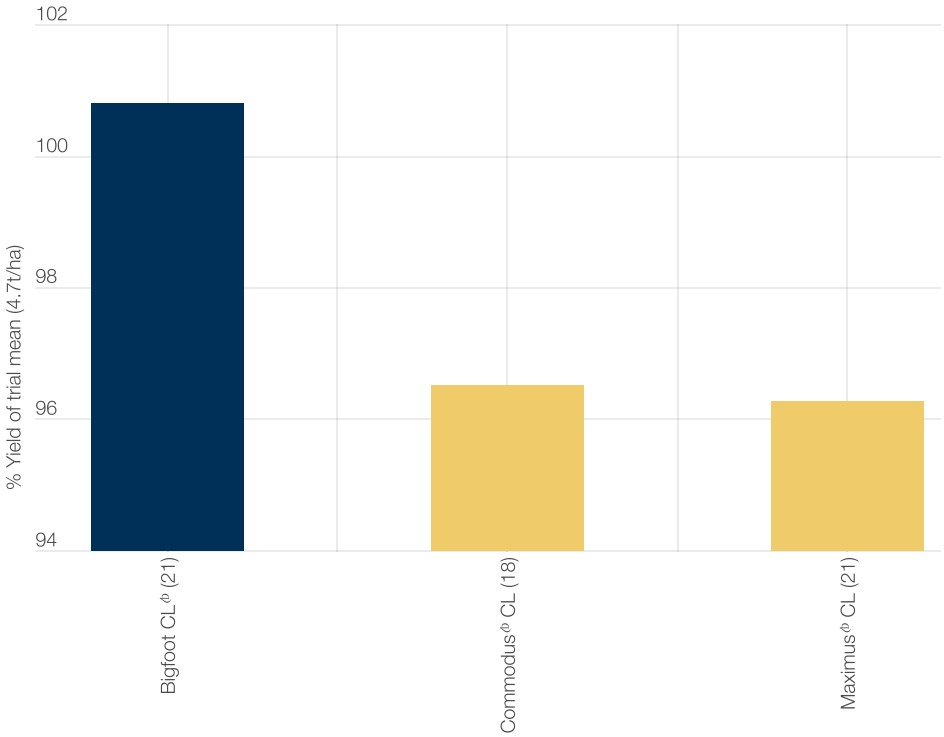
Grain Quality

Quality classification	FEED
Black Point resistance*	S (P)

Grain yield

Bigfoot CL$^{\Phi}$ has been fast-tracked through our breeding program due to it's excellent yield performance relative to other main season Clearfield® barley varieties suited to low-medium rainfall environments, showing an advantage over Maximus$^{\Phi}$ CL and Commodus$^{\Phi}$ CL (Figure 1). Bigfoot CL$^{\Phi}$ was entered into a limited number of NVT trials in 2023, with wider testing being carried out in 2024. Please consult the NVT website for current data: https://nvt.grdc.com.au/trials

Figure 1. Predicted grain yield of Bigfoot CL$^{\Phi}$ versus comparators - AGT data



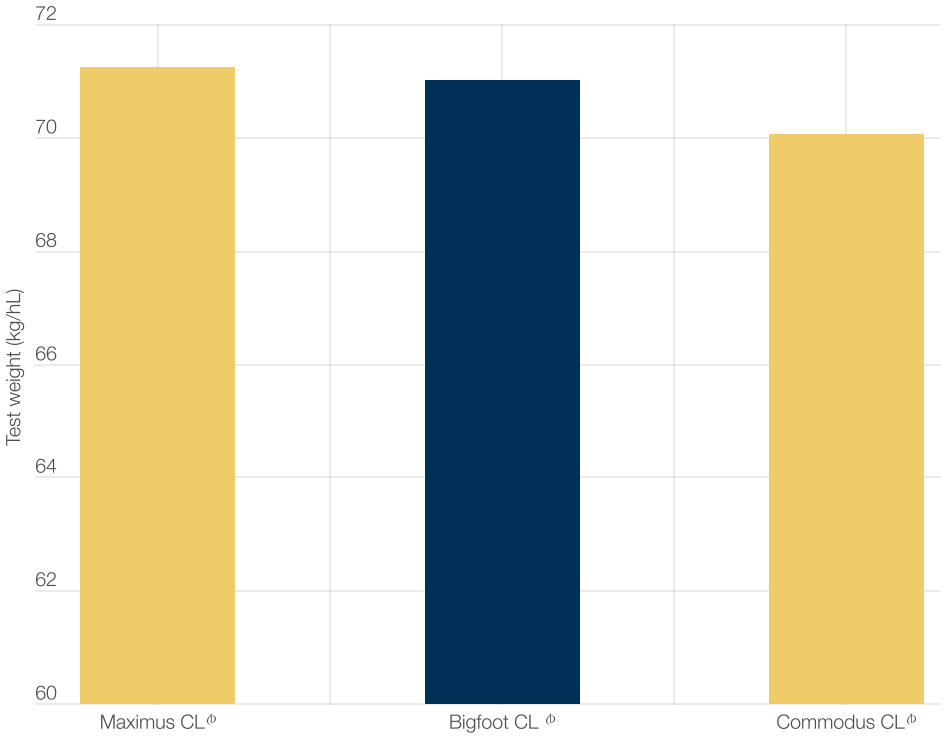
Source: AGT main season trial series 2021-2023 (21 trials across SA/VIC/southern NSW)

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

Grain quality

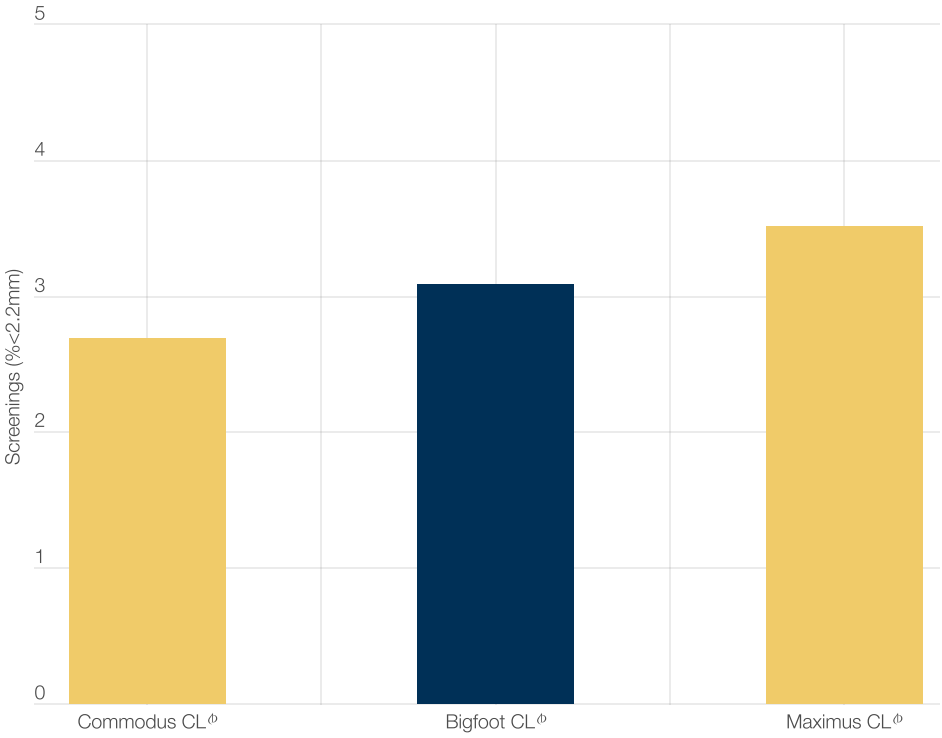
Bigfoot CL$^{\Phi}$ has produced grain with good test weight; and relative to Maximus$^{\Phi}$ CL, has produced lower screenings and higher retentions (Figures 2, 3 & 4).

Figure 2. Test weight of Bigfoot CL$^{\Phi}$ versus comparators



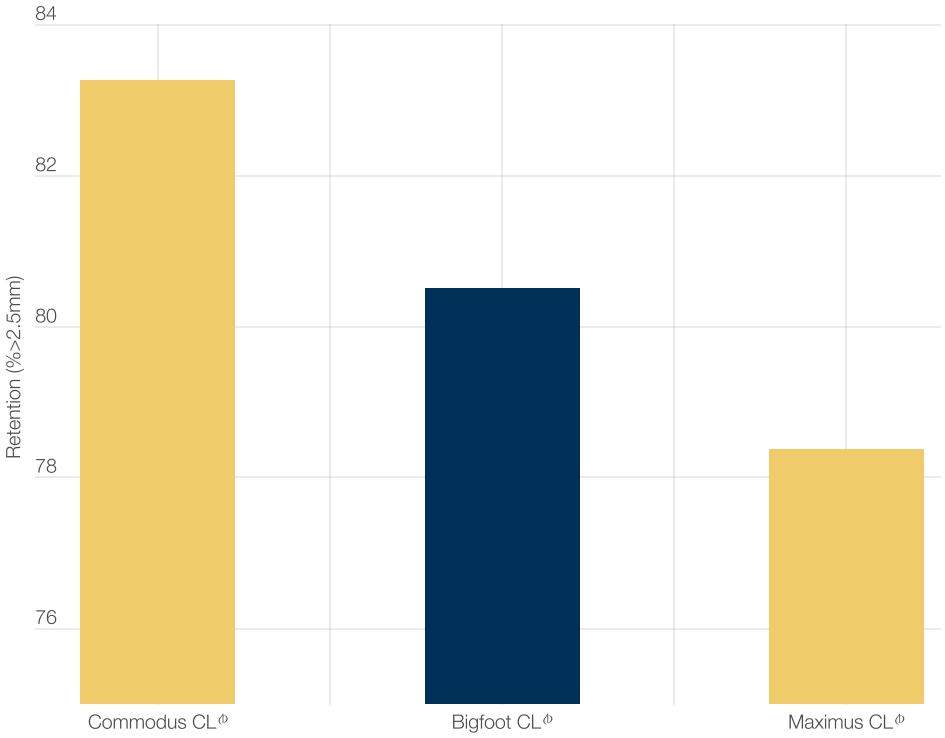
Source: NVT main season trial series 2023 (20 trials across SA/VIC where all varieties were present)

Figure 3. Screenings of Bigfoot CL$^{\Phi}$ versus comparators



Source: NVT main season trial series 2023 (21 trials across SA/VIC where all varieties were present)

Figure 4. Retention of Bigfoot CL$^{\Phi}$ versus comparators

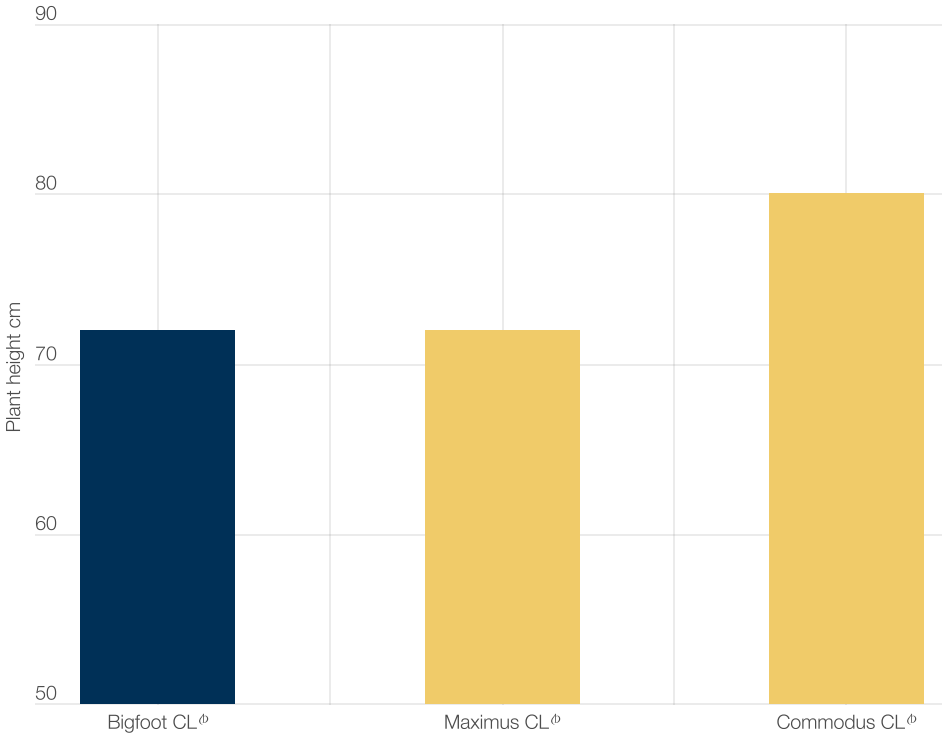


Source: NVT main season trial series 2023 (20 trials across SA/VIC where all varieties were present)

Plant height and lodging

Bigfoot CL$^{\Phi}$ shares a similar plant type to the Compass$^{\Phi}$ family of barley varieties (which includes Commodus CL$^{\Phi}$), generally offering more early vigour than the Hindmarsh$^{\Phi}$ family of varieties (including Maximus CL$^{\Phi}$). However, Bigfoot CL$^{\Phi}$ is shorter, and therefore offers less risk of lodging than Commodus CL$^{\Phi}$ (and others closely related to Compass$^{\Phi}$) (Figures 5 & 6).

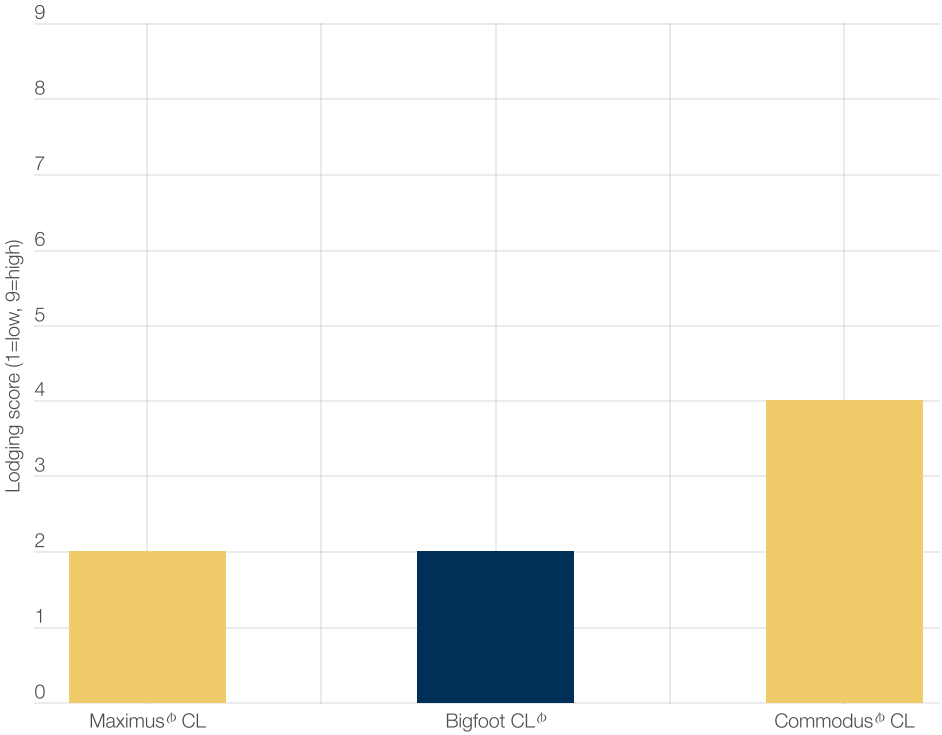
Figure 5. Plant height of Bigfoot CL$^{\Phi}$ versus comparators



Source: AGT barley trials (4 trials across Australia, 2022-2023)

Plant height and lodging

Figure 6. Lodging of Bigfoot CL$^{\Phi}$ versus comparators



Source: AGT barley trials (21 trials across Australia, 2021-2023)

Table 2. Variety comparisons

	Bigfoot CL$^{\phi}$	Commodus$^{\phi}$ CL	Maximus$^{\phi}$ CL
Quality Classification	FEED	MALT	MALT
Maturity^	Quick-mid	Quick-mid	Quick-mid
Leaf Rust resistance* (SA/VIC)	S (P)	S	S
Leaf Rust resistance* (NSW)	SVS (P)	S	MSS
Powdery Mildew resistance*	S (P)	MSS	S
Net Blotch (Net Form) resistance* (SA)	MRMS (P)	MRMS-MSS	MR-MS
Net Blotch (Net Form) resistance* (VIC)	MRMS (P)	MSS	MRMS
Net Blotch (Net Form) resistance* (NSW)	NA	MS	MRMS
Net Blotch (Spot Form) resistance* (SA)	MS (P)	MSS	MS
Net Blotch (Spot Form) resistance* (VIC/NSW)	MRMS (P)	MSS	MS
Scald resistance* (SA)	VS (P)	MSS-SVS	R-SVS
Scald resistance* (VIC)	VS (P)	SVS	SVS
Scald resistance* (NSW)	SVS (P)	SVS	S
Barley Yellow Dwarf Virus resistance*	MS (P)	MRMS-MS	MRMS
CCN resistance*	R	R	R
Pratylenchus Neglectus resistance*	RMR (P)	MRMS	MRMS
Pratylenchus Neglectus tolerance*	NA	TMT	MT
Pratylenchus Thornei resistance*	RMR (P)	MRMS	MRMS
Pratylenchus Thornei tolerance*	NA	MTMI	MI
Crown Rot resistance*	NA	S	S
Black Point resistance*	S (P)	MS	MSS

Legend

R	Resistant
MR	Moderately Resistant
MS	Moderately Susceptible
S	Susceptible
VS	Very Susceptible
T	Tolerant
MT	Moderatly 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 2024
^	AGT ratings/data interpretation

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Seed Availability

Please contact an AGT Affiliate or your local retailer for seed. Consult the AGT website for AGT Affiliate contact details (agtbreeding.com.au/sourcing-seed/agt-affiliates).

PRB and EPR

Varieties denoted by the ϕ 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

Brad Koster, Variety Support Manager SA:	0400 812 475
Rob Harris, Variety Support Manager Vic:	0429 576 044
James Whiteley, Variety Support Manager southern NSW:	0419 840 589
AGT End Point Royalty team:	(08) 7111 0201

agtbreeding.com.au