



Barley

Variety guide

Western Australia



- Very high yielding in low-medium rainfall environments
- Quick maturity, quicker than Compass[Ⓟ]
- Excellent performance in stressed, tight finishing environments and seasons
- Compass[Ⓟ] plant type, with similar early vigour
- Competitive physical grain quality package, with test weight comparable to most commonly grown varieties and excellent grain size resulting in high retentions
- Has entered the Grains Australia malt accreditation program but is currently deliverable as Barley/Feed



- Exceptional yield potential
- Quick-mid maturity, slightly slower than Spartacus CL[Ⓟ]
- Wide adaptation to a range of environments and seasonal conditions
- Erect growing Hindmarsh[Ⓟ] plant type
- Less susceptible to lodging than taller varieties such as Compass[Ⓟ]
- Competitive physical grain quality package
- Improved spot-form net blotch resistance over Rosalind[Ⓟ] and Spartacus CL[Ⓟ]
- Has entered the Grains Australia malt accreditation program but is currently deliverable as Barley/Feed



Minotaur[Ⓛ]

- A lower risk alternative to RGT Planet[Ⓛ] with similar top-end yield potential
- Best suited to medium-high rainfall environments
- Mid-slow maturity, similar to RGT Planet[Ⓛ]
- Broader adaptation than RGT Planet[Ⓛ], delivering more stable yields across a wider range of environmental conditions
- Improved test weight compared with RGT Planet[Ⓛ]
- Has entered the Grains Australia malt accreditation program but is currently deliverable as Barley/Feed



Titan AX[Ⓛ]

- The world's first CoAXium[®] barley variety
- Tolerant to Aggressor[®] (Group 1) herbicide
- Derived from popular variety Compass[Ⓛ]
- Mid season maturity, slightly later than Compass[Ⓛ], similar to RGT Planet[Ⓛ]
- Wide adaptation but particularly suited to low-medium rainfall or Mallee type environments
- Agronomically very similar to Compass[Ⓛ]
- Has entered the Grains Australia malt accreditation program but is currently deliverable as Barley/Feed

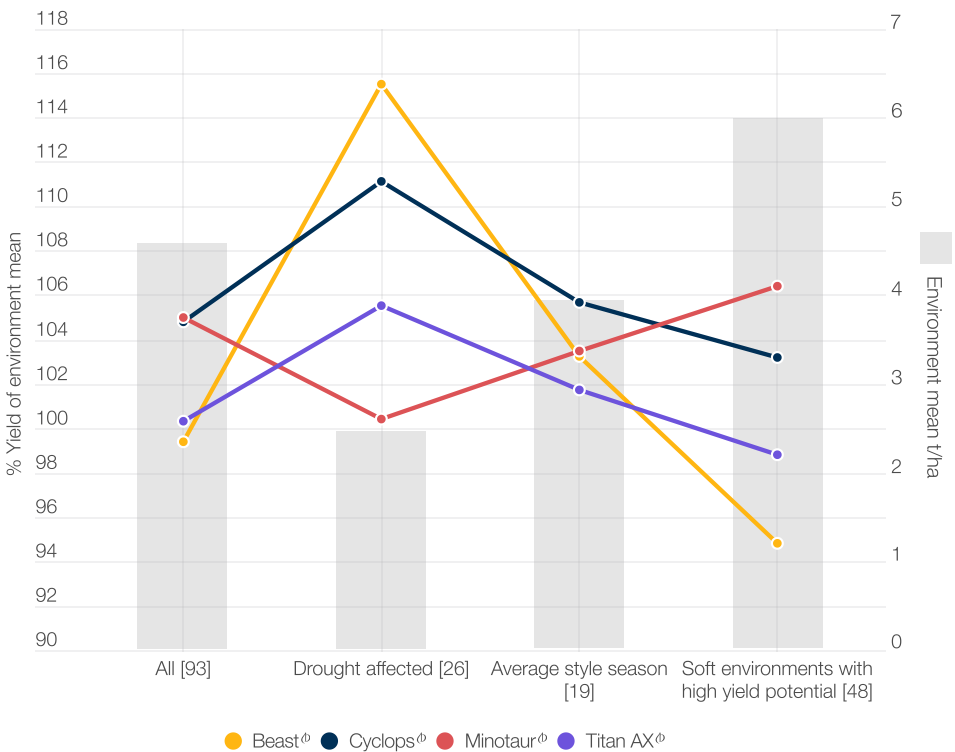
Grain yield

The adaptation of individual varieties is highlighted when AGT single site experiments are grouped based on relative performance of varieties within those trials (Figure 1).

Beast[®] performs particularly well in lower yielding, drought affected sites, while Minotaur[®] performs best under high yield potential or softer environments. Cyclops[®] has recorded high and stable yields across a range of conditions.

This data is backed up by NVT long term yield predictions which shows that Cyclops[®], Beast[®] and Minotaur[®] are all very high yielding choices relative to other malt accredited/under malt evaluation varieties on the market (Figure 2).

Figure 1. Grain yield across a range of growing conditions – AGT long term data

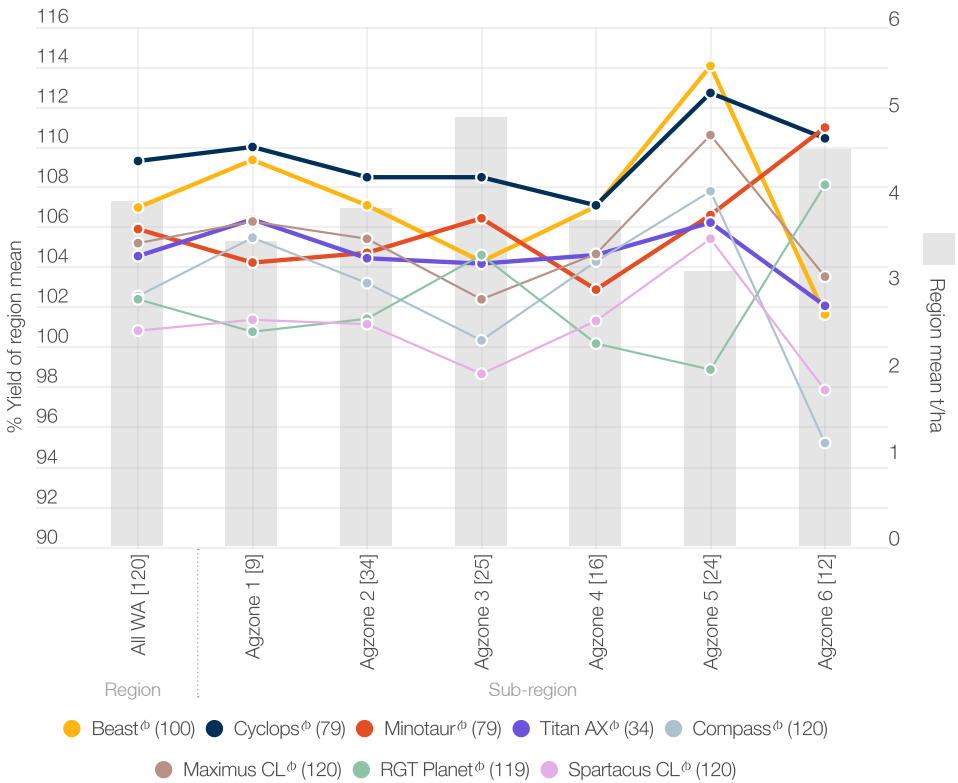


Source: AGT long term MET analysis, all Australian trial sites 2019-2022

[] Total number of trials per environmental grouping

() Number of trials that each variety was present in across the dataset [93]

Figure 2. Predicted grain yield across WA environments – NVT long term data



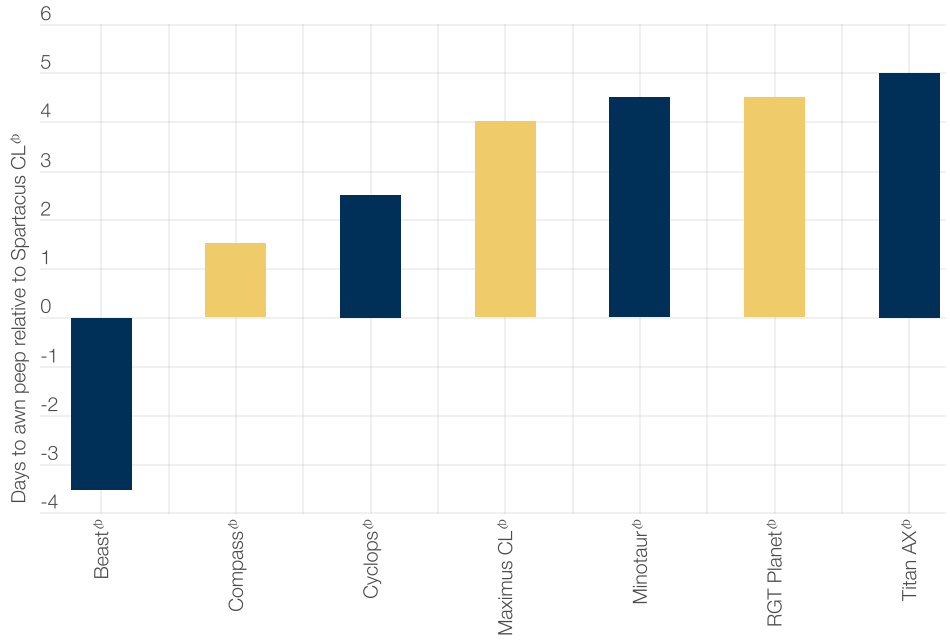
Source: NVT long term MET analysis yield prediction 2018-2022

[] Total number of trials per region

() Number of trials that each variety was present in across the WA dataset [120]

Maturity

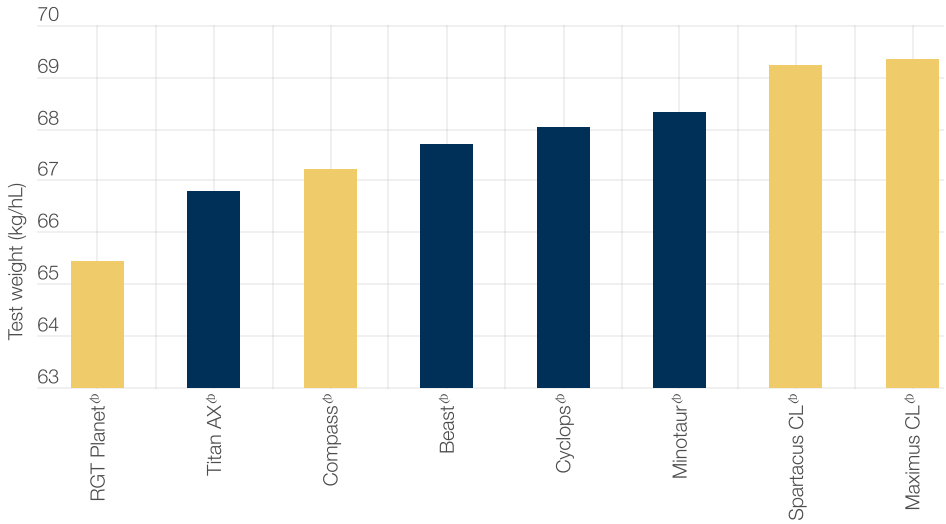
Figure 3. Awn peep of AGT barley varieties and comparators relative to *Spartacus CL*^φ



Source: AGT main season barley trials (Northam WA, 2021-2022)

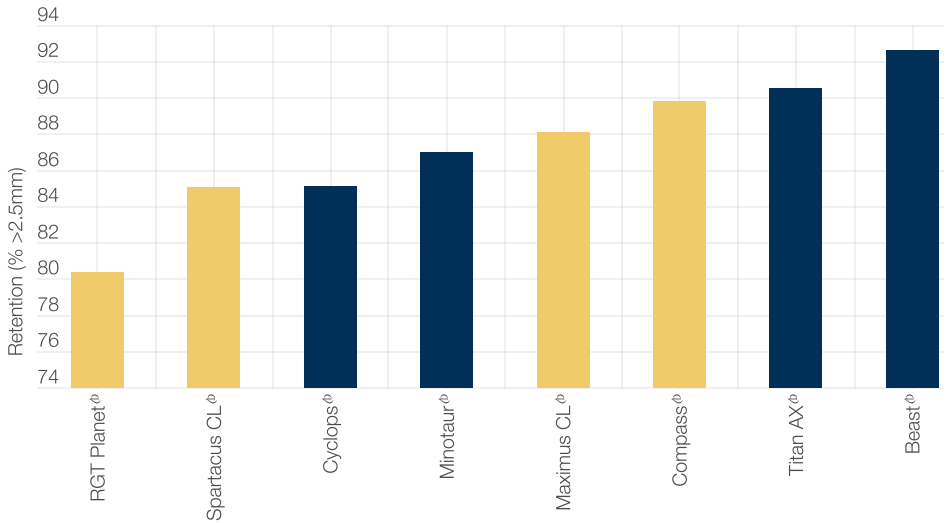
Grain quality

Figure 4. Test weight comparisons



Source: NVT main season barley trial series 2022 (29 sites in WA)

Figure 5. Grain size comparisons



Source: NVT main season barley trial series 2022 (27 sites in WA)

Plant characteristics

Table 1. Plant characteristic comparisons

	Beast ^ϕ	Cyclops ^ϕ	Minotaur ^ϕ	Titan AX ^ϕ
Malt Classification	Potential Malt	Potential Malt	Potential Malt	Potential Malt
Herbicide Tolerance	-	-	-	CoAXium® (Aggressor®)
Plant Height	Tall	Moderately Short	Moderately Short	Tall
Early Vigour	Good	Moderate	Moderate	Good
Early Plant Growth Habit	Semi-erect	Erect	Prostrate	Semi-erect
Lodging Tolerance	Medium to Weak	Medium to Strong	Strong	Medium to Weak
Brackling Tolerance	Medium	Medium	Medium to Strong	Medium
Sprouting Tolerance	Good	Good	Good	Good
Coleoptile Length	Medium Long	Short	Long	Medium Long
Rachilla Hair	Long	Short	Long	Long
Head Loss Tolerance	Medium to Weak	Medium	Medium	Medium to Weak

Disease resistance

Table 2. Disease resistance comparisons

	Beast ^ϕ	Cyclops ^ϕ	Minotaur ^ϕ	Titan AX ^ϕ	Compass ^ϕ	Maximus CL ^ϕ	RGT Planet ^ϕ	Spartacus CL ^ϕ
Spot Form of Net Blotch	MSS	S	S	MS	MSS	MSS	S	SVS
Net Form of Net Blotch	MRMS-S	MR-S	MRMS-MS	MR-MSS	MR-S	MR-S	MRMS-SVS	MRMS-S
Leaf Rust	MSS	S	S	S	S	MSS	MRMS-MS	MSS
Powdery Mildew	MR	MR	S	RMR	R-MRMS	MR	R	MSS
Barley Yellow Dwarf Virus	MS	S	MSS	MS	MS	MRMS	MRMS-MS	MSS
Scald	S	MRMS	VS	S	MS	R	RMR	RMR

R Resistant
 MR Moderately Resistant
 MS Moderately Susceptible
 S Susceptible
 VS Very Susceptible

A range of reactions is provided (separated with -) where different strains of the pathogen exist and where the variety may respond differently to them

Source: NVT consensus ratings 2022

Seed Availability, PBR and EPR

Table 3. Variety comparisons

	Beast [®]	Cyclops [®]	Minotaur [®]	Titan AX [®]
Tested as	AGTB0113	AGTB0200	AGTB0213	AGTB0325
Released	Spring 2020	Spring 2021	Spring 2021	Spring 2022
EPR rate per tonne	\$4.00 + GST	\$4.00 + GST	\$4.00 + GST	\$4.55 + GST
Seed Availability	Affiliates, Retailers & Seed Sharing™			

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 Growers License Agreement that acknowledges that an EPR must be paid on all production other than seed saved for planting.

Commercial quantities of AGT barley varieties may be available through AGT Affiliates, or your local retailer. AGT barley varieties can be traded between growers upon the completion of a License Agreement as part of AGT's Seed Sharing™ initiative.



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Disclaimer: 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.