

# National Variety Trial – Mingenew Barley (BMAA23MING6).

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## Key Messages

- The 2023 season in the region began with a challenging dry start with reasonable follow up rainfall in June and July to promote valuable germination and enabled beneficial growth. Although the current dry conditions are unfavourable.

## Aim

The aim of the National Variety Trials (NVT) is to generate independent information for growers and industry about newly released varieties of field crops to the current commercial varieties grown in the area.

## Background

The NVT program has been designed to identify the highest yielding varieties, free from the constraints of nutrition and disease. As a result, the nutrition and crop protection packages applied to NVT trials are typically higher than may be applied by the average grower. Management is the same for all plots with no differences in timing for crop protection or nutrition.

All trials have 3 replicates of each variety, and all plots are sown (and subsequently harvested) on the same day. Timing of sowing is dependent upon the season but is typically done within an average district “best practice” window and located on a typical soil type for the area.

## Trial Details

<b>Plot size &amp; replication</b>	10 m x 1.75 m x 3 replicates.
<b>Soil type</b>	Sandy Loam.
<b>Paddock rotation:</b>	2022 Canola.
<b>Sowing date</b>	17/05/2023 – Germinating rainfall 31/05/2023.
<b>Sowing rate</b>	150 seed/m <sup>2</sup> .
<b>Fertiliser</b>	12/05/2023: Urea (100 kg/ha) and K Till Extra (130 kg/ha). 05/07/2023: Flexi N (150 L/ha).
<b>Herbicides, insecticides &amp; fungicides</b>	17/05/2023: Knockdown pre-seeding spray. 05/07/2023: Broadleaf & grass spray. 22/08/2023: Insecticide & fungicide spray.  Details of chemicals used and rates available at <a href="http://nvtonline.com.au">nvtonline.com.au</a>
<b>Growing season rainfall until 31<sup>st</sup> August 2023</b>	181.2 mm (01/04/2023 – 31/08/2023).

**Table 1.** Mingenew NVT Cereal Trial Site Total Rainfall (mm).

Source Long Paddock Patch Point Data (Retrieved from <https://www.longpaddock.qld.gov.au/silo/point-data/#>).

Jan	Feb	Mar	April	May	June	July	August
2.1	0	5.1	9.5	15.2	91.5	41.3	23.7

## Soil Composition

**Table 2.** Soil composition of the Mingenew NVT Cereal Trial Site at 0 -10 cm and 10 – 30 cm compiled from CSBP test results.

Depth (cm)	Texture (1 sand, 2 sandy loam, 3 loam, 4 loamy clay, 5 clay)	Total Nitrogen (mg/kg)	Phosphorus (mg/kg)	P Test Type	Organic Carbon (%)	pH (H <sub>2</sub> O)	pH (CaCl <sub>2</sub> )	Conductivity (EC) (dS/m)
0-10	2	21	15	Colwell	0.48	6.9	6.4	0.061
10-30	2	3				7.0	6.2	0.040

## Variety Entry List

**Table 3.** List of barley varieties included into the Mingenew Main Season Barley (BMaA23MING6) NVT Trial for the 2023 season.

1	AGTB0415	14	Fathom	27	SCA21-Y003
2	AGTB0530	15	IGB22012T	28	SCA23-Y004
3	AGTB0532	16	IGB22014T	29	Scope CL
4	Alestar	17	IGB22015T	30	Spartacus CL
5	Bass	18	La Trobe	31	Titan AX
6	Beast	19	Laperouse	32	Zena CL
7	Buff	20	Leabrook		
8	CA22-228	21	Litmus		
9	Combat	22	Maximus CL		
10	Commander	23	Minotaur		
11	Commodus CL	24	Neo		
12	Compass	25	RGT Planet		
13	Cyclops	26	Rosalind		

## Variety Descriptions

For variety descriptions and information on the best choice of variety to grow this season see the 2022 WA Crop Sowing Guide at

<https://grdc.com.au/resources-and-publications/all-publications/nvt-crop-sowing-guides>

## Field Plan

**Table 4.** Field plan of the Mingenew Main Season Barley (BMAA23MING6) NVT Trial for the 2023 season.

	Range 1	Range 2	Range 3	Range 4	Range 5	Range 6
Row 1	Cyclops	Buff	Titan AX	Neo	Bass	Litmus
Row 2	Commodus CL	AGTB0532	SCA21-Y003	Combat	IGB22012T	Laperouse
Row 3	Beast	Compass	AGTB0530	La Trobe	CA22-228	Zena CL
Row 4	SCA23-Y004	Spartacus CL	AGTB0415	Alestar	Minotaur	Commander
Row 5	Rosalind	IGB22014T	Maximus CL	Leabrook	RGT Planet	IGB22015T
Row 6	Scope CL	Fathom	Cyclops	Rosalind	Neo	Leabrook
Row 7	IGB22012T	AGTB0415	Zena CL	AGTB0532	Fathom	AGTB0530
Row 8	Maximus CL	Commander	Bass	RGT Planet	Alestar	Commodus CL
Row 9	Titan AX	La Trobe	Laperouse	Spartacus CL	Beast	Buff
Row 10	CA22-228	Litmus	Compass	Scope CL	IGB22014T	SCA21-Y003
Row 11	Combat	Minotaur	SCA23-Y004	IGB22015T	Titan AX	Compass
Row 12	Bass	IGB22015T	CA22-228	Fathom	SCA23-Y004	Combat
Row 13	Alestar	SCA21-Y003	Commander	Beast	AGTB0532	Cyclops
Row 14	AGTB0530	Neo	Commodus CL	Litmus	Maximus CL	Spartacus CL
Row 15	RGT Planet	Zena CL	IGB22014T	IGB22012T	La Trobe	Rosalind
Row 16	Laperouse	Leabrook	Minotaur	Buff	Scope CL	AGTB0415

## Acknowledgements

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