

National Variety Trial – Mingenew Imidazolinone Canola (CLIA23MING6).

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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

| | |
|--|---|
| Plot size & replication | 10 m x 1.85 m x 3 replicates. |
| Soil type | Sandy Loam. |
| Paddock rotation: | 2022 Wheat. |
| Sowing date | 03/05/2023 – Germinating rainfall 06/05/2023. |
| Sowing rate | 40 targeted seeds/m ² . |
| Fertiliser | 03/05/2023: Urea (100 kg/ha) and K Till Extra (130 kg/ha). 13/06/2023: Flexi N (180 L/ha). 26/07/2023: Flexi N (152 L/ha). |
| Herbicides, insecticides & fungicides | 03/05/2023: Knockdown pre-seeding spray. 04/05/2023: Herbicide spray. 13/06/2023: Broadleaf & grass spray. 26/07/2023: Insecticide & fungicide spray. 24/08/2023: Insecticide & fungicide spray. Details of chemicals used and rates available at nvtonline.com.au |
| Growing season rainfall until 31st August 2023 | 179.8 mm (01/04/2023 – 31/08/2023). |

Table 1. Mingenew NVT Canola & Lupin 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 |
|-----|-----|-----|-------|------|------|------|--------|
| 0.8 | 0 | 5.2 | 9.5 | 15.2 | 90.3 | 42.1 | 22.7 |

Soil Composition

Table 2. Soil composition of the Mingenew NVT Canola & Lupin 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 ₂ O) | pH (CaCl ₂) | Conductivity (EC) (dS/m) |
|------------|--|------------------------|--------------------|-------------|--------------------|-----------------------|-------------------------|--------------------------|
| 0-10 | 2 | 2 | 15 | Colwell | 0.87 | 6.8 | 6.2 | 0.047 |
| 10-30 | 2 | < 1 | | | | 6.5 | 5.8 | 0.032 |

Variety Entry List

Table 3. List of canola varieties included into the Mingenew Imidazolinone Canola (CLIA23MING6) NVT Trial for the 2023 season.

| | | | |
|---|----------------------|----|---------------------|
| 1 | AA0424I | 14 | Hyola Solstice (CL) |
| 2 | AA0686I | 15 | Pioneer 43Y92 (CL) |
| 3 | CL220836 | 16 | Pioneer 44Y94 (CL) |
| 4 | Hyola Continuum (CL) | 17 | PY421C |

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 Imidazolinone Canola (CLIA23MING6) NVT Trial for the 2023 season.

| | Range 1 | Range 2 | Range 3 | Range 4 | Range 5 | Range 6 |
|--------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Row 1 | Pioneer 44Y94 CL | Pioneer 43Y92 (CL) | Hyola Solstice CL | CL220836 | AA0424I | PY421C |
| Row 2 | AA0686I | Hyola Continuum CL | PY421C | AA0686I | CL220836 | Pioneer 43Y92 (CL) |
| Row 3 | AA0424I | Hyola Solstice CL | Pioneer 44Y94 CL | Hyola Continuum CL | Pioneer 44Y94 CL | AA0686I |
| Row 4 | PY421C | CL220836 | Pioneer 43Y92 (CL) | AA0424I | Hyola Continuum CL | Hyola Solstice CL |

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