

## **Crop Report**

9-May-2025

Andrew H Ware: Lock

#### Crop: Wheat Cultivar: Calibre

Sowing details: 150 plants/m<sup>2</sup> on 25-May Expected maturity date: 24-Nov

#### Paddock Details

Initial conditions date: 1-Apr

Soil: Grey Calcareous Loamy Sand (Lock

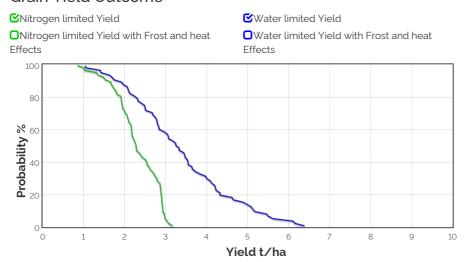
No318)

800 mm max rooting depth

Stubble: 1000 kg/ha of Canola

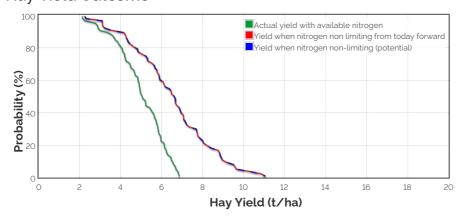
No till

#### Grain Yield Outcome



This graph shows the probability of exceeding a range of yield outcomes this season. It takes into account your pre-season soil moisture, the weather conditions so far, soil N and agronomic inputs. The long term record from your nominated weather station is then used to simulate what would have happened from this date on in each year of the climate record. The yield results are used to produce this graph.

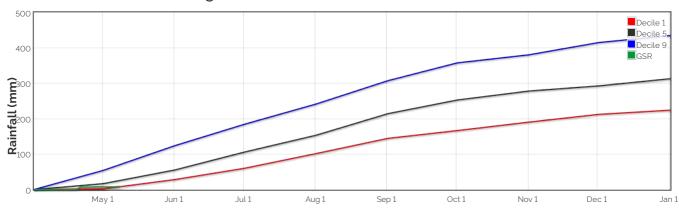
#### Hay Yield Outcome



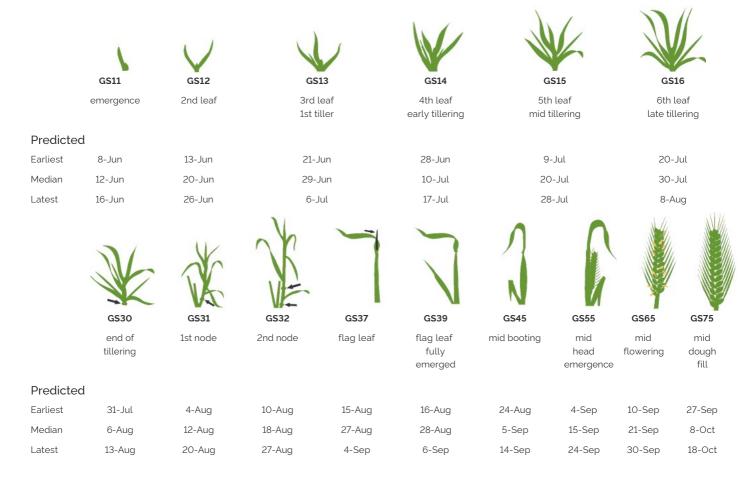
This graph shows the probability of exceeding a range of hay yield outcomes this season. It takes into account the same factors as the grain yield graph above. When above ground dry matter is below 2t/ha, hay yield is assumed to be 70% of dry matter, with a moisture content of 13%. When dry matter is between 2 and 12t/ha, hay yield is assumed to be between 70 and 75% of dry matter (sliding scale). When dry matter is above 12t/ha, hay yield is assumed to be between 75 and 80% (sliding scale).

Current dry matter: Okg/ha

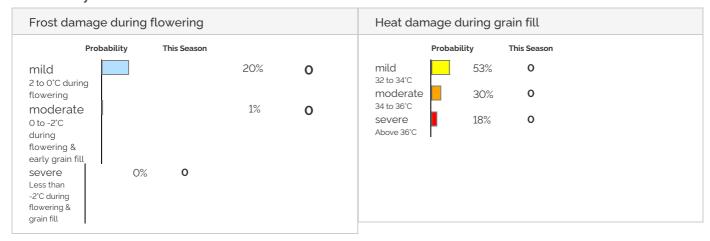
## The Season So Far - Growing Season Rainfall Deciles



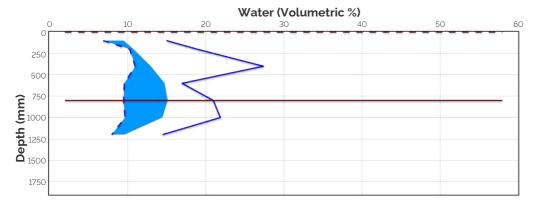
## Simulated and Predicted Crop Growth Stage

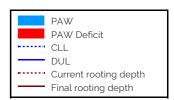


#### Probability and Incidence of Frost and Heat Shock



#### **Current Distribution of PAW**





Current root depth = 0 mm Median final root depth = 800 mm Current crop PAW available to roots = 3 mm Total Soil PAW = 29 mm

PAWC = 87 mm

PAW = Plant Available Water

**CLL** = Crop Lower Limit or Wilting Point

DUL - Drained Upper Limit or Field Capacity

PAWC = Plant Available Water Capacity

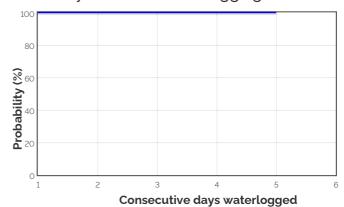
Current Crop PAW = Soil water currently accessible to the roots down to the current rooting depth

Soil PAW = Total accessible soil water in the soil profile

#### Water Budget

Initial PAW status @ 1-Apr 33 mm
Rainfall since 1-Apr 8.6 mm
Irrigations
Evaporation since 1-Apr 9 mm
Transpiration since 1-Apr 0 mm
Deep drainage since 1-Apr 0 mm
Run-off since 1-Apr 0 mm
Current PAW status: 29 mm

#### Probability of Future Waterlogging Events

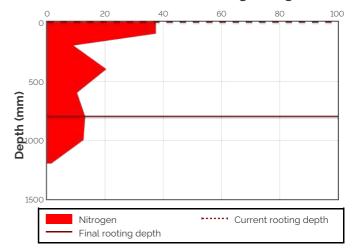


#### Nitrogen Budget

Initial N status @ 1-Apr 87 kg/ha N mineralisation since 1-Apr 16 kg/ha N tie up since 1-Apr 0 kg/ha N applications 1-May: 20 kg/ha Total N in plant 0 kg/ha De-nitrification since 1-Apr 0 kg/ha Leaching since 1-Apr 0 kg/ha **Current N status:** 106 kg/ha

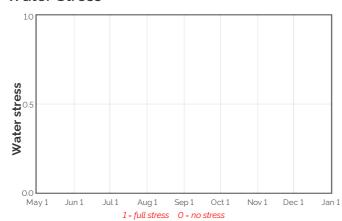
Median N mineralisation to maturity = 62.4698028841927 kg/ha Median N tie up to maturity = 0 kg/ha

## Current distribution of soil nitrogen (kg/ha)

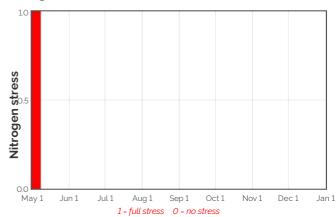


Current Crop Available N = 37 kg/ha Total Soil N = 106 kg/ha

#### Water Stress



## Nitrogen Stress



Brief periods of mild to moderate stress do not necessarily lead to reduced yield. To see the likely impacts of additional nitrogen fertiliser rates use the Nitrogen and Nitrogen Profit reports.

# Median projected crop performance and requirements for the next 10 days assuming no rain and no added fertiliser

Date	Growth	Evap.	Water	N use	Water avail. to roots	Water avail. to roots	N avail.	MineralisationN tie up	
	Stage	(mm)	use (mm)	(kg/ha)	above stress threshold (mm)	above CLL (mm)	to roots (kg/ha)	(kg/ha)	(kg/ha)
10-May	9.0	0.1	0.0	0.0	0.2	2.6	37.6	0.4	0.0
11-May	9.0	0.1	0.0	0.0	0.2	2.6	37.7	0.4	0.0
12-May	9.0	0.1	0.0	0.0	0.2	2.6	37.8	0.4	0.0
13-May	9.0	0.1	0.0	0.0	0.2	2.6	37.9	0.4	0.0
14-May	9.0	0.1	0.0	0.0	0.2	2.6	38.0	0.4	0.0
15-May	9.0	0.1	0.0	0.0	0.2	2.6	38.2	0.4	0.0
16-May	9.0	0.1	0.0	0.0	0.2	2.6	38.3	0.4	0.0
17-May	9.0	0.1	0.0	0.0	0.2	2.6	38.4	0.4	0.0
18-May	9.0	0.1	0.0	0.0	0.2	2.6	38.5	0.4	0.0
19-May	9.0	0.1	0.0	0.0	0.2	2.6	38.6	0.4	0.0

The water available to roots above the stress threshold is the amount of PAW (mm) above one third of the total water holding capacity of this soil. If the water values are below this stress threshold the water available to roots above the stress threshold will be negative.

## Bureau of Meteorology Seasonal and Monthly Outlooks

