

# **Crop Report**

28-Jul-2025

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Crop: Wheat Cultivar: Calibre

Sowing details: 100 plants/m<sup>2</sup> on 15-May Expected maturity date: 16-Nov

#### Paddock Details

Initial conditions date: 1-Apr

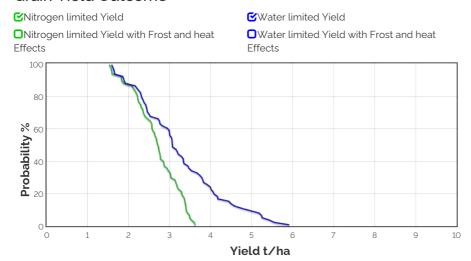
Soil: Red sandy clay loam (Minnipa No909)

1000 mm max rooting depth

2000 kg/ha of Wheat No till

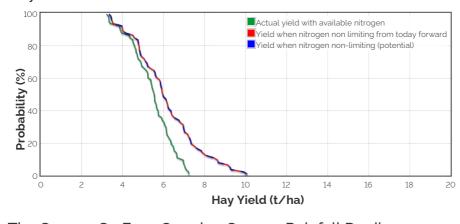
Stubble:

### 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



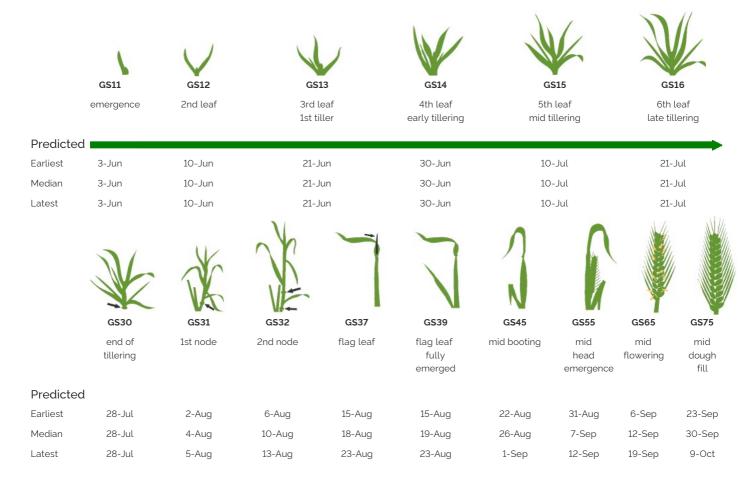
This graph shows the probability of exceeding a range of hay yield outcomes this season. It takes into account the same factors as the grain yield graph above. When above ground dry matter is below 2t/ha, hay yield is assumed to be 70% of dry matter, with a moisture content of 13%. When dry matter is 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: 1459.4026732568248kg/ha

### The Season So Far - Growing Season Rainfall Deciles



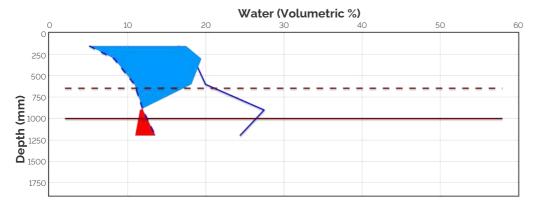
# Simulated and Predicted Crop Growth Stage

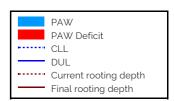


## Probability and Incidence of Frost and Heat Shock

Frost damage during flowering				Heat damage during grain fill		
Probability		Probability This Season		This Season		
mild 2 to 0°C during		1%	0	mild 32 to 34°C	33%	0
lowering				moderate	15%	0
moderate D to -2°C during lowering & early grain fill		0%	0	34 to 36°C SeVere Above 36°C	4%	0
severe ( Less than 2°C during lowering & grain fill	0%					

### **Current Distribution of PAW**





Current root depth = 645 mm Median final root depth = 1000 mm Current crop PAW available to roots = 57 mm Total Soil PAW = 57 mm

PAWC = 139 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

73 mm

20 mm

0 mm

0 mm

57 mm

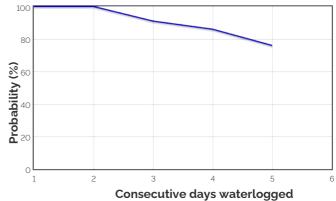
Soil PAW = Total accessible soil water in the soil profile

### Water Budget

Initial PAW status @ 1-Apr Rainfall since 1-Apr Irrigations Evaporation since 1-Apr Transpiration since 1-Apr Deep drainage since 1-Apr Run-off since 1-Apr

**Current PAW status:** 

# Probability of Future Waterlogging Events 9 mm 142.4 mm

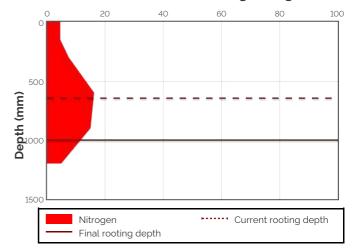


### Nitrogen Budget

Initial N status @ 1-Apr 106 kg/ha 27 kg/ha N mineralisation since 1-Apr N tie up since 1-Apr 0 kg/ha N applications 30-Apr: 14 kg/ha Total N in plant 67 kg/ha De-nitrification since 1-Apr 0 kg/ha Leaching since 1-Apr 0 kg/ha **Current N status:** 49 kg/ha

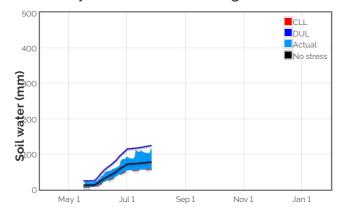
Median N mineralisation to maturity = 40.1892151376411 kg/ha Median N tie up to maturity = 0 kg/ha

# Current distribution of soil nitrogen (kg/ha)

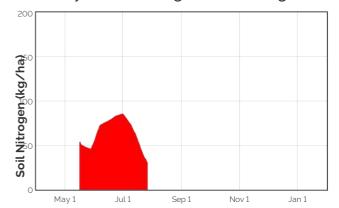


Current Crop Available N = 30 kg/ha Total Soil N = 49 kg/ha

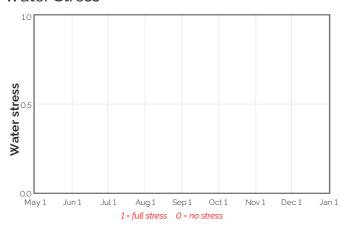
### Availability of Water to Growing Roots



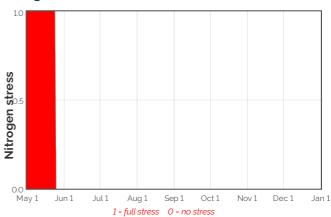
### Availability of Soil Nitrogen to Growing Roots



### 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	(kg/ha)	above stress threshold	above CLL (mm)	to roots	(kg/ha)	(kg/ha)
			(mm)		(mm)		(kg/ha)		
29-Jul	30.2	0.6	1.1	-1.8	35.7	55.8	28.7	0.2	0.0
30-Jul	30.3	0.6	1.1	-1.6	34.0	54.4	27.3	0.2	0.0
31-Jul	30.5	0.5	1.2	-1.4	32.1	52.6	26.1	0.2	0.0
1-Aug	30.6	0.5	1.2	-1.2	30.3	50.9	25.0	0.2	0.0
2-Aug	30.8	0.5	1.3	-1.0	28.7	49.3	24.2	0.2	0.0
3-Aug	30.9	0.5	1.3	-0.9	26.8	47.6	23.4	0.2	0.0
4-Aug	31.4	0.5	1.3	-0.8	24.7	45.8	22.8	0.2	0.0
5-Aug	31.5	0.5	1.3	-0.7	22.8	44.0	22.3	0.2	0.0
6-Aug	31.6	0.5	1.3	-0.7	20.6	42.0	21.8	0.2	0.0
7-Aug	31.8	0.5	1.3	-0.6	18.7	40.3	21.4	0.2	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

