



Crop Report

9-May-2025

Andrew H Ware: Matthews Cootra

Crop: Barley Cultivar: Spartacus

Sowing details: 150 plants/m² on 23-May Expected maturity date: 25-Oct

Paddock Details

Initial conditions date: 1-Apr

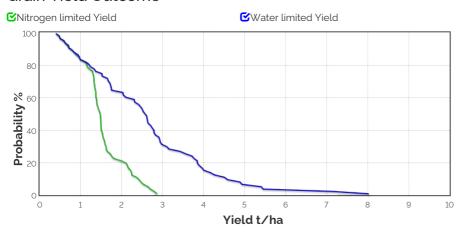
Soil: Sand (Tuckey No366)

1000 mm max rooting depth

Stubble: 1500 kg/ha of Wheat

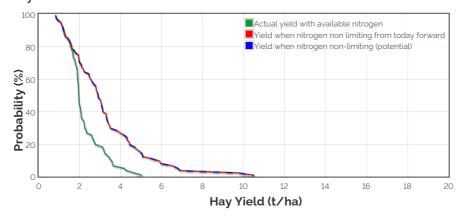
No till

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.

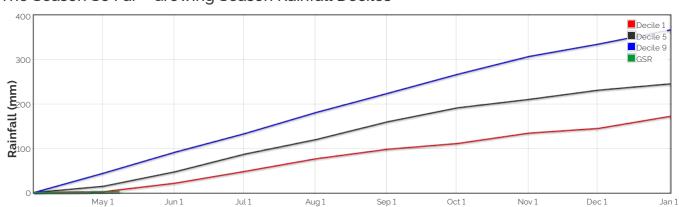
Hay Yield Outcome



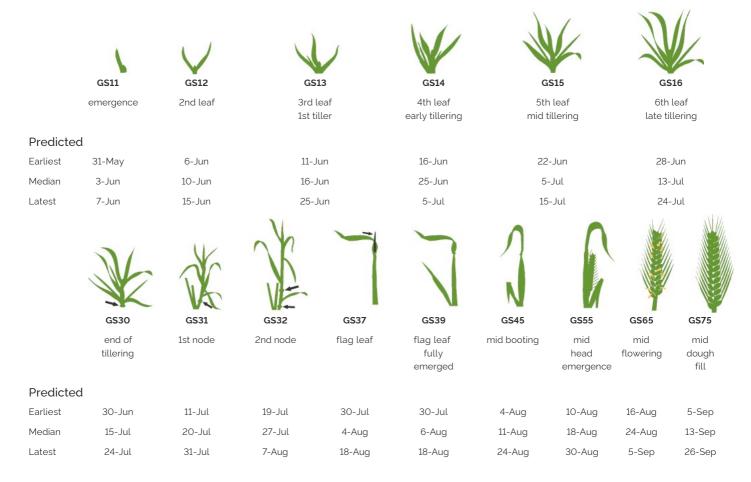
This graph shows the probability of exceeding a range of hay yield outcomes this season. It takes into account the same factors as the grain yield graph above. When above ground dry matter is below 2t/ha, hay yield is assumed to be 70% of dry matter, with a moisture content of 13%. When dry matter is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

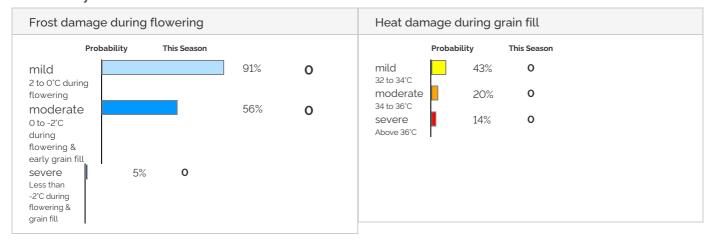
The Season So Far - Growing Season Rainfall Deciles



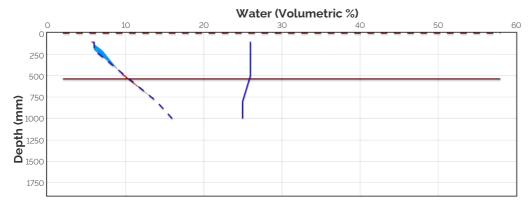
Simulated and Predicted Crop Growth Stage

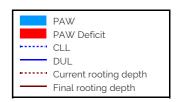


Probability and Incidence of Frost and Heat Shock



Current Distribution of PAW





Current root depth = 0 mm Median final root depth = 536 mm Current crop PAW available to roots = 0 mm Total Soil PAW = 1 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

5 mm

2.2 mm

5 mm

0 mm

0 mm

0 mm

1 mm

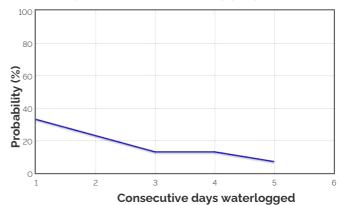
Soil PAW = Total accessible soil water in the soil profile

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

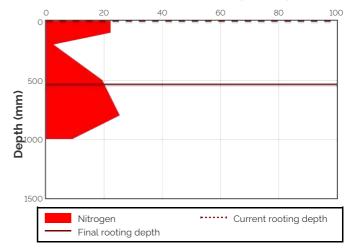


Nitrogen Budget

Initial N status @ 1-Apr 78 kg/ha N mineralisation since 1-Apr 24 kg/ha N tie up since 1-Apr 0 kg/ha N applications 7-May : 5 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:** 79 kg/ha

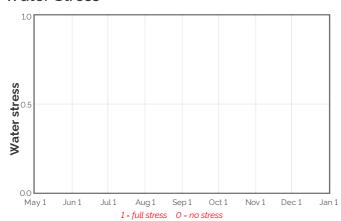
Median N mineralisation to maturity = 49.0876730166366 kg/ha Median N tie up to maturity = 0 kg/ha

Current distribution of soil nitrogen (kg/ha)

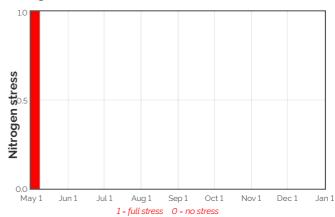


Current Crop Available N = 22 kg/haTotal Soil N = 79 kg/ha

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	10.0	0.1	0.0	0.0	-6.5	0.0	22.2	0.5	0.0
11-May	10.0	0.1	0.0	0.0	-6.5	0.0	22.2	0.5	0.0
12-May	10.0	0.1	0.0	0.0	-6.5	0.0	22.3	0.5	0.0
13-May	10.0	0.1	0.0	0.0	-6.5	0.0	22.3	0.5	0.0
14-May	10.0	0.1	0.0	0.0	-6.5	0.0	22.3	0.5	0.0
15-May	10.0	0.1	0.0	0.0	-6.5	0.0	22.3	0.5	0.0
16-May	10.0	0.1	0.0	0.0	-6.5	0.0	22.3	0.5	0.0
17-May	10.0	0.1	0.0	0.0	-6.5	0.0	22.3	0.5	0.0
18-May	10.0	0.1	0.0	0.0	-6.5	0.0	22.4	0.4	0.0
19-May	10.0	0.1	0.0	0.0	-6.5	0.0	22.4	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

