

Crop Report

11-Nov-2022

Nicole Baty:
Pinkawillinie

Crop: Wheat

Cultivar: GrenadeCLPlus

Sowing details: 150 plants/m² on 12-May

Expected maturity date: 30-Oct

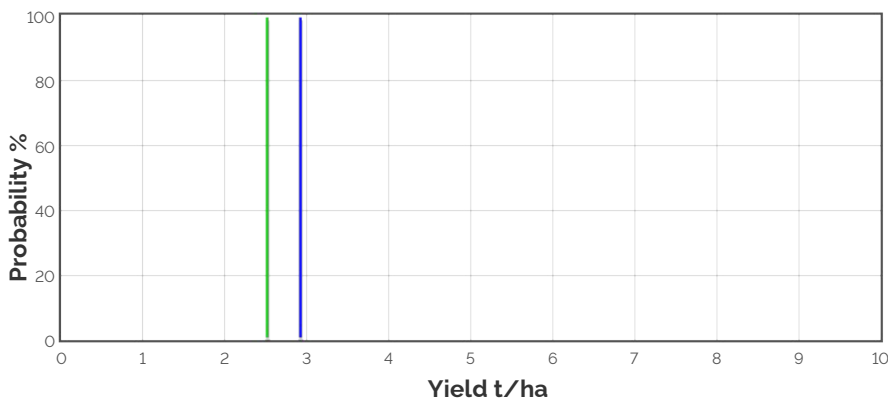
Paddock Details

Initial conditions date: 16-Mar

Soil: ResEP-Buckleboo Sandy Loam over Clay Loam
800 mm max rooting depth
Stubble: 1500 kg/ha of Barley
No till

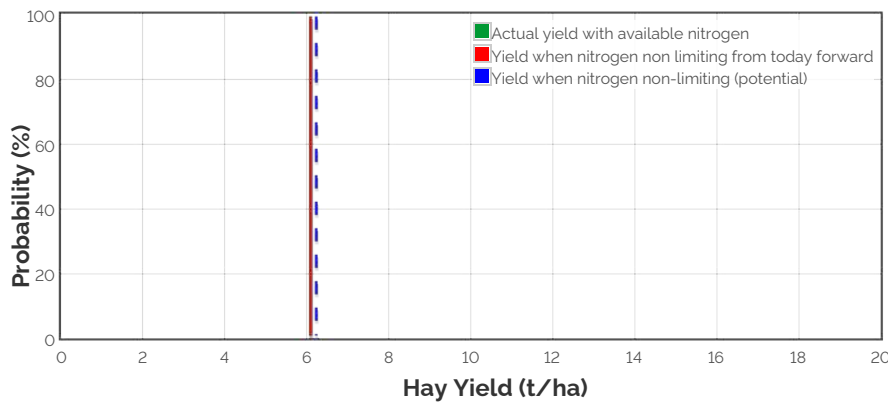
Grain Yield Outcome

- Nitrogen limited Yield
- Water limited Yield
- Nitrogen limited Yield with Frost and heat Effects
- Water limited Yield with Frost and heat Effects



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.

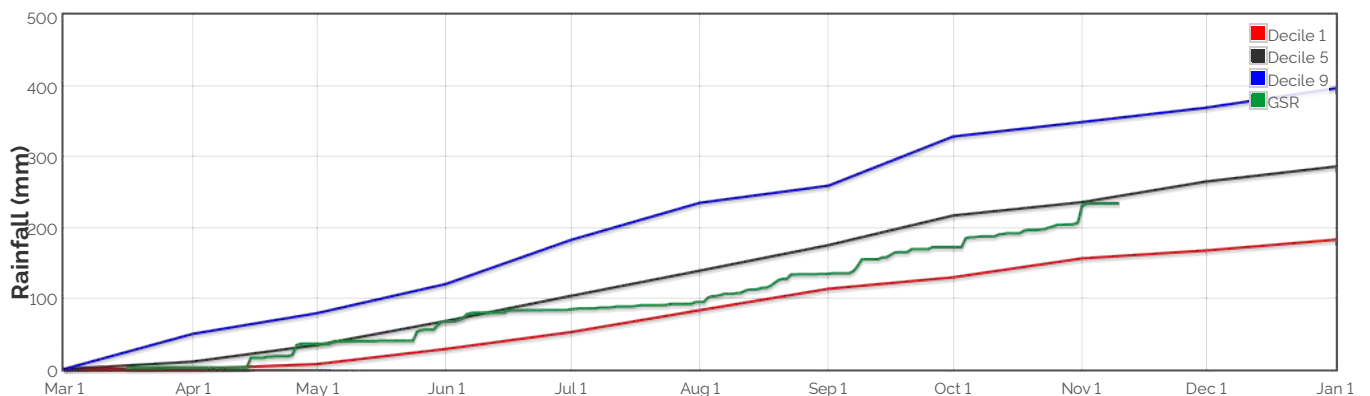
Hay Yield Outcome



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: 0kg/ha

The Season So Far - Growing Season Rainfall Deciles



Simulated and Predicted Crop Growth Stage



Predicted

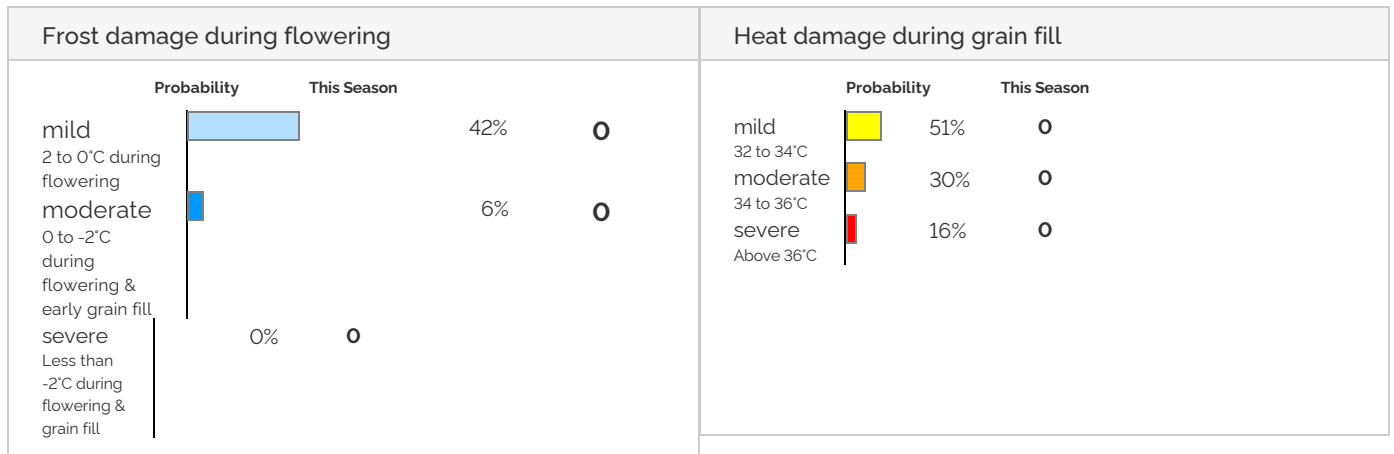
Earliest	22-May	31-May	9-Jun	18-Jun	25-Jun	5-Jul
Median	22-May	31-May	9-Jun	18-Jun	25-Jun	5-Jul
Latest	22-May	31-May	9-Jun	18-Jun	25-Jun	5-Jul



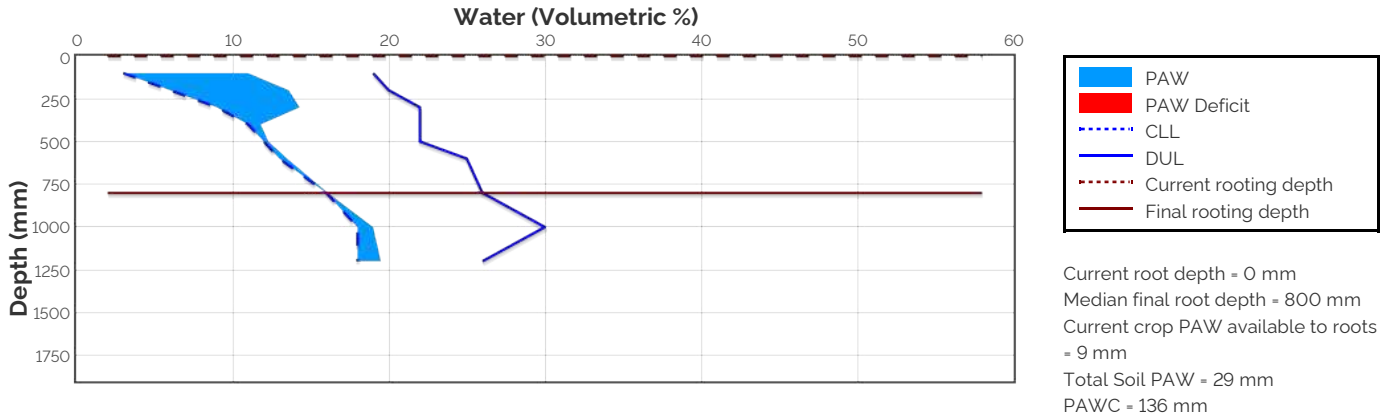
Predicted

Earliest	24-Jul	27-Jul	1-Aug	12-Aug	18-Aug	26-Aug	7-Sep	17-Sep	4-Oct
Median	24-Jul	27-Jul	1-Aug	12-Aug	18-Aug	26-Aug	7-Sep	17-Sep	4-Oct
Latest	24-Jul	27-Jul	1-Aug	12-Aug	18-Aug	26-Aug	7-Sep	17-Sep	4-Oct

Probability and Incidence of Frost and Heat Shock



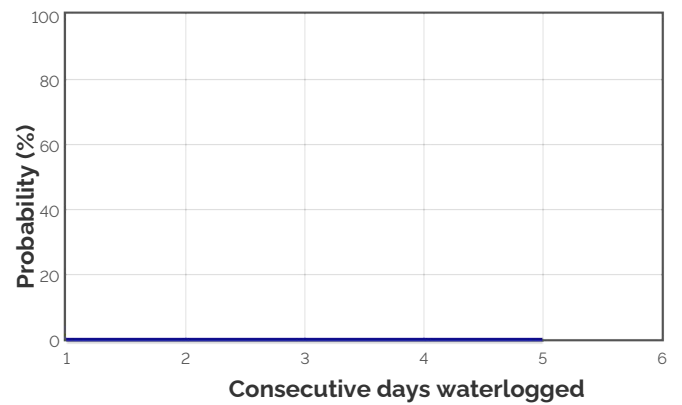
Current Distribution of PAW



Water Budget

Initial PAW status @ 16-Mar	70 mm
Rainfall since 16-Mar	232.8 mm
Irrigations	
Evaporation since 16-Mar	169 mm
Transpiration since 16-Mar	105 mm
Deep drainage since 16-Mar	0 mm
Run-off since 16-Mar	0 mm
Current PAW status:	29 mm

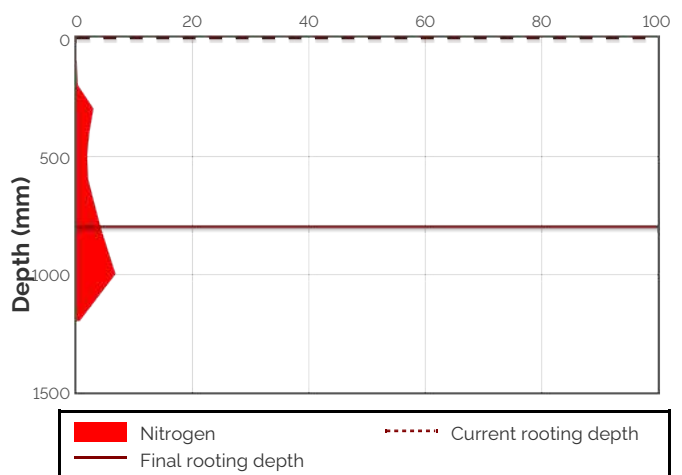
Probability of Future Waterlogging Events



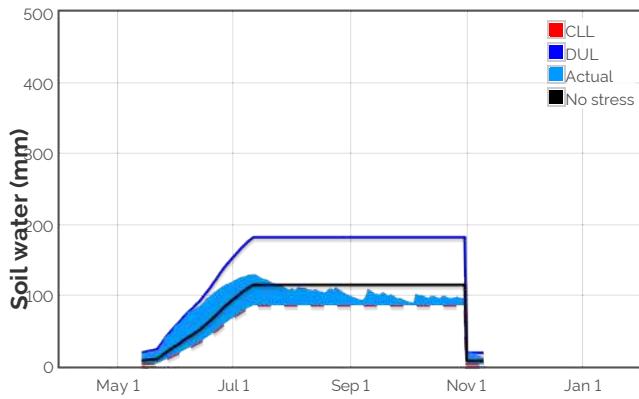
Nitrogen Budget

Initial N status @ 16-Mar	81 kg/ha
N mineralisation since 16-Mar	9 kg/ha
N tie up since 16-Mar	13 kg/ha
N applications	
	12-May : 25.4 kg/ha
	11-Jul : 18.4 kg/ha
Total N in plant	0 kg/ha
De-nitrification since 16-Mar	0 kg/ha
Leaching since 16-Mar	0 kg/ha
Current N status:	21 kg/ha
Median N mineralisation to maturity = 0 kg/ha	
Median N tie up to maturity = 0 kg/ha	

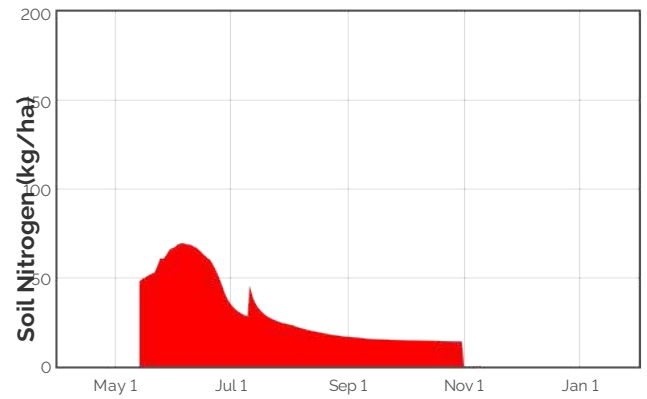
Current distribution of soil nitrogen (kg/ha)



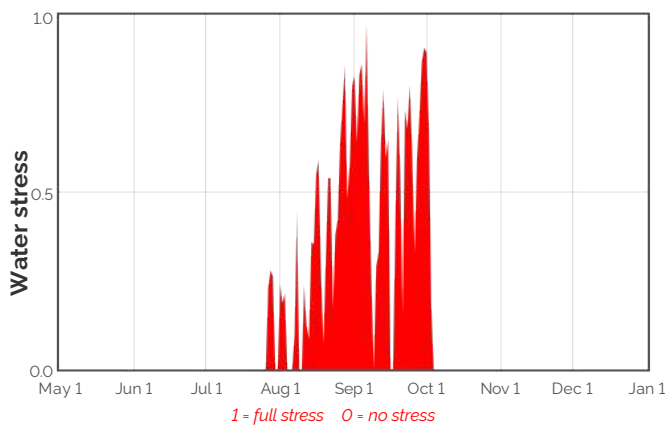
Availability of Water to Growing Roots



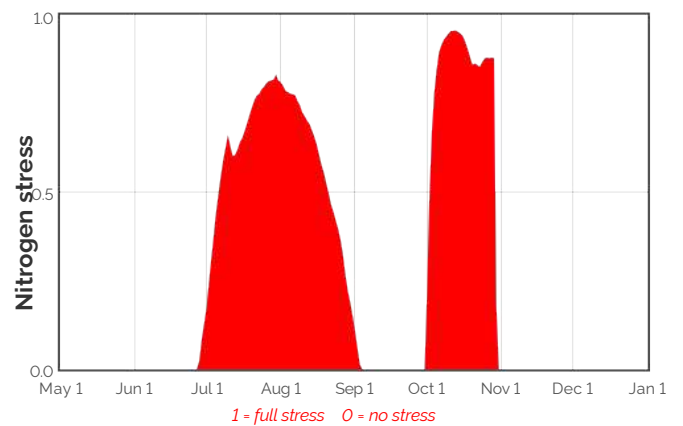
Availability of Soil Nitrogen to Growing Roots



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.

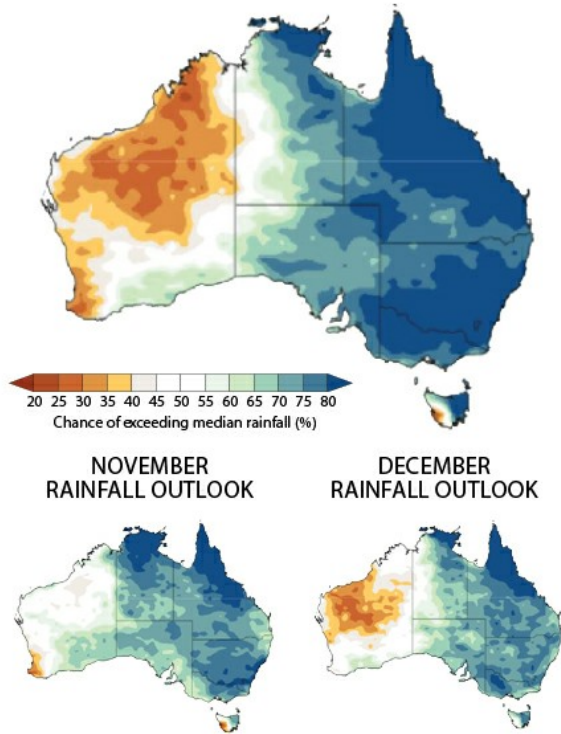
Median projected crop performance and requirements for the next 10 days assuming no rain and no added fertiliser

Date	Growth Stage	Evap. (mm)	Water use (mm)	N use (kg/ha)	Water avail. to roots above stress threshold (mm)	Water avail. to roots above CLL (mm)	N avail. to roots (kg/ha)	Mineralisation (kg/ha)	N tie up (kg/ha)
11-Nov	9.0	0.7	0.0	0.0	2.3	7.1	0.0	0.0	0.1
12-Nov	9.0	0.7	0.0	0.0	2.0	6.8	0.0	0.0	0.1
13-Nov	9.0	0.6	0.0	0.0	1.6	6.4	0.1	0.0	0.0
14-Nov	9.0	0.6	0.0	0.0	1.3	6.1	0.1	0.0	0.0
15-Nov	9.0	0.6	0.0	0.0	1.0	5.8	0.1	0.0	0.0
16-Nov	9.0	0.5	0.0	0.0	0.7	5.5	0.1	0.0	0.0
17-Nov	9.0	0.5	0.0	0.0	0.4	5.2	0.1	0.0	0.0
18-Nov	9.0	0.5	0.0	0.0	0.2	5.0	0.1	0.0	0.0
19-Nov	9.0	0.5	0.0	0.0	-0.1	4.7	0.1	0.0	0.0
20-Nov	9.0	0.5	0.0	0.0	-0.3	4.5	0.1	0.0	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

3 MONTH RAINFALL OUTLOOK FOR NOVEMBER TO JANUARY



PAST ACCURACY FOR NOVEMBER TO JANUARY

