

Crop Report

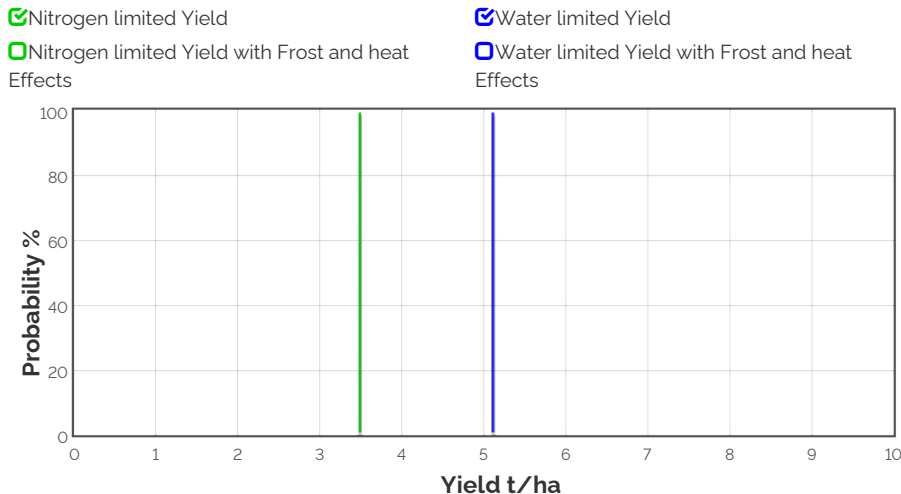
11-Nov-2022

Nicole Baty: Yeelanna

Crop: Canola
 Cultivar: Early
 Sowing details: 45 plants/m² on 29-Apr
 Expected maturity date: 19-Oct

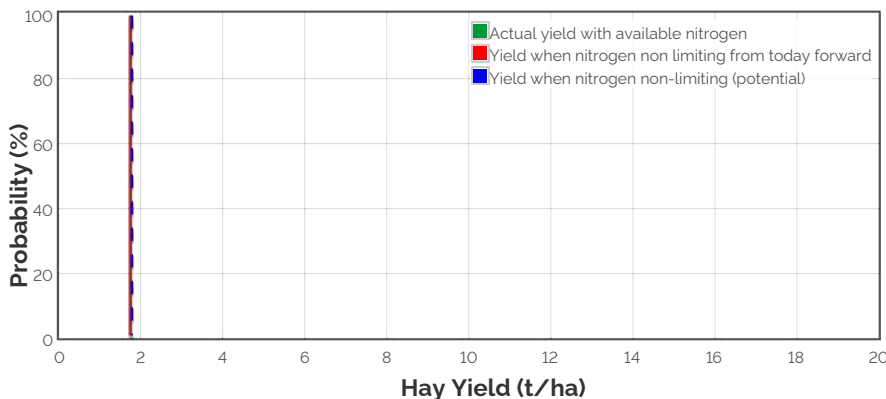
Paddock Details
 Initial conditions date: 24-Mar
 Soil: Clay Loam over Loamy Medium Clay (Yeelanna No590)
 1200 mm max rooting depth
 Stubble: 1000 kg/ha of Lentil
 No till

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.

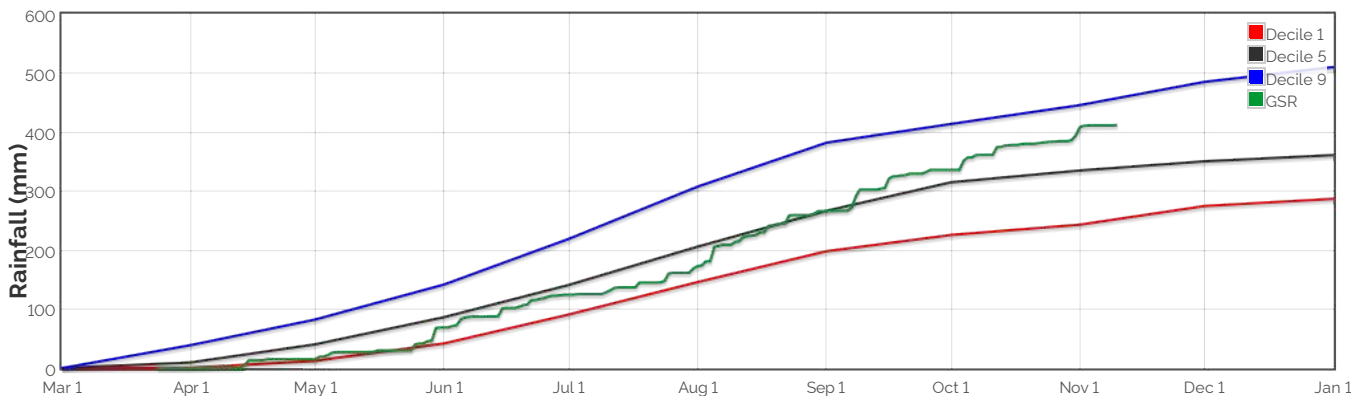
Hay Yield Outcome



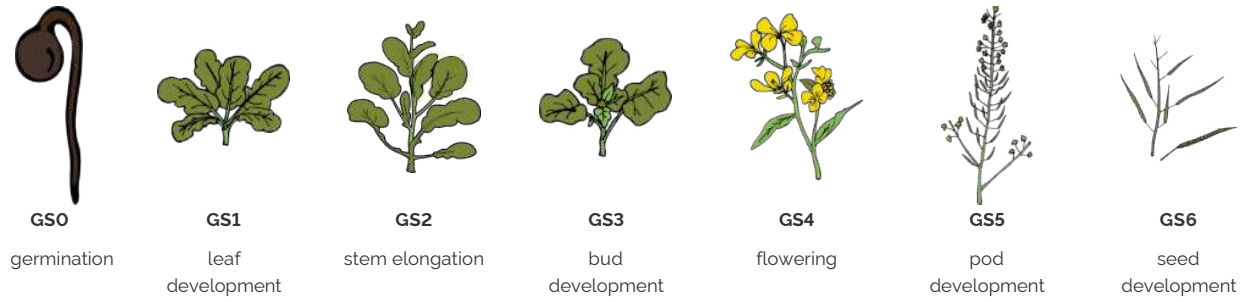
This graph shows the probability of exceeding a range of hay yield outcomes this season. It takes into account the same factors as the grain yield graph above. When above ground dry matter is below 2t/ha, hay yield is assumed to be 70% of dry matter, with a moisture content of 13%. When dry matter is 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: 0kg/ha

The Season So Far - Growing Season Rainfall Deciles



Simulated and Predicted Crop Growth Stage

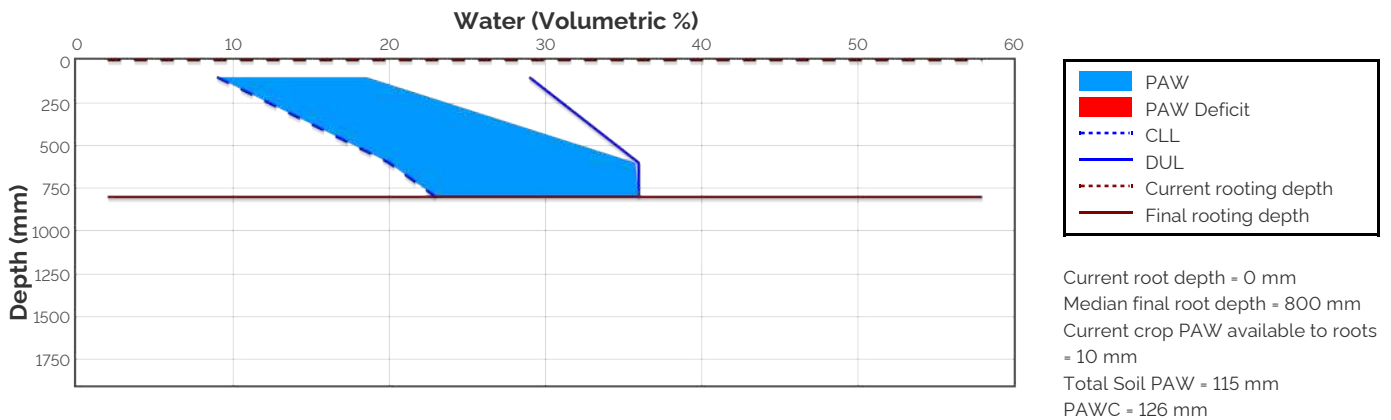


Predicted	→						
Earliest	18-May	23-May	7-Jun	11-Jul	4-Aug	22-Aug	17-Oct
Median	18-May	23-May	7-Jun	11-Jul	4-Aug	22-Aug	17-Oct
Latest	18-May	23-May	7-Jun	11-Jul	4-Aug	22-Aug	17-Oct

Probability and Incidence of Frost and Heat Shock

Frost damage during flowering			Heat damage during grain fill		
	Probability	This Season		Probability	This Season
mild 2 to 0°C during flowering	100%	1	mild 32 to 34°C	0%	0
moderate 0 to -2°C during flowering & early grain fill	0%	0	moderate 34 to 36°C	0%	0
severe Less than -2°C during flowering & grain fill	0%	0	severe Above 36°C	0%	0

Current Distribution of PAW

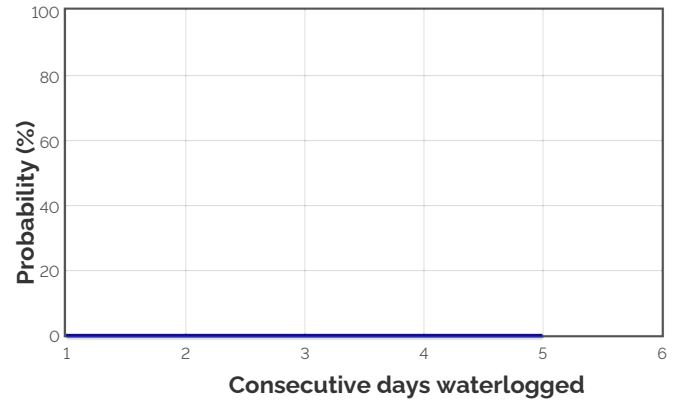


PAW = Plant Available Water
CLL = Crop Lower Limit or Wilting Point
DUL = Drained Upper Limit or Field Capacity
PAWC = Plant Available Water Capacity
Current Crop PAW = Soil water currently accessible to the roots down to the current rooting depth
Soil PAW = Total accessible soil water in the soil profile

Water Budget

Initial PAW status @ 24-Mar	90 mm
Rainfall since 24-Mar	411.9 mm
Irrigations	
Evaporation since 24-Mar	203 mm
Transpiration since 24-Mar	161 mm
Deep drainage since 24-Mar	20 mm
Run-off since 24-Mar	2 mm
Current PAW status:	115 mm

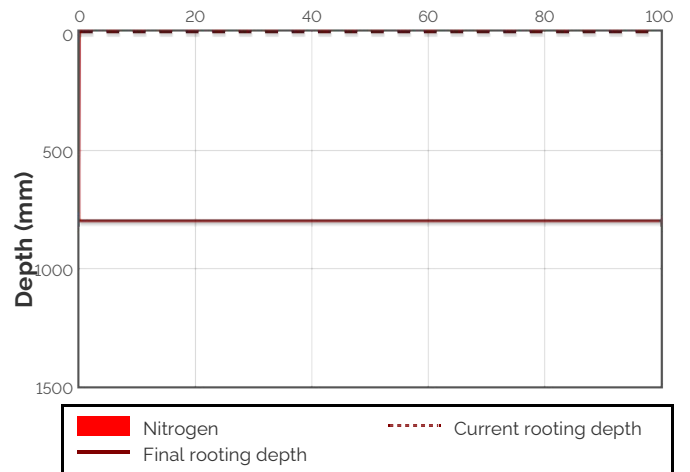
Probability of Future Waterlogging Events



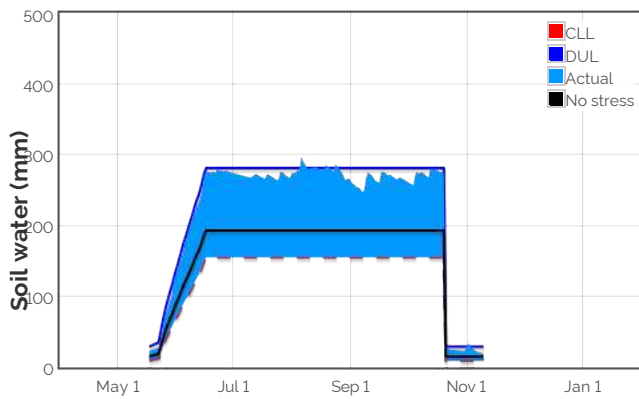
Nitrogen Budget

Initial N status @ 24-Mar	121 kg/ha
N mineralisation since 24-Mar	20 kg/ha
N tie up since 24-Mar	4 kg/ha
N applications	
29-Apr : 16.1 kg/ha	
16-Jun : 46 kg/ha	
8-Jul : 57.5 kg/ha	
Total N in plant	0 kg/ha
De-nitrification since 24-Mar	1 kg/ha
Leaching since 24-Mar	4 kg/ha
Current N status:	0 kg/ha

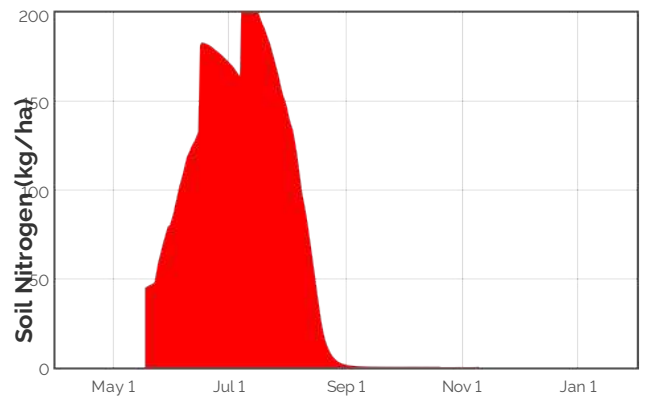
Current distribution of soil nitrogen (kg/ha)



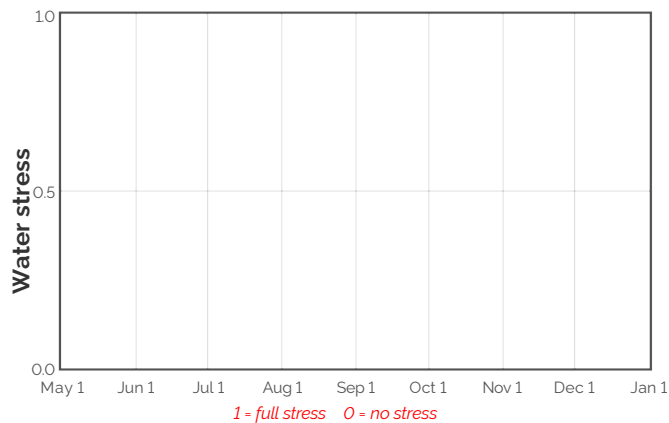
Availability of Water to Growing Roots



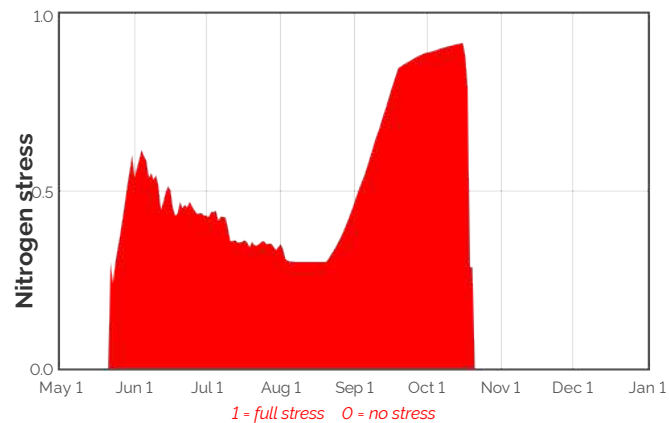
Availability of Soil Nitrogen to Growing Roots



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.

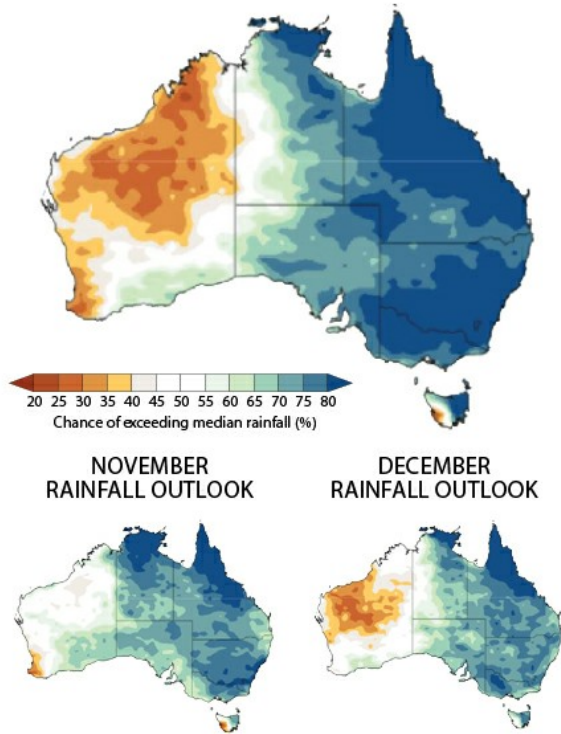
Median projected crop performance and requirements for the next 10 days assuming no rain and no added fertiliser

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	0.6	0.0	0.0	2.6	8.6	0.2	0.0	0.0
12-Nov	9.0	0.6	0.0	0.0	2.2	8.2	0.2	0.0	0.0
13-Nov	9.0	0.6	0.0	0.0	1.8	7.8	0.1	0.0	0.0
14-Nov	9.0	0.5	0.0	0.0	1.4	7.4	0.1	0.0	0.0
15-Nov	9.0	0.5	0.0	0.0	1.1	7.1	0.1	0.0	0.0
16-Nov	9.0	0.5	0.0	0.0	0.8	6.8	0.1	0.0	0.0
17-Nov	9.0	0.5	0.0	0.0	0.4	6.4	0.1	0.0	0.0
18-Nov	9.0	0.5	0.0	0.0	0.1	6.1	0.1	0.0	0.0
19-Nov	9.0	0.4	0.0	0.0	-0.2	5.8	0.1	0.0	0.0
20-Nov	9.0	0.4	0.0	0.0	-0.4	5.6	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

