



Yield Prophet - Spring Field Day

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The Liebe Group acknowledges the support from the GRDC and the Department of Agriculture, Fisheries and Forestry



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COGGO

Main Trial Site, East Maya (Red Loam)

Site Rainfall

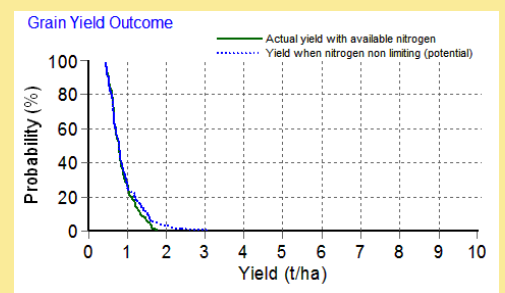
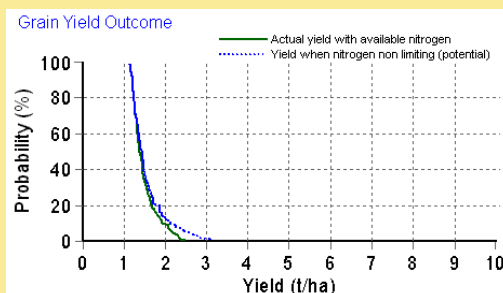
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1									20			
2												
3												
4												
5												
6				13								
7												
8												
9							22					
10							7					
11							1					
12						1	4	4.5				
13								16				
14								1				
15												
16						15						
17								1.5				
18												
19					3							
20												
21			5									
22			25									
23					7							
24						5						
25												
26												
27												
28												
29												
30												
31								15				
Total	0	0	30	13	10	21	34	38	20	0	0	0

Total rainfall for the year from the 1st of April: mm
 Total rainfall for the whole year: mm

Grain Yield Predictions

8th September (113mm GSR)

14th August (55mm GSR)



SITE DESCRIPTION

PROPERTY: Liebe Group Main Trial Site.

Rob Nankivell, East Maya.

SOIL TYPE: Red Loam

ROTATIONS:

2009 = Field Peas

2008 = Wheat

2007 = Wheat

VARIETY: Wyalkatchem

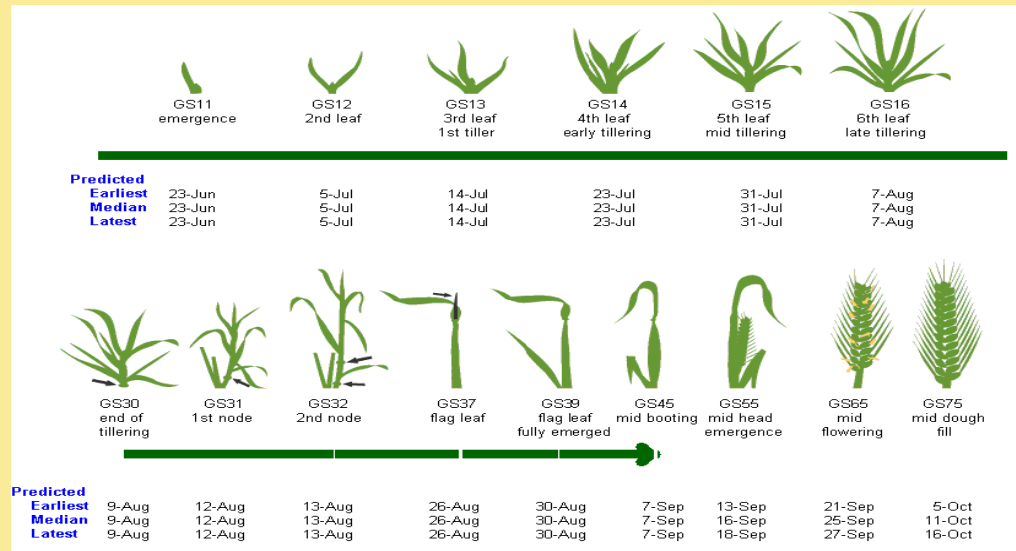
SOWING DATE: 1/6/2010

Probability of Heat Stress

Percentage of years in which heat shock occurs during grain fill (Z70-T9)

Mild	Maximum temperature between 32 and 34°C	38%
Moderate	Maximum temperature between 34 and 36°C	21%
Severe	Maximum temperature above 36°	9%

Phenology



Practice for Profit Sensitivity Analysis

Treatment 1: Low Inputs

Wheat (1.0 ha)			Break-Even \$/t	200.00 t/ha 0.70		270.00 0.52		300.00 0.46	
	t/ha	t		GM \$	GM \$/ha	GM \$	GM \$/ha	GM \$	GM \$/ha
Pess.	1.10	1.10	126.64	\$81	\$80.69	\$158	\$157.69	\$191	\$190.69
Exp.	1.40	1.40	99.51	\$141	\$140.69	\$239	\$238.69	\$281	\$280.69
Opt.	1.50	1.50	92.87	\$161	\$160.69	\$266	\$265.69	\$311	\$310.69

This report has been created with assistance from:



Treatment 2: Inputs Actively Managed

Wheat (1.0 ha)			Break-Even \$/t	200.00 t/ha 1.29		270.00 0.95		300.00 0.86	
	t/ha	t		GM \$	GM \$/ha	GM \$	GM \$/ha	GM \$	GM \$/ha
Pess.	1.10	1.10	234.19	\$-38	\$-37.61	\$39	\$39.39	\$72	\$72.39
Exp.	1.40	1.40	184.01	\$22	\$22.39	\$120	\$120.39	\$162	\$162.39
Opt.	1.70	1.70	151.54	\$82	\$82.39	\$201	\$201.39	\$252	\$252.39

SITE DESCRIPTION

PROPERTY: Liebe Group Long Term Research Site, West Buntine.

Stuart and Leanne McAlpine, West Buntine.

SOIL TYPE: Deep Yellow Sand

ROTATIONS:
2009 = Lupins
2008 = Wheat
2007 = Wheat

VARIETY: Magenta

SOWING DATE: 28/5/2010

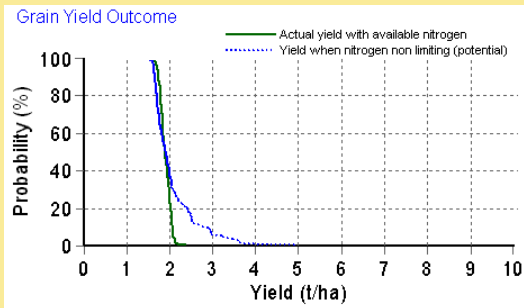
Treatment 3: High Inputs

Wheat (1.0 ha)			200.00		270.00		300.00		
t/ha	t	Break-Even \$/t	t/ha	GM \$	GM \$/ha	GM \$	GM \$/ha	GM \$	GM \$/ha
Pess.	1.10	349.18	1.92	\$-164	\$-164.10	\$-87	\$-87.10	\$-54	\$-54.10
Exp.	1.40	274.36		\$-104	\$-104.10	\$-6	\$-6.10	\$36	\$35.90
Opt.	2.00	192.05		\$16	\$15.90	\$156	\$155.90	\$216	\$215.90

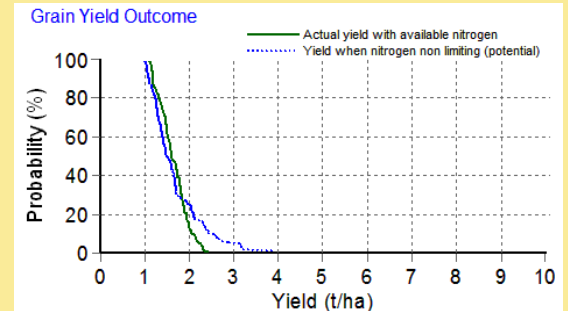
Yield Prophet at Other 2010 Sites

Long Term Research Site, West Buntine (Sand)

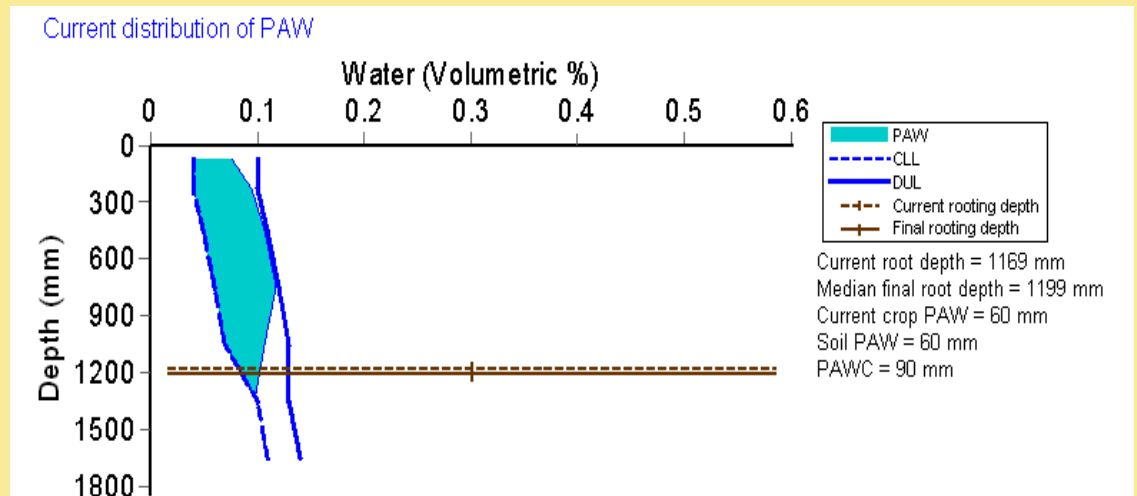
7th September (148 mm GSR)



14th August (81mm GSR)



Plant Available Water (PAW) as of 7th September



Water Budget

Initial PAW status @ 24-May	16 mm
Rainfall since 24-May	143.9 mm
Irrigations	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
Evaporation since 24-May	54 mm
Transpiration since 24-May	49 mm
Deep drainage since 24-May	0 mm
Run-off since 24-May	0 mm
Current PAW status:	60 mm

Nitrogen Budget

Initial N status @ 24-May	81 kg/ha
Mineralisation since 24-May	-18 kg/ha
N applications	28-May: 6 kg/ha
	12-Jul: 12 kg/ha
	: kg/ha
	: kg/ha
	: kg/ha
	: kg/ha
Total N in plant	55 kg/ha
De-nitrification since 24-May	0 kg/ha
Leaching	0 kg/ha
Current N status:	25 kg/ha



SITE DESCRIPTION

PROPERTY: Ian Hyde, Dalwallinu

SOIL TYPE: Loamy Clay

ROTATIONS:

2009 = Volunteer Medic Pasture
2008 = Wheat
2007 = Barley

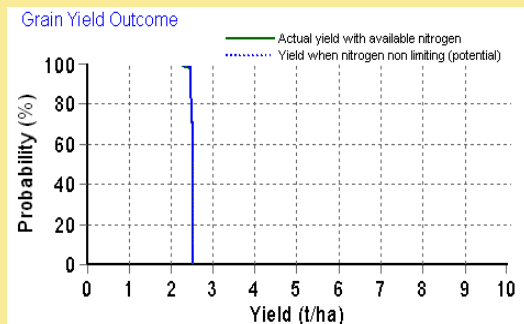
VARIETY: Bonnie Rock

SOWING DATE:

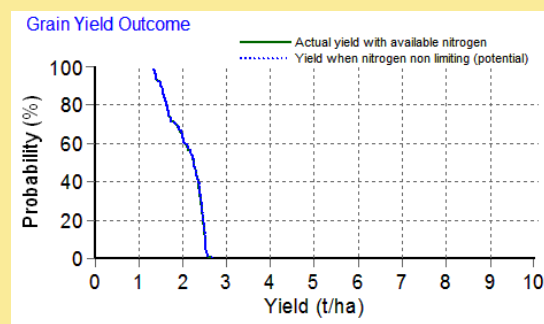
25/5/2010

Ian Hyde, Dalwallinu (Clay)

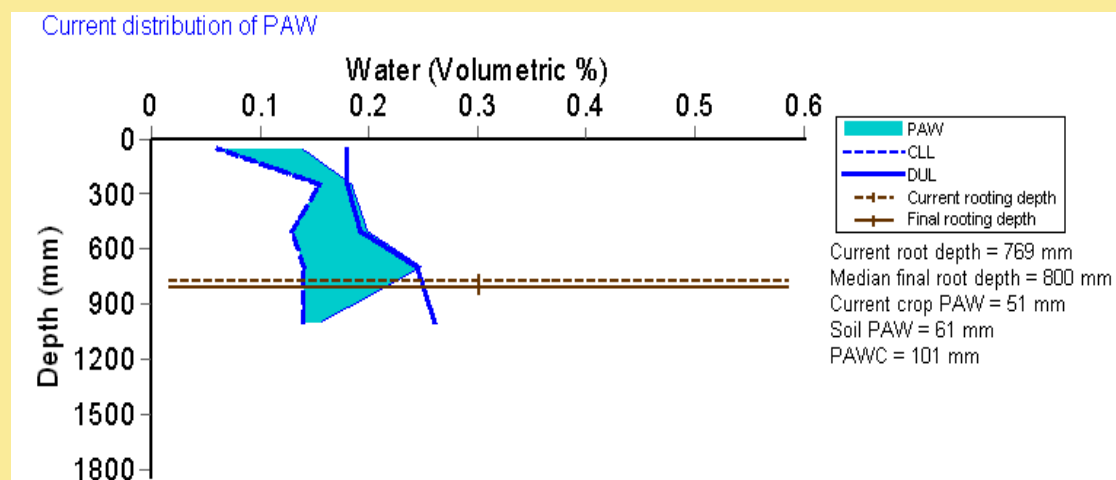
7th September (185mm GSR)



14th August (133mm GSR)



Plant Available Water (PAW)



Acknowledgements:

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Support with Yield Prophet from Caroline Peek and Rob Grima, Department of Agriculture & Food, WA.

Water Budget

Initial PAW status @ 24-May	17 mm
Rainfall since 24-May	162.1 mm
Irrigations	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
	: mm
Evaporation since 24-May	66 mm
Transpiration since 24-May	53 mm
Deep drainage since 24-May	0 mm
Run-off since 24-May	1 mm
Current PAW status:	61 mm

Nitrogen Budget

Initial N status @ 24-May	124 kg/ha
Mineralisation since 24-May	-4 kg/ha
N applications	31-May: 11 kg/ha
	21-Jul: 16 kg/ha
	: kg/ha
	: kg/ha
	: kg/ha
	: kg/ha
Total N in plant	70 kg/ha
De-nitrification since 24-May	0 kg/ha
Leaching	0 kg/ha
Current N status:	77 kg/ha