

Hart 2015 season and rainfall chart

The 2015 season started with good opening rains which enabled a number of early sowing trials to be sown in mid-March (Table 1). Consistent rainfall in April was in line with the long-term average (Figure 1) however, in May, June and July we observed well below average rainfall with only 19, 21 and 29 mm respectively. Much needed rainfall occurred in August (66 mm) and September (32 mm) however minor frost damage at the trial site occurred in early and late August (greater damage was observed in neighbouring districts). Care should be taken when interpreting variety and time of sowing trials due to differences in varietal maturities and therefore frost incidence this season.

The season came to a quick end as we experienced below average rainfall and a run of days where temperature increased to 30-35°C in early October. Similar to 2014 it was another warm dry finish to the season. Overall the 2015 growing season rainfall was 230 mm and annual was 353 mm, well below the long-term average of 300 mm and 400 mm, respectively.

Table 1. Hart rainfall chart 2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1st			2.0					14.2				
2nd						2.4		5.6	6.0			
3rd								1.4	11.4		23.8	
4th	1.4							3.8			23.6	
5th					6.0			3.2			0.2	
6th				17.0				4.0				
7th							0.6					2.6
8th	3.4	0.6					0.2					
9th	14.6					1.0			13.6			
10th	23.6						0.4		0.6			
11th	7.4						5.4					
12th							2.2	15.4				
13th	17.2						0.8	1.6				
14th							2.2	0.2				
15th						0.4	3.0		0.6			
16th							0.8	0.2				
17th							8.4	1.0		0.4		
18th							3.2	0.8				
19th				18.0	13.0							
20th							1.2			0.6		
21st	1.0									2.6		
22nd							7.6					
23rd			0.2			0.6	0.2					
24th						1.6	0.4	16.0				
25th				25.0		1.4					0.8	
26th			1.0				1.6					
27th							1.0					
28th						0.2	0.8					
29th												
30th												
31st												
Monthly total	68.6	0.6	3.2	60.0	19.0	20.4	29.0	65.6	32.2	3.6	48.4	2.6
Running total	68.6	69.2	72.4	132.4	151.4	171.8	200.8	266.4	298.6	302.2	350.6	353.2

Total annual rainfall		Growing season (Apr-Oct)	
Long-term average	400 mm	Long-term average	305 mm
2013	377 mm	2013	303 mm
2014	426 mm	2014	280 mm
2015	353 mm	2015	230 mm



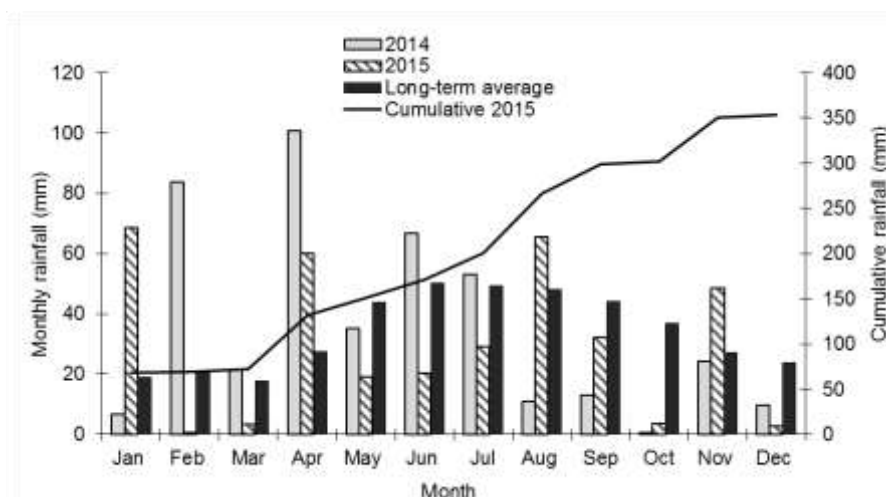


Figure 1. Hart rainfall graph for 2014, 2015 and long-term average.

Hart trial site - soil analysis

Soil physical and chemical properties for the 2015 Hart trial site. Sampled on 14th April, 2015.

	Sampling depth (cm)				Total profile
	0-15	15-30	30 - 60	60 - 90	
Texture					sandy loam - loam
Gravel %	5	5	5	5	
Available Nitrogen kg N/ha					45
Phosphorus Colwell mg/Kg	31	14	17	11	
Potassium Colwell mg/Kg	275	158	167	176	
Sulphur mg/Kg	2.5	2.3	5.5	26.5	
Organic Carbon %	1.0	0.8	0.6	0.3	
Conductivity dS/m	0.2	0.2	0.3	0.4	
pH Level (CaCl ₂) pH	7.1	7.6	7.8	8	

Predicta B - on row samples, no added stubble (sampled 16/04/2015)

- Take-all – low/medium risk
- Crown rot (*F. pseudograminearum*) – high risk
- Yellow leaf spot (test under development) – present
- Common root rot – low risk
- Pythium clade f – present
- Root lesion nematode (*Pratylenchus neglectus*) – low risk (6 nematodes/g of soil)
- Root lesion nematode (*P. thornei*) – low risk (1 nematode/g of soil)
- Black spot of peas – medium risk

The following were not detected

- Cereal cyst nematode
- Take – all (oat)
- Rhizoctonia bare patch
- Root lesion nematodes (*P. penetrans*, *P. teres*)
- Phytophthora root rot (*Phytophthora medicaginis*)
- Eyespot
- Crown rot caused by *Fusarium culmorum*