

Hart – rainfall & a summary of the 2016 season

Early seeded crops were sown into marginal soil moisture, with only 11 mm of rainfall recorded for April (Table 1). Time of sowing research trials required irrigation to achieve early sowing and establishment at Hart. Rainfall was patchy and lower than expected in May however, consistent rain in June, July and August was in line with the long-term average (Figure 1).

For those who attended the Hart Field day in September it was a muddy one. Overall 119 mm was recorded for the month, 75 mm more than the long-term average (Table 1). In late September wind gusts in excess of 110 km/hr were recorded in the Mid-North. Fortunately, a small windstorm which headed towards Blyth narrowly missed the trial site. Lodging and grain loss due to this weather however, was evident in many trial plots and has been noted in the interpretation of results.

Cooler evening temperatures caused minor frost damage at the trial site however, much greater damage was observed in neighbouring districts. Between August and October there were six events where temperatures fell below 1°C, ranging from 0.9°C to -0.4°C. Care should be taken when interpreting variety and time of sowing trials due to differences in varietal maturities and therefore possible frost incidence this season.

Overall the 2016 Spring was wetter and cooler compared to the two previous seasons. This resulted in well above average yields in many districts in the Mid-North (which were not affected by frost). Majority of Hart’s trials were harvested prior to the first week of December and the 53 mm which fell that month. The 2016 growing season rainfall at Hart was 356 mm and annual was 485 mm, well above the long-term average of 300 mm and 400 mm, respectively.

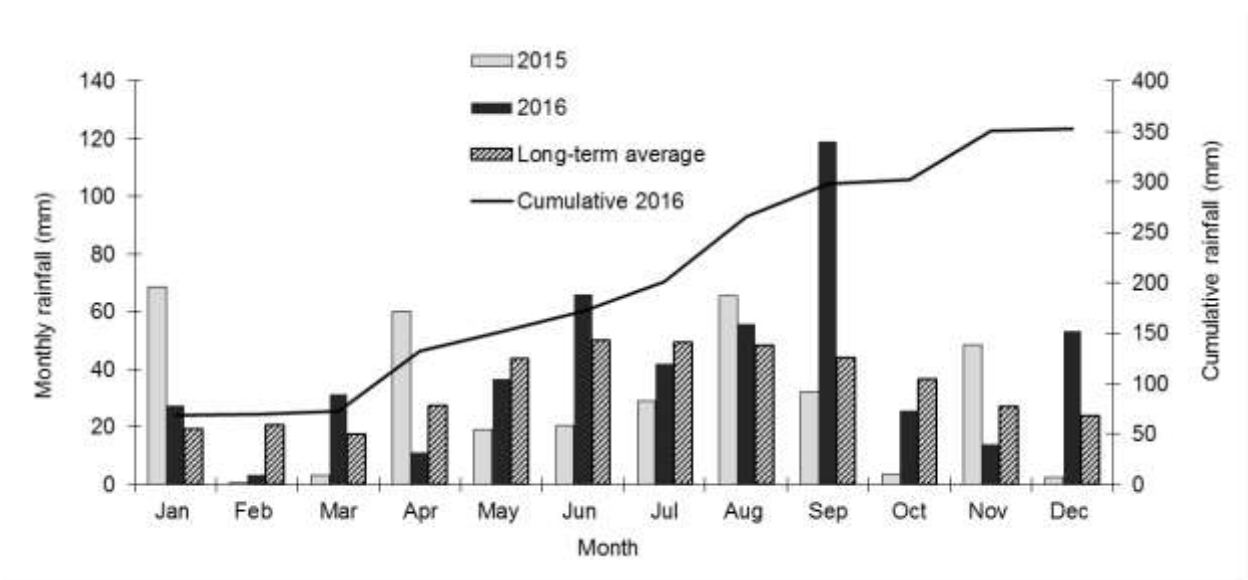


Figure 1. Hart rainfall graph for 2015, 2016 and long-term average. The black line indicates cumulative rainfall for 2016.

Table 1. Hart rainfall chart 2016

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	0	0	0	0	0	0	0.4	8.4	1.4	0	0	0
2	0	2.4	0	0	0	1	0	0.2	0	4.6	0	0
3	0	0.2	0	0	2.8	0	0	0.8	0.6	1	0	0
4	0	0	0	0	0.6	0	7.8	0	0	5.2	0	0.8
5	0	0	3	0.2	0	1.4	2	0	0.2	0	0	0
6	0	0	3.6	6.6	0	5	1.8	0	0	0	0	0
7	0	0	0.6	0	1.2	1	0	0	0	0	0	0
8	0	0	0.4	0	3.6	2.4	0	0	16.2	0	0	8.4
9	0	0	0.8	0	4.4	4.8	4.6	0	3.2	0.2	0	0
10	0	0	19.6	0	2.6	0.6	0.6	2.6	0	0.6	0	0
11	0.2	0	0	0	0	0.4	0.2	1.2	0	0	0	0
12	0	0	0	0	0	0	8	0	1.4	0	0	0
13	0	0	0	0	0	0	1	0	6.4	0	6.8	0
14	0	0	0	0	0	0	0	0	3.6	0	0	5.6
15	0	0	0	0	0	0	0	0	3.2	0	0	0.2
16	0	0	0	0	0.2	14.2	0	0.2	0.8	5.2	0	0
17	0	0	0.6	0	0	2.4	0	0	19.2	0.4	0	0
18	0	0	0.8	0	0	1.2	0	12.2	1.4	1.2	0	0
19	0	0	0	0	0	0	0	16.2	0	0	0	0
20	1	0	0	0.8	0	0	0	0	4.8	0	0	0
21	0.6	0	0	0.6	0	10.4	0	0	1.8	6	0.6	0
22	11	0	0	0	0	0.8	4.4	0	0	1	5.8	0
23	0	0	0	0	0	12.8	0.2	0	0	0	0	0
24	0	0	0	0	0	3.2	2.0	0	6	0	0	0
25	0	0.6	1.4	0	7.2	0.2	4.4	0	0	0	0	0
26	0	0	0	0	3.8	0	3.6	0	0	0.4	0	1.8
27	0	0	0	0	8.8	0.6	0.8	0	0	0	0	29.8
28	0	0	0	2	1.4	0	0	0	20.8	0	0	4
29	6.8	0	0.4	0.4	0	0	0	0.4	21.2	0	0	2.6
30	4.6		0	0.4	0	3.6	0	13.2	7	0	0.8	0
31	3.2		0		0		0.2	0.2		0		0
Montly total	27.4	3.2	31.2	11.0	36.6	66.0	42.0	55.6	119.2	25.8	14.0	53.2
GSR				11.0	47.6	113.6	155.6	211.2	330.4	356.2		
Total	27.4	30.6	61.8	72.8	109.4	175.4	217.4	273.0	392.2	418.0	432.0	485.2

Hart trial site – soil analysis

General soil physical and chemical properties for the Hart field 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	
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	