

METEOROLOGICAL NOTES AND CROP RETURNS

By W. R. N. NATHANAEL,

Acting Chemist.

A COMPLETE series of weather records has been kept at Bandirippuwa Estate since May 1, 1933, which includes rainfall, maximum and minimum temperatures, ground temperatures, humidity, barometric pressure and cloud observations. Abstracts of these readings have been regularly sent to the Colombo Observatory at the end of each month, for publication in the Observatory Meteorological abstract for the Island.

The adjoining table summarises the rainfall and bimonthly crop figures for the 16 years 1934-1949.

Meteorological Notes

- 1934.—It will be seen from the summary that the rainfall this year was a record, totalling 100·08 inches falling on 149 rainy days (0·01" and over).
- 1935.—During this year 66·94 inches fell on 126 rainy days. A severe drought was experienced during the early part of this year, only 0·17" falling during the six weeks beginning January the first.
- 1936.—Rainfall during this year was good and well distributed, 93·26 inches falling on 131 rainy days.
- 1937.—The distribution of rain was fair, there being a fall of 87·41 inches on 149 days. The early part of the year was dry with an absolute drought from February 2nd to the 18th (Absolute drought—Any period of at least 15 consecutive days, to none of which is credited ·01 inch of rain or more). Rainfall in April and May was satisfactory and the North-East monsoon rains in November were moderate.
- 1938.—The rainfall was 47·81 inches on 153 days. This year was unprecedented for shortage of rainfall, there having been in effect a failure of both monsoons. The shortfall from average rainfall was about 31 inches.
- 1939.—The rainfall was 70·07 inches on 143 rainy days; which was reasonably well distributed through the year. There were two droughts during the periods late January to the end of March, and mid August to mid September.
- 1940.—The rainfall was 81·92 inches on 162 days. Only 0·10" of rain fell between January 1st and March 3rd. For the rest of the year rainfall was reasonably good and well distributed.
- 1941.—The rainfall was 71·99 inches on 169 days. The first quarter of the year was dry, only 2·85 inches of rain falling in this period. During the rest of the year rainfall was satisfactory and well distributed. The October and November rains were particularly favourable with 29·54 inches in the two months on 48 rainy days.

SUMMARY OF RAINFALL AND CROP FIGURES, BANDIRIPPUWA ESTATE, 1934-1949.

32

Month	1934 (R)	1934 (C)	1935 (R)	1935 (C)	1936 (R)	1936 (C)	1937 (R)	1937 (C)	1938 (R)	1938 (C)	1939 (R)	1939 (C)	1940 (R)	1940 (C)	1941 (R)	1941 (C)
Jan.	8.14	78,589	0.17	76,825	1.35	46,574	2.42	82,697	1.64	80,286	8.59	90,213	nil	78,668	1.68	56,190
Feb.	1.84		1.59		2.34		2.32		9.16		0.54		0.10		0.15	
March	5.36	89,398	2.77	122,026	12.93	98,680	2.85	130,327	9.75	98,594	0.54	104,729	4.13	131,131	1.02	125,842
April	12.04		4.39		0.67		13.65		6.64		7.03		7.55		9.15	
May	12.38	129,296	9.79	116,876	27.70	112,175	14.68	151,254	2.79	129,485	7.30	95,590	14.51	100,682	7.25	158,627
June	14.72		7.92		8.48		3.19		0.76		6.45		8.89		6.24	
July	0.29	122,457	0.42	99,966	2.61	116,650	3.43	118,265	0.97	112,953	7.31	67,361	1.91	88,210	2.18	123,534
August	1.03		5.85		0.56		0.66		4.19		7.75		3.34		4.21	
Sep.	0.30	85,562	1.39	66,148	7.31	64,850	16.27	94,910	3.97	74,918	1.82	44,262	3.61	72,009	7.71	87,094
Oct.	14.97		16.63		7.48		7.80		2.93		8.64		13.72		9.19	
Nov.	27.84	70,453	11.69	59,858	12.90	63,208	17.93	87,289	1.19	97,421	12.03	41,450	21.31	47,816	20.35	55,070
Dec.	1.17		4.33		8.93		2.21		3.82		2.07		2.85		2.84	
Total	100.08	575,735	66.94	541,699	93.26	502,137	87.41	664,742	47.81	593,657	70.07	443,605	81.92	518,516	71.97	606,357

(R)—Rainfall. (C)—Crop.

Month	1942 (R)	1942 (C)	1943 (R)	1943 (C)	1944 (R)	1944 (C)	1945 (R)	1945 (C)	1946 (R)	1946 (C)	1947 (R)	1947 (C)	1948 (R)	1948 (C)	1949 (R)	1949 (C)
Jan.	1.35	41,622	2.25	85,010	0.94	61,700	0.02	67,054	0.19	66,809	5.79	48,224	1.13	111,740	1.28	36,698
Feb.	0.81		0.92		2.77		0.17		0.39		4.38		0.93		0.48	
March	3.87	99,426	3.02	124,024	12.07	113,369	6.85	77,508	8.35	146,926	5.36	117,420	11.12	148,796	0.17	88,371
April	14.08		5.34		9.14		6.32		8.88		3.98		7.16		17.93	
May	14.04	159,575	8.86	168,904	4.72	132,069	2.50	133,386	10.59	128,593	7.19	135,776	4.51	126,457	20.86	119,494
June	6.17		6.82		7.00		6.57		6.03		8.32		8.17		11.47	
July	2.26	138,156	1.67	128,278	1.07	145,007	3.94	146,775	0.78	105,455	6.83	116,589	1.47	111,388	7.23	107,288
August	3.82		2.85		2.49		0.57		1.51		5.02		7.50		4.53	
Sep.	0.85	80,318	0.98	100,712	12.11	84,211	1.00	74,968	3.98	67,425	3.36	79,373	1.36	65,466	2.94	83,260
Oct.	6.67		13.72		10.06		26.83		19.20		6.91		20.71		10.58	
Nov.	7.51	64,113	13.67	50,365	18.77	92,891	11.48	22,411	25.01	71,281	0.56	91,083	5.30	33,599	6.49	59,734
Dec.	7.94		4.96		10.33		5.88		12.98		2.23		3.99		2.41	
Total	69.37	583,210	65.06	657,293	91.47	629,247	72.13	522,102	97.89	586,491	59.93	588,465	73.35	597,446	86.37	494,842

(R)—Rainfall. (C)—Crop.

- 1942.—69.37 inches were recorded falling on 152 rainy days. The first quarter was characterised by dry conditions. There were two absolute droughts. The S. W. Monsoon rains in April and May totalled 28.12 inches. The November rainfall was much below the average and in general the year's rainfall could not be described as satisfactory in amount or distribution.
- 1943.—The rainfall was 65.06 inches on 160 rainy days. Although below the average the distribution was fairly satisfactory and the N.E. Monsoon rains were favourable.
- 1944.—91.47 inches of rain fell on 191 rainy days. The rainfall was well distributed and the total was above the average, and the highest since 1934.
- 1945.—72.13 inches fell on 127 rainy days. Early in the year there was a severe drought. Rainfall to the end of September totalled only 27.94 inches. In October there was unusually heavy rain totalling 26.83 inches.
- 1946.—97.89 inches fell on 170 rainy days. Drought conditions prevailed during the early part of the year. The highest temperature, a record for this station was read on March 8, 1946. Copious rain totalling 57.19 inches fell in the last three months.
- 1947.—The rainfall was 59.93 inches against an average (1933-46) of 78.07 inches. Rainy days numbered 159. Up to the end of September rainfall was limited but well distributed. The end of the year saw a failure of the N.E. Monsoon only 0.56 inch fell in November compared with an average (1933-46) of 14.96 inches.
- 1948.—73.35 inches of rain were recorded on 162 rainy days. The October rains were very heavy and out of a total of 20.71 inches, a record fall of 10.62 inches was recorded on 22nd October, 1948.
- 1949.—The total rainfall was 86.37 inches falling on 156 days. The rains were well above the average and well distributed. The fall during May and June was unusually heavy totalling 32.33 inches.

Crop Returns.—The record crop for Bandirippuwa Estate during 1934-49 totalled 664,742 nuts, picked in 1937, and the lowest was 443,605 nuts in 1939. The latter is obviously the result of the shortage of rain during 1938. The response to favourable rain or adverse drought is usually evident in Coconut Crops about 12-15 months later. The average rainfall for the past 16 years is 77.19 inches, and the average yearly crop for Bandirippuwa is 569,098 nuts for the same period.