WEATHER REPORT FOR THE YEAR 1st JUNE, 1969-31st MAY, 1970

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General Scope of Report

This report records the weather experienced in the South African sugar industry during the year ending May, 1970, and compares it with conditions experienced in the past. Some changes have been made in the form of the report. For example, temperature and Class A pan evaporation data from meteorological stations recently established throughout the sugar industry, are included. Climatic data from Swaziland and the new quota areas such as Melmoth, Muden, the Natal Midlands and the Eastern Transvaal are also reported. Included in these records are the mean monthly temperatures at grass level, and the number of days per month when sub-zero temperatures were recorded. The sub-zero records do not necessarily indicate that a dangerous frost has occurred, since a temperature of -0.5°C or -1.0°C (31°F or 30°F) at ground level for one or two nights is unlikely to harm the plants. Nevertheless they are a guide to the possibility of severe frost in the area, particularly on low lying ground. The report for the Mount Edgecombe meteorological station includes data on relative humidity, sunshine hours and run-of-wind, in addition to details of temperature and evaporation. These data reflect broadly the weather conditions prevailing in a large part of the industry.

Tabulated Data

Table I gives the annual rainfall recorded at each of the 53 measuring stations for the past 5 years.

Table II gives this year's rainfall distribution compared with the 46 year average for 53 stations in the sugarbelt.

Table III gives the mean monthly rainfall during the past year for each district covered by this survey, as well as for each of the main subdivisions.

Table IV gives the mean monthly screen temperatures and Class A pan evaporation data for 28 meteorological sites in the sugar industry.

Table V gives the mean monthly grass minimum temperatures and the number of days when sub-zero temperatures were recorded during the last two years for 7 meteorological sites.

Table VI gives the mean monthly screen and soil temperatures, relative humidity, sunshine hours and run-of-wind for Mount Edgecombe.

NOTE: Due to rounding off of decimal points, the sum of monthly averages does not in all cases exactly equal the annual average.

Comments on the Rainfall

The total rainfall for the year was below the long term average and its distribution was poor. There were better than average rains in September and October which gave promise of a good season to come, particularly as the November rains were only slightly below average. However, as is now well known, the rains started tailing off and there was a drought in February, March and April. All three of these months had less than half of the corresponding long term averages.

The drought was so severe that it has been compared with the drought in the 1964/65 season which was the worst in at least 46 years. The comparison is valid because the rainfall records for the three main regions of the Industry show that the remarkable similarities between the two seasons greatly outweigh minor differences.

These are illustrated in Figure 1, where the patterns of the rainfall from September to May in each season are compared. The similarities are obvious, even extending to the better rains for the recovery of the crop in May, which is usually a dry month.

Comments on the Climate in General

Air and soil temperatures during the midwinter months of June and July 1969 were not as cold as those of the previous year and over most of the region were about average throughout the year. The clear skies associated with the drought were reflected in higher values for solar radiation in February, March and April 1970 and in turn by above average evaporation from a free water surface, particularly in March and April.

TABLE II

This Year's Rainfall Distribution compared with the mean of the 46 years average for 54 stations in the sugarbelt.

MONTHS	Computed mean Rainfall for 54 centres in mm 1924 — 1970	Actual Rainfall for 54 centres in mm June '69 — May 1970
June	39.1	17.2
July	29.6	18.0
August	36.9	13.0
September	61.7	76.0
October	93.2	161.8
November	107.2	99.5
December	114.6	93.6
January	113.1	77.5
February	116.5	52.1
March	129.4	46.1
April	72.6	35.7
May	50.7	93.5
Total	964.6	787.5

Note: Data from Mehlomnyama is no longer available so data from Umzimkulu mill site has been used instead from 1st June 1968.

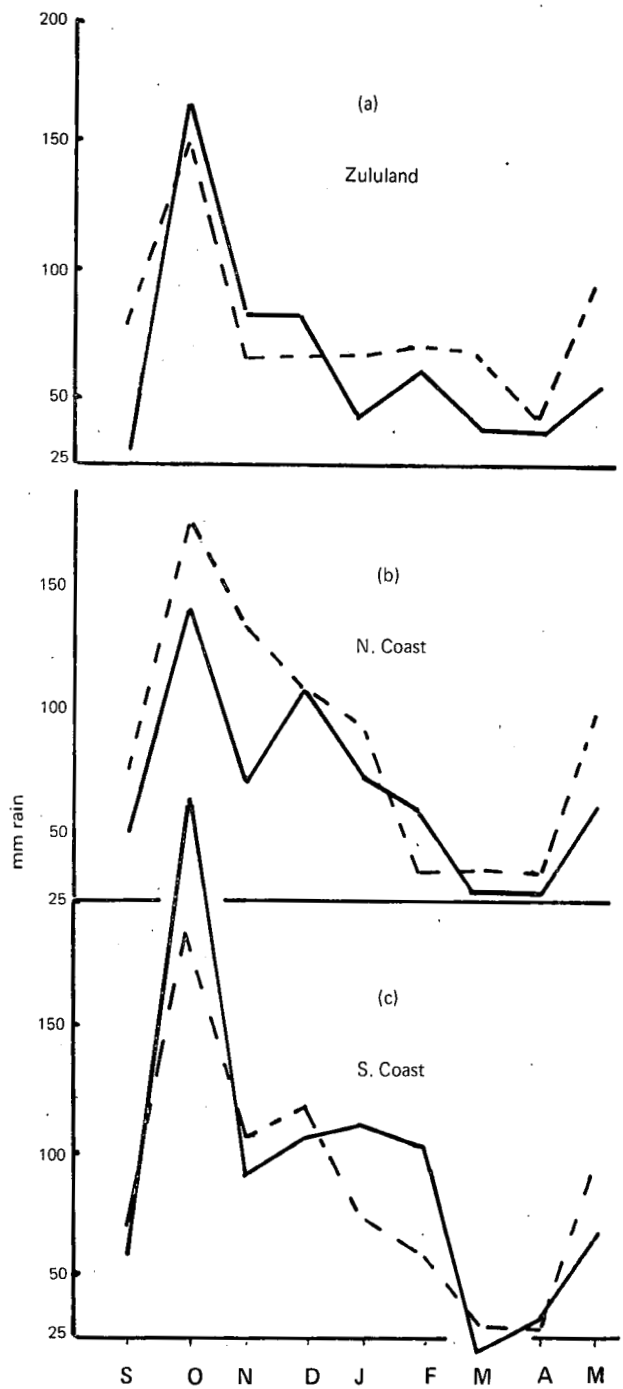

FIGURE 1: The pattern of the rainfall in both seasons in each district 1964/65 —— 1969/70 ——

Acknowledgements

The South African Sugar Association Experiment Station is indebted to the many growers and millers whose records form the basis of much of this report. It is also indebted to the Swaziland Government Lowveld Experiment Station and to the South African Government Makatini Flats Research Station for so generously supplying copies of their meteorological records.

TABLE I
The Annual Rainfall Recorded at 53 Centres in the Sugar Belt

Magisterial District and Locality	mm Rainfall for year 1st June, 1965 to 31st May, 1966	mm Rainfall for year 1st June, 1966 to 31st May, 1967	mm Rainfall for year 1st June, 1967 to 31st May, 1968	mm Rainfall for year 1st June, 1968 to 31st May, 1969	mm Rainfall for year 1st June, 1969 to 31st May, 1970
Port Shepstone:					
Mehlomnyama/Umzimkulu*	915	899	725	1096	734
Umzinto:					
Hibberdene	1072	903	706	1121	736
Umtwalumi	999	744	635	836	632
Sezela Mill	1238	904	733	985	903
Esperanza	1160	855	717	911	809
Renishaw mill	1148	847	912	925	966
Dumisa	1243	912	671	773	869
Durban, Camperdown:					
Illovo Mill	1089	884	1044	1000	977
Umbumbulu	1128	931	774	786	696
Thornville	857	965	641	675	666
Indana, Mt. Edgecombe:					
Effingham	889	804	699	806	574
Experiment Station	894	784	820	927	815
Burnside	916	808	884	1006	884
La Mercy	894	908	934	1106	—
Canelands (Windermere)	1223	872	725	964	879
Frosterly	820	913	695	939	914
Inyaninga	835	882	758	965	848
Inanda	1043	1124	771	1103	878
Mwawini	973	981	709	1150	968
Lower Tugela:					
Maidstone Mill	806	874	719	1031	782
Sinembe	959	1023	827	1100	917
Upper Tongaat	963	1067	763	1064	839
Frasers	955	1078	809	1117	844
Chaka's Kraal Experiment Station	985	1111	753	1027	864
Chaka's Kraal Deep Riv./Ferney	1005	1110	920	957	820
Groutville	895	1020	639	935	748
Kearsney	1139	1223	870	1169	895
Doornkop Mill	843	1155	751	1033	974
Doornkop Sprinz	1170	1328	909	1113	854
Gledhow Mill	953	949	733	974	652
Darnall Mill	1100	1096	856	1086	764
Tugela Mouth	1275	1167	1083	1269	917
Mtunzini:					
Mandeni	1151	1123	894	1080	681
Amatikulu	947	978	735	967	796
Inyoni	1110	1102	827	1028	751
Mtunzini	1238	1619	1031	1400	1005
Eshowe:					
Entumeni	945	1114	761	1013	816
Eshowe	1161	1183	925	1232	998
Nkwaleni	673	830	433	796	523
Lower Umfolozi:					
Felixton Mill	1485	1463	953	1576	936
Empangeni West	811	964	625	1003	678
Empangeni Mill	1078	1124	877	1307	809
Kulu Halt	990	1057	755	1136	950
Ukulu Properties	843	945	712	1002	711
Mposa	964	837	777	994	808
Kwambonambi	1211	970	724	1002	851
Eteza	1115	854	665	1038	766
Hlabisa:					
Mtubatuba Mill	749	697	589	843	642
U.L.O.A.	1105	808	817	1071	651
Nyalazi River	923	888	633	1020	599
Hluhluwe	712	641	565	774	471
Ubombo:					
Mkuzi	496	823	423	623	439
Piet Retief:					
Pongola	640	717	570	663	583
Mean	995	982	764	1009	790

*Data from Mehlomnyama is no longer available, so data from the Umzimkulu Mill site has been used instead from 1st June, 1968.

TABLE III

Rainfall in mm by districts for months of June 1969 to May 1970 inclusive

DISTRICT	No. of Centres	1969							1970					TOTAL Jun 1969 May 1970
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	
Port Shepstone	1	8.1	26.9	18.8	104.9	118.6	131.8	82.3	62.2	63.9	22.0	27.7	66.4	733.6
Umzinto	6	7.0	26.0	24.2	62.9	186.1	106.2	122.9	69.1	57.2	16.7	30.1	95.6	804.0
Durban, Pinetown etc.	3	6.1	30.1	25.1	72.6	119.4	99.1	120.9	88.5	62.1	52.8	28.4	74.3	779.4
Mean South Coast	10	6.9	27.3	23.9	70.0	159.3	106.6	118.2	74.3	59.3	28.1	29.3	86.3	789.5
Inanda	9	15.4	17.0	15.3	72.2	171.5	150.6	111.8	98.5	21.5	34.0	37.7	107.0	852.5
Lower Tugela	13	12.5	11.6	18.5	79.0	179.3	117.2	108.0	89.9	44.7	39.9	26.7	92.8	820.1
Mean North Coast	22	13.7	13.8	17.2	76.2	176.1	130.9	109.6	93.5	35.2	37.5	31.2	98.6	833.5
Mean South of Tugela	32	11.8	18.0	19.3	74.3	170.9	123.3	112.3	87.5	42.7	34.5	30.6	94.7	819.7
Mtunzini	4	31.2	13.7	6.5	103.3	147.2	86.8	74.8	74.4	45.2	67.2	48.4	102.0	800.7
Eshowe	3	13.3	10.7	10.7	99.7	175.3	58.1	104.7	64.6	101.2	43.9	30.6	62.7	775.5
Melmoth	1	10.9	11.9	2.8	68.1	170.7	76.3	74.7	71.7	49.1	59.7	53.4	44.5	693.8
Lower Umfolozi	8	39.7	25.9	2.1	81.5	141.4	67.8	54.3	81.3	73.0	87.4	51.7	113.5	819.6
Hlabisa	4	16.4	20.8	2.0	47.4	141.2	35.1	56.2	28.7	54.6	48.5	36.3	103.6	590.8
Ubombo	1	0.0	3.1	0.0	61.2	143.0	29.0	52.8	35.6	22.7	55.7	10.7	24.7	438.5
Piet Retief	1	0.0	2.3	0.0	44.5	145.8	116.6	62.0	24.8	87.4	18.5	41.5	39.7	583.1
Mean Zululand & Piet Retief	22	25.4	17.9	3.9	78.5	148.6	64.8	66.4	63.1	65.7	64.9	43.2	91.9	743.3
Seven Oaks	1	5.6	21.6	23.9	51.3	113.0	88.7	253.9	102.9	105.8	56.3	48.2	42.4	913.6
Windy Hill	1	13.2	25.6	21.1	60.5	178.0	86.4	161.2	125.9	136.2	63.1	20.0	41.5	932.7
Mean Midlands	2	9.4	23.6	22.5	55.9	145.5	87.6	207.5	114.4	121.8	59.7	34.1	42.0	924.0
Tenbosch	1	0.0	31.5	0.1	28.2	56.2	53.3	103.6	23.6	0.0	—	3.5	2.3	—
Umhlali	1	0.8	13.2	0.0	22.9	92.5	95.6	81.7	20.8	18.8	44.6	2.1	3.1	396.1
Mean E. Tvl. Lowveld	2	0.4	22.4	0.0	25.6	74.4	74.4	92.6	22.2	9.4	44.6	2.8	2.7	371.5
Mhlumi	2	0.8	14.2	2.5	48.2	176.0	108.1	77.5	10.0	32.4	55.4	10.9	10.3	546.3
Big Bend	1	2.5	2.8	1.5	38.5	65.1	76.8	49.8	8.8	78.7	23.0	30.9	20.7	399.1
Mean: Swaziland lowveld	3	1.4	10.4	2.2	45.0	139.0	97.7	68.3	9.6	47.8	44.6	17.6	13.8	497.3
General Mean	61	15.6	18.0	12.4	72.2	157.3	98.1	96.1	73.6	52.8	45.7	33.7	85.0	760.5

TABLE IV Mean: Maximum (Max) and minimum screen temperatures

	1969																	
	June			July			August			September			October			November		
Met. Centres	Max	Min	Eo	Max	Min	Eo	Max	Min	Eo	Max	Min	Eo	Max	Min	Eo	Max	Min	Eo
Umzimkulu	22.8	10.9	3.3	22.1	11.0	2.8	23.8	11.1	3.8	22.3	13.9	3.8	23.5	16.4	4.1	25.2	17.4	4.9
Esperanza	22.7	8.6	2.0	22.3	7.9	2.0	24.0	7.0	3.0	22.6	11.2	3.3	23.3	15.2	3.5	25.1	16.1	3.4
Powers Court	20.2	4.3	2.5	20.4	8.6	2.8	22.9	9.8	4.3	20.1	11.2	3.6	22.2	13.4	4.3	22.6	14.5	4.1
Illovo	22.2	10.0	2.5	22.2	10.2	2.5	23.7	10.3	4.1	22.8	13.7	3.8	24.3	16.2	4.6	25.1	17.3	4.7
Mt. Edgecombe	21.1	10.8	2.5	21.8	10.9	2.3	22.3	11.3	4.1	22.0	13.9	3.8	23.9	16.2	4.6	24.7	17.5	4.9
Tongaat	22.2	9.5	2.5	22.1	9.5	2.8	23.5	10.0	6.1	22.4	13.5	4.8	24.2	16.0	6.1	25.0	17.0	5.6
Chaka's Kraal	23.2	8.3	2.0	23.3	8.6	2.3	24.9	10.0	3.8	23.5	13.6	3.3	25.9	15.9	4.2	26.4	17.4	4.1
Gledhow	22.9	10.3	2.8	22.9	10.8	3.0	24.7	10.7	4.3	23.0	14.0	6.4	24.9	16.1	6.9	25.3	17.4	5.3
Glendale	23.6	8.9	2.5	25.2	8.5	2.5	27.0	8.7	3.6	25.1	13.1	3.6	27.1	16.0	6.1	26.7	17.2	4.5
Doornkop	21.5	11.8	3.3	22.3	12.2	3.0	24.4	12.9	4.6	22.7	13.4	4.1	25.9	14.9	5.8	26.0	14.7	4.8
Darnall	22.9	11.5	3.6	22.9	11.9	3.3	24.7	12.4	4.3	23.5	15.1	4.3	25.5	16.6	4.8	25.7	17.8	4.9
Muden	20.2	7.4	2.5	21.7	7.6	3.3	24.1	7.3	4.6	23.4	12.7	5.3	27.0	13.8	6.1	27.7	12.8	6.5
Seven Oaks	17.3	6.7	3.0	19.3	6.7	3.3	21.8	7.4	4.8	20.2	9.7	4.6	23.2	12.0	5.8	23.7	13.1	4.6
Windy Hill	18.8	7.1	3.0	19.7	8.5	3.8	22.5	9.6	5.6	20.4	10.7	4.8	24.6	13.5	6.4	23.2	13.5	4.7
Amatikulu	23.3	10.6	3.3	24.3	10.5	3.8	27.0	12.4	5.6	24.6	14.3	5.1	27.4	16.7	5.8	27.2	18.2	4.4
Entumeni	20.9	7.7	2.3	21.5	7.3	1.5	23.7	9.0	2.3	22.1	11.8	2.8	24.2	13.7	5.1	24.1	15.6	5.9
Melmoth	20.9	—	—	21.6	—	2.5	23.4	7.6	4.3	22.1	9.9	3.0	—	—	—	23.2	12.9	4.5
Mtunzini	22.8	10.7	3.3	23.5	10.8	3.3	25.5	13.3	4.8	23.6	15.2	5.3	26.1	17.1	6.0	26.9	18.8	6.2
Empangeni	22.9	10.3	3.3	22.9	10.5	2.8	26.0	12.6	4.6	25.3	14.8	4.8	27.5	16.2	5.8	26.5	18.2	4.2
Riverview	23.1	12.4	3.1	23.8	12.7	3.3	25.7	14.6	5.0	25.2	15.9	4.8	26.8	17.7	6.1	27.6	19.5	6.8
Hluhluwe	27.8	14.4	3.8	27.2	13.3	3.8	30.0	13.9	4.6	30.6	16.1	4.8	30.0	17.8	5.8	31.4	18.4	6.1
Makatini Res. Stn.	25.2	8.6	4.1	26.0	10.5	4.6	27.8	11.2	6.3	27.7	15.3	6.9	28.1	17.0	7.4	29.2	18.4	7.6
Pongola	22.2	8.8	2.5	23.3	10.2	3.1	25.0	11.2	4.6	25.8	13.9	5.0	26.6	16.4	5.3	27.4	17.5	5.7
Big Bend (L.E.S)	24.4	7.4	3.1	25.2	8.3	3.1	27.3	9.6	5.0	27.9	14.0	5.8	28.4	17.6	5.8	29.8	18.0	7.0
Mhlume Mill	23.8	9.7	3.6	24.4	9.7	3.8	26.4	11.5	5.3	27.3	14.9	6.9	27.2	17.6	6.8	29.7	18.2	7.3
Mhlume Sect. 15	24.4	8.3	3.1	25.0	7.8	3.1	27.1	9.3	4.6	27.8	13.3	6.1	27.1	16.0	6.1	29.8	16.9	6.9
Mhlati	24.7	9.3	4.6	25.4	8.8	4.6	26.6	10.7	5.3	27.4	13.5	5.8	27.7	17.2	5.4	30.8	17.7	7.2
Tenbosch	—	8.5	4.3	—	8.9	3.8	—	12.5	5.3	—	14.7	6.3	—	17.7	6.9	34.2	18.6	7.5

°C (Min), daily evaporation (Eo) in mm from A pan at 28 centres

1970

December			January			February			March			April			May		
Max	Min	Eo	Max	Min	Eo	Max	Min	Eo	Max	Min	Eo	Max	Min	Eo	Max	Min	Eo
26.3	18.9	4.3	27.8	20.6	5.2	26.9	17.9	6.0	28.6	18.7	5.9	26.2	15.4	3.9	25.3	14.0	3.1
25.8	17.1	4.2	—	19.3	5.8	27.4	18.3	6.2	29.0	16.2	5.8	25.7	12.7	4.0	25.3	9.5	3.1
24.1	16.0	3.9	25.1	16.8	5.3	25.7	16.2	5.1	25.6	15.5	4.6	23.5	13.8	4.0	23.0	12.1	3.6
26.3	18.6	5.3	27.2	19.7	6.2	27.3	18.9	6.4	27.8	18.4	6.1	25.9	13.5	4.3	25.6	9.4	3.1
25.8	18.5	5.6	27.0	19.7	6.4	27.5	19.4	6.4	27.3	18.2	6.3	25.3	16.1	4.5	24.1	14.1	3.4
—	18.9	5.6	27.7	19.6	6.9	28.3	18.9	7.5	28.0	17.2	7.6	25.8	15.1	5.5	24.6	12.9	5.8
27.7	18.7	5.7	28.8	19.6	5.9	29.3	18.5	6.0	29.1	17.4	5.9	27.4	15.1	4.0	25.9	12.4	2.8
27.0	18.8	5.9	28.3	19.7	6.2	28.1	18.9	6.3	29.4	17.5	6.6	26.3	14.5	5.0	26.1	12.3	3.4
27.9	18.8	6.1	29.0	19.6	6.8	30.0	18.7	7.0	30.0	17.7	6.1	27.8	15.2	5.4	26.0	13.8	3.1
18.9	16.5	5.5	29.7	17.9	6.3	29.0	17.5	6.3	29.0	17.0	6.4	26.4	15.2	4.8	25.6	14.6	3.9
27.8	19.2	6.5	28.2	20.0	7.1	28.4	19.4	7.1	29.3	18.2	7.2	26.3	16.4	5.1	25.2	14.7	3.6
28.7	15.9	5.9	29.8	15.9	6.6	29.2	16.4	6.1	28.3	14.7	5.9	26.3	11.0	4.5	24.4	8.8	3.4
24.4	14.3	5.3	26.2	15.8	5.7	24.0	15.4	6.1	26.0	13.6	6.6	23.4	11.0	5.7	21.5	9.3	4.2
—	—	5.6	25.5	15.9	5.2	25.2	15.7	5.6	25.0	14.6	4.6	23.8	12.7	4.6	21.9	11.0	3.7
28.9	19.5	5.8	30.6	20.3	8.0	31.1	17.3	9.0	30.2	18.6	6.1	27.4	15.5	5.7	26.0	13.2	4.2
—	17.0	5.7	27.4	17.7	6.9	27.2	15.9	5.9	26.8	15.1	5.9	25.0	12.4	4.3	25.0	10.3	3.9
24.5	13.9	4.1	27.4	14.8	4.9	27.2	14.1	3.8	26.9	13.3	4.4	24.3	11.2	3.5	21.7	11.3	—
28.5	19.4	6.1	30.3	20.7	7.4	31.1	19.0	8.1	30.9	18.5	6.8	28.0	16.3	6.2	26.0	14.0	3.1
29.2	19.0	5.7	30.6	20.5	6.0	29.9	18.9	5.5	31.0	18.1	5.9	27.7	15.8	5.7	26.4	14.4	3.2
28.8	20.0	6.9	31.1	21.4	7.9	30.0	20.5	7.0	29.5	19.4	6.7	27.5	17.7	5.1	26.2	15.3	3.7
32.5	19.7	6.7	—	—	—	36.3	20.5	6.9	36.9	19.7	6.1	34.0	19.0	6.3	30.2	16.1	4.9
30.5	19.3	7.1	33.5	20.8	9.9	32.5	19.7	8.9	31.4	18.3	9.0	29.9	15.7	7.1	27.8	13.4	5.2
28.2	18.6	6.6	31.8	20.3	7.5	29.9	17.2	6.3	29.2	14.0	6.7	27.4	13.4	5.0	25.7	11.6	3.7
30.0	19.0	6.9	33.6	20.8	8.0	31.8	18.6	7.7	31.5	17.7	7.5	30.3	14.1	6.0	27.7	10.7	3.9
29.2	19.0	6.9	33.1	20.8	8.4	31.9	18.6	7.7	31.5	17.8	7.4	29.5	14.8	6.0	28.1	13.2	5.1
29.4	18.4	6.7	33.3	20.0	7.5	31.7	17.7	7.1	31.2	17.3	6.6	30.2	14.8	5.4	No	Return	
28.9	18.2	7.1	33.2	20.4	8.0	31.6	18.8	7.8	31.2	18.5	6.8	29.5	14.8	5.3	27.7	13.5	4.4
31.7	19.1	7.1	34.6	20.9	10.0	—	19.0	9.1	—	—	—	29.9	15.3	7.0	28.4	10.9	4.9

— Records incomplete or unavailable.

TABLE V

Mean: Monthly grass minimum (Min) temperatures in °C, and the number of days on which sub-zero temperatures were recorded at 7 centres

Months	1968														1969									
	June		July		August		September		October		November		December		January		February		March		April		May	
Met. Centres	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero
Tenbosch	5.0	—	7.8	—	6.9	—	8.2	—	13.6	—	14.3	—	18.0	—	20.7	—	20.7	—	18.2	—	15.3	—	9.7	—
Pongola	2.6	3	5.1	3	6.8	—	9.5	—	11.5	—	13.7	—	18.1	—	14.5	—	17.9	—	17.3	—	13.2	—	8.3	—
Doornkop	3.5	1	6.5	—	9.0	—	10.4	—	12.0	—	13.3	—	17.0	—	18.2	—	18.6	—	16.3	—	13.3	—	5.0	—
Muden	–3.3	25	2.0	8	5.1	2	7.5	—	10.3	—	12.0	—	15.6	—	15.8	—	16.7	—	13.7	—	10.1	—	5.5	—
Seven Oaks	–1.9	21	1.5	9	3.2	7	7.2	5	7.6	2	9.1	2	12.5	—	13.6	—	13.2	—	11.9	—	8.5	—	6.3	8
Windy Hill	–1.5	22	1.8	5	5.8	1	6.1	3	8.9	1	9.9	1	13.4	—	13.7	—	14.0	—	13.1	—	9.8	—	5.4	—
Mt. Edgecombe	5.6	—	6.4	—	8.8	—	10.4	—	11.5	—	13.9	—	17.7	—	18.4	—	19.7	—	17.4	—	13.4	—	9.3	—

Months	1969														1970									
	June		July		August		September		October		November		December		January		February		March		April		May	
Met. Centres	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero	Min.	No. of days sub-zero
Tenbosch	7.1	—	7.3	—	9.5	—	12.1	—	16.5	—	17.1	—	18.1	—	19.8	—	17.9	—	—	—	13.2	—	12.8	—
Pongola	5.0	2	7.0	—	5.5	—	9.4	—	12.3	—	8.8	—	13.8	—	15.5	—	13.6	—	13.8	—	8.4	—	3.4	1
Doornkop	6.7	—	6.5	—	7.1	—	11.5	—	13.3	—	14.9	—	16.5	—	16.7	—	16.0	—	14.5	—	11.9	—	9.8	—
Muden	4.3	—	4.8	—	5.8	—	5.5	—	6.7	—	8.3	—	9.7	—	12.9	—	13.2	—	13.1	—	9.3	—	6.4	—
Seven Oaks	0.1	17	0.5	15	0.7	13	4.9	5	9.0	—	11.1	1	12.4	—	14.1	—	12.8	—	10.4	—	8.3	—	5.4	2
Windy Hill	3.1	3	2.4	10	3.4	5	8.2	2	10.6	—	12.3	—	14.3	—	14.8	—	14.1	—	11.5	—	8.6	1	6.5	1
Mt. Edgecombe	5.6	1	5.3	—	5.3	—	10.4	—	14.1	—	15.9	—	16.7	—	17.6	—	16.3	—	14.6	—	11.5	—	8.8	—

TABLE VI

Mean daily screen temperature in °C at 08.00, relative humidity % (means of 08.00 & 14.00 data), sunshine hours/day, run of wind in kilometres/day evaporation in millimetres/day and monthly rainfall in millimetres for the year June, 1969 to May 1970 at Mount Edgecombe Experiment Station, and the corresponding long term means.

Year	June, 1969 — May, 1970												Longterm Means							
Months	Max. screen temp.	Min. screen temp.	Mean screen temp.	Soil Temperatures			Relative humidity %	Sunshine hours	Run of wind	Evaporation		Rainfall in mm	43 years mean screen temp.	36 Years soil temperatures			43 years relative humidity %	43 years sunshine hours per day	35 years Sym. tank evaporation in millimetres	45 years Rainfall in mm
				30 cm	60 cm	120 cm				Class 'A' Pan	Symons tank			30 cm	60 cm	120 cm				
June	21.1	10.8	16.0	17.2	18.4	19.4	66.2	6.1	115.2	2.5	2.0	17.5	17.1	17.6	18.9	20.6	61.2	7.4	2.0	36.8
July	21.8	10.9	16.4	17.2	17.9	18.5	71.4	6.1	147.6	2.3	2.0	14.5	16.7	16.9	17.9	19.2	61.2	7.3	1.8	25.4
August	23.2	11.3	17.3	18.6	18.7	18.7	65.5	8.7	212.2	4.1	3.3	17.8	17.5	18.1	18.6	19.1	65.4	7.1	2.5	37.6
September	22.0	13.9	18.0	19.6	19.6	19.5	71.0	5.0	206.2	3.8	2.8	49.3	18.7	19.9	20.0	19.9	67.3	6.3	3.0	53.6
October	23.9	16.2	20.0	21.3	21.1	20.8	75.6	5.8	228.1	4.6	3.4	181.4	20.0	21.5	21.5	21.1	70.0	5.5	3.5	85.9
November	24.7	17.5	21.2	23.0	22.6	22.1	76.4	5.2	213.6	4.9	3.4	173.5	21.3	23.1	22.9	22.4	71.1	5.4	4.1	105.9
December	25.8	18.5	22.2	24.1	23.6	23.1	73.5	6.0	216.9	5.6	4.5	85.9	22.7	24.8	24.5	23.5	71.2	5.9	4.6	107.2
January	27.0	19.0	23.4	26.3	25.5	24.7	80.0	7.1	198.2	6.4	5.4	93.0	23.4	26.0	25.9	24.7	72.2	6.1	4.8	113.7
February	27.5	19.4	23.5	27.6	26.6	25.5	71.9	8.1	206.8	6.4	6.1	13.0	23.7	26.4	26.3	25.4	73.7	6.6	4.5	105.9
March	27.3	18.2	22.8	27.0	26.6	25.7	67.6	8.5	222.6	6.3	6.0	15.7	22.9	25.6	25.9	25.5	74.9	6.6	3.9	112.5
April	25.3	16.1	20.8	23.5	24.1	24.2	69.2	7.2	168.1	4.5	3.6	38.7	21.1	23.5	24.2	24.5	71.7	6.9	3.0	73.0
May	24.1	14.1	19.1	20.3	21.2	21.8	67.8	7.0	140.4	3.4	2.5	115.0	19.0	20.5	21.7	22.8	67.4	7.1	2.4	47.9