



AGROMETEOROLOGICAL BULLETIN

The Weather of October 1990

Summary

*1st-14th : Changeable; rain, in mainly southwest airflow
15th-25th : Variable conditions in complex troughs; southeast airflow setting in
26th-end : Passage of low centres; southwest airflow becoming northwest.
Month : Very wet, mild and very dull.*

Meteorological Situation

Southwesterly winds mainly dominated to 11th. These were interrupted with the passage of trough centres or frontal rainbelts on 2nd/3rd, 4th, 6th, 10th and by a ridge on 7th/8th. Although dry and mild from 11th to 14th, south to southwest winds became strong under the influence of a deepening wave depression which approached the country from the Atlantic.

A trough with various centres extended from Spain to Iceland/Greenland from 15th to 25th—unsettled weather and variable wind conditions developed over Ireland; a more pronounced southeast airflow set in between 19th to 25th, a period in which rainfall in the north and east was low. Subsequently the Azores high recovered eastwards towards Spain, so that low pressure centres (the southern low centres of the complex trough) moved over Ireland into the North Sea. Later, on 29th, a northwest airflow set in as the entire low system was pushed into the North Sea ahead of high pressure developing eastwards in the higher latitudes of the Atlantic.

Precipitation

Amounts were well above normal. They varied from 240% at Malin Head to 120% at Cork Airport. Rainfall was well distributed throughout the month—in general while heaviest daily amounts occurred during the first half of the month, rainfall spells were more sustained in the second half.

Wind

Gales were prominent in south and southwest on 6th, 13th/14th and 23rd and were more frequent in extreme west and north. Gale gusts were extensive on 2nd, 4th-6th, 11th-14th and 28th/29th.

Temperature

Monthly means were mostly above normal, varying from 1.1°C above at Kilkenny to normal at Belmullet. Coldest spells were recorded during the first eight days and again in the last week, particularly on 29th. There was no air frost but ground frost was widespread on 8th, 26th and 29th—lowest ground value of -5.5°C occurred at Mooncoin on 29th. Soil temperature was mostly above average except for the last 5-day period when it was about 0.5°C below average.

Sunshine and Radiation

Bright sunshine was below normal, ranging from 89% at Mullingar to 66% at Valentia. The third week was generally dullest. Global radiation was 77% at Birr and 94% at Dublin Airport.

NOTE: The data contained in this bulletin are provisional. Some of the material in Table 1 will be published in its final form in the monthly Weather Report; final values of Global Radiation at stations in Table 2 will be published in the annual Solar Radiation Observations

Annual Sub.
£ 20.00

TABLE 1

OCTOBER 1990

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND				SOIL (10cm)			TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)		
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST						MEAN DAILY	DIFFERENCE FROM AVERAGE
Carlow (Oak Park) Co. Carlow	1-10	35.9	-	7	6	15.3	7.8	11.5	-	2.3	8	0	72	-	23	-	-0.5	8	1	-	-	22.2	-	5.0	-	-
	11-20	65.7	-	8	5	14.7	10.0	12.4	-	7.4	16	0	80	-	25	-	5.6	16	0	-	-	12.5	-	4.4	-	-
	21-END	42.5	-	7	6	12.5	7.1	9.8	-	2.6	29	0	60	-	13	-	0.8	26	0	-	-	37.5	-	4.5	-	-
	MONTH	144.1	187	22	17	14.1	8.2	11.2	-	2.3	8	0	212	-	62	-	-0.5	8	1	-	-	72.2	-	4.6	-	21
Shannon Airport Co. Clare	1-10	76.0	-	8	8	15.5	10.0	12.8	-	6.0	8	0	84	-	30	-	-1.9	8	1	12.7	-	17.2	-	5.5	5	-
	11-20	33.5	-	8	6	15.3	10.5	12.9	-	8.1	16	0	85	-	30	-	3.2	16	0	12.3	-	19.3	-	4.7	3	-
	21-END	48.3	-	10	9	12.9	7.9	10.4	-	5.2	28	0	66	-	13	-	-0.7	29	1	10.1	-	29.1	-	5.7	5	-
	MONTH	157.8	188	26	23	14.5	9.4	12.0	+0.8	5.2	28	0	234	105	74	125	-1.9	8	2	11.7	+0.3	65.6	77	5.3	13	26
Cork Airport Co. Cork	1-10	38.7	-	6	4	14.4	8.9	11.7	-	4.7	8	0	73	-	23	-	1.4	8	0	12.7	-	26.8	-	7.7	4	-
	11-20	51.4	-	8	7	13.9	10.3	12.1	-	7.2	16	0	77	-	23	-	4.6	16	0	12.6	-	8.3	-	7.3	6	-
	21-END	54.4	-	10	8	11.9	6.8	9.3	-	2.5	26	0	55	-	9	-	0.6	26	0	10.1	-	30.0	-	7.2	8	-
	MONTH	144.5	120	24	19	13.4	8.6	11.0	+0.5	2.5	26	0	205	103	55	106	0.6	26	0	11.7	+1.0	65.1	70	7.4	18	22
Fermoy (Coolnakilla) Co. Cork	1-10	45.1	-	6	5	14.7	7.3	11.0	-	0.7	7	0	67	-	20	-	0.8	8	0	-	-	27.1	-	N/A	-	-
	11-20	75.0	-	9	9	13.8	9.4	11.6	-	6.2	16	0	72	-	20	-	2.4	16	0	-	-	9.6	-	N/A	-	-
	21-END	73.4	-	11	10	11.2	6.6	8.9	-	2.8	29	0	50	-	6	-	-0.4	29	1	-	-	22.1	-	N/A	-	-
	MONTH	193.5	-	26	24	13.2	7.7	10.5	-	0.7	7	0	189	-	46	-	-0.4	29	1	-	-	58.8	-	N/A	-	N/A
Fermoy (Moore Park) Co. Cork	1-10	38.1	-	7	5	17.1	8.2	12.6	-	2.5	8	0	83	-	34	-	-2.0	8	2	-	-	25.0	-	3.7	-	-
	11-20	55.2	-	8	7	14.8	10.0	12.4	-	4.6	14	0	80	-	27	-	0.0	16	1	-	-	15.7	-	3.1	-	-
	21-END	42.0	-	10	8	12.7	6.3	9.5	-	1.2	29	0	57	-	11	-	-2.4	29	2	-	-	30.9	-	3.4	-	-
	MONTH	135.3	147	25	20	14.8	8.1	11.4	-	1.2	29	0	220	-	72	-	-2.4	29	5	-	-	71.6	-	3.4	-	19
Roches Point Co. Cork	1-10	27.0	-	4	1	15.3	9.9	12.6	-	5.5	8	0	82	-	29	-	2.1	8	0	13.0	-	25.8	-	8.1	4	-
	11-20	58.2	-	7	7	14.5	11.3	12.9	-	8.4	16	0	85	-	30	-	5.7	16	0	13.0	-	9.9	-	6.6	5	-
	21-END	28.8	-	8	8	13.0	8.3	10.7	-	5.0	26	0	69	-	16	-	2.6	29	0	10.6	-	29.4	-	7.5	7	-
	MONTH	114.0	128	19	16	14.2	9.8	12.0	+0.5	5.0	26	0	236	102	75	110	2.1	8	0	12.2	+0.5	65.1	69	7.4	16	29
Glencolumbkille Co. Donegal	1-10	129.3	-	10	8	13.6	8.6	11.1	-	6.3	3	0	67	-	16	-	3.5	3	0	-	-	N/A	-	4.9	-	-
	11-20	68.2	-	9	7	13.9	8.9	11.4	-	6.3	17	0	70	-	19	-	2.0	19	0	-	-	N/A	-	4.4	-	-
	21-END	108.7	-	8	8	12.0	7.3	9.6	-	3.5	30	0	58	-	10	-	2.8	29	0	-	-	N/A	-	5.2	-	-
	MONTH	306.2	-	27	23	13.1	8.2	10.7	-	3.5	30	0	195	-	44	-	2.0	19	0	-	-	N/A	-	4.8	-	N/A

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

OCTOBER 1990

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND													
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND			SOIL (10cm)				TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)											
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST						MEAN DAILY	DIFFERENCE FROM AVERAGE									
Glenties Co. Donegal	1-10	142.0	-	9	8	13.8	7.8	10.8	-	4.3	9	0	64	-	15	-	-1.7	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11-20	52.0	-	9	6	14.1	8.5	11.3	-	4.5	17	0	69	-	18	-	N/A		N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21-END	102.1	-	9	8	11.8	7.5	9.7	-	4.4	29	0	58	-	10	-	N/A		N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	MONTH	296.1	191	27	22	13.2	7.9	10.6	-	4.3	9	0	191	-	44	-	N/A		N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malin Head Co. Donegal	1-10	94.8	-	10	8	13.4	9.5	11.5	-	6.1	3	0	71	-	18	-	4.8	3	0	11.0	-	16.4	-	10.7	10	-	-	-	-	-	-	-	-	-	-
	11-20	59.7	-	6	4	14.5	10.3	12.4	-	6.3	17	0	80	-	26	-	4.3	17	0	11.1	-	12.6	-	9.8	7	-	-	-	-	-	-	-	-	-	-
	21-END	97.1	-	7	7	11.8	7.9	9.9	-	3.4	30	0	61	-	11	-	0.3	30	0	9.5	-	26.6	-	9.7	10	-	-	-	-	-	-	-	-	-	-
	MONTH	251.6	240	23	19	13.2	9.2	11.2	+0.2	3.4	30	0	211	99	55	102	0.3	30	0	10.5	+0.1	55.6	74	10.1	27	34	-	-	-	-	-	-	-	-	-
Casement Aerodrome Co. Dublin	1-10	49.2	-	8	7	14.4	7.7	11.1	-	2.6	8	0	67	-	20	-	0.2	8	0	11.3	-	25.1	-	9.1	8	-	-	-	-	-	-	-	-	-	-
	11-20	67.6	-	8	6	15.1	10.7	12.9	-	8.1	16	0	85	-	30	-	7.1	16	0	11.8	-	21.3	-	6.1	4	-	-	-	-	-	-	-	-	-	-
	21-END	22.1	-	7	6	12.1	7.0	9.6	-	2.9	29	0	57	-	11	-	1.5	29	0	9.3	-	39.1	-	7.2	7	-	-	-	-	-	-	-	-	-	-
	MONTH	138.9	204	23	19	13.8	8.4	11.1	+0.8	2.6	8	0	210	106	62	103	0.2	8	0	10.8	-	85.5	88	7.4	19	27	-	-	-	-	-	-	-	-	-
Dublin Airport Co. Dublin	1-10	40.8	-	7	6	14.9	8.8	11.8	-	4.1	8	0	75	-	24	-	-0.7	8	1	11.9	-	25.8	-	6.7	2	-	-	-	-	-	-	-	-	-	-
	11-20	75.6	-	7	6	14.9	11.1	13.0	-	8.0	16	0	86	-	31	-	7.1	16	0	12.2	-	14.1	-	4.8	1	-	-	-	-	-	-	-	-	-	-
	21-END	32.8	-	7	6	12.3	7.6	10.0	-	3.1	29	0	62	-	12	-	-0.2	26	1	9.8	-	36.8	-	5.9	4	-	-	-	-	-	-	-	-	-	-
	MONTH	149.2	219	21	18	14.0	9.1	11.6	+0.9	3.1	29	0	222	107	67	112	-0.7	8	2	11.3	+0.6	76.7	77	5.8	7	28	-	-	-	-	-	-	-	-	-
Kinsealy Co. Dublin	1-10	36.9	-	7	5	15.1	8.4	11.8	-	4.4	5	0	74	-	24	-	-2.5	8	2	-	-	28.3	-	4.7	-	-	-	-	-	-	-	-	-	-	
	11-20	65.3	-	7	6	15.1	10.3	12.7	-	5.2	15	0	83	-	29	-	0.0	16	0	-	-	15.0	-	4.2	-	-	-	-	-	-	-	-	-	-	-
	21-END	35.4	-	7	6	12.4	7.8	10.1	-	3.6	29	0	63	-	14	-	-1.8	29	3	-	-	36.1	-	4.8	-	-	-	-	-	-	-	-	-	-	-
	MONTH	137.6	212	21	17	14.1	8.8	11.5	-	3.6	29	0	219	-	66	-	-2.5	8	5	-	-	79.4	-	4.5	-	20	-	-	-	-	-	-	-	-	
Galway Co. Galway	1-10	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A		N/A	N/A	-	N/A	-	N/A		N/A	N/A	-	N/A	-	N/A	N/A	-	-	-	-	-	-	-	-	-	
	11-20	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A		N/A	N/A	-	N/A	-	N/A		N/A	N/A	-	N/A	-	N/A	N/A	-	-	-	-	-	-	-	-	-	-
	21-END	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A		N/A	N/A	-	N/A	-	N/A		N/A	N/A	-	N/A	-	N/A	N/A	-	-	-	-	-	-	-	-	-	-
	MONTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+N/A	N/A		N/A	N/A	-	N/A	-	N/A		N/A	N/A	+N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Killarney (Muckross House) Co. Kerry	1-10	89.7	-	8	7	15.4	9.1	12.2	-	5.0	8	0	78	-	27	-	-0.2	8	1	-	-	18.3	-	-	-	-	-	-	-	-	-	-	-	-	-
	11-20	74.6	-	8	8	14.6	10.7	12.6	-	7.3	16	0	82	-	28	-	0.8	16	0	-	-	9.9	-	-	-	-	-	-	-	-	-	-	-	-	-
	21-END	71.3	-	10	10	12.4	7.6	10.0	-	3.4	26	0	62	-	12	-	1.0	26	2	-	-	10.4	-	-	-	-	-	-	-	-	-	-	-	-	-
	MONTH	235.6	148	26	25	14.1	9.1	11.6	-	3.4	26	0	223	-	66	-	-0.2	8	3	-	-	38.7	-	-	-	-	-	-	-	-	-	-	-	-	-

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						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4 °C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0 °C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST	MEAN DAILY						DIFFERENCE FROM AVERAGE
Cahirciveen ^e (Valentia Obsy.) Co. Kerry	1-10	66.1	-	8	8	15.3	10.3	12.8	-	5.7	3	0	84	-	31	-	1.5	3	0	13.0	-	19.0	-	6.9	7	-
	11-20	48.0	-	8	7	15.3	10.5	12.9	-	6.9	16	0	85	-	30	-	3.0	16	0	12.6	-	12.5	-	6.0	4	-
	21-END	99.0	-	10	10	13.4	8.4	10.9	-	2.6	26	0	72	-	16	-	-0.9	26	1	10.5	-	22.2	-	6.3	9	-
	MONTH	213.1	150	26	25	14.6	9.7	12.1	+0.3	2.6	26	0	240	102	77	101	-0.9	26	1	12.0	+0.2	53.7	66	6.4	20	27
Ardfert (Liscahane) Co. Kerry	1-10	55.5	-	7	7	15.4	9.3	12.3	-	3.9	8	0	79	-	28	-	0.4	8	1	-	-	N/A	-	-	-	-
	11-20	40.1	-	8	7	15.1	9.8	12.5	-	7.2	16	0	81	-	26	-	2.6	16	0	-	-	N/A	-	-	-	-
	21-END	74.8	-	10	8	12.9	7.4	10.2	-	3.9	26	0	63	-	13	-	-1.5	26	1	-	-	N/A	-	-	-	-
	MONTH	170.4	-	25	22	14.4	8.8	11.6	-	3.9	8	0	223	-	67	-	-1.5	26	2	-	-	N/A	-	-	-	-
Lullymore Co. Kildare	1-10	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	N/A	N/A	-	-	N/A	-	N/A	-	-
	11-20	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	N/A	N/A	-	-	N/A	-	N/A	-	-
	21-END	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	N/A	N/A	-	-	N/A	-	N/A	-	-
	MONTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	N/A	N/A	-	-	N/A	-	N/A	-	N/A
Kilkenny ^e Co. Kilkenny	1-10	33.9	-	7	5	15.4	8.7	12.0	-	1.4	8	0	77	-	27	-	-2.5	8	1	12.5	-	20.9	-	4.9	3	-
	11-20	54.2	-	8	6	14.7	10.6	12.6	-	5.5	16	0	82	-	28	-	-0.1	16	1	12.5	-	9.4	-	4.2	3	-
	21-END	46.6	-	9	6	12.7	7.3	10.0	-	2.1	29	0	62	-	14	-	-2.4	29	3	10.2	-	35.6	-	4.4	5	-
	MONTH	134.7	162	24	17	14.2	8.8	11.5	+1.1	1.4	8	0	222	112	69	106	-2.5	8	5	11.7	+1.1	65.9	76	4.5	11	23
Mooncoin (Silverspring) Co. Kilkenny	1-10	27.9	-	7	2	16.2	7.6	11.9	-	0.9	8	0	76	-	28	-	-3.3	8	2	-	-	30.9	-	-	-	-
	11-20	67.4	-	8	8	15.0	10.6	12.8	-	5.5	16	0	84	-	30	-	0.0	16	1	-	-	11.2	-	-	-	-
	21-END	45.8	-	11	8	12.8	6.8	9.8	-	0.7	29	0	60	-	13	-	-5.5	29	4	-	-	30.0	-	-	-	-
	MONTH	141.1	145	26	18	14.6	8.3	11.4	-	0.7	29	0	221	-	72	-	-5.5	29	7	-	-	72.1	-	-	-	-
Ballinamore Co. Leitrim	1-10	90.3	-	9	8	14.0	7.4	10.7	-	4.5	8	0	63	-	16	-	-1.4	8	1	-	-	17.2	-	3.4	-	-
	11-20	44.8	-	10	5	14.3	8.9	11.6	-	5.2	16	0	72	-	20	-	1.0	17	0	-	-	12.9	-	3.0	-	-
	21-END	53.8	-	9	9	12.0	6.3	9.2	-	0.7	29	0	54	-	10	-	-1.0	29	1	-	-	31.6	-	2.7	-	-
	MONTH	188.9	172	28	22	13.4	7.5	10.5	-	0.7	29	0	189	-	45	-	-1.4	8	2	-	-	61.7	-	3.1	-	13
Ardee (Boharnamoe) Co. Louth	1-10	57.9	-	10	8	14.7	7.6	11.2	-	5.2	7	0	68	-	19	-	N/A	N/A	-	-	-	-	-	-	-	-
	11-20	52.3	-	8	6	14.9	9.7	12.3	-	7.3	15	0	79	-	25	-	N/A	N/A	-	-	-	-	-	-	-	-
	21-END	31.3	-	8	5	12.9	4.8	8.9	-	0.0	31	0	52	-	10	-	N/A	N/A	-	-	-	-	-	-	-	-
	MONTH	141.5	173	26	19	14.1	7.3	10.7	-	0.0	31	0	198	-	54	-	N/A	N/A	-	-	-	-	-	-	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

OCTOBER 1990

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)															BRIGHT SUNSHINE		WIND					
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR								GROUND			SOIL (10cm)				TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)			
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST	MEAN DAILY						DIFFERENCE FROM AVERAGE		
Ballinrobe (Creagh) Co. Mayo	1-10	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	N/A	-	-	-	-	-	-
	11-20	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	N/A	-	-	-	-	-	-
	21-END	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	N/A	-	-	-	-	-	-
	MONTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	N/A	-	N/A	-	N/A	-	N/A
Belmullet Co. Mayo	1-10	95.6	-	10	9	14.5	9.7	12.1	-	7.3	3	0	77	-	23	-	4.7	8	0	12.4	-	22.5	-	8.6	10	-	-	-
	11-20	67.4	-	9	8	13.9	9.4	11.7	-	6.4	17	0	73	-	20	-	2.6	17	0	11.6	-	10.8	-	7.2	4	-	-	-
	21-END	64.2	-	8	8	12.8	8.0	10.4	-	5.5	26	0	66	-	13	-	2.4	23	0	10.4	-	32.4	-	7.6	6	-	-	-
	MONTH	227.2	201	27	25	13.7	9.0	11.3	+0.0	5.5	26	0	215	99	56	95	2.4	23	0	11.4	+0.2	65.7	77	7.8	20	29	-	-
Claremorris Co. Mayo	1-10	80.9	-	8	8	14.9	8.0	11.4	-	3.0	3	0	71	-	22	-	-0.9	3	1	12.2	-	15.9	-	5.6	4	-	-	-
	11-20	55.9	-	8	7	13.7	8.8	11.3	-	6.6	19	0	69	-	18	-	1.8	19	0	11.2	-	11.6	-	5.2	4	-	-	-
	21-END	58.4	-	9	8	12.1	6.0	9.1	-	2.3	28	0	52	-	9	-	-2.3	28	2	9.5	-	27.1	-	5.3	5	-	-	-
	MONTH	195.2	170	25	23	13.5	7.6	10.5	+0.4	2.3	28	0	192	102	49	92	-2.3	28	3	10.9	+0.6	54.6	70	5.4	13	15	-	-
Glenamoy Co. Mayo	1-10	130.2	-	8	8	14.9	8.4	11.7	-	5.0	3	0	73	-	22	-	1.4	8	0	-	-	16.9	-	0.1	-	-	-	-
	11-20	63.6	-	7	7	14.5	7.6	11.1	-	2.9	17	0	67	-	19	-	-0.2	17	1	-	-	N/A	-	0.0	-	-	-	-
	21-END	81.3	-	8	8	12.4	7.2	9.8	-	3.8	29	0	59	-	9	-	-3.1	29	1	-	-	N/A	-	0.0	-	-	-	-
	MONTH	275.1	199	23	23	13.9	7.7	10.8	-	2.9	17	0	199	-	50	-	-3.1	29	2	-	-	N/A	-	0.1	-	N/A	-	-
Dunsany (Grange) Co. Meath	1-10	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	N/A	-	-	-	-	-	-
	11-20	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	N/A	-	-	-	-	-	-
	21-END	N/A	-	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	N/A	-	-	-	-	-	-
	MONTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	N/A	-	-	-	-	-	-
Clones Co. Monaghan	1-10	88.2	-	8	8	13.9	8.3	11.1	-	5.3	7	0	67	-	18	-	1.8	7	0	11.5	-	15.9	-	4.9	4	-	-	-
	11-20	51.8	-	7	7	14.4	9.5	11.9	-	6.5	16	0	75	-	22	-	3.1	17	0	11.4	-	14.4	-	4.5	4	-	-	-
	21-END	48.2	-	9	8	11.9	6.7	9.3	-	2.2	29	0	55	-	10	-	0.3	29	0	9.4	-	29.8	-	4.9	4	-	-	-
	MONTH	188.2	214	24	23	13.3	8.1	10.7	+0.8	2.2	29	0	197	106	49	96	0.3	29	0	10.7	+0.6	60.1	79	4.8	12	20	-	-
Birr Co. Offaly	1-10	67.9	-	8	7	14.5	8.5	11.5	-	2.3	8	0	72	-	22	-	-1.8	8	1	12.1	-	18.2	-	4.2	2	-	-	-
	11-20	46.0	-	7	5	14.6	10.4	12.5	-	7.9	16	0	81	-	26	-	4.0	16	0	12.0	-	11.4	-	3.7	3	-	-	-
	21-END	28.6	-	8	8	12.3	6.6	9.5	-	2.3	29	0	57	-	12	-	-1.5	26	2	9.7	-	29.2	-	4.0	5	-	-	-
	MONTH	142.5	178	23	20	13.8	8.4	11.1	+0.7	2.3	8	0	210	105	60	98	-1.8	8	3	11.2	+0.6	58.8	68	4.0	10	21	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

OCTOBER 1990

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND										
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND				SOIL (10cm)			TOTAL NO. OF HOURS	% OF AVERAGE	MEAN SPEED (ms ⁻¹)	DAYS WITH GALE GUSTS	P.E. (PENMAN) (mm)								
						MEAN MAX.	MEAN MIN.	MEAN DAILY	DIFFERENCE FROM AVERAGE	LOWEST MIN.	DATE	DAYS WITH AIR FROST	DEGREE DAYS ABOVE 4.4°C	% OF AVERAGE	DEGREE DAYS ABOVE 10.0°C	% OF AVERAGE	LOWEST "GRASS-MIN"	DATE	DAYS WITH GROUND FROST						MEAN DAILY	DIFFERENCE FROM AVERAGE						
Dundrum (Knockavilla) Co. Tipperary	1-10	51.4	-	8	6	14.8	7.5	11.2	-	3.3	8	0	68	-	20	-	-0.1	8	1	-	-	-	-	-	-	-	-	-	-	-	-	
	11-20	59.1	-	9	7	14.6	9.0	11.8	-	4.9	17	0	74	-	22	-	1.0	17	0	-	-	-	-	-	-	-	-	-	-	-	-	
	21-END	55.4	-	9	7	12.0	5.8	8.9	-	1.8	29	0	51	-	9	-	-0.2	29	1	-	-	-	-	-	-	-	-	-	-	-	-	
	MONTH	165.9	-	26	20	13.8	7.4	10.6	-	1.8	29	0	193	-	51	-	-0.2	29	2	-	-	-	-	-	-	-	-	-	-	-	-	
Dungarvan (Carriglea) Co. Waterford	1-10	35.1	-	5	4	16.3	8.5	12.4	-	2.7	8	0	80	-	31	-	0.2	8	0	-	-	36.5	-	3.6	-	-	-	-	-	-	-	
	11-20	78.0	-	9	7	15.4	10.1	12.8	-	5.5	15	0	84	-	31	-	3.5	16	0	-	-	9.4	-	2.8	-	-	-	-	-	-	-	
	21-END	40.9	-	10	9	13.1	7.1	10.1	-	2.0	29	0	64	-	15	-	0.0	29	1	-	-	33.3	-	2.5	-	-	-	-	-	-	-	
	MONTH	154.0	147	24	20	14.9	8.5	11.7	-	2.0	29	0	228	-	77	-	0.0	29	1	-	-	78.9	-	3.0	-	-	-	-	-	-	-	-
Mullingar Co. Westmeath	1-10	88.8	-	8	8	14.0	7.9	10.9	-	2.0	8	0	66	-	18	-	-1.0	8	1	11.8	-	23.0	-	4.3	2	-	-	-	-	-	-	
	11-20	49.5	-	7	5	14.3	10.0	12.1	-	7.4	16	0	77	-	23	-	5.6	16	0	11.8	-	16.2	-	4.0	2	-	-	-	-	-	-	-
	21-END	34.6	-	7	7	11.8	6.1	8.9	-	1.5	29	0	51	-	8	-	-1.4	29	1	9.3	-	37.4	-	4.2	1	-	-	-	-	-	-	-
	MONTH	172.9	192	22	20	13.3	7.9	10.6	+0.6	1.5	29	0	194	104	49	92	-1.4	29	2	10.9	+0.6	76.6	89	4.2	5	17	-	-	-	-	-	
J.F.K. Park Co. Wexford	1-10	24.1	-	5	3	15.2	8.6	11.9	-	3.2	8	0	75	-	25	-	-1.6	8	2	-	-	29.8	-	6.5	-	-	-	-	-	-	-	
	11-20	72.7	-	7	5	14.8	11.3	13.0	-	8.0	16	0	86	-	31	-	3.4	16	0	-	-	11.5	-	5.6	-	-	-	-	-	-	-	
	21-END	38.9	-	9	6	12.6	7.6	10.1	-	2.4	29	0	63	-	14	-	-2.1	29	2	-	-	32.0	-	4.4	-	-	-	-	-	-	-	
	MONTH	135.7	128	21	14	14.1	9.1	11.6	-	2.4	29	0	225	-	70	-	-2.1	29	4	-	-	73.3	-	5.5	-	-	-	-	-	-	-	-
Clonroche Co. Wexford	1-10	33.8	-	6	4	14.8	7.3	11.0	-	2.5	8	0	67	-	19	-	-3.5	8	2	-	-	30.0	-	3.5	-	-	-	-	-	-	-	
	11-20	77.3	-	6	5	14.5	10.7	12.6	-	7.4	16	0	82	-	28	-	2.5	16	0	-	-	12.9	-	2.1	-	-	-	-	-	-	-	
	21-END	55.2	-	10	7	12.2	7.1	9.6	-	2.1	29	0	58	-	12	-	-1.2	26	3	-	-	37.3	-	2.8	-	-	-	-	-	-	-	
	MONTH	166.3	146	22	16	13.8	8.3	11.0	-	2.1	29	0	207	-	59	-	-3.5	8	5	-	-	80.2	-	2.8	-	-	-	-	-	-	-	
Johnstown Castle Co. Wexford	1-10	31.1	-	5	4	15.0	8.8	11.9	-	5.1	8	0	75	-	24	-	-1.8	8	2	-	-	34.0	-	2.6	-	-	-	-	-	-	-	
	11-20	79.6	-	6	6	15.4	11.4	13.4	-	8.2	16	0	90	-	35	-	4.0	16	0	-	-	13.5	-	2.3	-	-	-	-	-	-	-	
	21-END	41.8	-	9	6	13.2	7.9	10.6	-	3.6	30	0	68	-	17	-	-0.5	29	1	-	-	41.7	-	2.3	-	-	-	-	-	-	-	
	MONTH	152.5	148	20	16	14.5	9.3	11.9	-	3.6	30	0	233	-	75	-	-1.8	8	3	-	-	89.2	-	2.4	-	-	-	-	-	-	-	
Rosslare Co. Wexford	1-10	26.3	-	3	3	15.1	10.0	12.6	-	5.6	8	0	82	-	29	-	2.4	8	0	12.9	-	33.4	-	7.7	6	-	-	-	-	-	-	
	11-20	63.6	-	6	4	15.3	12.4	13.9	-	8.7	16	0	95	-	39	-	6.4	16	0	13.7	-	12.3	-	7.0	5	-	-	-	-	-	-	
	21-END	37.8	-	7	5	13.3	8.9	11.1	-	4.4	29	0	73	-	19	-	1.0	29	0	11.1	-	37.7	-	6.7	6	-	-	-	-	-	-	
	MONTH	127.7	142	16	12	14.5	10.4	12.5	+1.0	4.4	29	0	250	108	87	123	1.0	29	0	12.5	+0.7	83.4	77	7.1	17	35	-	-	-	-	-	

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 2 GLOBAL RADIATION

STATION	PERIOD	AMOUNT MJ/m ²
Malin Head Co. Donegal	1-10	48.28
	11-20	39.09
	21-end	46.81
	Month	134.18
Dublin Airport Co. Dublin	1-10	65.19
	11-20	39.26
	21-end	57.61
	Month	162.06
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	54.89
	11-20	44.53
	21-end	47.86
	Month	147.28
Kilkenny Co. Kilkenny	1-10	65.35
	11-20	31.53
	21-end	57.26
	Month	154.14
Belmullet Co. Mayo	1-10	53.46
	11-20	34.45
	21-end	50.09
	Month	138.00
Clones Co. Monaghan	1-10	45.00
	11-20	39.06
	21-end	50.11
	Month	134.17
Birr Co. Offaly	1-10	51.75
	11-20	36.46
	21-end	54.43
	Month	142.64

Notes on the tables in January issue

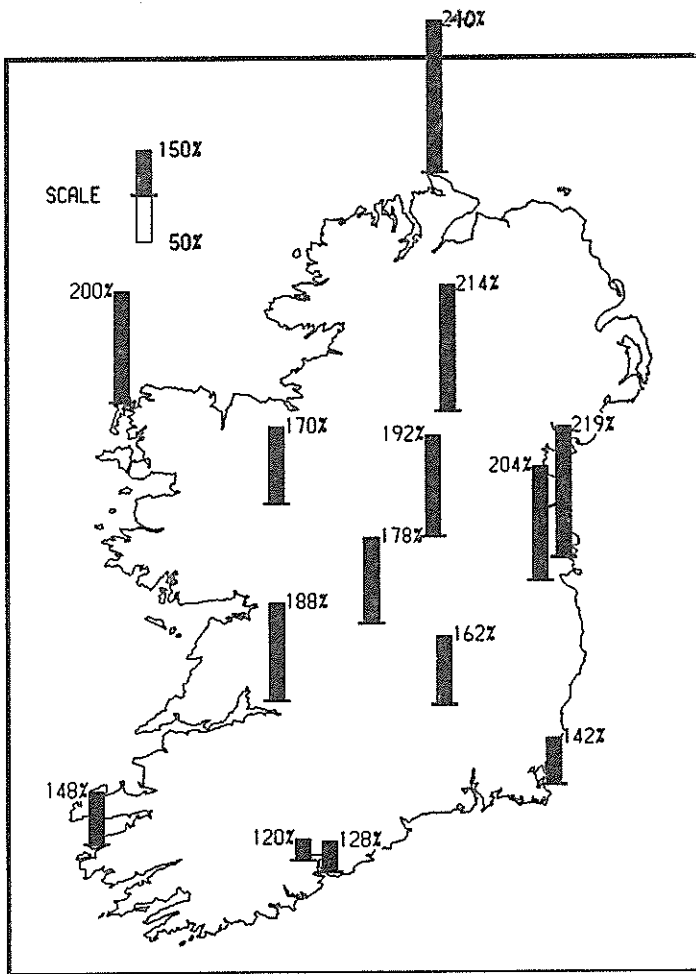
TABLE 3 POTENTIAL EVAPOTRANSPIRATION (P.E.) AND SOIL MOISTURE October 1990

STATION	PERIOD	SOIL MOISTURE (mm)			
		P.E. (mm)	Deficit	Accumulated Deficit	Surplus
Carlow (Oak Park) Co. Carlow	1-10	13.2	-	34	20
	11-20	20.3	-	0	53
	21-end	11.4	-	0	31
	Month	44.9	-	-	-
Kinsealy Co. Dublin	1-10	14.4	-	48	32
	11-20	4.7	-	0	60
	21-end	7.7	-	0	28
	Month	26.8	-	-	-
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	13.3	-	0	49
	11-20	17.4	-	0	16
	21-end	8.6	-	0	97
	Month	39.3	-	-	-
Ballinamore Co. Leitrim	1-10	-	-	0*	76*
	11-20	-	-	0*	59*
	21-end	-	-	-	54*
	Month	-	-	-	-
Glenamoy Co. Mayo	1-10	-	-	0*	-
	11-20	-	-	0*	-
	21-end	-	-	-	-
	Month	-	-	-	-
Johnstown Castle Co. Wexford	1-10	12.1	-	45	26
	11-20	13.8	-	0	68
	21-end	13.9	-	0	27
	Month	39.8	-	-	-

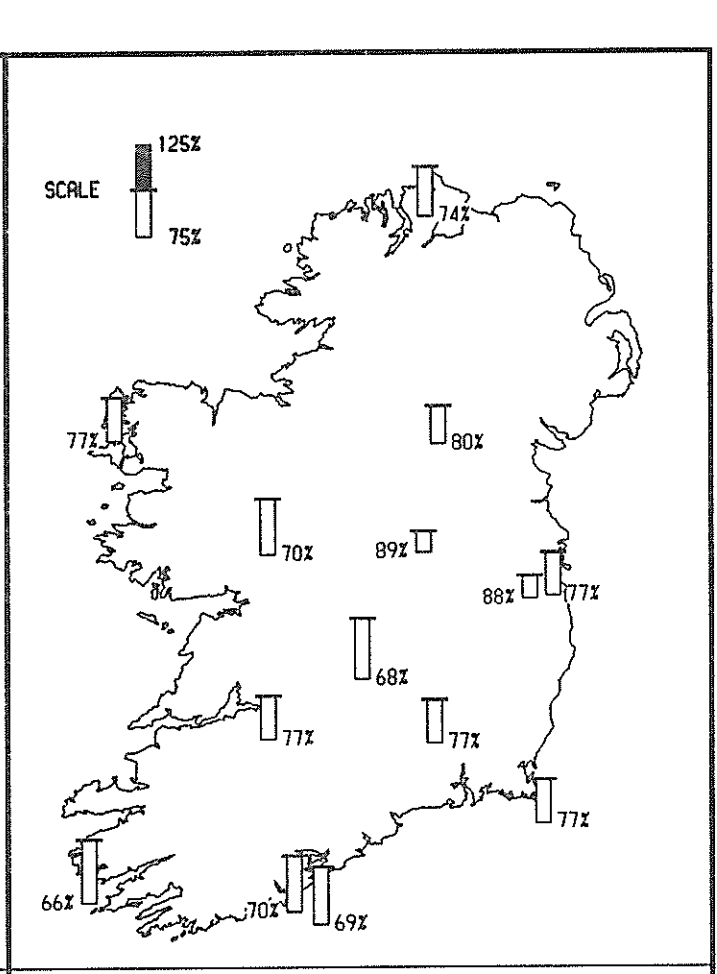
*Estimated

TABLE 4 SOIL CLIMATE (MULLINGAR)

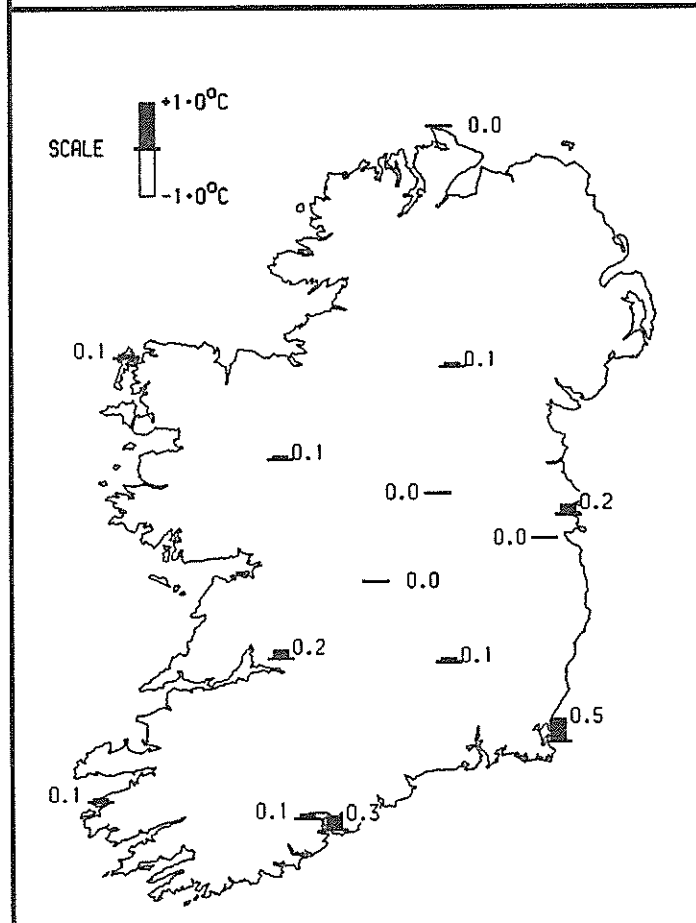
BARE SOIL TYPE	PERIOD	MEAN TEMPERATURE (°C at 100mm)			TEMPERATURE GRADIENT (to 200mm)	SOIL WATER POTENTIAL (hPa) (at depths)	
		Max.	Daily	Min.		75mm	200mm
		Peat	1-10	13.2	11.9	10.4	0.8
	11-20	12.4	11.7	10.3	0.5	56.1	59.9
	21-end	10.7	9.5	8.3	1.3	59.1	61.8
Mineral	1-10	13.7	11.8	10.3	0.3	208.5	176.0
	11-20	12.9	12.0	10.6	0.2	69.0	74.9
	21-end	11.5	9.8	8.5	0.6	69.9	76.6



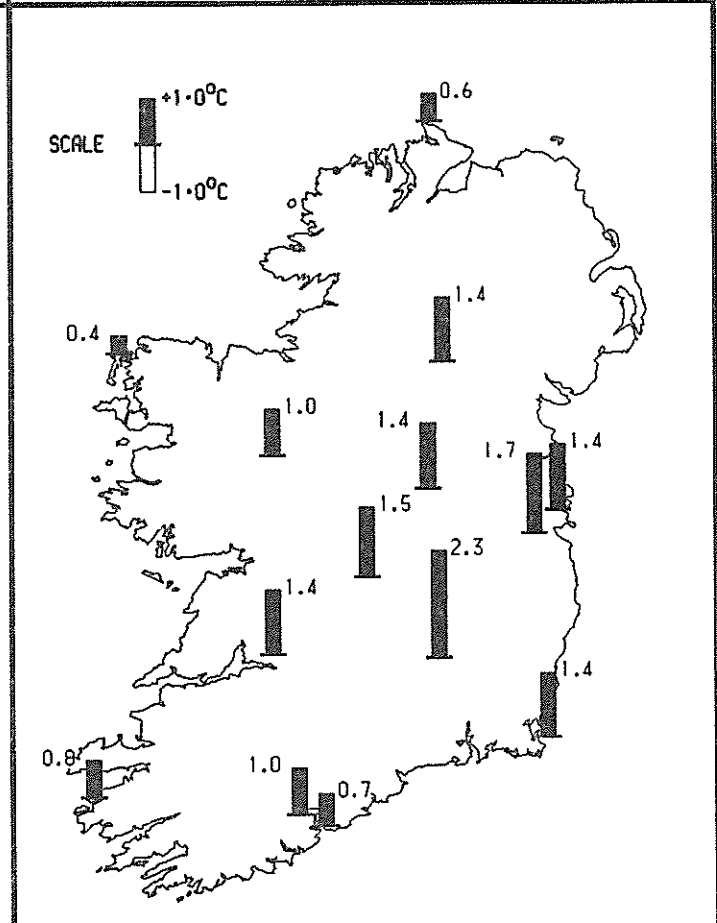
RAINFALL (Percentage of 1951-1980 normals)



SUNSHINE (Percentage of 1951-1980 normals)



MEAN MAX. TEMPERATURE (Deviation from 1951-1980 normals)



MEAN MIN. TEMPERATURE (Deviation from 1951-1980 normals)

Weather and Potato Blight — an Overview of the 1990 Season

Early Season

Dry conditions from March to May gave an early start to the season—the temperature was especially high in May. The only important spell of blight conditions occurred in coastal and western areas on May 29. The first report of infection from inspectors was observed on isolated plants over a widespread area of north Dublin on June 11—this may have resulted from the last spell in May.

Mid-Season

Although a number of minor blight spells set in from time to time during the season, the first major spell of conditions favouring the spread of potato blight took place on June 25/26. A second (major) spell followed on July 6/7 and a third spell of note occurred from July 27 to July 29.

Late Season

An extensive humid airmass and complex troughs affected the country during the second half of August, particularly between August 21 and 25—in many areas this spell was the most significant one of the season. Finally the frequency of blight spells in September was unusually low.

EBH Accumulations

Figs 1 to 4 show the progress of effective blight hour (EBH) accumulations through the season at a selection of representative stations. There was almost no EBH recorded at Malin Head before the first decade (ten-day interval) in July and again very little occurred until the last decade of August (coinciding with the second and last major spell of the season). Accumulations of EBH at Claremorris continued to occur through the early part of the season albeit at a low rate; totals for the first two decades of July brought the accumulation up to average and a further recovery occurred towards the end of August. Finally accumulations of EBH remained well below normal throughout the season both at Roche's Point and at Rosslare although the various spells are also marked.

Blight Warnings

Blight warnings were issued by the Meteorological Service on June 22, July 4, July 25 and August 17. The number of warnings was less than average, which is usually 5 to 6 warnings

Inspectors' Reports

Reports from inspectors in the southeast and east indicated that less than average infection was observed throughout the season with a slow spread of disease. This agrees with the accumulation of EBH at Rosslare. In the north of Donegal infection was reported to be more than average although with slow spread. Here the reports diverge from the EBH totals at Malin Head although two very prominent spells, which show up very well in Fig 1, may have contributed greatly to the sustained raised level of disease observed.

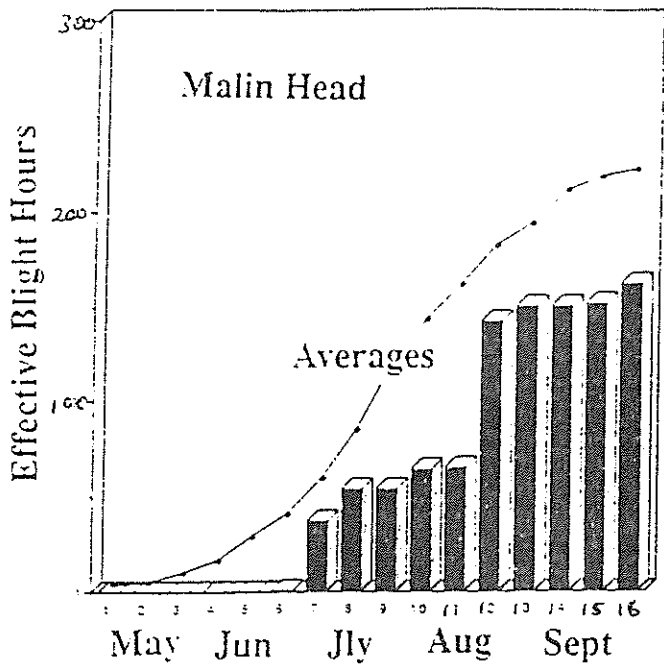


Fig 1

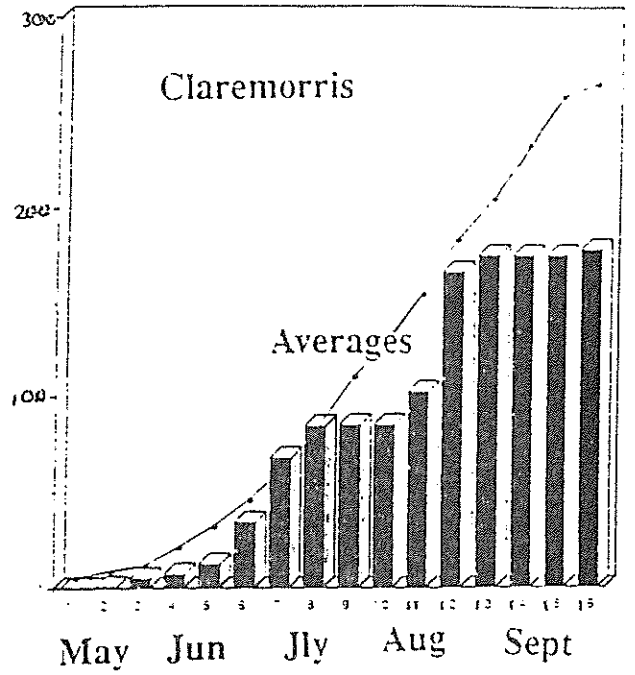


Fig 2

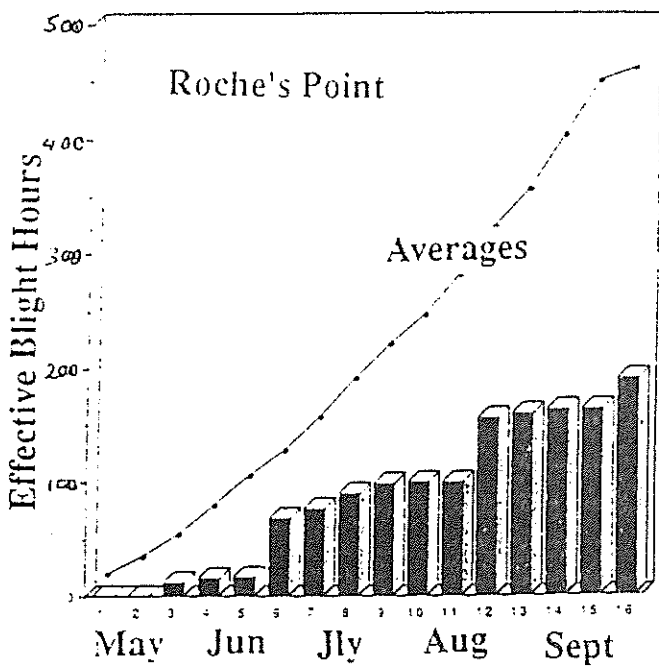


Fig 3

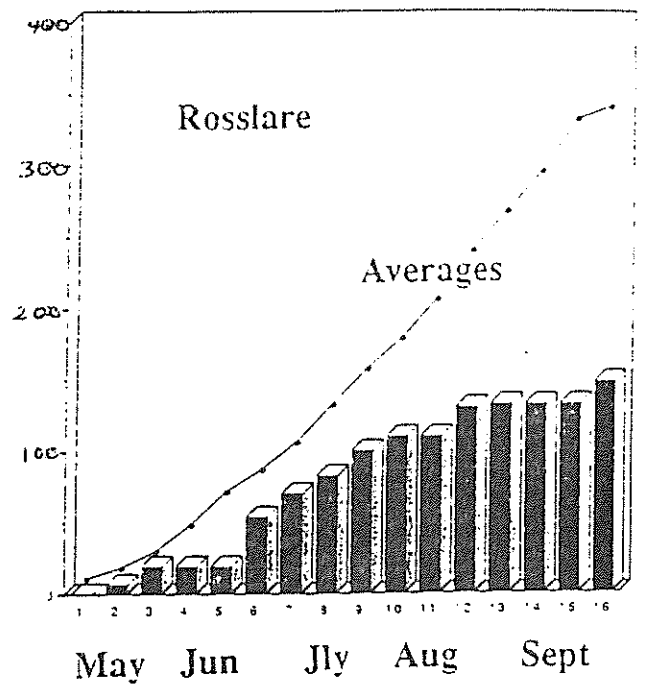


Fig 4

Effective Blight Hours (EBH) as they accumulated through the Season