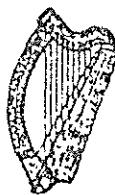


# METEOROLOGICAL SERVICE



## AGROMETEOROLOGICAL BULLETIN

MAY 1984

### The Weather of May

A northeasterly or light variable airflow over Ireland up to 3rd gave dry weather everywhere. Some rain occurred in southern areas on 4th as a depression southwest of Ireland moved away towards France. Subsequently a ridge of high pressure developed southwards from the Icelandic region, and dominated the weather conditions until 14th as its centre drifted over Scotland, Ireland and the North Sea. The associated weather was dry and sunny, although some cloudy spells also occurred. Winds were light variable and ground frost occurred on some nights.

As the high receded into Scandinavia a weak cold front, which crossed the country on 14th, gave a little rain in places. Eastern areas were affected by it to some extent up to 17th. Western areas were influenced by a ridge of high pressure, which extended to all areas by 18th. For most of the country however the period was dry and there was ground frost on most nights. Some rain from another front on 19th became a little more persistent in eastern areas and a north to northwest airflow prevailed to 22nd. Freshening northerly winds on 22nd were associated with a deepening depression over England giving more extensive rain particularly in eastern areas. Further outbreaks of rain occurred on 25th from a frontal trough which moved in from the North Atlantic. A northerly airflow set in on 26th but again high pressure dominated to 29th and there was sharp ground frost at night where skies were clear. More active troughs began to reach western and southwestern areas on 30th, and gave increased rainfall amounts over the following day and freshening southerly winds.

Monthly Amounts of Precipitation were well below normal everywhere. Values varied from 25% of normal at Mullingar to 59% at Dublin Airport and Belmullet. Wettest days were 3rd, 14th, 19th, 22nd, 25th, and 31st. The spell from 19th/20th April to May 18th/21st was classed as being very dry, particularly in the midland areas. The mean rainfall for many stations in these midland areas for a thirty day period ending May 19th did not exceed 6mm. Soil moisture deficits exceeded 70mm. at a number of measuring stations.

Mean Monthly Air Temperature was below normal everywhere, varying from 0.4°C below at Dublin Airport and Roches Point, to 1.2°C below at Casement. Air frost occurred infrequently, except in parts of the midlands. Ground frost was widespread on several nights, and was sharp to severe in some midland areas on a few nights. Degree days, threshold 10.0°C, were below average for most stations, varying from 61% at Malin Head to 100% at Roches Point and Clones. Soil temperatures (100mm) were 1.5 to 3°C above average up to 15th and were near average subsequently. For the month as a whole soil temperatures varied from 2.1°C above normal at Malin Head to 0.4°C at Shannon Airport and Roches Point.

Mean Duration of Bright Sunshine was well above normal varying from 107% of normal at Rosslare to 137% at Clones. It was in excess of 120% at many separated stations. Global radiation varied from 100% to 113% of average (at the long established stations).

Strong Winds with gale gusts were largely absent except on 22nd, 23rd in southern areas, and on 31st.

Summary Sunny and very dry. Although air temperatures were below normal soil temperatures were generally well above normal except in parts of the midlands.

The data contained in this Bulletin are Provisional. Some of the material in Table 1 will be published in its final form later in the Monthly Weather Report; final values of Solar Radiation at stations in Table 2 will be published in the Annual Summary of Solar Radiation.

TABLE 1

MAY 1984

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND				
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND			SOIL (10cm)				MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms <sup>-1</sup> )	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	0.0	-	0	0	16.0	4.9	10.4	-	-1.7	8	1	63	-	20	-	-7.0	8	2	-	-	7.62	-	3.0	-	-
	11-20	8.5	-	4	2	15.0	3.1	9.0	-	-1.6	13	2	51	-	14	-	-5.5	13	5	-	-	6.83	-	2.7	-	-
	21-END	10.4	-	4	4	15.1	5.5	10.3	-	0.5	27	0	67	-	19	-	-2.5	28	3	-	-	5.67	-	4.1	-	-
	MONTH	18.9	32	8	6	15.4	4.5	9.9	-	-1.7	8	3	182	-	53	-	-7.0	8	10	-	-	6.67	-	3.3	-	80
Shannon Airport Co. Clare	1-10	10.9	-	1	1	16.7	6.6	11.7	-	3.3	8	0	73	-	25	-	-0.5	8	1	13.6	-	7.57	-	4.0	0	-
	11-20	6.1	-	5	4	14.8	4.8	9.8	-	2.6	16	0	55	-	14	-	-2.9	17	2	13.2	-	8.17	-	3.6	0	-
	21-END	10.5	-	4	3	15.9	7.1	11.5	-	3.0	21	0	79	-	26	-	-0.6	21	2	14.0	-	5.83	-	4.8	3	-
	MONTH	27.5	47	10	8	15.8	6.2	11.0	-0.5	2.6	16	0	207	94	65	92	-2.9	17	5	13.6	+0.4	7.15	119	4.1	3	96
Fermoy (Coolnakilla) Co. Cork	1-10	13.1	-	3	1	14.4	5.1	9.8	-	1.5	8	0	55	-	13	-	-3.9	8	2	-	-	6.65	-	3.9	-	-
	11-20	1.6	-	1	1	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	3.8	-	-
	21-END	21.3	-	5	4	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	5.8	-	-
	MONTH	36.0	-	9	6	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	N/A	-	4.5	-	N/A
Fermoy (Moore Park) Co. Cork	1-10	10.6	-	3	1	16.0	4.2	10.1	-	-1.7	8	1	60	-	18	-	-7.2	8	7	-	-	6.27	-	2.7	-	-
	11-20	1.6	-	2	0	15.2	2.2	8.7	-	-1.8	13	2	49	-	14	-	-6.0	13	7	-	-	7.94	-	2.5	-	-
	21-END	15.1	-	5	4	15.3	5.5	10.4	-	0.0	28	0	69	-	20	-	-2.8	21	3	-	-	5.61	-	3.7	-	-
	MONTH	27.3	40	10	5	15.5	4.0	9.7	-	-1.8	13	3	177	-	52	-	-7.2	8	17	-	-	6.57	-	3.0	-	79
Mallow Co. Cork	1-10	14.5	-	2	2	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	6.03	-	-	-	-
	11-20	6.5	-	4	3	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	6.63	-	-	-	-
	21-END	15.3	-	4	3	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	4.99	-	-	-	-
	MONTH	36.3	50	10	8	N/A	N/A	N/A	-	N/A	N/A	N/A	-	N/A	-	N/A	-	N/A	N/A	-	-	5.85	-	-	-	-
Roches Point Co. Cork	1-10	18.5	-	2	2	14.3	7.6	10.9	-	3.7	8	0	65	-	16	-	-1.5	8	1	12.9	-	7.96	-	5.4	3	-
	11-20	3.4	-	2	2	13.8	5.9	9.9	-	4.0	13	0	55	-	11	-	-0.6	13	1	13.3	-	8.93	-	5.5	0	-
	21-END	11.1	-	3	3	14.9	7.9	11.4	-	5.7	21	0	77	-	21	-	1.7	28	0	13.6	-	6.72	-	7.9	4	-
	MONTH	33.0	49	7	7	14.3	7.1	10.7	-0.4	3.7	8	0	197	98	49	100	-1.5	8	2	13.3	+0.4	7.83	122	6.3	7	106
Glencolumbkille Co. Donegal	1-10	3.8	-	2	2	14.8	5.4	10.1	-	2.2	8	0	58	-	15	-	N/A	N/A	-	-	-	8.27	-	2.5	-	-
	11-20	17.7	-	7	6	13.4	5.0	9.2	-	2.5	17	0	49	-	9	-	-3.5	17	4	-	-	8.19	-	2.4	-	-
	21-END	26.3	-	8	4	13.2	6.9	10.0	-	3.0	28	0	63	-	12	-	-3.0	28	3	-	-	N/A	-	3.4	-	-
	MONTH	47.8	-	17	12	13.8	5.8	9.8	-	2.2	8	0	169	-	37	-	N/A	N/A	-	-	-	N/A	-	2.8	-	N/A

TABLE 1 (CONTINUED)

MAY 1984

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND											
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND				SOIL (10cm)			MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms <sup>-1</sup> )	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	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	-	-	-	-	-	-	-	-	-	-	-	-	
	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	-	-	-	-	-	-	-	-	-	-	-	-	
	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	-	-	-	-	-	-	-	-	-	-	-	-	
Malin Head Co. Donegal	1-10	4.4	-	3	2	11.6	5.5	8.5	-	1.8	8	0	42	-	5	-	-0.6	8	2	14.1	-	9.15	-	4.8	0	-	-	-	-	-	-	-	
	11-20	16.4	-	5	3	12.2	5.7	8.9	-	3.4	17	0	46	-	6	-	-0.2	17	2	13.9	-	8.59	-	4.9	0	-	-	-	-	-	-	-	
	21-END	7.4	-	7	4	12.3	8.2	10.3	-	3.1	28	0	65	-	11	-	0.5	28	0	14.7	-	6.57	-	7.1	1	-	-	-	-	-	-	-	
	MONTH	28.2	49	15	9	12.0	6.5	9.3	-0.8	1.8	8	0	153	87	22	61	-0.6	8	4	14.2	+2.1	8.05	125	5.7	1	88	-	-	-	-	-		
Casement Aerodrome Co. Dublin	1-10	4.8	-	1	1	14.7	3.5	9.1	-	-1.2	8	1	51	-	13	-	-5.3	8	6	12.3	-	8.46	-	3.3	0	-	-	-	-	-	-	-	
	11-20	9.4	-	4	4	14.0	3.5	8.7	-	-1.3	13	2	48	-	11	-	-5.0	13	5	12.4	-	6.76	-	2.8	0	-	-	-	-	-	-	-	
	21-END	15.6	-	6	3	15.1	4.8	10.0	-	-0.3	27	1	64	-	18	-	-5.3	27	4	12.9	-	5.39	-	3.9	2	-	-	-	-	-	-	-	
	MONTH	29.8	51	11	8	14.6	4.0	9.3	-1.2	-1.3	13	4	163	87	43	78	-5.3	8	15	12.5	-	6.82	111	3.3	2	77	-	-	-	-	-		
Dublin Airport Co. Dublin	1-10	0.0	-	0	0	14.3	5.8	10.0	-	3.0	8	0	57	-	14	-	-1.9	8	3	14.4	-	8.25	-	3.4	0	-	-	-	-	-	-	-	
	11-20	15.5	-	4	3	13.7	5.7	9.7	-	4.1	13	0	53	-	11	-	-1.9	13	4	14.4	-	7.18	-	2.6	0	-	-	-	-	-	-	-	
	21-END	18.9	-	5	4	15.0	6.4	10.7	-	2.3	27	0	70	-	20	-	1.4	27	0	14.3	-	5.87	-	4.0	0	-	-	-	-	-	-	-	
	MONTH	34.4	59	9	7	14.4	6.0	10.2	-0.4	2.3	27	0	180	93	45	87	-1.9	8	7	14.4	+1.5	7.06	112	3.4	0	85	-	-	-	-	-		
Kinsealy Co. Dublin	1-10	1.5	-	1	1	13.9	4.3	9.1	-	0.5	8	0	49	-	11	-	-3.6	8	6	-	-	8.39	-	3.0	-	-	-	-	-	-	-	-	
	11-20	18.5	-	4	3	13.3	4.5	8.9	-	-0.5	14	1	47	-	9	-	-3.9	13	4	-	-	7.30	-	2.4	-	-	-	-	-	-	-	-	
	21-END	17.5	-	6	5	14.3	6.1	10.2	-	2.5	28	0	65	-	16	-	-1.4	28	3	-	-	5.88	-	3.3	-	-	-	-	-	-	-	-	
	MONTH	37.5	67	11	9	13.8	5.0	9.4	-	-0.5	14	1	162	-	36	-	-3.9	13	13	-	-	7.15	-	2.9	-	78	-	-	-	-	-		
Galway Co. Galway	1-10	6.9	-	1	1	16.3	5.5	10.9	-	2.5	8	0	66	-	21	-	-0.6	8	2	14.2	-	7.25	-	3.9	0	-	-	-	-	-	-	-	
	11-20	7.8	-	4	2	14.4	4.0	9.2	-	1.4	17	0	51	-	13	-	-2.0	13	4	13.7	-	8.06	-	3.3	0	-	-	-	-	-	-	-	
	21-END	22.7	-	6	4	14.8	7.0	10.9	-	2.8	28	0	72	-	19	-	-1.0	21	1	13.9	-	6.86	-	5.1	2	-	-	-	-	-	-	-	
	MONTH	37.4	53	11	7	15.1	5.6	10.3	-0.5	1.4	17	0	189	-	53	-	-2.0	13	7	13.9	-	7.37	118	4.1	2	89	-	-	-	-	-		
Killarney (Muckross House) Co. Kerry	1-10	9.5	-	2	2	15.7	4.5	10.1	-	0.6	8	0	59	-	17	-	-2.1	8	4	-	-	6.92	-	-	-	-	-	-	-	-	-	-	
	11-20	10.1	-	4	3	13.9	3.4	8.7	-	1.3	14	0	46	-	10	-	-2.0	12	8	-	-	6.06	-	-	-	-	-	-	-	-	-	-	
	21-END	16.8	-	8	4	14.0	6.5	10.3	-	1.5	28	0	66	-	15	-	-3.0	21	4	-	-	5.05	-	-	-	-	-	-	-	-	-	-	
	MONTH	36.4	37	14	9	14.5	4.9	9.7	-	0.6	8	0	171	-	42	-	-3.0	21	16	-	-	5.98	-	-	-	-	-	-	-	-	-	-	

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

MAY

1984

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)															BRIGHT SUNSHINE		WIND			
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR										GROUND			SOIL (10cm)		MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms <sup>-1</sup> )	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
Cahirciveen (Valentia Obsy.) Co. Kerry	1-10	13.6	-	1	1	16.0	5.6	10.8	-	1.8	8	0	65	-	21	-	-0.4	8	1	14.0	-	7.69	-	3.6	0	-
	11-20	5.8	-	4	2	13.7	5.1	9.4	-	2.3	13	0	51	-	10	-	-1.0	13	1	14.0	-	7.26	-	4.5	0	-
	21-END	22.2	-	7	5	13.7	7.0	10.3	-	2.0	28	0	66	-	14	-	-0.8	28	1	14.0	-	6.00	-	6.0	4	-
	MONTH	41.6	49	12	8	14.4	5.9	10.2	-1.0	1.8	8	0	182	88	45	79	-1.0	13	3	14.0	+0.8	6.95	115	4.7	4	81
Ardfert (Liscahane) Co. Kerry	1-10	4.2	-	1	1	15.6	4.5	10.0	-	0.8	8	0	59	-	17	-	-2.8	8	3	-	-	8.22	-	-	-	-
	11-20	10.4	-	4	3	14.3	3.5	8.9	-	1.4	16	0	49	-	12	-	-2.0	17	9	-	-	7.77	-	-	-	-
	21-END	12.8	-	7	3	14.0	6.3	10.1	-	-0.4	21	1	65	-	15	-	-4.0	21	3	-	-	6.01	-	-	-	-
	MONTH	27.4	-	12	7	14.6	4.8	9.7	-	-0.4	21	1	173	-	44	-	-4.0	21	15	-	-	7.29	-	-	-	-
Lullymore Co. Kildare	1-10	0.0	-	0	0	15.3	1.3	8.3	-	-3.5	8	4	48	-	14	-	-9.0	8	9	-	-	7.67	-	2.8	-	-
	11-20	4.3	-	3	2	15.0	1.3	8.2	-	-4.0	13	4	46	-	14	-	-10.5	13	7	-	-	6.78	-	2.4	-	-
	21-END	12.5	-	5	4	15.4	3.8	9.6	-	-1.8	27	3	63	-	19	-	-10.5	27	5	-	-	5.69	-	3.7	-	-
	MONTH	16.8	27	8	6	15.2	2.2	8.7	-	-4.0	13	11	156	-	47	-	-10.5	27	21	-	-	6.68	-	3.0	-	71
Kilkenny Co. Kilkenny	1-10	1.2	-	1	1	16.2	5.0	10.6	-	-1.5	8	1	64	-	21	-	-6.9	8	3	13.9	-	7.31	-	2.8	0	-
	11-20	3.8	-	3	2	15.6	2.5	9.1	-	-1.4	13	3	53	-	15	-	-7.7	13	6	14.5	-	7.94	-	2.2	0	-
	21-END	12.7	-	4	3	15.7	5.2	10.5	-	1.5	21	0	69	-	20	-	-4.2	21	5	14.0	-	5.61	-	3.7	2	-
	MONTH	17.7	28	8	6	15.8	4.3	10.0	-0.7	-1.5	8	4	186	94	56	93	-7.7	13	14	14.1	+1.1	6.91	120	2.9	2	83
Mooncoin (Silverspring) Co. Kilkenny	1-10	8.6	-	1	1	15.8	4.6	10.2	-	-1.6	8	1	60	-	18	-	-4.5	8	6	-	-	7.78	-	-	-	-
	11-20	4.6	-	3	1	14.9	3.1	9.0	-	-1.0	12	2	51	-	14	-	-4.8	13	5	-	-	5.94	-	-	-	-
	21-END	12.9	-	5	3	15.3	5.9	10.6	-	1.9	28	0	70	-	20	-	-4.0	27	4	-	-	4.87	-	-	-	-
	MONTH	26.1	37	9	5	15.3	4.6	10.0	-	-1.6	8	3	181	-	52	-	-4.8	13	15	-	-	6.15	-	-	-	-
Ballinamore Co. Leitrim	1-10	0.3	-	1	0	16.2	3.6	9.9	-	-0.7	8	1	58	-	19	-	-5.7	8	7	-	-	7.07	-	2.0	-	-
	11-20	11.9	-	5	3	14.4	1.3	7.9	-	-2.0	13	3	43	-	12	-	-7.5	13	9	-	-	6.32	-	1.7	-	-
	21-END	18.9	-	4	3	15.5	5.5	10.5	-	0.8	27	0	70	-	21	-	-5.6	27	4	-	-	5.25	-	3.1	-	-
	MONTH	31.1	43	10	6	15.4	3.6	9.5	-	-2.0	13	4	171	-	52	-	-7.5	13	20	-	-	6.18	-	2.3	-	67
Ardee (Bohernamoe) Co. Louth	1-10	0.0	-	0	0	15.4	2.2	8.8	-	-1.1	8	1	51	-	15	-	-3.7	2	7	-	-	-	-	-	-	-
	11-20	10.5	-	5	3	14.3	1.5	7.9	-	-2.9	13	4	45	-	16	-	-4.9	14	5	-	-	-	-	-	-	-
	21-END	10.4	-	6	4	16.1	4.6	10.4	-	-0.9	27	2	70	-	22	-	-3.1	27	4	-	-	-	-	-	-	-
	MONTH	20.9	35	11	7	15.3	2.8	9.1	-	-2.9	13	7	166	-	53	-	-4.9	14	16	-	-	-	-	-	-	-

NOTES ON THE TABLES IN JANUARY ISSUE

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TABLE 1 (CONTINUED)

MAY 1984

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)														BRIGHT SUNSHINE		WIND		P.E. (PENMAN) (mm)		
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND				SOIL (10cm)			MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (ms <sup>-1</sup> )	DAYS WITH GALE GUSTS			
						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
Baillinrobe (Creagh) Co. Mayo	1-10	5.8	-	1	1	16.1	3.8	10.0	-	1.8	9	0	59	-	17	-	-3.3	9	5	-	-	6.61	-	2.3	-	-
	11-20	8.9	-	7	2	14.7	1.8	8.3	-	-1.0	17	2	46	-	13	-	-6.6	17	9	-	-	8.34	-	1.7	-	-
	21-END	19.4	-	6	4	15.8	5.6	10.7	-	1.2	29	0	72	-	22	-	-5.1	21	6	-	-	5.78	-	2.4	-	-
	MONTH	34.1	43	14	7	15.6	3.8	9.7	-	-1.0	17	2	176	-	53	-	-6.6	17	20	-	-	6.87	-	2.1	-	67
Belmullet Co. Mayo	1-10	7.7	-	1	1	14.9	6.0	10.5	-	2.8	8	0	61	-	17	-	-0.2	8	1	13.9	-	8.06	-	4.4	0	-
	11-20	13.3	-	8	6	13.3	4.7	9.0	-	1.6	13	0	48	-	9	-	-1.6	13	4	14.1	-	8.82	-	4.2	0	-
	21-END	18.4	-	8	5	13.7	7.0	10.4	-	3.6	29	0	66	-	14	-	0.0	29	0	14.0	-	5.55	-	5.9	2	-
	MONTH	39.4	59	17	12	14.0	5.9	10.0	-0.7	1.6	13	0	175	92	40	87	-1.6	13	5	14.0	+1.4	7.42	114	4.9	2	86
Claremorris Co. Mayo	1-10	1.2	-	1	1	16.3	3.8	10.0	-	0.4	8	0	59	-	19	-	-3.0	8	5	13.4	-	6.64	-	3.6	0	-
	11-20	11.5	-	6	3	14.4	1.2	7.8	-	-1.1	17	2	43	-	12	-	-5.0	17	9	12.3	-	6.61	-	3.1	0	-
	21-END	15.7	-	6	4	15.0	5.4	10.2	-	1.2	28	0	66	-	18	-	-2.3	28	3	13.5	-	5.85	-	5.0	2	-
	MONTH	28.4	39	13	8	15.2	3.5	9.4	-1.0	-1.1	17	2	168	91	49	94	-5.0	17	17	13.1	+1.1	6.35	114	3.9	2	72
Glenamoy Co. Mayo	1-10	3.7	-	1	1	15.3	4.0	9.6	-	-1.3	8	1	56	-	16	-	-3.4	8	3	-	-	7.68	-	1.8	-	-
	11-20	19.7	-	6	6	13.9	2.9	8.4	-	-0.6	17	2	45	-	10	-	-2.5	13	5	-	-	7.83	-	1.7	-	-
	21-END	21.1	-	7	7	13.9	4.8	9.3	-	0.0	28	0	59	-	13	-	-2.6	21	4	-	-	4.68	-	3.2	-	-
	MONTH	44.5	54	14	14	14.3	3.9	9.1	-	-1.3	8	3	160	-	39	-	-3.4	8	12	-	-	6.66	-	2.3	-	69
Dunsany (Grange) Co. Meath	1-10	0.2	-	1	0	14.6	2.4	8.5	-	-1.5	8	2	47	-	12	-	-5.6	8	8	-	-	7.47	-	-	-	-
	11-20	11.1	-	6	5	13.9	1.8	7.8	-	-7.1	13	3	43	-	11	-	-7.3	13	7	-	-	6.52	-	-	-	-
	21-END	9.4	-	5	4	15.0	4.9	10.0	-	-0.2	28	2	65	-	19	-	-4.5	28	4	-	-	5.92	-	-	-	-
	MONTH	20.7	33	12	9	14.5	3.1	8.8	-	-7.1	13	7	155	-	41	-	-7.3	13	19	-	-	6.55	-	-	-	-
Clones Co. Monaghan	1-10	5.2	-	2	2	15.8	3.8	9.8	-	1.1	8	0	57	-	18	-	-2.7	6	5	11.3	-	7.08	-	2.1	0	-
	11-20	8.4	-	3	2	14.7	2.5	8.6	-	-0.2	13	1	48	-	13	-	-7.5	13	8	11.3	-	9.00	-	2.2	0	-
	21-END	10.8	-	3	3	15.5	5.9	10.7	-	0.6	27	0	71	-	22	-	-7.5	27	4	12.3	-	6.45	-	3.6	2	-
	MONTH	24.4	38	8	7	15.3	4.1	9.7	-0.7	-0.2	13	1	176	95	53	100	-7.5	13	17	11.6	-0.7	7.47	137	2.7	2	80
Birr Co. Offaly	1-10	2.6	-	3	1	16.5	4.3	10.4	-	-0.4	8	1	63	-	21	-	-4.8	8	5	14.9	-	6.86	-	3.5	0	-
	11-20	4.4	-	2	2	15.3	1.8	8.5	-	-2.2	13	4	48	-	15	-	-8.1	13	8	14.7	-	7.71	-	2.3	0	-
	21-END	11.3	-	3	2	15.3	5.4	10.4	-	0.4	28	0	68	-	21	-	-4.7	27	4	14.8	-	5.58	-	3.7	1	-
	MONTH	18.3	30	8	5	15.7	3.9	9.8	-0.9	-2.2	13	5	180	91	56	95	-8.1	13	17	14.8	+1.8	6.68	116	3.1	1	79

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 1 (CONTINUED)

MAY 1984

STATION	PERIOD	RAINFALL (mm)				TEMPERATURE (°C)															BRIGHT SUNSHINE		WIND																
		AMOUNT	% OF AVERAGE	RAIN DAYS	WET DAYS	AIR							GROUND			SOIL (10cm)		MEAN DAILY (HRS.)	% OF AVERAGE	MEAN SPEED (me <sup>2</sup> )	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	8.3	-	3	2	15.6	4.4	10.0	-	-1.8	8	1	58	-	17	-	-6.6	8	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11-20	7.3	-	4	3	14.8	2.7	8.7	-	-2.6	13	2	49	-	14	-	-8.4	13	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21-END	9.9	-	5	2	15.2	5.7	10.5	-	1.3	21	0	69	-	19	-	-6.6	28	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	MONTH	25.5	-	12	7	15.2	4.3	9.8	-	-2.6	13	3	176	-	49	-	-8.4	13	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dungarvan (Carriglea) Co. Waterford	1-10	31.5	-	2	2	16.3	4.4	10.3	-	-1.4	8	1	62	-	19	-	-1.6	8	1	-	-	7.51	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11-20	0.8	-	1	0	15.7	3.4	9.5	-	-1.0	13	1	56	-	16	-	-1.5	13	2	-	-	8.76	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21-END	13.3	-	4	3	15.9	6.1	11.0	-	2.8	28	0	73	-	23	-	2.1	21	0	-	-	5.73	-	2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	MONTH	45.6	58	7	5	15.9	4.7	10.3	-	-1.4	8	2	190	-	58	-	-1.6	8	3	-	-	7.28	-	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mullingar Co. Westmeath	1-10	0.9	-	1	0	15.3	4.0	9.7	-	-1.0	8	1	55	-	16	-	-3.6	8	3	12.5	-	7.61	-	2.5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11-20	5.8	-	4	2	14.5	2.2	8.3	-	-1.3	13	1	46	-	12	-	-4.4	13	5	12.7	-	8.53	-	2.2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21-END	10.0	-	5	2	15.0	5.6	10.3	-	1.6	28	0	67	-	19	-	-1.9	28	1	13.4	-	5.76	-	3.6	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MONTH	16.7	25	10	4	14.9	4.0	9.5	-0.8	-1.3	13	2	168	88	47	82	-4.4	13	9	12.9	+0.5	7.25	125	2.8	2	79	-	-	-	-	-	-	-	-	-	-	-	-	-
J.F.K. Park Co. Wexford	1-10	5.9	-	1	1	15.1	6.4	10.8	-	3.4	8	0	64	-	18	-	-3.1	3	6	-	-	7.81	-	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11-20	8.9	-	4	4	14.5	5.2	9.9	-	2.3	14	0	55	-	13	-	-4.5	14	4	-	-	6.44	-	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21-END	16.1	-	4	4	15.9	6.4	11.1	-	3.0	27	0	74	-	24	-	-2.8	28	6	-	-	5.60	-	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	MONTH	30.9	42	9	9	15.2	6.0	10.6	-	2.3	14	0	194	-	55	-	-4.5	14	16	-	-	6.58	-	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Clonroche Co. Wexford	1-10	1.5	-	1	1	15.0	4.6	9.8	-	0.9	8	0	56	-	15	-	-6.5	8	10	-	-	7.86	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11-20	18.4	-	5	4	14.0	4.5	9.2	-	0.1	14	0	50	-	11	-	-6.8	14	6	-	-	6.41	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21-END	15.9	-	3	3	14.9	6.0	10.5	-	2.1	27	0	68	-	18	-	-2.5	27	6	-	-	6.33	-	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	MONTH	35.8	44	9	8	14.6	5.1	9.9	-	0.1	14	0	174	-	44	-	-6.8	14	22	-	-	6.85	-	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Johnstown Castle Co. Wexford	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	-	-	8.89	-	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	-	-	7.10	-	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	-	-	6.49	-	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	-	-	7.46	-	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Rosslare Co. Wexford	1-10	0.3	-	1	0	12.5	8.2	10.3	-	5.5	9	0	59	-	9	-	-1.5	9	1	14.0	-	8.47	-	6.1	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11-20	11.2	-	5	4	11.8	7.4	9.6	-	4.5	14	0	52	-	5	-	-5.5	14	2	13.4	-	7.06	-	4.9	0	-	-	-	-	-	-	-	-	-	-	-	-		
	21-END	13.0	-	3	3	13.4	8.2	10.8	-	5.7	27	0	70	-	15	-	-1.2	24	1	14.3	-	7.15	-	6.2	4	-	-	-	-	-	-	-	-	-	-	-	-		
	MONTH	24.5	42	9	7	12.6	7.9	10.3	-0.5	4.5	14	0	182	93	29	67	-5.5	14	4	13.9	+0.6	7.55	107	5.8	5	95	-	-	-	-	-	-	-	-	-	-	-		

NOTES ON THE TABLES IN JANUARY ISSUE

TABLE 2 GLOBAL SOLAR RADIATION

STATION	PERIOD	AMOUNT
		Joule/cm <sup>2</sup>
Malin Head Co. Donegal	1-10	20976
	11-20	20780
	21-end	20852
	Month	62608
Dublin Airport Co. Dublin	1-10	19228
	11-20	19499
	21-end	18334
	Month	57061
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	19194
	11-20	20768
	21-end	19747
	Month	59709
Kilkenny Co. Kilkenny	1-10	17768
	11-20	20389
	21-end	17560
	Month	55717
Belmullet Co. Mayo	1-10	18322
	11-20	21163
	21-end	19024
	Month	58509
Clones Co. Monaghan	1-10	N.A
	11-20	N.A
	21-end	N.A
	Month	N.A
Birr Co. Offaly	1-10	17123
	11-20	17829
	21-end	16552
	Month	51504

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

STATION	PERIOD	P.E. (mm)		SOIL MOISTURE (mm)		
		Amount	Deficit	Accumulated Deficit	Surplus	
Carlow (Oak Park) Co. Carlow	1-10	30.0	30	58	-	
	11-20	29.2	12	70	-	
	21-31	30.4	6	76	-	
	Month	89.6	-	-	-	
Kinsealy Co. Dublin	1-10	26.5	25	55	-	
	11-20	27.2	1	56	-	
	21-31	26.8	2	58	-	
	Month	80.5	-	-	-	
Cahirciveen (Valentia Obs.) Co. Kerry	1-10	18.2	4	23	-	
	11-20	18.3	12	35	-	
	21-30	22.3	14	49	-	
	Month	58.8	-	-	-	
Ballinamore Co. Leitrim	1-10	26.9	27	51	-	
	11-20	29.1	10	61	-	
	21-30	28.3	11	72	-	
	Month	84.3	-	-	-	
Glenamoy Co. Mayo	1-10	19.3	16	39	-	
	11-20	21.1	1	38	-	
	21-31	21.5	2	36	-	
	Month	61.9	-	-	-	
Johnstown Castle Co. Wexford	1-10					
	11-20	N.A.	N.A.	N.A.	N.A.	
	21-end					
	Month					

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Notes on the tables in January issue

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	14.2	12.4	10.6	-0.2	177	118
	11-20	14.7	12.8	11.0	-0.2	201	143
	21-end	15.0	13.5	12.1	-0.3	222	159
Mineral	1-10	15.3	12.0	9.1	+0.1	527	300
	11-20	15.8	12.2	8.8	+0.1	569	363
	21-end	15.7	12.8	10.4	0.0	590	440

## special topic

### Potato Blight and the Weather

(Continued from April)

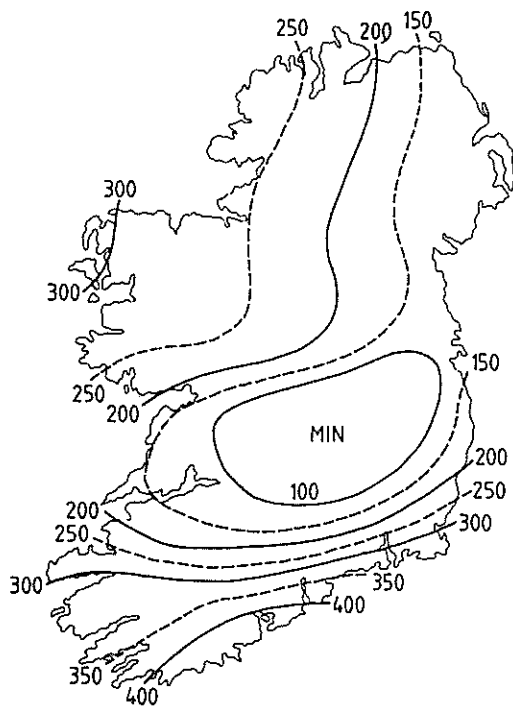
Forecasts of the occurrence of weather favourable to the spread of potato blight are made using the weather maps. The procedure involves relating the onset of blight weather periods to the type of meteorological situation which gives rise to blight. In general these situations are relatively few and easily recognised. Examples of typical situations include a moist and usually southerly airflow of tropical origin, which affects southern and western areas most, and stagnant or slow-moving depressions giving lengthy spells of showery or wet overcast weather.

Warnings of weather expected to be conducive to the spread of potato blight are issued as appropriate by the Meteorological Service. These are broadcast on the day of issue on RTE Radio I in its 1.30 p.m. and 6.30 p.m. news bulletins as well as the 'live' weather forecasts at night time on television. They are also included as appropriate in the recorded telephone weather services.

Blight warnings are usually issued sufficiently far in advance of a major blight spell for the grower to have the opportunity of spraying. As blight sprays generally protect crops for up to two weeks or more, it has been the practice not to issue warnings more frequently than this. If a major spell of blight weather is imminent however, discretion is used and the interval between warnings may be reduced below the two weeks. In the absence of periods of heavy rain the interval between warnings may be increased beyond the two weeks.

A year of low incidence occurs when only one or two spells of blight weather are recorded after the appearance of blight. An epidemic year is characterised by two or three spells close together, with less than 14 days separation. Potato inspectors of the Dept. of Agriculture regularly return blight progress reports so that the blight levels in the field are also monitored.

Accumulations of effective blight hours are monitored during the growing season, May to September, each year. The figure over shows the average (1957-1981) seasonal accumulations, recorded in Ireland. These totals vary from a maximum in southern coastal areas, high values in the west and northwest, to a minimum over much of the south midlands. It is clear that a reliable warning system has much to offer growers and product distributors on a regional basis in terms of economies to be achieved from adequate protection while eliminating unnecessary waste.



*Climatic susceptibility in Ireland to potato blight. Mean seasonal duration of effective blight hours, May-September, 1957-1981*

T. Keane  
Agricultural Meteorology  
Meteorological Service

Ref: Weather and Potato Blight, Agrometeorological Memorandum No. 8, Meteorological Service 1982, pp32, price £1.50 (incl. postage)