

TEMPERATURE REGIME DURING APRIL, 2012

Temperature plays vital role in the growth and development of crops. Thermal regime showed mostly normal to slightly above normal trend (rising only by 1°C) in the agricultural planes of the country.

Mean daily temperature remained normal in the agricultural plains of KPK, normal to above normal by 1°C in Potohar region, central and southern Punjab except Lahore division where it remained below normal by the same extent. In lower parts of Sindh represented by Tandojam and high elevated agricultural plains of Balochistan represented by Quetta, it remained below normal by 1°C. Whereas in upper plains of Sindh and Gilgit Baltistan region it remained above normal by the same extent. Mean daily temperature ranged 24 - 26°C in Khyber Pakhtoonkhawa, 23 to 26°C in Potohar plateau, in remaining parts of Punjab it ranged 26-28°C, in Sindh it ranged 30-31°C, in Gilgit Baltistan region it ranged 14 to 17°C and was observed 16°C in Quetta valley.

The day time temperature represented by mean maximum showed mostly normal to below normal trend in the country. It remained normal to below normal by 1-2°C in most parts of the country except Jhelum in the Potohar region and Gilgit Baltistan, where it increased above normal by the same extent of 1-2°C. The highest maximum temperature in the agricultural planes of the country was recorded 42.0°C at Tandojam in lower Sindh. This drop in day time temperature is mainly due to rainy/cloudy atmosphere observed for most of the days during this month. The night time temperature represented by mean minimum remained normal to below normal by 1 to 2°C in most of the agricultural planes of the country except at Lahore in central Punjab and Tandojam in lower Sindh where it remained slightly below normal by 1°C. The lowest minimum temperature was recorded 4.6°C at Quetta.

Maximum number of stress days with minimum temperature less than or equal to 0°C was observed nil in agricultural planes due to seasonal rise in temperature. Number of stress days with maximum temperature greater or equal to 40°C and R.H. less than or equal to 30% was observed for 3 days in Jhelum only.

Agricultural soils showed mixed trend in most agricultural areas of the country. In rainfed Potohar region represented by Rawalpindi and in high elevated agricultural planes of Balochistan represented by Quetta valley soil temperatures raised 1-2°C at root zones as well as in deep layers. In Agricultural soils of central Punjab represented by Faisalabad and Tandojam in lower Sindh, soil temperatures remained normal to below normal by 1-2°C at root zones. In deep layers this situation almost remained the same in Tandojam and observed normal having slightly rising trend in Faisalabad.

From the general analysis of soil behavior in this month, it is concluded that at the present the agricultural soil is free from any significant moisture stress due to above normal rains reported in this month. However the soil data indicates slightly dry condition in Potohar region and Quetta valley may exist. However main Kharif crops, i.e. cotton and sugarcane may get sufficient soil moisture at early growing stages in irrigated areas of Punjab and Sindh due to satisfactory rains received in April.

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STATION	TEMPERATURE (°C)					NUMBER OF STRESS DAYS WITH		
	DAILY	MAXIMUM		MINIMUM		MINIMUM TEMP ≤ 0°C	MAX. TEMP ≥ 35°C & R.H. ≤ 30 %	MAX. TEMP ≥ 40°C & R.H. ≤ 30 %
	MEAN	MEAN	HIGHEST	MEAN	LOWEST			
PESHAWAR	23.5 (23.2)	30.1 (30.0)	36.5 (42.0)	16.8 (16.4)	15.0 (5.0)	0	0	0
D.I. KHAN	25.5 (26.0)	32.4 (33.5)	37.5 (47.0)	18.5 (18.5)	16.0 (7.0)	0	0	0
KAMRA	21.8 ---	27.6 ---	34.5 ---	16.0 ---	13.5 ---	0	0	0
RAWALPINDI	23.0 (22.6)	29.8 (30.1)	34.0 (40.6)	16.1 (15.0)	13.0 (6.1)	0	0	0
JHELUM	26.5 (25.4)	34.0 (33.0)	37.6 (43.3)	18.9 (17.7)	15.6 (8.6)	0	3	0
SARGODHA	26.7 (25.9)	33.4 (33.9)	38.2 (44.0)	20.0 (17.9)	17.0 (8.9)	0	0	0
LAHORE	25.9 (26.8)	33.2 (33.9)	36.7 (46.0)	18.5 (19.6)	16.5 (8.0)	0	0	0
FAISALABAD	26.6 (25.8)	33.4 (33.5)	36.6 (46.0)	19.8 (18.0)	16.0 (9.0)	0	0	0
MULTAN	27.6 (27.5)	34.9 (35.5)	37.5 (47.0)	20.3 (19.5)	18.3 (9.4)	0	0	0
KHAN PUR	28.4 (27.7)	36.2 (37.0)	39.8 (47.0)	20.5 (18.5)	18.6 (6.5)	0	0	0
QUETTA	15.9 (16.6)	22.8 (24.8)	26.6 (35.0)	9.0 (8.3)	4.6 (-3.9)	0	0	0
ROHRI	30.6 (29.8)	37.1 (37.6)	41.0 (47.0)	24.0 (22.0)	21.0 (10.0)	0	0	0
TANDOJAM	30.2 (31.0)	38.1 (38.9)	42.0 (48.0)	22.2 (23.0)	19.5 (12.0)	0	0	0
GILGIT	17.4 (16.6)	24.6 (23.9)	30.5 (37.2)	10.1 (9.4)	5.5 (1.1)	0	0	0
SKARDU	13.9 (12.6)	20.4 (18.4)	23.1 (28.6)	7.3 (6.7)	4.9 (-1.1)	0	0	0

SOIL TEMPERATURE (°C)

STATION	TIME (PST)	DEPTHS (CM)					
		5	10	20	30	50	100
RAWALPINDI	8 AM	19.1 (17.3)	19.6 (16.8)	20.9 (18.1)	21.3 (19.0)	21.2 (19.3)	19.8 (18.2)
	2 PM	27.9 (27.9)	25.0 (24.2)	22.7 (20.0)	22.1 (19.2)	21.2 (19.2)	19.9 (18.2)
	5 PM	26.3 (25.5)	24.6 (24.2)	22.9 (21.2)	22.1 (19.8)	21.2 (19.1)	19.9 (18.3)
FAISALABAD	8 AM	23.7 (23.4)	24.1 (23.0)	25.8 (24.9)	26.5 (26.1)	26.3 (26.6)	23.9 (24.5)
	2 PM	36.0 (37.5)	32.6 (32.0)	28.2 (28.3)	26.6 (26.5)	26.0 (26.2)	23.9 (24.7)
	5 PM	34.2 (34.0)	32.9 (33.1)	29.9 (30.2)	27.4 (27.6)	26.0 (26.2)	23.9 (24.6)
TANDOJAM	8 AM	27.6 (27.1)	28.6 (27.9)	30.3 (28.7)	30.0 (30.7)	29.3 (29.5)	26.3 (27.7)
	2 PM	34.0 (35.6)	33.4 (32.6)	31.6 (29.8)	29.9 (30.6)	29.2 (29.4)	26.7 (27.8)
	5 PM	35.5 (36.1)	35.1 (34.3)	32.4 (31.3)	30.2 (31.0)	29.3 (29.4)	26.7 (27.9)
QUETTA	8 AM	13.4 (11.7)	13.9 (12.2)	16.3 (14.2)	10.4 (15.4)	16.2 (15.0)	16.1 (14.0)
	2 PM	22.6 (26.3)	20.7 (21.7)	17.2 (16.4)	10.8 (15.2)	16.1 (15.1)	16.2 (13.6)
	5 PM	22.8 (21.1)	21.7 (22.3)	18.6 (18.2)	11.8 (15.8)	16.2 (15.1)	16.3 (14.1)