

TEMPERATURE REGIME DURING MAY, 2012

Temperature plays vital role in the growth and development of crops. Thermal regime in this month generally remained above normal. Due to heat waves prevailed in second half of this month in the agricultural plains of Sindh and Punjab including cotton belt temperature also remained high. This above normal heat in crop atmosphere especially in the last week of this month may cause increased evapotranspiration and moisture stress to standing crops due to which Kharif crops may suffer.

Mean daily temperature remained normal to above normal by 1 to 2°C in all agricultural plains of the country except lower Sindh represented by Tandojam where it was observed slightly below normal by 1°C. Mean daily temperature ranged 28 to 32°C in Khyber Pakhtoonkhawa, 26 to 32°C in the Potohar plateau and 32 to 34°C in remaining agricultural plains of the Punjab. In Sindh it ranged 33 to 36°C, 16 to 20°C in Gilgit Baltistan region and it was observed 21°C in the high elevated agricultural plains of Balochistan represented by Quetta valley.

The day time temperature represented by mean maximum also remained above normal by 1-2°C in the country except lower Sindh represented by Tandojam and Quetta valley, where it was observed 1°C below normal. The highest maximum temperature was recorded 48.5°C at Rohri.

The night time temperature represented by mean minimum remained normal to above normal by 1-3°C in most of the agricultural plains of the country except upper plains of KPK represented by Peshawar and northern hilly areas of GB represented by Skardu where it was observed slightly below normal. The lowest minimum temperature was recorded 5.1°C at Skardu.

Maximum number of stress days with maximum temperature greater or equal to 35°C and R.H. less than or equal to 30% was 22 observed at Multan followed by 21 days at Lahore and Jhelum each. Maximum number of stress days with maximum temperature greater or equal to 40°C and R.H. less than or equal to 30% was 21, observed at Multan division followed by 16 days at Jhelum and 15 days at Lahore division. It is thus obvious that thermal stress conditions exist in the agricultural plains of the Punjab, which are not favorable for growth of standing and coming Kharif crops at this stage.

Agricultural soils also showed normal to cooler trend in Rawalpindi, Faisalabad, Tandojam and Quetta region. Soil temperature remained significantly below normal at shallow layers. But it gradually reached near to normal/normal range in deep layers. Over all soil temperature/soil moisture condition is satisfactory in most of the agricultural plains of the country. Generally the coming month of June is hot and dry in Pakistan; therefore farmers of irrigated areas should be cautious about in time supply of water to the crops, so that standing crops like sugarcane and cotton may not suffer due to any heat wave or rising temperature.

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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	28.2 (28.6)	36.3 (35.9)	43.0 (48.0)	20.0 (21.3)	14.3 (11.0)	0	03	02
D.I. KHAN	31.6 (30.9)	39.2 (38.7)	46.0 (49.0)	24.0 (23.1)	17.5 (14.0)	0	09	00
KAMRA	26.2 ---	33.8 ---	43.0 ---	18.5 ---	13.5 ---	0	05	04
RAWALPINDI	28.0 (27.5)	36.3 (35.3)	42.0 (45.6)	19.6 (19.7)	13.0 (11.0)	0	08	00
JHELUM	31.6 (30.1)	40.1 (38.1)	46.8 (49.2)	23.0 (22.0)	14.4 (13.0)	0	21	16
SARGODHA	32.5 (30.8)	40.1 (39.0)	47.7 (50.2)	24.9 (22.5)	19.1 (14.0)	0	18	10
LAHORE	32.6 (31.2)	39.7 (38.6)	46.0 (48.0)	25.4 (23.7)	16.5 (14.0)	0	21	15
FAISALABAD	32.1 (30.6)	39.7 (38.4)	46.8 (48.0)	24.5 (22.7)	18.5 (13.0)	0	16	13
MULTAN	33.8 (32.4)	41.4 (40.4)	48.0 (49.0)	26.1 (24.4)	20.7 (13.0)	0	22	21
KHAN PUR	33.1 (32.5)	41.2 (41.3)	45.5 (49.0)	25.0 (23.6)	19.5 (11.0)	0	09	07
QUETTA	20.8 (21.0)	28.8 (30.4)	34.2 (39.4)	12.7 (11.5)	8.0 (-0.3)	0	00	00
ROHRI	35.6 (34.3)	43.0 (42.4)	48.5 (49.0)	28.2 (26.2)	24.0 (16.0)	0	00	00
TANDOJAM	33.2 (33.9)	40.9 (41.6)	44.0 (49.0)	25.5 (26.2)	20.0 (17.0)	0	00	00
GILGIT	19.6 (20.0)	27.5 (28.4)	36.5 (39.5)	11.7 (11.7)	7.7 (3.9)	0	00	00
SKARDU	16.4 (16.7)	23.8 (23.5)	30.2 (34.2)	9.0 (9.9)	5.1 (1.7)	0	00	00

SOIL TEMPERATURE (°C)

STATION	TIME (PST)	DEPTHS (CM)					
		5	10	20	30	50	100
RAWALPINDI	8 AM	24.4 (26.2)	24.9 (25.5)	26.3 (26.7)	26.7 (27.4)	26.0 (26.8)	24.3 (23.8)
	2 PM	34.7 (39.4)	32.0 (34.9)	28.9 (29.3)	27.7 (27.7)	26.1 (26.5)	24.4 (23.8)
	5 PM	33.0 (36.1)	31.3 (34.8)	28.8 (31.0)	28.0 (28.6)	26.5 (26.6)	24.5 (23.8)
FAISALABAD	8 AM	30.0 (31.0)	29.6 (30.5)	30.9 (32.2)	31.5 (33.3)	30.8 (33.2)	27.7 (30.3)
	2 PM	43.4 (46.4)	38.1 (40.7)	33.2 (35.5)	31.5 (33.4)	30.5 (32.9)	27.7 (30.5)
	5 PM	41.4 (43.0)	38.7 (40.7)	35.7 (37.1)	32.2 (34.4)	30.5 (33.1)	27.6 (29.8)
TANDOJAM	8 AM	31.2 (31.4)	32.0 (31.9)	32.9 (32.6)	33.1 (34.2)	32.3 (33.0)	29.0 (30.8)
	2 PM	36.4 (39.0)	35.9 (36.1)	34.0 (33.6)	32.8 (34.2)	32.2 (32.9)	29.2 (30.9)
	5 PM	38.0 (39.5)	37.8 (37.2)	35.4 (34.9)	33.3 (34.4)	32.2 (32.8)	29.3 (30.8)
QUETTA	8 AM	18.6 (18.6)	18.6 (18.3)	21.1 (20.7)	15.3 (22.0)	20.6 (21.5)	19.7 (18.9)
	2 PM	30.1 (36.2)	27.5 (29.5)	22.5 (23.2)	15.5 (21.8)	20.6 (21.5)	19.9 (19.0)
	5 PM	29.6 (29.1)	28.1 (30.3)	24.3 (25.5)	16.7 (22.7)	20.6 (21.3)	20.0 (19.4)