





Crop Weather Calendar of *Rabi* season Soybean: Barisal Region (Districts: Barisal, Patuakhali, Jhalakathi, Barguna & Bhola), Bangladesh

Region: Barisal	<i>Rabi</i> season Soybean								Life span: 110-120 day									
Months	January				February				March				April					
Std. Week/Normal	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Rainfall (mm)	1.3	1.0	1.0	1.7	2.7	3.7	5.0	8.0	5.7	5.3	6.0	14.3	18.0	18.0	21.7	25.0	34.7	
Max. Temp. (°C)	25.1	25.2	25.8	26.2	27.0	27.8	28.9	29.7	30.7	31.7	32.7	33.0	32.9	33.3	33.7	33.5	33.5	
Min. Temp. (°C)	12.6	12.5	12.7	12.5	14.0	14.6	16.2	16.9	18.3	19.5	20.5	22.1	22.8	23.7	24.0	24.6	24.4	
Mean Temp. (°C)	18.9	18.9	19.2	19.4	20.5	21.2	22.5	23.3	24.5	25.6	26.6	27.6	27.9	28.5	28.8	29.1	29.0	
RH max (%)	98.0	97.8	97.6	97.6	97.3	97.1	97.0	97.0	96.7	97.1	96.7	96.5	96.5	96.6	96.4	96.0	96.0	
RH Min (%)	50.1	49.3	48.5	45.2	46.2	44.8	46.2	45.1	44.9	45.2	45.3	50.7	54.4	58.0	59.8	61.9	62.5	
RH mean (%)	74.1	73.6	73.1	71.4	71.7	70.9	71.6	71.0	70.8	71.2	71.0	73.6	75.4	77.3	78.1	78.9	79.3	
SS hr (hrs)	46.7	44.0	47.3	52.7	50.3	52.3	51.7	52.0	53.7	54.0	54.3	52.3	50.7	53.0	51.3	54.7	51.7	
WD (deg)	209	211	204	216	217	211	214	211	214	226	218	210	198	200	198	197	191	
WS(Km/hr)	4.5	4.4	4.5	4.3	5.0	4.6	4.9	4.9	5.1	5.2	5.4	6.3	6.7	6.9	7.0	7.5	7.2	
Growth stages																		
	Germination and emergence				Vegetative stage				Reproductive stage				Maturity and Harvesting					
Favourable Environment																		
Temperature	Germination rate lower below 13°C and maximum at 25°C				The optimum temperature is 20°C -30 °C; at 35°C temperatures and above considered inhibitory to production.													
Relative humidity	50% to 70%																	
Soil temperature	At least 10°C required for germination and root nodulation; Root zone temperature for adequate nodulation and nitrogen fixation is needed at least 15°C to 17°C whereas 25°C is optimal.																	
Sunshine hour	Six to eight hours of sunlight																	
Favorable environmental conditions for insects and diseases																		
Hairy caterpillar	Egg, larva and pupa gradually increased with increase in temperature, while total developmental period and adult survival period decreased. The maximum and minimum temperatures for larva development are 39 ± 1°C and 12 ± 1°C.respectively.																	
Common Cut worm	Lowest fecundity and fertility of eggs occur at 34.90 °C; the upper development threshold temperature for all stages is 37 °C; The highest fecundity and fertility of eggs occur at 19.55 °C; RH-65% to 85%.																	
Leaf roller	Temperatures between 25° C and 30° C are favorable for the survival and multiplication of leaf roller.																	
Pod borer	Maximum temperature: 27.48°C -31.44 °C, Minimum temperature: 1 9.73°C -23.91 °C; Average relative humidity ranging from 86.18% - 93.61 %; The weekly average of total rainfall ranging from 11.07-94.33 mm with low or medium rainfall in previous weeks followed by high in current weeks.																	
Anthracnose	For disease development maximum temperature ranged from 28 °C to 32 °C and minimum temperature 22 °C to 25 °C, Frequent rainy and warm weather along with prolonged leaf wetness (exceed 12 hrs/day) favored disease development																	
Yellow Mosaic Virus	Viral infection and symptom appearance are found most severe at 18 °C to 20 °C but may not be apparent at the temperature higher than 30 °C; Disease development favored by rainfall.																	

Weather Warning				
Rainfall	Occurrence of rainfall delayed sowing (5 to 10 mm)	Less than 20 mm		
Cloudy weather	Cloudy condition			
Drought	Too much dry weather creates soil moisture stress			
Duration of staying wet			Soybeans can tolerate brief water logging but long-term causes weathering of seeds.	
Hailstorm			Early rainfall with hailstorms	
Windspeed	15 Km/hr or more			
Temperature	35.5° C or more			