





## Crop Weather Calendar of *Rabi* season Soybean: Rangpur Region (Districts: Rangpur, Lalmonirhat, Nilphamari, Kurigram, Gaibandha), Bangladesh

Region: Rangpur	<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
<b>Rainfall (mm)</b>	1.0	2.5	2.0	1.0	1.0	1.5	3.5	1.5	2.5	1.0	2.5	5.5	18.5	11.0	19.5	28.5	31.5
<b>Max. Temp. (°C)</b>	22.7	22.4	23.2	23.4	24.7	25.9	26.7	27.5	28.5	29.9	30.8	31.6	31.4	32.1	32.5	32.3	32.0
<b>Min. Temp. (°C)</b>	10.9	10.4	10.8	10.8	11.8	12.7	13.7	14.4	15.3	16.1	17.3	18.4	19.5	20.3	21.1	21.9	21.9
<b>Mean Temp. (°C)</b>	16.8	16.4	17.0	17.0	18.3	19.3	20.2	21.0	21.9	23.0	24.0	25.0	25.4	26.2	26.8	27.1	27.0
<b>RH max (%)</b>	96.0	96.0	95.8	95.7	95.5	94.3	93.7	92.9	91.4	89.8	88.7	88.1	87.7	88.5	88.4	89.9	90.9
<b>RH Min (%)</b>	58.5	57.8	56.2	54.2	51.6	48.0	47.1	45.3	42.8	39.6	40.8	42.5	48.8	49.7	50.7	56.7	59.0
<b>RH mean (%)</b>	77.3	76.9	76.0	74.9	73.5	71.2	70.4	69.1	67.1	64.7	64.7	65.3	68.3	69.1	69.5	73.3	75.0
<b>SS hr (hrs)</b>	36.0	36.5	39.5	41.0	44.0	48.5	50.0	51.5	56.5	57.5	57.0	54.0	49.0	51.5	51.0	47.5	47.0
<b>WD (deg)</b>	199	214	199	210	208	192	201	201	201	207	196	179	152	148	141	135	118
<b>WS(Km/hr)</b>	5.7	5.7	5.7	5.6	6.2	6.6	7.5	7.2	7.7	7.8	8.2	8.7	8.7	8.3	8.4	8.3	8.6
<b>Growth stags</b>																	
	<b>Germination and emergence</b>				<b>Vegetative stage</b>				<b>Reproductive stage</b>				<b>Maturity and Harvesting</b>				
<b>Favourable Environment</b>																	
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																
<b>Favorable environmental conditions for insects and diseases</b>																	
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.		
<b>Weather Warning</b>			
Rainfall	Occurrence of rainfall delayed sowing (5 to 10 mm)	Less than 20 mm	
Cloudy weather	Cloudy condition		
Drought	Too much dry weather creates 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		