









Crop Weather Calendar of Rabi Chili:JashoreRegion (Districts: Jashore, Kushtia, Chuadanga, Jhenaidah, Meherpur, Magura) Bangladesh

Region: Jashore	Rabi Bottle gourd												Life span 170-180 days															
Months	October				November				December				January				February				March							
Std.Week/Normal	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13		
Rainfall (mm)	44.5	33.0	26.5	20.0	9.0	8.0	7.5	1.0	2.0	1.5	4.0	0.0	3.5	0.5	1.5	2.5	3.0	6.5	5.0	4.5	8.0	4.0	2.5	4.5	11.5	12.0		
Max. Temp. (°C)	33.2	33.0	32.7	31.9	31.1	31.1	30.3	29.6	28.5	27.7	26.6	25.7	25.2	24.5	24.5	25.1	25.6	26.6	27.8	28.9	30.0	31.0	32.4	33.6	34.7	34.6		
Min. Temp. (°C)	25.1	24.4	23.4	21.6	20.7	19.4	18.0	16.7	15.1	14.0	13.4	12.3	11.4	10.9	10.7	11.0	10.8	12.0	13.3	14.7	15.6	16.4	17.7	19.0	20.8	21.8		
Mean Temp. (°C)	29.1	28.7	28.0	26.7	25.9	25.3	24.2	23.1	21.8	20.9	20.0	19.0	18.3	17.7	17.6	18.0	18.2	19.3	20.5	21.8	22.8	23.7	25.0	26.3	27.7	28.2		
RHmax (%)	96.5	96.5	96.5	96.1	95.9	95.9	95.7	95.7	95.4	95.2	95.8	95.5	95.7	95.4	95.3	95.3	94.9	94.9	94.2	94.0	93.7	93.2	92.5	92.1	92.1	92.4		
RHMin (%)	67.0	64.4	61.5	57.1	56.2	52.0	49.8	48.1	46.3	47.2	49.2	49.4	47.9	49.6	47.9	47.0	44.7	44.2	42.2	41.0	39.3	36.5	35.4	34.9	36.7	42.0		
RHmean (%)	81.7	80.4	79.0	76.6	76.0	74.0	72.8	71.9	70.8	71.2	72.5	72.5	71.8	72.5	71.6	71.2	69.8	69.5	68.2	67.5	66.5	64.9	63.9	63.9	64.4	67.2		
SShr (hrs)	40.0	43.5	47.0	49.0	45.5	48.5	49.5	47.5	48.5	47.5	43.5	42.0	42.0	41.0	42.5	44.5	48.0	48.5	49.5	50.0	54.5	55.0	54.0	55.0	53.0	51.5		
WD (deg)	195	198	187	182	153	175	177	179	178	184	183	177	174	158	156	188	192	186	191	203	214	219	213	230	212	208		
WS(Km/hr)	3.1	3.0	2.9	2.5	2.5	2.3	2.4	2.3	2.4	2.3	2.4	2.5	2.5	3.0	3.0	3.0	3.0	3.2	3.1	3.3	3.7	3.5	3.9	4.1	4.4	4.7		
																												
Stage	Spouting & Seedling				vegetative growth				Flowering & fruiting				Harvesting															
Favorable Environment																												
Temperature	The ideal average monthly temperatures range between 21°C and 30 °C, with an average of 18 °C; Germination and growth decreases at lower temperature (10°C); Fruit set is adversely affected at temperatures above 35 °C as well as wilting of young parts, and slow growth occurred, especially with low air humidity or dry winds.																											
Relative Humidity	Sensitive to excess moisture and the high relative humidity; The optimum relative humidity varies from 50% to 70%.																											
Soil Temperature	Chili seeds can germinate and grow normally at soil temperatures of 15°C to 25°C, with the optimum around 20°C. Chili can tolerate moderately cold soil temperatures of 13°C to 15°C.																											
Sunshine Hour	At least 4 to 6 hours direct sunlight per day																											
Favorable environmental conditions for insects and diseases																												
Mites	Maximum temp.: 33 to 35°C; Raise a generation in 1 week under optimal conditions (25°C and high relative humidity); Minimum Temp.: 12 to 14°C;The prevailing high temperature and low relative humidity in absence of rainfall favored the population development of mites to reach the peak abundance.																											
Aphids	Moderate to high temperature and relative humidity favors population buildup of aphids																											
Thrips	Grow minimum temperature 9.7°C and maximum temperatures, 33.0°C; Population remains more abundant during prolonged dry conditions than in moist rainy periods; Heavy rainfall reduces population																											
White fly	Population increases at high temperatures; white fly population is low at humidity ≤45% and ≥85% and abundant at 70–85% RH																											
Fruit Borer	The upper development threshold temperature for all stages is 37 °C, and 40 °C is lethal; The optimum temperatures for the development of eggs, larvae, and pupae are around 24–27 °C; RH: 85% to ≤35%.																											
Leaf curl	Vector (White fly) population and virus transmission increased at 35 °C (max. temp.); Disease development correlated with relative humidity as the humidity decreased the disease incident decreased; Disease development favored by certain rainfall																											
Die back/Anthracnose	Max. Temp.: 28 °C to 32°C for disease development; Mini. Temp.: 22°C to 25°C for disease development; Initial infection required 95% or above relative humidity for 24 hrs; Frequent rainy and warm weather alone with prolonged leaf wetness favored disease development.																											
Weather Warning																												
Rainfall	Early rainfall (10 to 15 mm per day)																											
Cloudy weather	Cloudy weather																											
Drought	Short to moderate drought (7 to 10 days)																											
Duration of staying wet	2 to 3 days																											
Hailstorm	Hailstorms with early rainfall																											
Windspeed	≤20 Km/hr																											

Crop Weather Calendar of kharif Bottle gourd:JashoreRegion (Districts: Jashore, Kushtia, Chuadanga, Jhenaidah, Meherpur, Magura) Bangladesh

Region: Jashore	Kharif chilli																Life span: 170-180 days											
Months	April				May				June				July				August				September							
Std.Week/Normal	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39		
Rainfall (mm)	11.5	7.0	12.5	21.5	28.5	30.5	36.0	44.5	38.5	49.5	54.5	81.0	72.5	82.0	72.0	83.5	73.0	63.5	56.0	68.0	48.5	50.5	52.5	68.0	59.0	69.5		
Max. Temp. (°C)	35.5	36.1	36.5	36.3	36.0	36.0	35.9	35.5	35.6	35.3	34.0	33.3	33.0	32.7	32.9	32.7	32.7	33.0	32.8	32.7	33.1	33.3	32.9	32.9	33.0	33.2		
Min. Temp. (°C)	22.8	23.5	24.1	24.2	24.2	25.2	25.0	25.5	26.0	26.2	26.2	26.1	26.2	26.0	26.1	26.2	26.2	26.0	26.2	26.0	26.1	26.0	26.0	26.0	26.0	25.3		
Mean Temp. (°C)	29.2	29.8	30.3	30.3	30.1	30.6	30.4	30.5	30.8	30.7	30.1	29.7	29.6	29.4	29.5	29.5	29.4	29.5	29.5	29.3	29.6	29.6	29.5	29.5	29.5	29.2		
RHmax (%)	92.4	92.9	92.4	92.3	92.8	92.7	93.1	93.6	94.0	94.1	94.8	95.7	96.0	96.1	96.1	96.1	96.1	96.0	96.2	96.5	96.2	96.2	96.4	96.6	96.3	96.6		
RHMin (%)	41.5	41.6	44.3	46.9	49.9	51.7	54.8	58.7	60.0	62.1	67.5	71.7	73.5	74.4	73.4	74.6	73.4	72.6	73.0	73.0	71.7	71.0	71.5	70.8	69.7	67.7		
RHmean (%)	66.9	67.2	68.3	69.6	71.3	72.2	74.0	76.1	77.0	78.1	81.1	83.7	84.7	85.2	84.7	85.3	84.7	84.3	84.6	84.7	83.9	83.6	83.9	83.7	83.0	82.1		
SShr (hrs)	55.5	54.5	54.5	55.5	54.0	51.5	52.5	46.5	45.5	41.5	32.0	26.5	26.0	24.5	29.0	25.0	29.5	32.5	30.0	28.0	30.5	32.5	31.5	33.0	32.5	38.5		
WD (deg)	209	204	193	188	186	186	180	181	180	183	174	175	178	186	178	180	177	172	175	175	185	171	180	186	187	195		
WS(Km/hr)	5.1	5.2	5.7	5.6	5.6	5.8	5.2	5.2	5.0	4.6	4.9	4.6	4.6	4.4	4.3	4.4	4.7	4.3	4.4	4.3	3.9	4.1	4.1	4.1	3.8	3.7		
Stage																												
	Spouting & Seedling				vegetative growth				Flowering & fruiting				Harvesting															
Favorable Environment																												
Temperature	The ideal average monthly temperatures range between 21°C and 30 °C, with an average of 18 °C; Germination and growth decreases at lower temperature (10°C); Fruit set is adversely affected at temperatures above 35 °C as well as wilting of young parts, and slow growth occurred, especially with low air humidity or dry winds.																											
Relative Humidity	Sensitive to excess moisture and the high relative humidity; The optimum relative humidity varies from 50% to 70%.																											
Soil Temperature	Chili seeds can germinate and grow normally at soil temperatures of 15°C to 25°C, with the optimum around 20°C. Chili can tolerate moderately cold soil temperatures of 13°C to 15°C.																											
Sunshine Hour	At least 4 to 6 hours direct sunlight per day																											
Favorable environmental conditions for insects and diseases																												
Mites	Maximum temp.: 33 to 35°C; Raise a generation in 1 week under optimal conditions (25°C and high relative humidity); Minimum Temp.: 12 to 14°C;The prevailing high temperature and low relative humidity in absence of rainfall favored the population development of mites to reach the peak abundance.																											
Aphids	Moderate to high temperature and relative humidity favors population buildup of aphids																											
Thrips	Grow minimum temperature 9.7°C and maximum temperatures, 33.0°C; Population remains more abundant during prolonged dry conditions than in moist rainy periods; Heavy rainfall reduces population																											
White fly	Population increases at high temperatures; white fly population is low at humidity ≤45% and ≥85% and abundant at 70–85% RH																											
Fruit Borer	The upper development threshold temperature for all stages is 37 °C, and 40 °C is lethal; The optimum temperatures for the development of eggs, larvae, and pupae are around 24–27 °C; RH: 85% to ≤35%.																											
Leaf curl	Vector (White fly) population and virus transmission increased at 35 °C (max. temp.); Disease development correlated with relative humidity as the humidity decreased the disease incident decreased; Disease development favored by certain rainfall																											
Die back/Anthracnose	Max. Temp.: 28 °C to 32°C for disease development; Mini. Temp.: 22°C to 25°C for disease development; Initial infection required 95% or above relative humidity for 24 hrs; Frequent rainy and warm weather alone with prolonged leaf wetness favored disease development.																											
Weather Warning																												
Rainfall	Early rainfall (10 to 15 mm per day)																											
Cloudy weather	Cloudy weather																											
Drought	Short to moderate drought (7 to 10 days)																											
Duration of staying wet	2 to 3 days																											
Hailstorm	Hailstorms with early rainfall																											
Windspeed	≤20 Km/hr																											

