

CROP WEATHER CALENDARS

FOR

GUJARAT

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DIRECTOR GENERAL OF METEOROLOGY

MAUSAM BHAVAN

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PREFACE

Information on normal weather conditions and water requirement of crops is of vital importance for effective crop planning and management. From this point of view, the India Meteorological Department had compiled Crop Weather Calendars for major cereals, pulses and oilseed crops in the country on a districtwise basis. These calendars provide numerical as well as pictorial information on factors favourable or unfavourable to crops at various stages of their growth.

As and when new strains are introduced by plant breeders and bio-technologists, agricultural practices change accordingly, the crop weather calendars tend to lose some of their relevance. A periodical updating of these calendars thus becomes necessary. This publication which is the sixth in the new series of crop weather calendars is for the state of Gujarat for Wheat, Bajra, Maize, Paddy, Tur, Gram, Groundnut, Mustard, Castor, Tobacco and Cotton crops.

It is hoped that the crop weather calendars would prove useful in a wide range of applications such as plant breeding, crop adaptation, drought proofing and irrigation management, ultimately resulting in maximizing the yield.

The preparation of the calendars would not have been possible without the close co-operation of the Department of Agriculture, Govt. of Gujarat, which is gratefully acknowledged. These calendars were prepared by the Division of Agricultural Meteorology, Meteorological Office, Pune. I have great pleasure in acknowledging the work done by Dr H. P. Das, Director; Shri S. Sengupta, Meteorologist Grade I; Shri A. W. Mehandale, Assistant Meteorologist Grade I; Smt A. A. Kale, Smt A. S. Nair and Smt V. C. Thakur in preparing these calendars.

(R. R. KELKAR)
Director General Of Meteorology

PUNE : 411 005
Dated : 7TH August 2002.

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Cotton	4	Bharuch, Vadodara, Rajkot, Surendranagar, Bhavnagar	Maize	10	Panchmahal
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CROP WEATHER CALENDAR

STATE : GUJARAT
DISTRICTS : GANDHINAGAR, MEHSANA, BANASKANTHA

CROP : BAJRA(KHARIF)
NON-IRRIGATED

VARIETY : MH-169,GHB-30,GHB-316,GHB-235,GHB-15
DURATION : 120-135 DAYS

SOIL : SANDY, SANDY TO SANDY LOAM

Weather warnings	<i>Rain</i>	> 50 MM/DAY	> 80 MM/DAY	> 80 MM/DAY																		
	<i>Duration of wet spell</i>	>10 MM FOR 3 DAYS	>15 MM FOR 3 DAYS	>20 MM FOR 5 DAYS																		
	<i>Cloudy weather</i>			CLOUDY WEATHER																		
	<i>Drought</i>	22 DAYS	27 DAYS	35 DAYS																		
	<i>High winds</i>																					
	<i>Temperature</i>	MAX. TEMP.>40°C. MIN. TEMP. < 30°C	MAX. TEMP.>40°C. MIN. TEMP. < 30°C	MAX. TEMP.>40°C. MIN. TEMP. < 30°C																		
	<i>Hail Storm</i>																					
Weather conditions favourable for incidence of pests and diseases	<i>Pests</i>	HOPPERS.TERMITE	HELIOTHIS. STEM BORER	HELIOTHIS. BLISTER BEETLE																		
	<i>Weather</i>	HIGH RH	CLOUDY WEATHER	CLOUDY WEATHER																		
	<i>Diseases</i>	DOWNY MILDEW	EARGOT	DOWNY MILDEW																		
	<i>Weather</i>	HIGH WIND VELOCITY CYCLONE	FROST	CLOUDY WEATHER																		
Normal phase wise water requirement(mm)		62.9			103.5			97.8			150.8			53.9								
Weekly normal weather	<i>Rainfall(mm) total</i>	20.7	17.4	35.7	56.0	59.0	41.5	49.0	46.3	47.5	49.4	50.9	59.7	28.1	10.4	5.3	11.3	9.4	6.5	0.8		
	<i>Max. temp. °C</i>	38.2	37.7	36.2	34.4	33.7	32.5	31.9	31.9	31.3	31.3	31.3	31.5	32.1	33.4	34.8	35.4	36.0	34.9	36.0		
	<i>Min. temp. °C</i>	26.3	26.2	25.7	25.1	24.8	24.6	24.4	24.4	24.4	24.1	23.9	23.8	23.4	23.8	23.8	23.5	23.1	22.1	22.4		
	<i>Sunshine hours</i>	9.3	8.4	7.3	5.3	4.8	4.6	4.7	3.6	3.8	4.6	5.4	6.4	6.4	7.3	8.7	9.6	9.9	9.8	10.1		
Life history and mean dates of important epochs of crop growth																						
Standard weeks		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
Months		JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER								

CROP WEATHER CALENDAR

STATE : GUJARAT CROP : BAJRA (KHARIF) VARIETY : GHB-27,30,32,MH-169,179 SOIL : MEDIUM BLACK
 DISTRICTS : BHAVNAGAR, JUNAGADH, JAMNAGAR NON-IRRIGATED DURATION : 120-135 DAYS

Weather warnings	Rain	>75 MM/DAY	> 100 MM/DAY	ANY RAIN																															
	Duration of wet spell	>40 MM FOR 3 DAYS	>60 MM FOR 4 DAYS	>75 MM FOR 5 DAYS																															
	Cloudy weather			CLOUDY WEATHER																															
	Drought	20 DAYS	25 DAYS	20 DAYS																															
	High winds	> 1-2 KM/HR	> 1-2 KM/HR	> 1-2 KM/HR																															
	Temperature	MAX. TEMP > 30°C. MIN. TEMP < 25°C	MAX. TEMP >35°C. MIN. TEMP <23°C	MAX. TEMP > 40°C. MIN. TEMP < 25°C																															
	Hail Storm	HAIL STORM	HAIL STORM																																
Weather conditions favourable for incidence of pests and diseases	<i>Pests</i>	STEM FLIES, HELIOTHIS, GRASS HOPPER, THRIPS	STEM BORER, APHIDS, JASSIDS, LEAF ROT	HELIOTHIS																															
	<i>Weather</i>	WARM, MOIST, DRY SPELL RAINING	WARM, MOIST, HUMID, CLOUDY WEATHER	WARM, MOIST WEATHER																															
	<i>Diseases</i>	DOWNY MILDEW	STEM ROT	EARGOT, SMUT, RUST																															
	<i>Weather</i>	DROUGHT	HIGH RH, CLOUDY WEATHER	HUMID WEATHER																															
Normal phase wise water requirement(mm)		64.0	106.6	134.8	154.2	66.9	68.9																												
Weekly normal weather	<i>Rainfall(mm) total</i>	23.0	24.3	50.9	46.8	38.9	42.9	48.9	34.6	29.4	40.3	36.1	15.8	31.8	21.7	13.2	10.1	22.5	8.7	4.5	1.0														
	<i>Max. temp. °C</i>	35.4	34.8	34.0	33.1	32.7	32.3	31.6	31.4	31.2	30.7	30.6	30.8	30.8	31.2	31.6	32.6	32.7	33.5	33.9	34.4														
	<i>Min. temp. °C</i>	27.6	27.4	27.3	26.9	26.7	26.4	26.2	26.0	25.9	25.4	25.2	25.1	24.8	24.6	24.4	24.5	24.4	25.0	23.3	22.4														
	<i>Sunshine hours</i>	9.3	8.0	5.5	4.1	4.4	3.2	3.0	3.2	2.7	2.2	3.0	5.1	4.9	5.7	7.5	8.1	8.4	9.4	9.7	9.9														
Life history and mean dates of important epochs of crop growth																																			
Standard weeks		22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44											
Months		JUNE				JULY				AUGUST				SEPTEMBER				OCTOBER																	

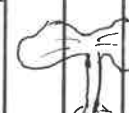


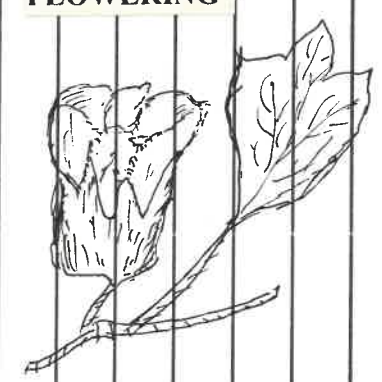
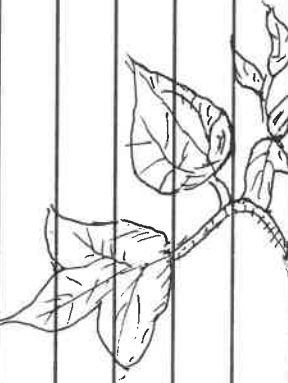

CROP WEATHER CALENDAR

STATE : GUJARAT
DISTRICTS : BHARUCH,VADODARA,RAJKOT
 SURENDRANAGAR,BHAVNAGAR

CROP : COTTON
IRRIGATED

VARIETY : H4, H6, H8, H-13, H-10
DURATION : 190-280 DAYS

SOIL : MEDIUM BLACK

Weather warnings		Rain	> 30 MM/DAY	> 125 MM/DAY	> 55 MM/DAY																																	
		Duration of wet spell	> 40 MM FOR 7 DAYS	> 50 MM FOR 5 DAYS	> 50 MM FOR 3 DAYS																																	
Weather conditions favourable for incidence of pests and diseases		Pests	APHIDS,SHOOT BORER,JASSIDS,THRIPS	HELIOTHIS,THRIPS,APHIDS,WHITE FLY,SPOTTED BOLLWORM,PINK BOLL WORM	HELIOTHIS, SPOTTED BOLLWORM																																	
		Weather	CLOUDY WEATHER	CLOUDY WEATHER	CLOUDY WEATHER																																	
Normal phase wise water requirement(mm)		Drought	15 DAYS	20 DAYS	20 DAYS																																	
		High winds	> 30 KM/HR																																			
Weather conditions favourable for incidence of pests and diseases		Temperature	MAX. TEMP.>43°C, MIN. TEMP.<22°C	MAX. TEMP.>40°C, MIN. TEMP.<25°C	MIN. TEMP.<8°C																																	
		Hail Storm	CLOUDY WEATHER	CLOUDY WEATHER	CLOUDY WEATHER																																	
Weather conditions favourable for incidence of pests and diseases		Diseases	WILT, ROOT ROT	ANGULAR LEAF SPOT	ANGULAR LEAF SPOT																																	
		Weather	RAIN, CLOUDY WEATHER	HUMID, CLOUDY WEATHER	HOT AND MOIST WEATHER																																	
Normal phase wise water requirement(mm)			93.4	171.0	171.0	294.0	276.5	191.7																														
Weekly normal weather	Rainfall(mm) total	8.1	24.0	33.8	21.5	49.1	47.8	50.7	50.9	33.4	32.2	56.0	49.9	44.6	70.9	42.9	17.2	10.7	35.4	22.9	6.6	3.1	2.0	1.9	3.6	2.3	3.3	1.0	0.1	0.2	0.7	0.0	0.1	0.2	0.1	0.1	0.0	
	Max. temp. °C	39.4	38.2	37.0	36.3	34.7	33.5	33.0	32.3	32.2	32.0	31.4	31.3	31.3	31.3	32.0	32.9	34.3	34.1	35.1	35.6	36.0	35.1	34.7	34.0	33.3	32.2	30.8	30.4	30.0	29.8	29.0	29.0	28.6	28.7	29	29.3	
	Min. temp. °C	26.3	26.4	26.4	26.3	25.7	25.4	25.2	24.9	25.0	24.9	24.6	24.5	24.4	21.2	23.9	23.9	24.2	24.0	23.5	23.0	22.1	21.1	19.7	18.0	17.5	16.6	15.4	14.5	13.7	13.5	12.9	12.4	12.1	12.3	12.5	12.7	
	Sunshine hours	10.6	9.2	8.6	7.3	4.8	4.9	3.7	4.0	4.4	3.1	2.9	4.0	4.8	5.4	5.4	7.1	8.2	8.1	9.4	9.4	9.9	9.8	10.2	9.9	9.2	8.9	9.1	9.7	9.7	9.3	9.9	9.2	9.8	9.9	9.5	9.9	
Life history and mean dates of important epochs of crop growth		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>SOWING</p>  </div> <div style="text-align: center;"> <p>GERMINATION</p>  </div> <div style="text-align: center;"> <p>VEGETATIVE GROWTH</p>  </div> <div style="text-align: center;"> <p>FLOWERING</p>  </div> <div style="text-align: center;"> <p>BOLL FORMATION</p>  </div> <div style="text-align: center;"> <p>HARVESTING</p>  </div> </div>																																				
Standard weeks			22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5
Months			JUNE				JULY				AUGUST				SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER				JANUARY							

CROP WEATHER CALENDAR

STATE : GUJARAT
DISTRICTS : BHARUCH, VADODARA, SURENDRANAGAR
 BHAVNAGAR

CROP : COTTON
NON-IRRIGATED

VARIETY : HYBRID 4, 6, 8, GUJ-11,13
SOIL : MEDIUM BLACK
DURATION : 190-280 DAYS

Weather warnings	<i>Rain</i>	> 50 MM/DAY	> 100 MM/DAY	> 150 MM/DAY																																	
	<i>Duration of wet spell</i>	> 40 MM FOR 5 DAYS	> 50 MM FOR 5 DAYS	> 50 MM FOR 3 DAYS																																	
	<i>Cloudy weather</i>		CLOUDY WEATHER	CLOUDY WEATHER																																	
	<i>Drought</i>	20 DAYS	30 DAYS	60 DAYS																																	
	<i>High winds</i>	> 30 KM/HR																																			
	<i>Temperature</i>	MAX. TEMP. > 43°C, MIN. TEMP. < 15°C	MAX. TEMP. > 40°C, MIN. TEMP. < 10°C	MAX. TEMP. > 30°C, MIN. TEMP. < 20°C																																	
Weather conditions favourable for incidence of pests and diseases	<i>Pests</i>	APHIDS, BOLL WORM, JASSIDS, HELIOTHIS	HELIOTHIS, SPOTTED BOLLWORM, APHID, THRIPS	SPOTTED BOLLWORM, PINK BOLLWORM, APHIDS																																	
	<i>Weather</i>	CLOUDY, WARM, MOIST WEATHER	CLOUDY, WARM, MOIST WEATHER	CLOUDY, HUMID, WARM WEATHER																																	
	<i>Diseases</i>	WILT, ANGULAR LEAF SPOT, ROOT ROT	WILT, ANGULAR LEAF SPOT																																		
	<i>Weather</i>	HEAVY RAIN	HUMID, WARM WEATHER	HOT, MOIST WEATHER																																	
Normal phase wise water requirement(mm)		159.6				122.0				401.0								298.2					80.2														
Weekly normal weather	<i>Rainfall(mm) total</i>	9.2	24.7	38.1	19.3	47.8	58.6	55.3	46.2	33.1	32.7	51.7	53.7	50.2	73.6	25.6	18.4	9.9	38.9	13.3	7.4	3.8	1.1	3.1	3.0	2.5	5.2	1.3	0.1	0.1	0.1	0.0	0.0	0.2			
	<i>Max. temp. °C</i>	39.3	38.0	36.9	36.2	34.7	33.4	33.0	32.3	32.2	31.9	31.5	31.4	31.2	31.8	32.9	34.3	34.1	34.9	35.5	36.0	35.0	34.7	34.0	33.2	32.3	30.9	30.5	29.9	29.8	29.2	28.9					
	<i>Min. temp. °C</i>	26.3	26.4	26.4	26.3	25.3	25.3	25.2	25.1	25.0	24.9	24.8	24.5	24.5	24.3	24.0	24.2	24.4	24.2	23.9	23.1	22.1	21.1	19.5	17.9	17.3	15.6	15.2	14.4	13.6	13.5	12.9	12.5	12.3			
	<i>Sunshine hours</i>	10.7	9.1	8.5	7.4	5.3	4.9	4.3	3.9	4.5	3.0	3.0	3.9	4.8	5.4	7.7	6.7	4.1	7.9	9.4	9.3	9.9	9.9	10.2	10.0	9.4	8.9	9.2	9.7	9.6	9.3	9.7	9.2	9.7			
Life history and mean dates of important epochs of crop growth																																					
Standard weeks		22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5
Months		JUNE				JULY				AUGUST				SEPTEMBER				OCTOBER			NOVEMBER			DECEMBER			JANUARY										

CROP WEATHER CALENDAR

STATE : GUJARAT
DISTRICTS : AMRELI, BHAVNAGAR

CROP : WHEAT
IRRIGATED

VARIETY : LOK-1,GW-80,120,405
DURATION : 160-175DAYS

SOIL : MEDIUM BLACK

Weather warnings	Rain	ANY RAIN																																																		
	Duration of wet spell																																																			
	Cloudy weather	CLOUDY WEATHER																																																		
	Drought																																																			
	High winds	> 20 KM/HR	> 15 KM/HR	> 10 KM/HR																																																
	Temperature	MAX. TEMP. > 30°C. MIN. TEMP. < 22°C							MAX. TEMP. > 20°C. MIN. TEMP. < 18°C							MAX. TEMP. > 25°C. MIN. TEMP. < 25°C																																				
	Hail Storm								HAIL STORM							HAIL STORM																																				
Weather conditions favourable for incidence of pests and diseases	Pests	TERMITES, STEM FLIES							RUST, STEM BORER							HELIOTHIS																																				
	Weather	COLD AND DRY WEATHER							COLD AND DRY WEATHER							COLD AND DRY WEATHER																																				
	Diseases	RUST							BLACK RUST							RED RUST																																				
	Weather	HIGH TEMP							CLOUDY WEATHER							CLOUDY WEATHER																																				
Normal phase wise water requirement(mm)		16.1							28.3							42.8							34.2							33.7																						
Weekly normal weather	Rainfall(mm) total	6.4	1.2	8.9	5.0	2.3	0.0	0.5	0.1	0.0	0.2	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.2	0.0	0.4	0.8	0.9																										
	Max. temp. °C	34.5	33.4	32.5	31.3	30.1	30.1	29.8	29.9	28.7	28.5	28.6	29.1	29.5	29.9	30.7	31.7	33.7	34.5	35.5	36.1	36.8	37.5	38.7	39.5																											
	Min. temp. °C	19.4	17.7	17.9	16.9	15.7	14.1	13.3	13.7	12.3	11.7	11.7	11.6	12.3	12.5	12.5	13.9	15.0	16.1	17.3	18.7	19.5	20.7	21.7	22.7	23.3																										
	Sunshine hours	10.1	9.9	8.9	8.5	8.6	9.8	9.6	9.4	9.8	9.2	9.8	9.9	9.9	10.2	10.1	10.2	10.2	10.1	9.8	10.0	9.9	10.3	10.3	10.5																											
Life history and mean dates of important epochs of crop growth																																																				
Standard weeks		44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17																									
Months		NOVEMBER					DECEMBER					JANUARY				FEBRUARY				MARCH			APRIL																													

CROP WEATHER CALENDAR

STATE : GUJARAT

CROP : GROUNDNUT

VARIETY : G-2,G AUG-1,11,GG-2,J-11,G.G.11

SOIL : MEDIUM BLACK

DISTRICTS : JAMNAGAR,JUNAGARH,BHAVNAGAR,AMRELI

NON-IRRIGATED

DURATION : 130-155 DAYS

Weather warnings	Rain	> 125 MM/DAY	> 160 MM/DAY	ANY RAIN																																									
	Duration of wet spell	> 45 MM FOR 4 DAYS	> 75 MM FOR 5 DAYS	> 55 MM FOR 6 DAYS																																									
	Cloudy weather	CLOUDY WEATHER	CLOUDY WEATHER	CLOUDY WEATHER																																									
	Drought	26 DAYS	25 DAYS	20 DAYS																																									
	High winds	> 28 KM/HR	> 22 KM/HR	> 25 KM/HR																																									
	Temperature	MAX. TEMP.>35°C, MIN. TEMP. <25°C	MAX. TEMP.>36°C, MIN. TEMP.<24°C	MAX. TEMP. >40°C, MIN. TEMP.<25°C																																									
	Hail Storm	HAIL STORM	HAIL STORM	HAIL STORM																																									
Weather conditions favourable for incidence for pests and diseases	Pests	THRIPS, APHIDS, HELIOTHIS	APHIDS, JASSIDS, HELIOTHIS, LEAF MINER	HELIOTHIS SPODOPTERA																																									
	Weather	HIGH TEMP. CLOUDY WEATHER, DRY SPELL	CLOUDY, HUMID WEATHER	DRY WEATHER, HIGH TEMP. AND HUMIDITY																																									
	Diseases	SOIL SEED BORNE DISEASES, STEM ROT, RUST	ROOT ROT, WILT, AFLAXIN, EARLY LATE LEAF SPOT	AFLAXIN, TIKKA, RUST, BUD NECROSIS																																									
	Weather	HOT,CLOUDY WEATHER, DROUGHT,LESS RAINFALL	HOT, CLOUDY WEATHER, HIGH RH, LESS RAINFALL,HUMID	HOT, CLOUDY,HUMID WEATHER																																									
Normal phase wise water requirement(mm)		102.7	81.2	99.6	236.7	93.0	96.4																																						
Weekly normal weather	Rainfall(mm) total	3.5	17.4	20.3	40.1	42.4	33.7	40.5	50.5	33.2	26.5	32.5	38.0	18.3	30.0	21.2	13.5	15.3	21.6	7.5	5.2	0.7	3.7	5.2																					
	Max. temp. °C	36.7	36.2	35.3	34.4	33.4	33.0	32.4	24.0	31.3	31.1	30.6	30.5	30.9	30.9	31.3	31.8	32.8	33.0	33.8	34.3	34.7	34.1	34.2																					
	Min. temp. °C	26.7	27.2	27.1	26.9	26.6	26.3	26.0	25.9	25.7	25.5	25.1	24.9	24.8	24.5	24.2	23.9	24.1	24.1	23.6	22.9	21.9	21.3	20.0																					
	Sunshine hours	10.7	9.2	8.1	5.9	4.3	4.4	3.4	3.2	3.4	2.7	2.4	3.2	5.0	5.0	5.5	7.3	8.0	8.2	9.3	9.6	9.9	9.7	10.0																					
Life history and mean dates of important epochs of crop growth																																													
	Standard weeks		22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44																				
	Months		JUNE					JULY					AUGUST					SEPTEMBER					OCTOBER																						

CROP WEATHER CALENDAR

STATE : GUJARAT
DISTRICTS : PANCHMAHAL

CROP : GRAM
NON-IRRIGATED

VARIETY : CHAFA DAHOD YELLOW
DURATION : 110-125 DAYS

SOIL : MEDIUM DEEP SANDY
LOAM

Weather warnings		ANY RAIN																							
		CLOUDY WEATHER																							
		HAIL STORM																							
		> 4-5 KM/HR						> 4-5 KM/HR						> 4-5 KM/HR											
		MAX. TEMP. > 30°C, MIN. TEMP. < 10°C						MAX. TEMP. > 20°C, MIN. TEMP. < 5°C						MAX. TEMP. > 25°C, MIN. TEMP. < 5°C											
		HELIOTHIS																							
		MODERATE CLIMATE																							
Weather conditions favourable for incidence of pests and diseases		HELIOTHIS						HELIOTHIS						HELIOTHIS											
		MODERATE CLIMATE						MODERATE CLIMATE						MODERATE CLIMATE											
		ROOT ROT						ROOT ROT						ROOT ROT											
		CLOUDY, HUMID WEATHER						CLOUDY, HUMID WEATHER						CLOUDY, HUMID WEATHER											
Normal phase wise water requirement(mm)		18.0				53.2				66.4				96.9				35.2				64.5			
Weekly normal weather	Rainfall(mm) total		2.8	0.2	1.8	0.8	1.3	1.4	0.0	0.0	0.7	0.5	0.0	0.4	0.5	0.2	0.0	0.0	26.3	0.0	0.0				
	Max. temp. °C		32.1	30.7	29.6	29.1	28.5	28.8	27.7	27.9	27.9	27.9	28.3	28.5	29.0	30.4	31.2	32.4	33.7	34.8	35.3				
	Min. temp. °C		15.8	15.2	13.9	12.9	11.9	12.3	11.6	11.5	11.3	11.5	11.7	12.0	11.9	13.6	14.7	15.8	17.2	18.5	19.4				
	Sunshine hours		9.6	9.0	9.4	9.7	9.5	9.3	9.7	9.2	9.7	9.7	9.8	9.9	10.1	10.1	10.2	10.1	10.1	9.8	9.9				
Life history and mean dates of important epochs of crop growth																									
Standard weeks		46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12					
Months		NOVEMBER			DECEMBER				JANUARY					FEBRUARY				MARCH							

CROP WEATHER CALENDAR

STATE : GUJARAT

CROP : CASTOR (KHARIF)

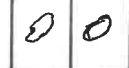

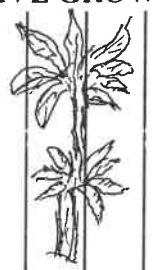
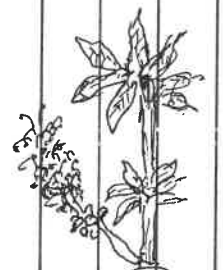
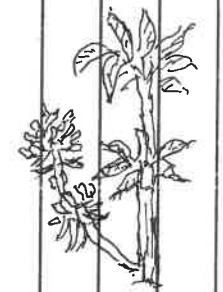

VARIETY : CHU-1,CHU-2,CHU-4
H-7, H-4, QUACH-1,4

SOIL : SANDY/ SANDY LOAM

DISTRICTS : GANDHINAGAR.SABARKANTHA.BANASKANTHA

NON-IRRIGATED

DURATION : 200-220 DAYS

Weather warnings	Rain	> 50 MM/DAY	>100 MM/DAY	ANY RAIN																												
	Duration of wet spell	> 10 MM FOR 30 DAYS	> 15 MM FOR 30 DAYS																													
	Cloudy weather		CLOUDY WEATHER	CLOUDY WEATHER																												
	Drought	25 DAYS																														
	High winds	> 40 KM/HR	> 40 KM/HR	> 40 KM/HR																												
	Temperature	MAX. TEMP.>39°C, MIN. TEMP < 4°C	MAX. TEMP.>39°C, MIN. TEMP.< 4°C	MAX. TEMP. >39°C. MIN. TEMP < 7°C																												
	Hail Storm		HAIL STORM	HAIL STORM																												
Weather conditions favourable for incidence of pests and diseases	Pests	SEMILOOPER, THRIPS, TERMITE	WHITE FLY, SUCKING PESTS, POD BORER, SEMILOOPER	CAPSULE BORER																												
	Weather	HUMID WEATHER	HUMID WEATHER	HUMID WEATHER																												
	Diseases	WILT, BLIGHT, ROOT ROT	ROOT ROT,WILT	ROOT ROT																												
	Weather	HUMID,CLOUDY WEATHER	HIGH TEMP. HUMID, CLOUDY WEATHER	HIGH TEMP, HUMID, CLOUDY WEATHER																												
Normal phase wise water requirement(mm)		124.3					144.3					169.6					240.6					55.9			58.1							
Weekly normal weather	Rainfall(mm) total	5.8	20.7	17.4	35.7	56.0	59.0	41.5	49.0	46.3	47.5	49.4	50.9	59.7	28.1	10.4	5.3	11.3	9.4	6.5	0.8	3.5	1.2	4.8	3.7	1.6	0.0	0.2	0.7	1.7	0.2	
	Max. temp. °C	39.5	38.3	37.7	36.2	34.4	35.7	32.5	31.9	31.9	31.3	31.3	31.3	31.5	32.1	33.4	34.8	35.4	36.0	35.9	36.0	35.0	34.4	33.6	32.8	31.6	30.1	29.7	29.1	28.6	27.5	
	Min. temp. °C	25.9	26.3	26.2	25.7	25.1	24.8	24.6	24.4	24.4	24.4	24.1	23.9	23.8	23.4	23.5	23.8	23.5	23.1	22.1	22.4	20.3	19.1	17.6	17.4	16.6	15.3	14.3	13.8	13.4	14.7	
	Sunshine hours	9.5	9.3	8.4	7.3	5.3	4.8	4.6	4.7	3.7	3.9	4.6	5.4	6.4	6.4	7.7	8.7	9.6	9.9	9.8	10.1	10.1	10.3	10.1	9.5	8.6	9.2	10.0	10.1	9.4	9.7	
Life history and mean dates of important epochs of crop growth		<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>SOWING</p>  </div> <div style="text-align: center;"> <p>GERMINATION</p>  </div> <div style="text-align: center;"> <p>VEGETATIVE GROWTH</p>  </div> <div style="text-align: center;"> <p>FLOWERING</p>  </div> <div style="text-align: center;"> <p>SEED FORMATION</p>  </div> <div style="text-align: center;"> <p>HARVESTING</p>  </div> </div>																														
Standard weeks		23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
Months		JUNE					JULY					AUGUST					SEPTEMBER					OCTOBER					NOVEMBER			DECEMBER		

CROP WEATHER CALENDAR

STATE : GUJARAT
DISTRICTS : KHEDA

CROP : TOBACCO VARIETY : GT-4, ANAND-2, 119
IRRIGATED DURATION : 145-155 DAYS

SOIL : SANDY LOAM

Weather warnings	Rain	> 100 MM/DAY	> 250 MM/DAY	> 50 MM/DAY																							
	Duration of wet spell	> 50 MM FOR 4 DAYS	> 50 MM FOR 8 DAYS	> 25 MM FOR 3 DAYS																							
	Cloudy weather	CLOUDY WEATHER	CLOUDY WEATHER																								
	Drought	20 DAYS	15-20 DAYS	20-25 DAYS																							
	High winds	> 5 KM/HR	> 5-8 KM/HR	> 3-4 KM/HR																							
	Temperature	MAX. TEMP. > 30°C, MIN. TEMP. < 10°C	MAX. TEMP. > 25°C, MIN. TEMP. < 5°C	MAX. TEMP. > 35°C, MIN. TEMP. < 10°C																							
	Hail Storm		HAIL STORM	HAIL STORM																							
Weather conditions favourable for incidence of pests and diseases	Pests	SPODOPTERA		HELIOTHIS																							
	Weather	HUMID WEATHER		SEMI-COLD AND DRY WEATHER																							
	Diseases	DAMPING OFF		MOSAIC VIRUS AND LEAF CURL VIRUS FREQUENTLY ROOT ROT																							
	Weather	HEAVY RAINFALL. HIGH RH		HEAVY RAINFALL. HIGH RH																							
Normal phase wise water requirement(mm)		37.5			68.5			101.0			305.4						115.0										
Weekly normal weather	Rainfall(mm) total	72.3	62.9	48.7	36.1	50.8	46.0	45.4	53.8	80.4	33.7	11.3	4.5	13.4	13.1	10.7	0.3	0.7	0.0	6.3	0.0	0.0	0.0	0.5			
	Max. temp. °C	33.9	33.3	32.1	31.5	31.3	30.8	30.9	30.7	30.7	31.5	33.0	34.4	34.8	35.5	35.4	35.5	34.8	34.1	33.3	32.8	31.7	30.2	30.0			
	Min. temp. °C	24.2	24.1	23.9	23.8	23.8	23.7	23.7	23.5	23.4	23.0	23.6	23.7	23.7	23.8	23.0	22.4	21.9	21.1	19.3	19.1	18.3	17.2	16.6			
	Sunshine hours	5.4	4.7	4.1	4.6	3.5	2.9	3.8	4.7	5.8	6.0	7.4	8.7	9.0	9.8	9.4	10.0	10.0	10.3	10.1	9.5	9.2	9.5	9.8			
Life history and mean dates of important epochs of crop growth																											
	Standard weeks	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Months	JULY					AUGUST					SEPTEMBER					OCTOBER					NOVEMBER					DECEMBER	

CROP WEATHER CALENDAR

STATE : GUJARAT
DISTRICTS : VADODARA

CROP : TUR
NON-IRRIGATED

VARIETY : BDN₂ AND LOCAL
DURATION : 230-245 DAYS

SOIL : MEDIUM BLACK

Weather warnings	Rain	>15 MM/DAY										> 45 MM/DAY										> 15 MM/DAY														
	Duration of wet spell	> 50 MM FOR 4 DAYS										> 75 MM FOR 6 DAYS										> 50 MM FOR 3 DAYS														
	Cloudy weather	CLOUDY WEATHER																																		
	Drought																																			
	High winds																																			
	Temperature																																			
	Hail Storm	HAIL STORM															HAIL STORM																			
Weather conditions favourable for incidence of pests and diseases	Pests	HELIOTHIS															HELIOTHIS AND SUCKING INSECT																			
	Weather	HUMID WEATHER															HUMID WEATHER																			
	Diseases																																			
	Weather																																			
Normal phase wise water requirement(mm)		166.0										80.1					391.6										256.7					177.3				
Weekly normal weather	Rainfall(mm) total	2.4	2.2	7.1	25.7	28.5	21.9	43.3	60.9	48.1	65.8	42.5	36.8	69.9	60.5	51.3	62.3	29.6	14.4	18.2	26.6	4.5	12.9	3.3	1.1	3.1	3.4	3.8	14.9	3.8	0.0	0.2	0.5	0.0	0.0	0.2
	Max. temp. °C	40.1	39.8	39.2	38.1	37.1	36.0	34.2	33.3	32.8	32.3	32.1	31.8	31.1	31.3	31.4	31.3	32.0	32.9	34.3	34.5	35.4	35.7	36.3	35.3	35.1	34.2	33.6	32.3	31.1	30.8	30.5	30.5	29.5	29.5	29.1
	Min. temp. °C	26.9	27.1	27.4	27.5	27.1	26.8	26.2	26.0	25.9	25.7	25.6	25.5	25.2	24.9	24.8	24.7	24.5	24.6	24.6	24.5	23.0	22.7	21.2	20.2	18.6	17.5	17.3	16.2	15.5	14.5	13.4	13.6	12.8	12.4	12.2
	Sunshine hours	11.0	10.3	10.8	8.8	8.1	7.5	5.0	5.0	4.2	4.0	4.8	3.0	3.0	3.9	4.7	5.5	5.0	6.4	8.6	7.8	9.5	9.3	9.9	10.0	10.2	10.0	9.6	9.0	9.4	9.7	9.5	9.3	9.7	9.2	9.7
Life history and mean dates of important epochs of crop growth																																				
Standard weeks		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2
Months		MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			JANUARY										