



GOVERNMENT OF INDIA
INDIA METEOROLOGICAL DEPARTMENT

CROP WEATHER CALENDARS

MADHYA PRADESH

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PREFACE

Information on normal weather conditions and water requirement of crop 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 country on a districtwise basis. These calendars provide numerical as well as pictorial information on factors favourable to crop 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 twelfth in the new series of crop weather calendars is for the state of Madhya Pradesh for Wheat, Jowar, Groundnut, Bajra 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 Madhya Pradesh, 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, DDGM; Dr. N. Chattopadhyay, Director; Shri. I. J. Verma, Director; Smt. P.V. Kochhar, Assistant Meteorologist Gr. I; Smt. S.H. Bhandari, Smt. S.M. Shaikh and Smt. V.B. Raskar and staff of Drawing Branch in preparing these calendars.

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B. Lal
Director General of Meteorology

INTRODUCTION

1. General

Madhya Pradesh is bounded by Rajasthan and Gujarat in the West, Uttar Pradesh in the North, Chhattisgarh in the East and Maharashtra in the South. The state of Madhya Pradesh lies within 22°N to 27°N latitude and 74°E to 83°E longitude. Agriculture is the mainstay of state's economy as nearly 75 percent of the total population lives in rural areas and about 49 percent area of the state is cultivable. The principal crops grown in this state are wheat, rice, jowar, cotton, oilseeds, maize, mustard, soybean and gram.

2. Climate

Geographical location and orographic features have profound influence on the climate of the state, which is practically free from maritime influence. The climate of the state can be broadly classified into three categories viz semi-arid, warm temperate rainy and tropical wet and dry. The climate is semi-arid over north western districts. It is warm temperate rainy i.e. with dry winter and hot summer over plateaus of Vindhya and Satpura ranges and adjoining northern plains. It is tropical wet and dry with distinct dry season in winter over southern parts of the state.

May is the hottest month with mean maximum temperature of 41°C in the plains, the plateau regions and elevated places recording 2 to 5°C lower. December and January are the coldest months when the mean minimum temperature for the state is 10°C , varying from 7°C in the northwest to about 14°C in the south. Southwest Monsoon is the principal rainy season, when the state receives more than 80 percent of its annual rainfall. The total annual rainfall varies from 700 mm over extreme northwestern parts, to 1600 mm over the southern parts of the state.

3. Agro-Climatic zone

The districts of north and south Madhya Pradesh (Bhind, Bhopal, Chhatarpur, Chhindwara, Damoh, Datia, Guna, Gwalior, Hoshangabad, Jabalpur, Mandla, Narsimhapur, Panna, Raisen, Rewa, Sagar, Satna, Seoni, Shivpuri, Sidhi, Tikamgarh, Vidisha, Morena and Betul) belong to 'Central plateau and Hill region'. The districts of west Madhya Pradesh (Dewas, Dhar, East Nimar, Indore, Jhabua, Mandsaur, Rajgarh, Ratlam, Shajapur, Ujjain, and West Nimar) belongs to 'Western plateau and Hill region'. The districts of east Madhya Pradesh (Balaghat, Dindori and Shahdol) belongs to 'Eastern plateau and Hill region'.

4. Crop weather Calendar

The information collected from State Agricultural Departments with regard to major crops grown in different districts of the state has been analysed and influence of weather on these crops has been presented in a pictorial form in these Crop Weather Calendars. It can easily be understood with an illustration of crop weather calendar on page 2, which represents wheat crop grown in three districts viz., Chhindawara, Betul and Seoni. The crop grown in these districts is both irrigated as well as non-irrigated. The duration of the crop in these districts for varieties WH-147, LOK-1, C-306, HO-1593, NH-2, N-4 and Sujata is from 120 to 130 days. The soil in this region is mostly Clay and Black cotton. At the bottom of the calendar, life history and mean dates of important growth stages of the crop are shown. Wheat is a rabi crop, in this region it is grown during November to March (i.e. standard week numbers 46 to 12). Different growth stages such as Germination, Vegetative growth, Flowering, Grain formation, Maturity are shown in this part of the calendar. The optimum sowing time in this region is 46 to 47 standard week (i.e. 12 Nov to 25 Nov). The middle portion of the calendar shows the normal phase wise water requirement (mm) of the crop for respective growth stages. It is 57 mm during Germination / Seedling stage, 122 mm during Vegetative growth stage, 79 mm during Flowering stage, 118 mm during Grain formation stage, 24 mm during Maturity. The total water requirement of the crop is 400 mm. The normal weekly weather conditions of rainfall, temperature (maximum, minimum) and sunshine hours are also given in this part of the calendar. The upper most portion of calendar indicates the nature of the weather warnings to be issued for various adverse weather conditions, in relation to rainfall, wet spell, cloudy weather, drought, high winds, temperature and hail storm. Weather condition favourable for incidence of pests and diseases is also given in this part of the calendar.

Contents

Crop	Page No.	Districts	Crop	Page No.	Districts
<i>Wheat</i>	1	Sidhi, Baikunthpur, Shahdol	<i>Maize</i>	20	Ratlam, Jhabua, Mandsaur
	2	Chhindawara, Betul, Seoni		21	Shivpuri, Guna
	3	Gwalior, Datia, Shivpuri, Guna		22	Sidhi, Shahdol, Mandla
	4	Chhatarpur, Panna, Satna, Tikamgarh			
	5	Jabalpur, Mandla, Damoh	<i>Soybean</i>	23	Guna, Vidisha, Shivpuri
	6	Jhabua, Indore, Ujjain, Dhar		24	Betul, Chhindawara, Seoni, Mandsaur
	7	Bhopal, Raisen, Vidisha		25	Dewas, Indore, Ujjain
		26		Sehore, Bhopal, Raisen, Narsimhapur	
<i>Paddy</i>	8	Panna, Satna, Rewa, Chhatarpur	<i>Arhar</i>	27	Satna, Jhabua, Betul
	9	Gwalior, Shivpuri			
	10	Damoh, Mandla, Jabalpur		<i>Cotton</i>	28
	11	Baikunthpur, Sidhi, Shahdol			
	12	Jabalpur	<i>Groundnut</i>	29	Shivpuri, Guna
13	Balaghat, Seoni				
<i>Gram</i>	14	Shivpuri, Guna, Gwalior	<i>Mustard</i>	30	Shivpuri, Guna
	15	Panna, Satna, Rewa, Sidhi			
	16	Mandla	<i>Urid</i>	31	Jhabua, Tikamgarh, Shivpuri
	17	Ujjain, Rajgarh, Jhabua			
	18	Bhopal, Raisen, Sehore			
	19	Chhindawara, Narsimhapur, Seoni			

STATE : MADHYA PRADESH

CROP : WHEAT

VARIETY : N-4, C-306, HDM-1553, LOK-1,
WH-147, R.Q. 21, HV-65, SUJATA

SOIL : SANDY LOAM

DISTRICTS : SIDHI, BAIKUNTHPUR, SHAHDOL

IRRIGATED/NON-IRRIGATED

DURATION : 110-135 DAYS

Weather warnings	Rain	> 50 MM/DAY										> 100 MM/DAY															
	Duration of wet spell	> 50 MM FOR 3-4 DAYS										> 75 MM FOR 3-4 DAYS															
	Cloudy weather											CLOUDY WEATHER															
	Drought	20 DAYS										20 DAYS															
	High winds	> 50 KM/HR										> 50 KM/HR															
	Temperature	MAX. TEMP. > 30 °C, MIN.TEMP. < 15 °C										MAX. TEMP. > 30 °C, MIN.TEMP. < 15 °C															
	Hail Storm											HAIL STORM															
Weather conditions favourable for incidence of pests and diseases	Pests	STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS										STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS															
	Weather	CLOUDY WEATHER										CLOUDY WEATHER															
	Diseases	RUST, LEAF SPOTS, LEAF BLIGHT										RUST, LEAF SPOTS, LEAF BLIGHT															
	Weather	HIGH HUMIDITY,CLOUDINESS										HIGH HUMIDITY,CLOUDINESS															
Normal phase wise water requirement(mm)							51					119					65					98		29		TOTAL = 362	
Weekly normal weather	Rainfall(mm) total	3.4	1.3	3.0	6.0	0.1	1.0	1.4	5.1	5.8	4.4	7.1	9.8	4.7	7.0	8.2	2.0	6.9	5.7	3.0							
	Max. temp. °C	29.1	28.6	27.6	26.3	25.5	25.2	24.9	24.3	23.7	24.2	23.9	24.6	25.5	25.6	27.5	28.4	29.5	31.2	32.9							
	Min. temp. °C	13.7	13.1	12.1	10.6	9.0	8.7	8.2	8.3	7.7	8.9	8.8	9.1	9.8	9.7	11.8	12.1	13.3	14.5	15.8							
	Sunshine hours	9.0	9.3	8.9	9.4	8.5	8.5	8.3	9.0	8.5	8.2	7.3	8.3	7.6	7.7	6.5	8.3	8.0	8.0	8.8							
Life history and mean dates of important epochs of crop growth		<p>The diagram illustrates the life cycle of wheat across 13 weeks. It shows the progression from sowing to maturity, with key stages labeled: SOWING (around week 48), GERMINATION & SEEDLING (weeks 49-52), VEGETATIVE GROWTH (weeks 51-52), FLOWERING (week 5), GRAIN FORMATION (weeks 6-10), and MATURITY (weeks 11-13). Illustrations of a seedling, a developing ear, and a fully matured ear are shown at different points in the timeline.</p>																									
Standard weeks		44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13				
Months							NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

CROP : WHEAT

VARIETY : WH-147, LOK-1, C-306,
HO-1593, NH-2,N-4, SUJATA

SOIL : CLAY, BLACK COTTON

DISTRICTS : CHHINDAWARA, BETUL, SEONI IRRIGATED/NON-IRRIGATED DURATION : 120-130 DAYS

Weather warnings	Rain	> 50 MM/DAY		> 100 MM/DAY		> 100 MM/DAY																									
	Duration of wet spell	> 50 MM FOR 3-4 DAYS		> 75 MM FOR 3-4 DAYS		> 50 MM FOR 3-4 DAYS																									
	Cloudy weather	CLOUDY WEATHER		CLOUDY WEATHER		CLOUDY WEATHER																									
	Drought	20 DAYS		20 DAYS		20 DAYS																									
	High winds	> 50 KM/HR		> 50 KM/HR		> 50 KM/HR																									
	Temperature	MAX. TEMP. > 30°C, MIN.TEMP. < 15°C		MAX. TEMP. > 30°C, MIN.TEMP. < 15°C		MAX. TEMP. > 32°C, MIN.TEMP. < 15°C																									
	Hail Storm	HAIL STORM		HAIL STORM		HAIL STORM																									
Weather conditions favourable for incidence of pests and diseases	Pests	STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS		STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS		STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS																									
	Weather	CLOUDY WEATHER		CLOUDY WEATHER		CLOUDY WEATHER																									
	Diseases	RUST, LEAF SPOTS, LEAF BLIGHT		RUST, LEAF SPOTS, LEAF BLIGHT		RUST, LEAF SPOTS, LEAF BLIGHT																									
	Weather	HIGH HUMIDITY,CLOUDINESS		HIGH HUMIDITY,CLOUDINESS		HIGH HUMIDITY,CLOUDINESS																									
Normal phase wise water requirement(mm)		57		122		79		118		24		TOTAL = 400																			
Weekly normal weather	Rainfall(mm) total	1.7	10.6	7.4	0.4	1.5	1.7	4.0	4.0	4.1	3.6	5.0	3.6	7.4	5.8	3.4	7.8	6.0	2.6	1.5											
	Max. temp. °C	29.0	28.2	27.3	26.9	26.6	26.8	26.2	25.7	26.0	26.3	26.8	27.7	27.9	29.4	29.7	30.8	32.2	33.6	35.1											
	Min. temp. °C	13.3	12.5	11.5	10.4	9.6	9.9	9.6	9.4	10.3	10.5	10.8	11.3	11.1	12.8	13.1	14.0	15.5	16.5	17.6											
	Sunshine hours	9.2	9.0	9.3	8.6	8.8	8.5	9.3	8.7	9.0	9.0	9.5	9.9	9.5	10.6	9.7	10.3	9.7	9.0	8.8											
Life history and mean dates of important epochs of crop growth																															
		44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13								
		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH																					
		Months																													

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

CROP : WHEAT

VARIETY : WH-147, LOK-1, C-306,
HDM-1553, N-4SOIL : SANDY LOAM, CLAY LOAM,
BLACK COTTON, ALLUVIALDISTRICTS : GWALIOR, DATIA,
SHIVPURI, GUNA

IRRIGATED/NON-IRRIGATED

DURATION : 110-145 DAYS

Weather warnings	Rain	> 50 MM/DAY												> 100 MM/DAY														
	Duration of wet spell	> 50 MM FOR 3-4 DAYS												> 75 MM FOR 3-4 DAYS														
	Cloudy weather													CLOUDY WEATHER														
	Drought	20 DAYS												20 DAYS														
	High winds	> 50 KM/HR												> 50 KM/HR														
	Temperature	MAX. TEMP. > 30° C, MIN.TEMP. < 15° C												MAX. TEMP. > 30° C, MIN.TEMP. < 15° C														
	Hail Storm													HAIL STORM														
Weather conditions favourable for incidence of pests and diseases	Pests	STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS												STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS														
	Weather	CLOUDY WEATHER												CLOUDY WEATHER														
	Diseases	RUST, LEAF SPOTS, LEAF BLIGHT												RUST, LEAF SPOTS, LEAF BLIGHT														
	Weather	HIGH HUMIDITY,CLOUDINESS												HIGH HUMIDITY,CLOUDINESS														
	Normal phase wise water requirement(mm)	47												128														
Weekly normal weather	Rainfall(mm) total	1.5	2.2	4.2	0.5	1.2	1.0	2.0	1.1	3.6	3.7	2.1	1.2	4.7	4.7	3.0	3.0	1.2	0.7	1.3	0.4	1.1						
	Max. temp. °C	29.6	28.0	26.4	25.8	25.3	24.9	23.8	23.3	23.2	23.0	24.0	24.5	25.3	26.8	27.6	29.0	31.2	32.7	33.8	35.0	36.3						
	Min. temp. °C	12.2	11.3	9.8	8.2	7.9	7.5	7.1	6.7	7.4	7.3	7.9	8.1	8.2	10.3	10.9	12.2	13.7	15.1	16.3	17.9	19.0						
	Sunshine hours	9.5	9.4	9.1	8.6	8.9	8.8	9.2	8.3	8.3	8.4	8.9	8.1	9.0	9.8	9.8	9.1	8.8	9.4	9.5	9.7	10.0						
Life history and mean dates of important epochs of crop growth		<p>The diagram illustrates the life cycle of wheat across 18 weeks. It starts with 'SOWING' in week 47 (November). Following 'GERMINATION AND SEEDLING' (weeks 48-50), the plant undergoes 'VEGETATIVE GROWTH' (weeks 51-60). At week 6 (January), it begins to 'FLOWER'. This is followed by 'GRAIN FORMATION' (weeks 7-13) and finally 'MATURITY' (weeks 14-18, February-March) where the grain is fully developed.</p>																										
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	18
Months		NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				APRIL						

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH CROP : WHEAT VARIETY : KATHIYA, SUJATA, C-306, WH-147, N-112, HD-1553
 SOIL : SANDY LOAM , CLAY LOAM
 DISTRICTS : CHHATARPUR, PANNA, SATNA, TIKAMGARH IRRIGATED/NON-IRRIGATED DURATION : 110-140 DAYS

Weather warnings	<i>Rain</i>	> 50 MM/DAY										> 100 MM/DAY										
	<i>Duration of wet spell</i>	> 50 MM FOR 3-4 DAYS										> 75 MM FOR 3-4 DAYS										
	<i>Cloudy weather</i>											CLOUDY WEATHER										
	<i>Drought</i>	20 DAYS										20 DAYS										
	<i>High winds</i>	> 50 KM/HR										> 50 KM/HR										
	<i>Temperature</i>	MAX. TEMP. > 30°C, MIN.TEMP. < 15°C										MAX. TEMP. > 30°C, MIN.TEMP. < 15°C										
	<i>Hail Storm</i>											HAIL STORM										
Weather conditions favourable for incidence of pests and diseases	<i>Pests</i>	STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS										STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS										
	<i>Weather</i>	CLOUDY WEATHER										CLOUDY WEATHER										
	<i>Diseases</i>	RUST, LEAF SPOTS, LEAF BLIGHT										RUST, LEAF SPOTS, LEAF BLIGHT										
	<i>Weather</i>	HIGH HUMIDITY,CLOUDINESS										HIGH HUMIDITY,CLOUDINESS										
Normal phase wise water requirement(mm)		46					117					74					125					TOTAL = 390
Weekly normal weather	<i>Rainfall(mm) total</i>	1.4	8.0	0.8	0.9	1.5	1.7	1.9	3.5	7.3	6.6	2.4	5.4	6.7	2.6	4.0	2.8	1.5	1.1	1.8	0.8	
	<i>Max. temp. °C</i>	28.4	26.7	25.8	25.6	25.0	24.2	23.5	23.9	23.4	24.3	24.7	25.4	27.0	27.9	29.2	31.1	32.9	34.4	35.4	36.8	
	<i>Min. temp. °C</i>	11.8	10.4	9.1	8.7	8.3	8.1	7.4	8.1	8.0	8.6	8.9	8.7	10.9	11.4	12.5	13.9	15.1	16.5	17.9	19.1	
	<i>Sunshine hours</i>	9.8	9.8	9.6	9.3	9.5	10.3	8.1	8.7	6.9	7.3	7.3	6.7	6.6	8.6	8.9	8.8	9.1	8.7	9.5	9.4	
Life history and mean dates of important epochs of crop growth																						
Standard weeks		44	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13
Months		NOVEMBER					DECEMBER					JANUARY					FEBRUARY					MARCH

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

CROP : WHEAT

VARIETY : LOK-1, C-306, WH-147, LOCAL,
SUJATA, HD-2236SOIL : SANDY LOAM, CLAY
LOAM

DISTRICTS : JABALPUR, MANDLA, DAMOH

IRRIGATED/NON-IRRIGATED

DURATION : 120-130 DAYS

Weather warnings	Rain	> 50 MM/DAY					> 100 MM/DAY					> 100 MM/DAY				
	Duration of wet spell	> 50 MM FOR 3-4 DAYS					> 75 MM FOR 3-4 DAYS					> 50 MM FOR 3-4 DAYS				
	Cloudy weather						CLOUDY WEATHER					CLOUDY WEATHER				
	Drought	20 DAYS					20 DAYS					20 DAYS				
	High winds	> 50 KM/HR					> 50 KM/HR					> 50 KM/HR				
	Temperature	MAX. TEMP. > 30°C, MIN.TEMP. < 15°C					MAX. TEMP. > 30°C, MIN.TEMP. < 15°C					MAX. TEMP. > 32°C, MIN.TEMP. < 15°C				
	Hail Storm						HAIL STORM					HAIL STORM				
Weather conditions favourable for incidence of pests and diseases	Pests	STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS					STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS					STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS				
	Weather	CLOUDY WEATHER					CLOUDY WEATHER					CLOUDY WEATHER				
	Diseases	RUST, LEAF SPOTS, LEAF BLIGHT					RUST, LEAF SPOTS, LEAF BLIGHT					RUST, LEAF SPOTS, LEAF BLIGHT				
	Weather	HIGH HUMIDITY,CLOUDINESS					HIGH HUMIDITY,CLOUDINESS					HIGH HUMIDITY,CLOUDINESS				
Normal phase wise water requirement(mm)		56					116					68				
Weekly normal weather	Rainfall(mm) total	0.7	2.3	7.4	7.0	0.9	1.7	1.0	3.5	3.3	5.9	5.9	4.9	5.7	7.0	7.8
	Max. temp. °C	30.1	29.5	28.6	27.2	26.4	25.9	25.7	25.2	24.7	25.4	25.2	26.0	26.6	26.8	28.6
	Min. temp. °C	13.8	13.1	12.4	11.0	9.3	8.7	8.4	8.5	8.2	9.4	9.1	9.5	10.1	10.1	11.9
	Sunshine hours	9.3	9.5	9.1	9.2	8.8	8.8	8.8	9.3	8.3	8.6	8.1	8.6	8.5	8.7	8.7
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
Months		NOVEMBER					DECEMBER					JANUARY				
												FEBRUARY				
												MARCH				

CROP WEATHER CALENDAR

6

STATE : MADHYA PRADESH

CROP : WHEAT

VARIETY : WH-147, N-4, HD-1553,
 SUJATA, LOK-1

SOIL : RED ALLUVIAL,
BLACK COTTON

DISTRICTS : JHABUA, INDORE, UJJAIN, DHAR

IRRIGATED

DURATION : 120-150 DAYS

CROP WEATHER CALENDAR

7

STATE : MADHYA PRADESH

CROP : WHEAT

VARIETY : WH-147, LOK-1, C-306,
HD-1553, N-4,112, SUJATA

SOIL : BLACK COTTON

DISTRICTS : BHOPAL, RAISEN, VIDISHA

IRRIGATED/NON-IRRIGATED

DURATION : 115-140 DAYS

Weather warnings	Rain	> 50 MM/DAY		> 100 MM/DAY		> 100 MM/DAY			
	Duration of wet spell	> 50 MM FOR 3-4 DAYS		> 75 MM FOR 3-4 DAYS		> 50 MM FOR 3-4 DAYS			
	Cloudy weather			CLOUDY WEATHER		CLOUDY WEATHER			
	Drought	20 DAYS		20 DAYS		20 DAYS			
	High winds	> 50 KM/HR		> 50 KM/HR		> 50 KM/HR			
	Temperature	MAX. TEMP. > 30°C, MIN.TEMP. < 15°C		MAX. TEMP. > 30°C, MIN.TEMP. < 15°C		MAX. TEMP. > 32°C, MIN.TEMP. < 15°C			
	Hail Storm			HAIL STORM		HAIL STORM			
Weather conditions favourable for incidence of pests and diseases	Pests	STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS		STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS		STEM BORER, APHIDS, TERMITES, ARMY WORMS,CUT WORMS			
	Weather	CLOUDY WEATHER		CLOUDY WEATHER		CLOUDY WEATHER			
	Diseases	RUST, LEAF SPOTS, LEAF BLIGHT		RUST, LEAF SPOTS, LEAF BLIGHT		RUST, LEAF SPOTS, LEAF BLIGHT			
	Weather	HIGH HUMIDITY,CLOUDINESS		HIGH HUMIDITY,CLOUDINESS		HIGH HUMIDITY,CLOUDINESS			
Normal phase wise water requirement(mm)			54		148		85		
Weekly normal weather	Rainfall(mm) total	4.7	0.6	2.5	10.3	1.7	2.4	1.7	
	Max. temp. °C	31.0	30.2	29.2	27.7	26.9	26.6	26.6	
	Min. temp. °C	13.3	13.0	12.0	10.9	9.6	8.9	8.9	
	Sunshine hours	7.3	7.2	7.0	6.8	6.9	6.9	7.0	
Life history and mean dates of important epochs of crop growth		44	45	46	47	48	49	50	
		51	52	1	2	3	4	5	
		6	7	8	9	10	11	12	
Standard weeks		13							
Months		NOVEMBER		DECEMBER		JANUARY		FEBRUARY	
		MARCH							

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH
 DISTRICTS : PANNA, SATNA, REWA,
 CHHATARPUR

CROP : PADDY
 IRRIGATED/NON-IRRIGATED

VARIETY : RATNA, IR-36, LOCAL, MADHURI SOIL : LATERITE, ALLUVIAL
 DURATION : 100-135 DAYS

Weather warnings	Rain	> 100 MM/DAY																> 100 MM/DAY							
	Duration of wet spell																								
	Cloudy weather																								
	Drought	7-14 DAYS						7-14 DAYS						7-14 DAYS											
	High winds	> 30 KM / HR						> 30 KM / HR						> 30 KM / HR											
	Temperature	MAX. TEMP. > 40°C						MAX. TEMP. > 40°C						MAX. TEMP. > 35°C											
	Hail Storm																								
Weather conditions favourable for incidence of pests and diseases	Pests	APHIDS, JASSIDS, LEAF ROLLER, GALL MIDGE						STEM BORER, GALL FLY, GRASS HOPPER, LEAF FOLDER						ARMY WORM, GUNDHI BUG, CUT WORM											
	Weather	RAIN & CLOUDY WEATHER						RAIN & CLOUDY WEATHER						RAIN & CLOUDY WEATHER											
	Diseases	BLAST, LEAF BLIGHT, ROOT ROT						BLAST, SHEATH BLIGHT, BROWN SPOT						BLAST, SHEATH ROT, BROWN SPOT											
	Weather	HIGH HUMIDITY, CLOUDINESS						HIGH HUMIDITY, CLOUDINESS						HIGH HUMIDITY, CLOUDINESS											
	Normal phase wise water requirement(mm)	100					432					125					144			104		TOTAL = 905			
Weekly normal weather	Rainfall(mm) total	98.0	101.1	77.5	72.4	68.6	78.2	59.5	32.8	17.4	13.0	9.1	7.3	1.0	0.5	2.9	0.8								
	Max. temp. °C	31.3	30.7	31.1	31.2	31.3	31.1	31.3	32.0	32.5	32.6	32.8	32.6	31.7	30.9	29.9	29.2								
	Min. temp. °C	24.4	24.0	24.1	24.0	24.0	23.5	23.4	23.2	22.6	21.4	20.3	18.6	16.9	15.4	13.8	13.2								
	Sunshine hours	5.6	5.5	5.3	5.5	5.6	6.2	7.4	7.5	7.6	7.7	8.3	9.9	9.9	9.7	9.8	9.7								
Life history and mean dates of important epochs of crop growth																									
Standard weeks		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
Months		JULY				AUGUST				SEPTEMBER				OCTOBER				NOVEMBER							

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH
DISTRICTS : GWALIOR, SHIVPURI

CROP : PADDY
IRRIGATED

VARIETY : RATNA, KRANTI, IR-36
DURATION : 115-130 DAYS

SOIL : SANDY LOAM, CLAY LOAM

Weather warnings	Rain	> 100 MM/DAY																		> 100 MM/DAY																	
	Duration of wet spell																																				
	Cloudy weather																																				
	Drought	7-14 DAYS						7-14 DAYS						7-14 DAYS																							
	High winds	> 30 KM / HR						> 30 KM / HR						> 30 KM / HR																							
	Temperature	MAX. TEMP. > 40°C						MAX. TEMP. > 40°C						MAX. TEMP. > 35°C																							
	Hail Storm																																				
Weather conditions favourable for incidence of pests and diseases	Pests	APHIDS, JASSIDS, LEAF ROLLER, GALL MIDGE						STEM BORER, GALL FLY, GRASS HOPPER, LEAF FOLDER						ARMY WORM, GUNDHI BUG, CUT WORM																							
	Weather	RAIN & CLOUDY WEATHER						RAIN & CLOUDY WEATHER						RAIN & CLOUDY WEATHER																							
	Diseases	BLAST, LEAF BLIGHT, ROOT ROT						BLAST, SHEATH BLIGHT, BROWN SPOT						BLAST, SHEATH ROT, BROWN SPOT																							
	Weather	HIGH HUMIDITY, CLOUDINESS						HIGH HUMIDITY, CLOUDINESS						HIGH HUMIDITY, CLOUDINESS																							
Normal phase wise water requirement(mm)					112		465						142		128		83		TOTAL = 930																		
Weekly normal weather	Rainfall(mm) total																																				
	Max. temp. °C																																				
	Min. temp. °C																																				
	Sunshine hours																																				
Life history and mean dates of important epochs of crop growth																																					
Standard weeks		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48													
Months																																					
		</																																			

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

CROP : PADDY

VARIETY : KRANTI, IR-36, IR-75, POORVA,
PUSA-2, PUSA-21, LOCALSOIL : SANDY LOAM,
CLAY LOAM

DISTRICTS : DAMOH, MANDLA, JABALPUR

IRRIGATED/NON-IRRIGATED

DURATION : 75-135 DAYS

Weather warnings	Rain	> 100 MM/DAY														> 100 MM/DAY																											
	Duration of wet spell																																										
	Cloudy weather																																										
	Drought	7 - 14 DAYS														7 - 14 DAYS																											
	High winds	> 30 KM/HR														> 30 KM/HR																											
	Temperature	MAX. TEMP. > 40°C														MAX. TEMP. > 40°C																											
	Hail Storm																																										
Weather conditions favourable for incidence of pests and diseases	Pests	APHIDS, JASSIDS, LEAF ROLLER, GALL MIDGE														STEM BORER, GALL FLY, GRASS HOPPER, LEAF FOLDER																											
	Weather	RAIN & CLOUDY WEATHER														RAIN & CLOUDY WEATHER																											
	Diseases	BLAST, LEAF BLIGHT, ROOT ROT														BLAST, SHEATH BLIGHT, BROWN SPOT																											
	Weather	HIGH HUMIDITY, CLOUDINESS														HIGH HUMIDITY, CLOUDINESS																											
	Normal phase wise water requirement(mm)	128														521															TOTAL = 1000												
Weekly normal weather	Rainfall(mm) total	96.8	87.7	74.1	103.3	101.5	101.1	84.7	95.4	59.2	44.8	24.5	22.9	13.4	8.5	8.9	4.6																										
	Max. temp. °C	32.8	31.3	30.8	30.6	30.2	29.2	29.7	29.9	29.7	29.9	29.7	30.2	30.7	31.7	32.2	32.2																										
	Min. temp. °C	24.2	23.8	23.8	23.7	23.6	23.3	23.4	23.3	23.2	23.0	22.9	22.6	22.3	20.9	20.0	18.4																										
	Sunshine hours	4.3	3.4	3.3	4.1	3.5	3.1	3.2	4.0	4.9	4.8	5.9	7.7	7.6	7.6	8.0	9.3																										
Life history and mean dates of important epochs of crop growth																																											

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

CROP : PADDY

**VARIETY : IR-36, SAFARI-17, MASURI, RATNA,
SUREKHA, FALGUNA**

SOIL: SANDY LOAM,
CLAY LOAM

DISTRICTS : BAIKUNTHAPUR, SIDHI, SHAHDOL

NON-IRRIGATED

DURATION : 100-140 DAYS

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH
DISTRICTS : JABALPUR

CROP : PADDY VARIETY : KRANTI
IRRIGATED/NON-IRRIGATED DURATION : 130-145 DAYS

SOIL : CLAY LOAM

Weather warnings	Rain	> 100 MM/DAY												> 100 MM/DAY																	
	Duration of wet spell																														
	Cloudy weather																														
	Drought	7-14 DAYS						7-14 DAYS						7-14 DAYS																	
	High winds	> 30 KM / HR												> 30 KM / HR																	
	Temperature	MAX. TEMP. > 40°C												MAX. TEMP. > 40°C																	
	Hail Storm													HAILSTORM																	
Weather conditions favourable for incidence of pests and diseases	Pests	APHIDS, JASSIDS, LEAF ROLLER, GALL MIDGE												STEM BORER, GALL FLY, GRASS HOPPER, LEAF FOLDER																	
	Weather	RAIN & CLOUDY WEATHER												RAIN & CLOUDY WEATHER																	
	Diseases	BLAST, LEAF BLIGHT, ROOT ROT												BLAST, SHEATH BLIGHT, BROWN SPOT																	
	Weather	HIGH HUMIDITY, CLOUDINESS												HIGH HUMIDITY, CLOUDINESS																	
Normal phase wise water requirement(mm)				105			493						127			175			150			TOTAL = 1050									
Weekly normal weather	Rainfall(mm) total	76.0	72.3	71.7	85.1	90.0	97.2	72.1	84.9	52.5	44.2	25.9	21.9	12.9	12.1	7.7	4.2	1.6	3.9												
	Max. temp. °C	31.7	31.1	30.9	30.6	29.7	30.1	30.2	30.3	30.7	31.4	32.4	32.9	33.2	33.2	33.0	32.2	31.4	30.8												
	Min. temp. °C	24.3	24.2	24.1	24.0	23.7	23.8	23.8	23.6	23.4	23.3	23.3	22.9	21.7	21.0	19.6	18.1	16.8	15.3												
	Sunshine hours	3.6	3.3	3.5	3.3	3.5	3.4	3.9	4.7	4.8	6.4	7.2	7.7	7.8	8.1	9.1	8.8	9.0	9.1												
Life history and mean dates of important epochs of crop growth				<p>NURSERY (00) → TRANSPLANTING → VEGETATIVE GROWTH → FLOWERING → GRAIN FORMATION → MATURITY</p>																											
Standard weeks				25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48				
Months							JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER												

CROP WEATHER CALENDAR

13

STATE : MADHYA PRADESH

CROP: PADDY

VARIETY : IR-36, PURVA, TRIPTI

SOIL : BLACK COTTON ,
SANDY LOAM ,
CLAY LOAM

DISTRICTS : BALAGHAT, SEONI

IRRIGATED/NON-IRRIGATED DUR

DURATION : 90-145 DAYS

CROP WEATHER CALENDAR

14

STATE : MADHYA PRADESH
DISTRICTS : SHIVPURI, GUNA, GWALIOR

CROP : GRAM
IRRIGATED

VARIETY : JG-315, CZ-35, GOURAB, LOCAL
DURATION : 120-130 DAYS

SOIL : SANDY LOAM, CLAY LOAM,
BLACK COTTON

Weather warnings	Rain	> 100 MM/DAY																		> 100 MM/DAY																		> 100 MM/DAY																																																																								
	Duration of wet spell	> 25 MM FOR 3-4 DAYS																		> 25 MM FOR 3-4 DAYS																		> 25 MM FOR 3-4 DAYS																																																																								
	Cloudy weather	CLOUDY WEATHER																		CLOUDY WEATHER																		CLOUDY WEATHER																																																																								
	Drought	> 21 DAYS																		> 21 DAYS																		> 21 DAYS																																																																								
	High winds	> 60 KMPH																		> 60 KMPH																		> 60 KMPH																																																																								
	Temperature	MAX. TEMP. > 30°C, MIN.TEMP. < 5°C																		MAX. TEMP. > 30°C, MIN.TEMP. < 5°C																		MAX. TEMP. > 30°C, MIN.TEMP. < 5°C																																																																								
	Hail Storm	HAIL STORM																		HAIL STORM																		HAIL STORM																																																																								
Weather conditions favourable for incidence of pests and diseases	Pests	GRAM CATERPILLAR, HELIOTHIS, CUT WORM																		CUT WORM, GRAM CATERPILLAR, HELIOTHIS																		CUT WORM, POD BORER																																																																								
	Weather	CLOUDY WEATHER																		CLOUDY WEATHER																		CLOUDY WEATHER																																																																								
	Diseases	WILT, BLAST, DRY ROT																		WILT, BLAST, DRY ROT																		WILT, BLAST, DRY ROT																																																																								
	Weather	HIGH HUMIDITY, CLOUDINESS																		HIGH HUMIDITY, CLOUDINESS																		HIGH HUMIDITY, CLOUDINESS																																																																								
Normal phase wise water requirement(mm)		25																		105																		76																		94																		50																		TOTAL = 350																		
Weekly normal weather	Rainfall(mm) total	1.8	2.5	3.3	1.3	2.4	4.2	0.5	1.4	1.0	2.3	1.2	3.3	3.9	2.1	1.1	4.8	3.9	3.2	1.8	31.3	30.2	29.3	27.8	26.2	25.7	25.2	24.9	23.8	23.3	23.2	23.0	24.1	24.5	25.3	26.8	27.6	1.8	32.1	31.3	30.2	29.3	27.8	26.2	25.7	25.2	24.9	23.8	23.3	23.2	23.0	24.1	24.5	25.3	26.8	27.6	1.8	32.1	31.3	30.2	29.3	27.8	26.2	25.7	25.2	24.9	23.8	23.3	23.2	23.0	24.1	24.5																																						

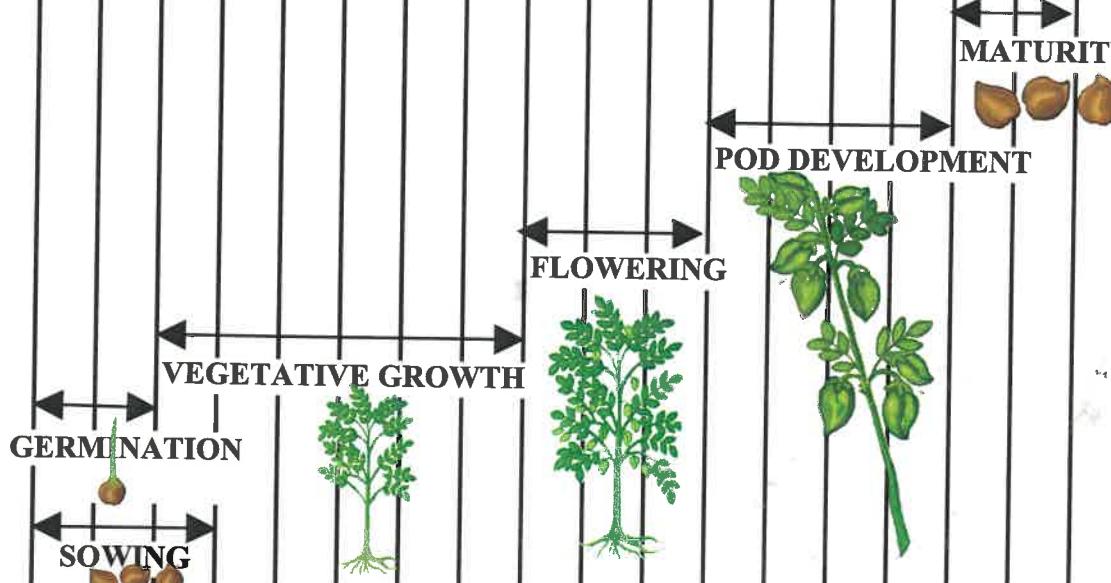
CROP WEATHER CALENDAR

STATE : MADHYA PRADESH
DISTRICTS : PANNA, SATNA, REWA, SIDHI

CROP : GRAM
IRRIGATED

VARIETY : LH-355, JG-62, JG-315, JG-2774, RADHEY
DURATION : 110-120 DAYS

SOIL : LATERITE, ALLUVIAL

Weather warnings	Rain	> 100 MM/DAY												> 100 MM/DAY													
	Duration of wet spell	> 25 MM FOR 3-4 DAYS												> 25 MM FOR 3-4 DAYS													
	Cloudy weather													CLOUDY WEATHER													
	Drought													> 21 DAYS													
	High winds	> 60 KMPH												> 60 KMPH													
	Temperature	MAX. TEMP. > 30°C, MIN.TEMP. < 5°C												MAX. TEMP. > 30°C, MIN.TEMP. < 5°C													
	Hail Storm													HAIL STORM													
Weather conditions favourable for incidence of pests and diseases	Pests	GRAM CATERPILLAR, HELIOTHIS, CUT WORM												CUT WORM, GRAM CATERPILLAR, HELIOTHIS,													
	Weather	CLOUDY WEATHER												CLOUDY WEATHER													
	Diseases	WILT, BLAST, DRY ROT												WILT, BLAST, DRY ROT													
	Weather	HIGH HUMIDITY, CLOUDINESS												HIGH HUMIDITY, CLOUDINESS													
Normal phase wise water requirement(mm)		22												95													
Weekly normal weather	Rainfall(mm) total	7.2	1.7	0.8	3.4	0.9	1.8	6.7	0.4	1.1	1.4	2.7	2.9	3.7	8.0	8.8	3.2	6.8									
	Max. temp. °C	32.2	31.4	30.6	29.8	29.0	28.0	26.4	25.5	25.2	24.7	23.9	23.3	23.8	23.1	24.0	24.6	25.1									
	Min. temp. °C	19.0	17.2	15.8	14.1	13.6	12.5	10.9	9.3	9.0	8.5	8.6	7.8	8.6	8.5	9.0	9.5	9.4									
	Sunshine hours	9.8	9.8	9.7	9.6	9.5	9.4	9.6	9.0	9.0	9.0	9.9	8.3	8.4	6.8	7.0	7.2	6.5									
Life history and mean dates of important epochs of crop growth		 <p>The diagram illustrates the life cycle of the crop. It starts with 'SOWING' (weeks 40-44), followed by 'GERMINATION' (weeks 44-47). 'VEGETATIVE GROWTH' occurs from week 47 to week 52, during which the plant grows leaves and stems. 'FLOWERING' begins at week 52 and continues through week 5. 'POD DEVELOPMENT' follows, ending at week 7. Finally, 'MATURITY' is reached at week 8, indicated by three brown seed pods.</p>																									
Standard weeks		40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9				
Months		OCTOBER												NOVEMBER												DECEMBER	
																										JANUARY	
																										FEBRUARY	

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH
DISTRICTS : MANDLA

CROP : GRAM
IRRIGATED VARIETY : JG-74, JG-315
DURATION : 110-130 DAYS

SOIL : SANDY LOAM

Weather warnings	Rain	> 100 MM/DAY												> 100 MM/DAY												
	Duration of wet spell	> 25 MM FOR 3-4 DAYS												> 25 MM FOR 3-4 DAYS												
	Cloudy weather	CLOUDY WEATHER												CLOUDY WEATHER												
	Drought	> 21 DAYS												> 21 DAYS												
	High winds	> 60 KMPH												> 60 KMPH												
	Temperature	MAX. TEMP. > 30°C, MIN.TEMP. < 5°C												MAX. TEMP. > 30°C, MIN.TEMP. < 5°C												
	Hail Storm	HAIL STORM												HAIL STORM												
Weather conditions favourable for incidence of pests and diseases	Pests	GRAM CATERPILLAR, HELIOTHIS, CUT WORM												CUT WORM, GRAM CATERPILLAR, HELIOTHIS,												
	Weather	CLOUDY WEATHER												CLOUDY WEATHER												
	Diseases	WILT, BLAST, DRY ROT												WILT, BLAST, DRY ROT												
	Weather	HIGH HUMIDITY, CLOUDINESS												HIGH HUMIDITY, CLOUDINESS												
Normal phase wise water requirement(mm)						20	97				70				90				58				TOTAL = 335			
Weekly normal weather	Rainfall(mm) total	7.2	3.7	0.6	1.2	5.2	4.4	0.3	1.7	0.6	5.3	4.1	7.1	6.0	4.7	5.5	4.8	11.0	2.0							
	Max. temp. °C	30.2	29.0	28.5	28.0	27.3	26.0	25.7	25.2	25.4	24.9	23.7	24.1	24.6	25.3	27.0	27.3	29.0	29.4							
	Min. temp. °C	17.3	16.1	14.9	14.4	13.6	12.1	10.6	10.1	10.0	9.5	10.8	11.0	11.2	11.8	11.8	13.3	13.4								
	Sunshine hours	8.4	8.6	8.7	9.2	8.9	9.1	8.4	8.4	8.9	8.4	8.6	8.8	8.9	9.0	9.2	9.4	9.4	9.3							
Life history and mean dates of important epochs of crop growth																										
Standard weeks		40	41	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9				
Months		OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY								

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH
DISTRICTS : UJJAIN, RAJGARH, JHABUA

CROP : GRAM
IRRIGATED/NON-IRRIGATED

VARIETY : UJJAIN 21, UJJAIN 24

SOIL : BLACK COTTON, RED SOIL

DURATION : 100-120 DAYS

Weather warnings	Rain	> 100 MM/DAY		> 100 MM/DAY		> 100 MM/DAY														
	Duration of wet spell	> 25 MM FOR 3-4 DAYS		> 25 MM FOR 3-4 DAYS		> 25 MM FOR 3-4 DAYS														
	Cloudy weather			CLOUDY WEATHER		CLOUDY WEATHER														
	Drought			> 21 DAYS																
	High winds	> 60 KMPH		> 60 KMPH		> 60 KMPH														
	Temperature	MAX. TEMP. > 30°C, MIN.TEMP. < 5°C		MAX. TEMP. > 30°C, MIN.TEMP. < 5°C		MAX. TEMP. > 30°C, MIN.TEMP. < 5°C														
	Hail Storm					HAIL STORM														
Weather conditions favourable for incidence of pests and diseases	Pests	GRAM CATERPILLAR, HELIOTHIS, CUT WORM		CUT WORM, GRAM CATERPILLAR, HELIOTHIS		CUT WORM, POD BORER														
	Weather	CLOUDY WEATHER		CLOUDY WEATHER		CLOUDY WEATHER														
	Diseases	WILT, BLAST, DRY ROT		WILT, BLAST, DRY ROT		WILT, BLAST, DRY ROT														
	Weather	HIGH HUMIDITY, CLOUDINESS		HIGH HUMIDITY, CLOUDINESS		HIGH HUMIDITY, CLOUDINESS														
Normal phase wise water requirement(mm)		30		105		80		98		47		TOTAL = 360								
Weekly normal weather	Rainfall(mm) total	5.7	1.7	5.3	5.8	0.8	0.4	1.1	0.9	1.0	2.4	1.0	1.2	1.4	1.0	0.7	0.9	1.1		
	Max. temp. °C	31.8	31.2	30.0	28.5	28.2	27.9	28.0	27.1	26.5	26.8	26.3	27.2	27.6	28.2	29.7	30.5	32.0		
	Min. temp. °C	14.0	14.2	13.1	11.8	11.0	10.0	10.1	9.3	9.2	9.7	9.4	10.0	9.7	9.9	11.3	12.4	14.1		
	Sunshine hours	9.2	9.1	8.8	8.6	8.6	8.6	9.0	8.8	8.8	8.8	9.2	9.3	9.4	9.5	10.3	10.5	9.3		
Life history and mean dates of important epochs of crop growth		GERMINATION		VEGETATIVE GROWTH		FLOWERING		POD DEVELOPMENT		MATURITY										
Standard weeks		44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	
Months				NOVEMBER		DECEMBER		JANUARY		FEBRUARY										

CROP WEATHER CALENDAR

STATE : **MADHYA PRADESH**

CROP : GRAM

VARIETY : UJJAIN 21, UJJAIN 24, UJJAIN 25,
UJJAIN 315, JG-315, RADHEY

SOIL : BLACK COTTON

DISTRICTS : BHOPAL, RAISEN, SEHORE

IRRIGATED/NON-IRRIGATED

DURATION : 100-125 DAYS

CROP WEATHER CALENDAR

19

STATE : MADHYA PRADESH
DISTRICTS : CHHINDAWARA, NA

**CROP : GRAM
IRRIGATED**

VARIETY : JG-315, UJJAIN-21, UJJAIN-24
DURATION : 105-125 DAYS

SOIL : BLACK COTTON

Weather warnings	Rain	> 100 MM/DAY										> 100 MM/DAY													
	Duration of wet spell	> 25 MM FOR 3-4 DAYS										> 25 MM FOR 3-4 DAYS													
	Cloudy weather	CLOUDY WEATHER										CLOUDY WEATHER													
	Drought	> 21 DAYS										> 21 DAYS													
	High winds	> 60 KMPH										> 60 KMPH													
	Temperature	MAX. TEMP. > 30°C, MIN.TEMP. < 5°C										MAX. TEMP. > 30°C, MIN.TEMP. < 5°C													
	Hail Storm	HAIL STORM										HAIL STORM													
Weather conditions favourable for incidence of pests and diseases	Pests	GRAM CATERPILLAR, HELIOTHIS, CUT WORM										CUT WORM, GRAM CATERPILLAR, HELIOTHIS													
	Weather	CLOUDY WEATHER										CLOUDY WEATHER													
	Diseases	WILT, BLAST, DRY ROT										WILT, BLAST, DRY ROT													
	Weather	HIGH HUMIDITY, CLOUDINESS										HIGH HUMIDITY, CLOUDINESS													
Normal phase wise water requirement(mm)							22	118					84	102					54	TOTAL = 380					
Weekly normal weather	Rainfall(mm) total	2.1	1.8	10.6	7.1	0.2	1.6	1.9	3.4	4.3	4.8	4.3	5.9	4.5	7.6	4.9	2.6	8.2	6.1						
	Max. temp. °C	30.4	29.9	29.0	28.0	27.4	27.1	27.1	26.5	25.9	26.2	26.4	26.8	27.9	28.1	29.6	30.1	31.2	32.7						
	Min. temp. °C	14.0	13.4	12.4	11.5	10.2	9.5	9.6	9.3	9.0	10.1	10.2	10.6	11.2	10.9	12.9	13.1	14.0	15.5						
	Sunshine hours	9.1	9.2	9.1	9.4	8.7	8.8	8.6	9.5	8.5	8.8	8.6	9.2	9.5	9.1	10.0	9.6	10.0	9.6						
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		
Months							NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH										

CROP WEATHER CALENDAR

20

STATE : MADHYA PRADESH
DISTRICTS : RATLAM, JHABUA, MANDSAUR

CROP : MAIZE **VARIETY : GANGA-5, CHANDAN-3, HY-5**
IRRIGATED/NON-IRRIGATED **DURATION : 100-110 DAYS**

SOIL : BLACK COTTON,
RED ALLUVIAL

Rain	> 100 MM/DAY												> 100 MM/DAY																								
Duration of wet spell	> 50 MM FOR 4 DAYS												> 50 MM FOR 4 DAYS																								
Cloudy weather																																					
Drought	15 DAYS																																				
High winds	> 30 KMPH												> 30 KMPH												> 30 KMPH												
Temperature	MAX. TEMP. > 35°C, MIN.TEMP. < 15°C												MAX. TEMP. > 35°C, MIN.TEMP. < 15°C												MAX. TEMP. > 35°C, MIN.TEMP. < 15°C												
Hail Storm	HAIL STORM												HAIL STORM												HAIL STORM												
Weather conditions favourable for incidence of pests and diseases	Pests	GRASS HOPPER, STEM BORER, WHITE GRUB												GRASS HOPPER, STEM BORER, WHITE GRUB												GRASS HOPPER, STEM BORER, CATER PILLAR											
	Weather	HIGH HUMIDITY & CLOUDINESS												HIGH HUMIDITY & CLOUDINESS												HIGH HUMIDITY & CLOUDINESS											
	Diseases	SEED ROT, BROWN SPOT, LEAF SPOT												LEAF BLIGHT, POWDERY MILDEW, LEAF SPOT												LEAF BLIGHT, POWDERY MILDEW											
	Weather	HIGH HUMIDITY & CLOUDINESS												HIGH HUMIDITY & CLOUDINESS												HIGH HUMIDITY & CLOUDINESS											
Normal phase wise water requirement(mm)					30	176						127	103						54	TOTAL = 490																	
Weekly normal weather	Rainfall(mm) total	49.5	56.9	74.0	71.8	74.5	65.6	66.1	72.5	75.0	52.0	26.4	11.9	19.6	6.7	11.4	1.9																				
	Max. temp. °C	32.3	31.2	30.2	29.8	29.6	28.7	28.9	28.9	29.2	29.5	30.7	32.2	33.0	33.5	34.2	34.1																				
	Min. temp. °C	23.8	23.4	23.0	22.8	22.9	22.7	23.0	22.5	22.6	22.2	21.9	22.1	21.8	21.3	20.6	19.9																				
	Sunshine hours	8.6	5.2	4.0	3.6	3.5	3.0	3.5	2.9	3.4	3.4	5.3	6.5	7.3	7.8	8.3	8.4																				
Life history and mean dates of important epochs of crop growth																	MATURITY																				
Standard weeks					26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44														
Months					JULY						AUGUST						SEPTEMBER						OCTOBER														

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

CROP : MAIZE

VARIETY : GANGA-5, CHANDAN-2,
GANGA, WHITE-2

SOIL : CLAY LOAM,
BLACK COTTON

DISTRICTS : SHIVPURI, GUNA

IRRIGATED/NON-IRRIGATED

DURATION : 105-115 DAYS

Weather warnings	Rain	> 100 MM/DAY												> 100 MM/DAY														
	Duration of wet spell	> 50 MM FOR 4 DAYS												> 50 MM FOR 4 DAYS														
	Cloudy weather																											
	Drought													15 DAYS														
	High winds	> 30 KMPH												> 30 KMPH														
	Temperature	MAX. TEMP. > 35°C, MIN.TEMP. < 15°C												MAX. TEMP. > 35°C, MIN.TEMP. < 15°C														
	Hail Storm	HAIL STORM												HAIL STORM														
Weather conditions favourable for incidence of pests and diseases	Pests	GRASS HOPPER, STEM BORER, WHITE GRUB												GRASS HOPPER, STEM BORER, WHITE GRUB														
	Weather	HIGH HUMIDITY & CLOUDINESS												HIGH HUMIDITY & CLOUDINESS														
	Diseases	SEED ROT, BROWN SPOT, LEAF SPOT												LEAF BLIGHT, POWDERY MILDEW, LEAF SPOT														
	Weather	HIGH HUMIDITY & CLOUDINESS												HIGH HUMIDITY & CLOUDINESS														
Normal phase wise water requirement(mm)		24				180				128				95				48				TOTAL = 475						
Weekly normal weather	Rainfall(mm) total	64.3	65.6	88.8	78.0	68.8	85.4	67.4	77.6	59.5	45.8	44.3	32.0	12.4	8.8	14.9	7.3											
	Max. temp. °C	33.9	32.4	31.0	30.7	30.5	29.5	29.9	30.0	30.5	30.8	31.2	32.1	32.7	33.1	33.0	32.8											
	Min. temp. °C	24.8	24.1	24.0	23.8	23.6	23.1	23.1	23.0	22.9	22.6	22.3	22.0	21.1	19.8	18.8	17.5											
	Sunshine hours	6.1	3.7	3.5	4.2	3.1	4.9	3.7	4.2	5.1	5.9	6.7	7.9	7.8	8.4	7.8	9.9											
Life history and mean dates of important epochs of crop growth																												
Standard weeks		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44								
Months		JULY				AUGUST				SEPTEMBER				OCTOBER														

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

CROP : MAIZE

VARIETY : CHANDAN-MAKKA-1, CHANDAN-MAKKA-3,
CHANDAN-MAKKA-SAFED-2, GANGA-5

SOIL : SANDY LOAM,
CLAY LOAM

DISTRICTS : SIDHI, SHAHDOL, MANDLA

NON-IRRIGATED

DURATION : 90-105 DAYS

Rain	> 100 MM/DAY												> 100 MM/DAY														
Duration of wet spell	> 50 MM FOR 4 DAYS												> 50 MM FOR 4 DAYS														
Cloudy weather																											
Drought													15 DAYS														
High winds	> 30 KMPH												> 30 KMPH														
Temperature	MAX. TEMP. > 35°C, MIN.TEMP. < 15°C												MAX. TEMP. > 35°C, MIN.TEMP. < 15°C														
Hail Storm	HAIL STORM												HAIL STORM														
Weather conditions favourable for incidence of pests and diseases	Pests	GRASS HOPPER, STEM BORER, WHITE GRUB												GRASS HOPPER, STEM BORER, WHITE GRUB													
	Weather	HIGH HUMIDITY & CLOUDINESS												HIGH HUMIDITY & CLOUDINESS													
	Diseases	SEED ROT, BROWN SPOT, LEAF SPOT												LEAF BLIGHT, POWDERY MILDEW, LEAF SPOT													
	Weather	HIGH HUMIDITY & CLOUDINESS												HIGH HUMIDITY & CLOUDINESS													
Normal phase wise water requirement(mm)			28				147				124				106				55				TOTAL = 460				
Weekly normal weather	Rainfall(mm) total	42.7	63.2	64.4	69.4	89.3	68.8	83.2	80.3	82.8	86.3	79.1	80.4	69.1	29.8	27.3											
	Max. temp. °C	36.8	34.6	33.5	32.3	31.4	31.2	30.9	30.4	31.0	30.9	30.9	31.1	31.2	32.0	32.2											
	Min. temp. °C	26.2	25.2	24.6	24.2	24.1	24.1	24.0	23.8	23.9	23.7	23.6	23.5	23.3	22.9	22.5											
	Sunshine hours	6.1	5.0	3.5	4.4	3.8	5.0	5.1	5.2	5.1	5.4	5.5	5.5	6.4	7.4	7.4											
Life history and mean dates of important epochs of crop growth																											
Standard weeks		22	23	45	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39								
Months		JUNE												JULY												AUGUST	
		SEPTEMBER																									

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

CROP: SOYBEAN

VARIETY : JS-72-44, JS-72-280,
JS-76-205, P.L

SOIL : BLACK COTTON, CLAY LOAM
SANDY LOAM

DISTRICTS : GUNA, VIDISHA, SHIVPURI

IRRIGATED / NON-IRRIGATED DURATION : 100-115 DAYS

Rain	> 50 MM/DAY												> 100 MM/DAY					
Duration of wet spell	> 50 MM FOR 4 DAYS												> 50 MM FOR 4 DAYS					
Cloudy weather																		
Drought	> 15 DAYS												> 15 DAYS					
High winds	> 50 KMPH												> 50 KMPH					
Temperature	MAX. TEMP. > 40°C, MIN.TEMP. < 10°C												MAX. TEMP. > 40°C, MIN.TEMP. < 10°C					
Hail Storm													HAIL STORM					
Weather conditions favourable for incidence of pests and diseases	Pests	HAIRY CATER PILLAR, GRIDLE BEETLE, STEM FLY												GRIDLE BEETLE, HAIRY CATER PILLAR, LEAF MINER, LEAF ROLLER				
	Weather	CLOUDY WEATHER & HIGH HUMIDITY												CLOUDY WEATHER & HIGH HUMIDITY				
	Diseases	YELLOW MOSAIC, BACTERIAL BLIGHT, ROOT KNOTS												DOWNY MILDEW, YELLOW MOSAIC, LEAF SPOT, POD BLIGHT,				
	Weather	CLOUDY WEATHER & HIGH HUMIDITY												CLOUDY WEATHER & HIGH HUMIDITY				
Normal phase wise water requirement(mm)		28				180				95				120				
Weekly normal weather	Rainfall(mm) total	63.3	92.6	74.6	67.6	78.0	74.3	87.2	67.8	49.8	39.0	28.3	11.8	12.0	14.4	8.0	2.4	
	Max. temp. °C	32.5	31.1	30.7	30.5	29.5	30.0	29.9	30.2	30.7	31.4	32.3	33.1	33.4	33.2	33.1	32.2	
	Min. temp. °C	23.8	23.6	23.5	23.4	23.0	23.0	22.8	22.7	22.2	22.0	21.6	21.0	19.9	18.9	17.6	16.0	
	Sunshine hours	2.5	2.4	2.8	2.1	3.3	2.5	2.8	3.4	3.9	4.5	5.3	5.2	5.6	5.2	6.6	6.7	
Life history and mean dates of important epochs of crop growth																		
Standard weeks		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Months		JULY				AUGUST				SEPTEMBER				OCTOBER				

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

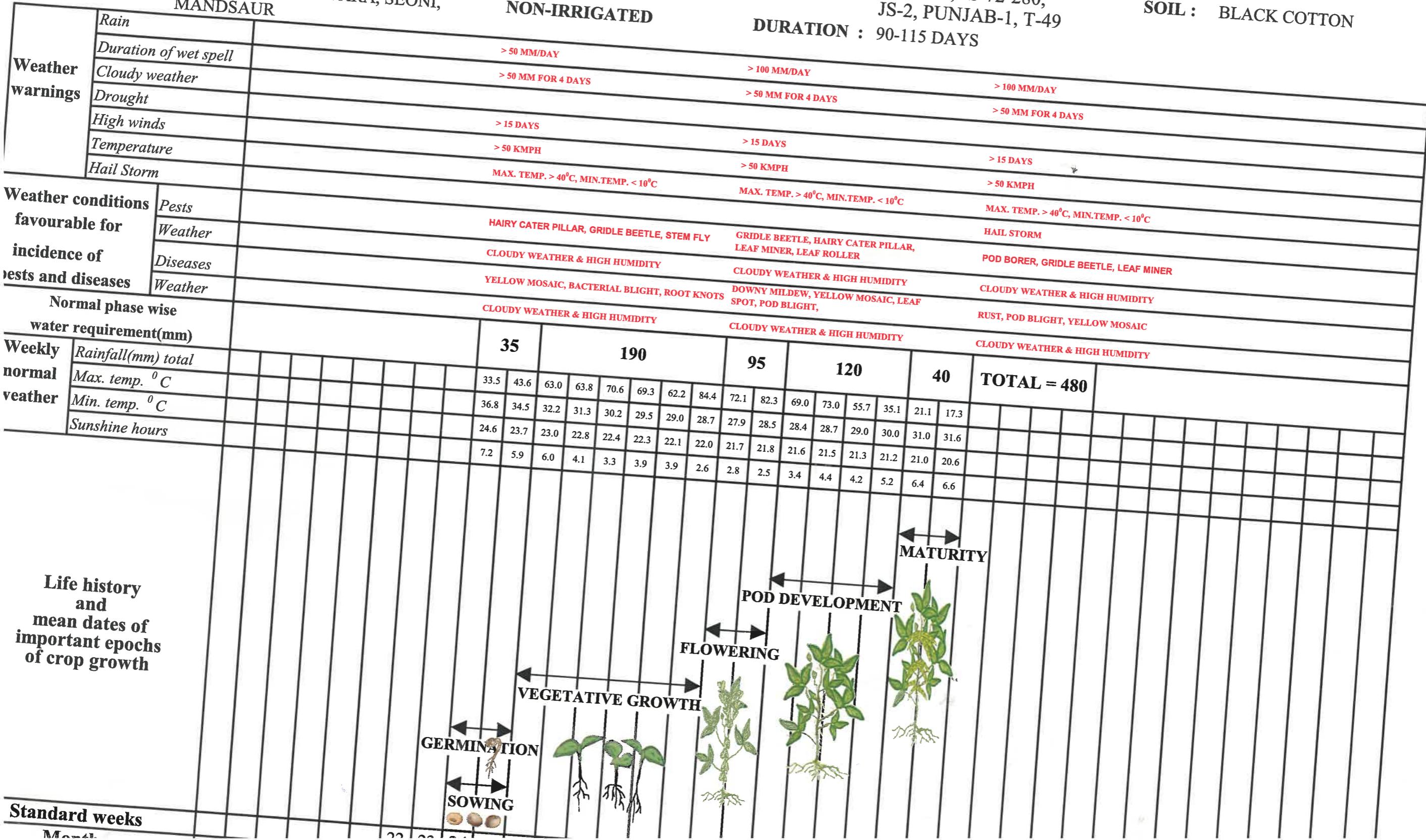
DISTRICTS : BETUL, CHHINDAWARA, SEONI,
MANDSAUR

CROP : SOYBEAN

NON-IRRIGATED

VARIETY : JS-72-44, JS-72-280,
JS-2, PUNJAB-1, T-49
DURATION : 90-115 DAYS

SOIL : BLACK COTTON



CROP WEATHER CALENDAR

25

STATE : MADHYA PRADESH

DISTRICTS : DEWAS, INDORE, UJJAIN

CROP : SOYBEAN

VARIETY : JS-72-44, PUNJAB-1,
 ANKUR, JS-72-2380, JS-71-05

SOIL : BLACK COTTON

CROP WEATHER CALENDAR

STATE : MADHYA PRADESH

CROP : SOYBEAN

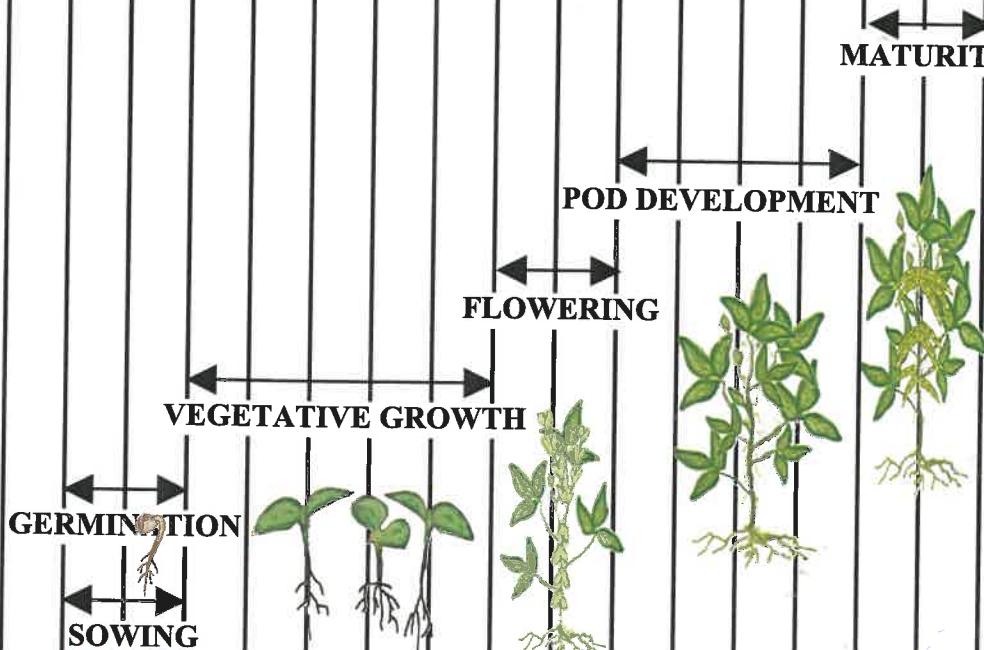
VARIETY : PUNJAB-1, JS-71-05, JS-78-41,
JS-81-303, JS-72-44, JS-72-280

SOIL : BLACK COTTON

DISTRICTS : SEHORE, BHOPAL, RAISEN,
NARSIMHAPUR

IRRIGATED/NON-IRRIGATED

DURATION : 90-105 DAYS

Weather warnings	<i>Rain</i>	> 50 MM/DAY												> 100 MM/DAY				> 100 MM/DAY									
	<i>Duration of wet spell</i>	> 50 MM FOR 4 DAYS												> 50 MM FOR 4 DAYS				> 50 MM FOR 4 DAYS									
	<i>Cloudy weather</i>																										
	<i>Drought</i>	> 15 DAYS												> 15 DAYS				> 15 DAYS									
	<i>High winds</i>	> 50 KMPH												> 50 KMPH				> 50 KMPH									
	<i>Temperature</i>	MAX. TEMP. > 40°C, MIN.TEMP. < 10°C												MAX. TEMP. > 40°C, MIN.TEMP. < 10°C				MAX. TEMP. > 40°C, MIN.TEMP. < 10°C									
	<i>Hail Storm</i>																	HAIL STORM									
Weather conditions favourable for incidence of pests and diseases	<i>Pests</i>	HAIRY CATER PILLAR, GRIDLE BEETLE, STEM FLY												GRIDLE BEETLE, HAIRY CATER PILLAR, LEAF MINER, LEAF ROLLER				POD BORER, GRIDLE BEETLE, LEAF MINER									
	<i>Weather</i>	CLOUDY WEATHER & HIGH HUMIDITY												CLOUDY WEATHER & HIGH HUMIDITY				CLOUDY WEATHER & HIGH HUMIDITY									
	<i>Diseases</i>	YELLOW MOSAIC, BACTERIAL BLIGHT, ROOT KNOTS												DOWNY MILDEW, YELLOW MOSAIC, LEAF SPOT, POD BLIGHT,				RUST, POD BLIGHT, YELLOW MOSAIC									
	<i>Weather</i>	CLOUDY WEATHER & HIGH HUMIDITY												CLOUDY WEATHER & HIGH HUMIDITY				CLOUDY WEATHER & HIGH HUMIDITY									
Normal phase wise water requirement(mm)						36	153				108	120				33	TOTAL = 450										
Weekly normal weather	<i>Rainfall(mm) total</i>	78.5 69.8 69.7 89.6 91.5 106.0 97.2 91.3 55.5 46.7 29.1 16.9 10.9 9.8 5.7																									
	<i>Max. temp. °C</i>	31.1 30.8 30.4 30.0 28.9 29.5 29.5 29.7 30.1 31.2 32.2 33.1 33.4 33.5 33.4																									
	<i>Min. temp. °C</i>	23.6 23.8 23.5 23.4 23.0 23.0 22.9 22.8 22.5 22.4 22.2 21.7 20.5 19.3 18.0																									
	<i>Sunshine hours</i>	3.2 3.4 3.6 3.0 2.7 2.7 3.5 4.2 4.4 5.8 7.3 7.7 8.1 8.4 9.4																									
Life history and mean dates of important epochs of crop growth																											
Standard weeks		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44							
Months						JULY			AUGUST			SEPTEMBER			OCTOBER												

CROP WEATHER CALENDAR

27

STATE : MADHYA PRADESH
DISTRICTS : SATNA, JHABUA, BETUL

CROP : ARHAR
NON-IRRIGATED

VARIETY : LOCAL, IPCL-87, T-21
DURATION : 100-150 DAYS

SOIL : RED ALLUVIAL, SANDY LOAM

Weather warnings	Rain	>100 MM/DAY		> 50 MM/DAY		> 50 MM/DAY																						
	Duration of wet spell	> 50 MM FOR 4 DAYS		> 50 MM FOR 4 DAYS		> 50 MM FOR 4 DAYS																						
	Cloudy weather																											
	Drought	21 DAYS																										
	High winds	> 50 KMPH		> 50 KMPH		> 50 KMPH																						
	Temperature	MAX. TEMP. > 40°C, MIN.TEMP. < 10°C		MAX. TEMP. > 40°C, MIN.TEMP. < 10°C		MAX. TEMP. > 40°C, MIN.TEMP. < 10°C																						
	Hail Storm																											
Weather conditions favourable for incidence of pests and diseases	Pests	HAIRY CATER PILLAR, STEM BORER																										
	Weather	CLOUDY WEATHER																										
	Diseases	STERILITY MOSAIC, STEM ROT																										
	Weather	HIGH HUMIDITY & CLOUDY WEATHER																										
Normal phase wise water requirement(mm)		50	220		115	115		40	TOTAL = 540																			
Weekly normal weather	Rainfall(mm) total	34.2	59.7	62.9	73.6	90.1	55.8	85.9	76.3	74.9	64.1	75.2	66.5	36.6	25.0	21.4	9.4	12.5	4.9	2.5	1.6	2.5	1.4					
	Max. temp. °C	35.4	33.3	32.3	30.9	30.2	30.2	29.7	28.9	29.2	29.5	29.5	29.6	30.4	31.5	32.1	32.4	33.1	33.0	32.1	31.4	30.7	30.3					
	Min. temp. °C	24.7	24.2	23.9	23.5	23.2	23.2	23.0	22.9	23.2	22.9	22.9	22.6	22.2	22.2	21.8	21.0	20.0	18.8	17.6	15.8	14.7	14.6					
	Sunshine hours	6.5	6.4	4.3	3.5	3.3	4.3	3.7	3.3	3.6	4.0	4.2	5.6	6.3	6.8	7.3	8.1	8.7	9.0	9.2	9.5	9.3	9.2					
Life history and mean dates of important epochs of crop growth		<p>The diagram illustrates the life cycle of the crop across 48 weeks. It shows the progression from sowing (Week 25) through germination, vegetative growth, flowering, pod development, and finally maturity (Week 48). Illustrations of the plant at each stage are provided.</p>																										
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
Months		JUNE				JULY				AUGUST				SEPTEMBER				OCTOBER				NOVEMBER						

CROP WEATHER CALENDAR

28

STATE : MADHYA PRADESH

CROP : COTTON

VARIETY : H-4, JKH-1, VIKRAM,
KHANDWA-2

SOIL : BLACK COTTON,
RED ALLUVIAL

DISTRICTS : DEWAS, JHABUA, DHAR, KHANDWA

IRRIGATED/NON-IRRIGATED

DURATION : 150-180 DAYS

Rain		> 100 MM / DAY																		> 100 MM / DAY																	
Duration of wet spell		> 50 MM FOR 3-4 DAYS																		> 50 MM FOR 3-4 DAYS																	
Cloudy weather		CLOUDY WEATHER																		CLOUDY WEATHER																	
Drought		15 DAYS																		15 DAYS																	
High winds		> 50 KM/HR																		> 50 KM/HR																	
Temperature		MAX. TEMP. > 40°C, MIN.TEMP. < 15°C																		MAX. TEMP. > 40°C, MIN.TEMP. < 15°C																	
Hail Storm		HAIL STORM																		HAIL STORM																	
Weather conditions favourable for incidence of pests and diseases	Pests	THRIPS, JASSIDS, CATERPILLAR, APHIDS																		BOLL WORM, WHITE FLY																	
	Weather	HIGH HUMIDITY & CLOUDY WEATHER																		HIGH HUMIDITY & CLOUDY WEATHER																	
	Diseases	ROOT ROT, BACTERIAL BLIGHT, DAMPING OFF																		WILT, LEAF SPOTS																	
	Weather	HIGH HUMIDITY, CLOUDINESS																		HIGH HUMIDITY, CLOUDINESS																	
Normal phase wise water requirement(mm)		60																		230																	
Weekly normal weather	Rainfall(mm) total	41.5	45.7	66.1	69.0	53.3	67.4	63.7	63.6	51.2	73.0	42.8	23.1	19.1	26.0	8.6	9.4	3.0	2.0	2.8	3.7	0.9	4.8	7.9	1.1	0.6	1.1										
	Max. temp. °C	34.0	32.8	31.5	30.7	30.5	30.1	29.2	29.5	29.6	29.6	30.1	31.3	32.3	32.9	33.5	34.0	34.1	33.3	32.7	31.9	31.6	30.5	29.4	28.8	28.5	28.7										
	Min. temp. °C	23.4	23.3	22.8	22.6	22.7	22.4	22.1	22.4	22.0	22.1	21.8	21.5	21.6	21.4	20.7	19.9	18.9	17.8	15.9	14.9	15.0	14.0	13.0	12.2	11.1	11.1										
	Sunshine hours	5.8	3.2	2.7	2.5	2.5	2.0	1.9	2.0	2.3	2.3	3.4	4.5	4.8	5.3	6.1	6.1	6.6	7.0	7.1	6.8	6.8	6.6	6.4	6.4	6.5	6.5										
Life history and mean dates of important epochs of crop growth		VEGETATIVE GROWTH																		FLOWERING																	
GERMINATION		GERMINATION																		BOLL FORMATION																	
SOWING		SOWING																		PICKING																	
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					
Months		JUNE																		AUGUST																	
JULY		SEPTEMBER																		OCTOBER																	

CROP WEATHER CALENDAR

29

STATE : MADHYA PRADESH
DISTRICTS : SHIVPURI, GUNA

CROP : GROUND NUT
IRRIGATED/NON-IRRIGATED

VARIETY : AK-1224, GANGAPURI, J.L.-24
DURATION : 100-110 DAYS

SOIL : BLACK COTTON,
SANDY LOAM

Weather warnings	Rain	> 100 MM/DAY																		
	Duration of wet spell	> 30 MM FOR 10 DAYS																		
	Cloudy weather	> 30 MM FOR 10 DAYS																		
	Drought	15 DAYS																		
	High winds	> 50 KMPH																		
	Temperature	MAX. TEMP. > 40°C, MIN.TEMP. < 10°C																		
	Hail Storm	MAX. TEMP. > 40°C, MIN.TEMP. < 10°C																		
Weather conditions favourable for incidence of pests and diseases	Pests	JASSIDS, APHIDS, THRIPS, LEAF MINER																		
	Weather	CLOUDY WEATHER & HIGH HUMIDITY																		
	Diseases	TIKKA, LEAF SPOTS, RUST																		
	Weather	CLOUDY WEATHER & HIGH HUMIDITY																		
Normal phase wise water requirement(mm)		38			100			162			80			35			TOTAL = 415			
Weekly normal weather	Rainfall(mm) total	64.3	65.6	88.8	78.0	68.8	58.4	67.4	77.6	59.5	45.8	44.3	32.0	12.4	8.8	14.9	7.3			
	Max. temp. °C	33.9	32.4	31.0	30.7	30.5	29.5	29.9	30.0	30.5	30.8	31.2	32.1	32.7	33.1	33.0	32.8			
	Min. temp. °C	24.8	24.1	24.0	23.8	23.6	23.1	23.1	23.0	22.9	22.6	22.3	22.0	21.1	19.8	18.8	17.5			
	Sunshine hours	6.1	3.7	3.5	4.2	3.1	4.9	3.7	4.2	5.1	5.9	6.7	7.9	7.8	8.4	7.8	9.9			
Life history and mean dates of important epochs of crop growth																				
Standard weeks		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
Months		JULY				AUGUST				SEPTEMBER				OCTOBER						

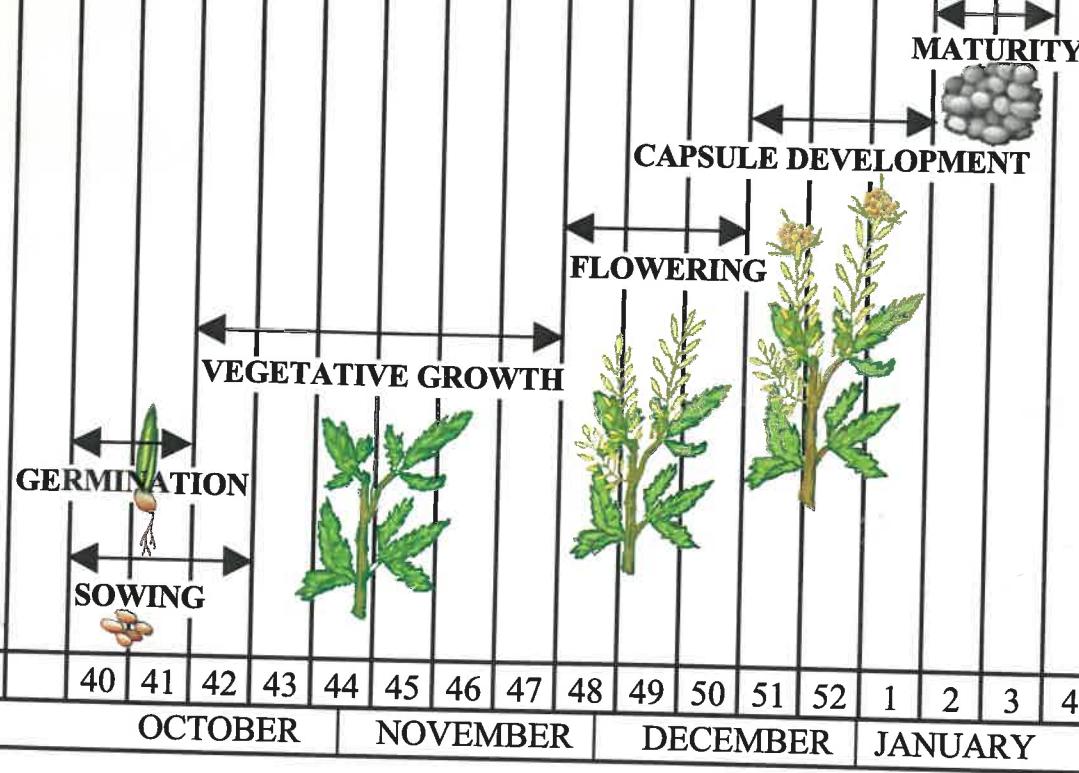
CROP WEATHER CALENDAR

STATE : MADHYA PRADESH
DISTRICTS : SHIVPURI, GUNA

CROP : MUSTARD
IRRIGATED/NON-IRRIGATED

VARIETY : VARUNA, PUSA BOLD
DURATION : 110-120 DAYS

SOIL : BLACK COTTON,
 SANDY LOAM, LOAM

Weather warnings	Rain	> 100 MM/DAY														> 100 MM/DAY														ANY RAIN		
	Duration of wet spell	> 50 MM FOR 4 DAYS														> 50 MM FOR 4 DAYS																
	Cloudy weather																															
	Drought	15 DAYS														15 DAYS																
	High winds	> 50 KMPH														> 50 KMPH																
	Temperature	MAX. TEMP. > 35°C, MIN.TEMP. < 5°C														MAX. TEMP. > 35°C, MIN.TEMP. < 5°C																
	Hail Storm																															
Weather conditions favourable for incidence of pests and diseases	Pests	SAW FLY, APHIDS														APHIDS																
	Weather	CLOUDY WEATHER, HIGH HUMIDITY														CLOUDY WEATHER, HIGH HUMIDITY															APHIDS	
	Diseases	BLIGHT, DOWNY MILDEW														BLIGHT, DOWNY MILDEW															CLOUDY WEATHER, HIGH HUMIDITY	
	Weather	CLOUDY WEATHER, HIGH HUMIDITY														CLOUDY WEATHER, HIGH HUMIDITY															BLIGHT, DOWNY MILDEW	
	Normal phase wise water requirement(mm)	25														108															TOTAL = 240	
Weekly normal weather	Rainfall(mm) total	8.8	14.9	7.3	2.1	2.7	3.7	1.5	3.0	5.4	0.4	1.4	0.8	2.0	1.3	3.6	3.8															
	Max. temp. °C	33.1	33.0	32.8	31.8	31.0	30.0	29.1	27.7	26.2	25.8	25.4	25.2	24.1	23.8	23.5	23.3															
	Min. temp. °C	19.8	18.8	17.5	15.9	14.2	12.8	12.4	11.6	9.9	8.4	7.9	7.8	7.2	6.9	7.8	7.6															
	Sunshine hours	8.4	7.8	9.9	10.0	9.6	9.8	9.4	9.2	8.9	8.6	8.9	8.9	9.1	8.5	9.0	8.8															
Life history and mean dates of important epochs of crop growth																																
Standard weeks		40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5													
Months		OCTOBER					NOVEMBER					DECEMBER					JANUARY															

CROP WEATHER CALENDAR

31

STATE : MADHYA PRADESH
DISTRICTS : JHABUA, TIKAMGARH, SHIVPURI

CROP : URID
IRRIGATED/NON-IRRIGATED

VARIETY : LOCAL, T-9, RU-2
DURATION : 80-90 DAYS

SOIL : SANDY LOAM,
RED ALLUVIAL

Weather warnings	<i>Rain</i>	> 100 MM/DAY												> 100 MM/DAY													
	<i>Duration of wet spell</i>	> 50 MM FOR 4 DAYS												> 50 MM FOR 4 DAYS													
	<i>Cloudy weather</i>																										
	<i>Drought</i>	15 DAYS												15 DAYS													
	<i>High winds</i>	> 50 KMPH												> 50 KMPH													
	<i>Temperature</i>																										
	<i>Hail Storm</i>													HAIL STORM													
Weather conditions favourable for incidence of pests and diseases	<i>Pests</i>	HAIRY CATER PILLAR, BEETLE, LEAF HOPPER, JASSIDS												HAIRY CATER PILLAR, BEETLE, LEAF HOPPER, JASSIDS													
	<i>Weather</i>	CLOUDY WEATHER & HIGH HUMIDITY												CLOUDY WEATHER & HIGH HUMIDITY													
	<i>Diseases</i>	YELLOW MOSAIC, LEAF CRINKLE, LEAF CURL, LEAF SPOT, CHARCOAL ROT												YELLOW MOSAIC, LEAF CRINKLE, LEAF CURL, LEAF SPOT, CHARCOAL ROT													
	<i>Weather</i>	HIGH HUMIDITY, CLOUDINESS												HIGH HUMIDITY, CLOUDINESS													
	Normal phase wise water requirement(mm)																										
Weekly normal weather	<i>Rainfall(mm) total</i>	28	100	75	80	32	TOTAL = 315																				
	<i>Max. temp. °C</i>	76.4	96.6	74.5	75.4	88.4	73.6	63.5	71.5	50.3	45.2	23.8	26.0	8.7													
	<i>Min. temp. °C</i>	32.1	31.3	31.2	30.9	30.1	30.5	30.8	30.8	31.0	31.6	32.4	32.9	33.3													
	<i>Sunshine hours</i>	24.1	23.9	23.8	23.7	23.5	23.7	23.4	23.4	23.2	23.0	22.9	22.3	21.4													
Life history and mean dates of important epochs of crop growth		<p>The diagram illustrates the life cycle of the Urid crop across four months. It shows the progression from sowing to germination, followed by vegetative growth where the plant develops leaves and stems. This is followed by a flowering phase where small flowers appear. Subsequently, the plant undergoes pod development, where green, elongated pods form along the stems. Finally, the crop reaches maturity, indicated by a cluster of mature, dark-colored seeds or pods at the top of the plant.</p>																									
Standard weeks		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44							
Months		JULY												AUGUST												SEPTEMBER	
																										OCTOBER	