







CROP WEATHER CALENDAR AMFU KANPUR, U.P.

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Developed by
Chandra Shekhar Azad University of
Agriculture & Technology, Kanpur (U.P.)
Under Gramin Krishi Mausam Sewa (GKMS)







Crop Weather Calendar of Kanpur Nagar, Uttar Pradesh

Agro-climatic Zone

Main Crops

Soil Type

Middle Gangetic Plain Region Paddy, Wheat, Maize, Pulses, Oilseeds (Mustard), Vegetables Alluvial Soil (Sandy Loam to Clayey Loam)













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Crop-weather calendar of Rice (Oryza Sativa L.)

	Cro	op-	R	Rice									Dur	ation	-12 ()- 135	5 (Day	rs)					
	Month		J	lune				Ju	ly			A	ugus				Septe		r		Oct	ober	
Climatic	Std. week	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Normal	Tmax (°c)	42.2	34.7	33.8	33.3	33.9	34.9	35.6	33.0	33.4	33.5	32.2	35.0	33.5	32.9	33.6	34.3	33.7	35.4	31.7	31.4	31.5	30.4
110111111	Tmin (⁰ c)	29.8	27.6	25.9	26.5	26.0	27.2	28.9	26.0	26.6	26.4	25.6	25.9	24.8	25.5	24.6	23.7	22.1	20.5	17.3	14.5	15.2	14.6
	RHm(%)	48	79	89	92	92	80	80	88	81	81	87	80	82	92	87	85	82	77	83	83	93	92
	RHe(%)	29	69	72	68	71	65	57	73	65	70	79	64	67	72	69	56	58	42	42	37	41	45
	SS (hr./day)	9.6	4.3	4.3	3.0	2.2	7.0	7.0	2.1	2.8	3.2	2.6	2.6	5.6	2.2	3.6	7.5	7.3	9.1	7.5	8.8	2.3	0.2
	Rain(mm/week)	0.0	128.6	106.8	40.6	47.4	65.0	8.1	38.0	0.0	16.4	128.0	0.0	25.6	79.2	45.0	0.0	15.7	0.0	3.4	0.0	0.0	0.0
Phenophase wise weather for better			S	owing			Т	ranspl	anting	g		Active	tilleri	ng)	Flowe	ring		Gr	ain fill	ing	Physiol matu	-
yield	Tmax (°c)		30)–35°C				28-	32°C			3	30–34°	°C		7	28–32°C	Ţ.	2	5–30°C	1	22–28	3°C
	Tmin (⁰ c))–25°C					26°C				20–25°				20–25°C			8–22°C		18–20	
	RHm(%)		85	5–95%				85–	95%				80–90	%			80–90%)	7	5-85%		70–8	0%
	RHe(%)		70	0-80%				70–	80%			(65–75	%			65–75%)	6	0-70%		55–6	5%
	SS (hr./day)		6–7	hrs/day	у			4–5 h	rs/day	7		5-	-6 hrs/	day		6-	-7 hrs/d	ay	7–3	8 hrs/da	ay	8–9 hrs	s/day
	Rainfall (mm)		30-	–50 mm	l			40–6	60 mm			40	0–60 n	nm		3	0–50 m	m	20)–30 mi	n	<10 r (dry harve	for
Congenial	Stem borer																•	e initia	ation (T	illering	to Boo	oting stag	ge)
weather for	Gundhi bug	Tn	nax: 25-	-30°C -	RH: 6	0-759	6 - Dr	y, cloud	ly wea	ther w	ith lit	le rain ((Flow	ering t	o doug	h stage	e)						
pest/diseases	Leaf roller	Tn	nax: 30-	-35°C -	High	RH (>	85%)	- Cloud	ly, hur	nid we	eather	Tillerir	ng to e	arly pa	anicle e	merge	nce)						
	Sheath blight (Rhizoctonia solani	Tn	min: 20–	25°C - 1	RH: >	90% -	Conti	nuous c	cloudy	/rainy	days -	Poor ai	ir circu	ılation	(Tiller	ing to	heading)					

Crop-weather calendar of Wheat (Triticum Aestivum)

		Crop-	Whe	at (Tim	ely so	wn)						Dı	ıratio	n –	12:	5-13 0	(Day	(s)		
CII	Month	Nove	ember		Decen	nber			Janu	ary			Febru	ıary			Mai	rch		
Climatic Normal	Std. week	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13
Normal	Tmax (⁰ c)	26.8	25.2	24.2	24.6	22.7	19.9	16.8	16.4	12.5	17.7	23.1	21.5	26.0	26.2	25.5	26.4	30.0	30.8	35.8
	Tmin (⁰ c)	11.4	12.7	13.2	8.4	7.6	8.3	10.0	5.5	5.3	5.1	9.0	9.3	10.1	11.6	13.5	10.8	13.3	14.0	20.0
	RHm(%)	94	94	92	94	90	95	95	96	92	95	92	88	92	87	83	73	78	75	67
	RHe(%)	54	61	65	46	47	69	81	72	77	63	55	54	48	45	51	40	36	37	31
	Rain(mm/week)	0.0	6.6	11.8	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	26.8	0.0	0.6	32.2	0.0	0.0	0.0	0.0
			N.	W		1	À	N.	N.	4			4	-			100			
Phenophase wise weather for better yield	Sowing & emerg	gence	Emo	ergence	to tiller	ing	Till	ering (to head	ding	Н	eading fill	to gra	ain	for	Grain mation naturit	n to		ysiolog Maturi	
Tmax (°c)	24–28°C			20–2:	5°C			20–2	25°C			22-	26°C		,	25–30°C	C		28-32°	С
Tmin (⁰ c)	12–16°C			10–1:	5°C			8–1	4°C			10-	15°C			12–18°C	C		14-20°	С
RHm(%)	80–90%			75–8	5%			70–	80%			65–	75%			60–70%			50-609	
RHe(%)	60–70%			55–6	5%			50-	60%			45–	55%			40–50%	ó		30–409	
Rainfall (mm)	10–15 mm			5–10	mm			<10	mm			<10	mm		<5 m	nm (min	imal)	Nil (dry weat harvest	
Congenial	Yellow Rust (Puccinia striifor		Tmax: 1	0–20°C - 7	Γmin: 7–	10°С - Н	igh RH	>85% -	Prolong	ed dew/	fog, clo	udy wea	ther (E	arly veg	etative t	to bootii	ng stage	(Dec-F	eb))	,
weather for pest/diseases	Brown Rust (Puccinia tritici			0–25°C - I			·	•		•			,							
F	Loose smut (Ustilago tritic		Temp: 1 emerger	8–24°C - I ice	High soil	and air n	noisture	during 1	flowerin	g - Infe	cted see	d is maj	or sourc	e Infecti	ion at fl o	owering	g stage;	sympton	ns appea	r at ea

Crop-weather calendar of Mustard (Brassica spp.)

			rop-v	<u>veat</u>	ner (care	<u>nual</u>	101	<u> 1V1 U;</u>	<u>star</u>	u (D	rusi	<u>sica</u>	Spp.	<u>.)</u>					
	Crop-	Musta	ırd						Γ	Ourati	ion –	12	25-13	0 (Day	vs)					
CII 41	Month	Oct	tober		No	vemb	er		Dece	embe	r			Janua	ary			Feb	ruary	
Climatic Normal	Std. week	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9
Norman	Tmax (°c)	31.4	31.5	30.4	27.5	26.8	25.2	24.2	24.6	22.7	19.9	16.8	16.4	12.5	17.7	23.1	21.5	26.0	26.2	25.5
	Tmin (⁰ c)	14.5	15.2	14.6	12.9	11.4	12.7	13.2	8.4	7.6	8.3	10.0	5.5	5.3	5.1	9.0	9.3	10.1	11.6	13.5
	RHm(%)	83	93	92	93	94	94	92	94	90	95	95	96	92	95	92	88	92	87	83
	RHe(%)	37	41	45	62	54	61	65	46	47	69	81	72	77	63	55	54	48	45	51
	Rain(mm/week)	0.0	0.0	0.0 0.0 0.0			6.6	11.8	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	26.8	0.0	0.6	32.2
	eedling establishmen 15-21 days)			cetative 30 days				vering 0 days)			d devel (25-30 d		,		Matu (15-30			200	B. C.	
Phenophase wise weather for better yield	Sowing & emerg	gence	Vegetat	(25-30 days)			loweri	ing		\$	Siliqua	forma	ation	S	eed dev	velopm	nent	Matu	ırity	
Tmax (°c)	30–35°C			25–30	°C			20–25°	°C			18–24	°C		20	–25°C			25-30°	C
Tmin (°c)	18–22°C			12–16				8–12°				8–10°				–15°C			12–18°	
RHm(%)	80–85%			75–80				70–80				70–75				5–70%			60–659	
RHe(%)	60–70%			55–65	5%			50–60	%			50–55	%		45	5-50%			40–509	%
Dainfall (mm)	5 10 mm			/5 m	m			/5 mr	n			Nil 2 r	nm		2	5 mm			Nii	

wise weather	Sowing & emergence	Vegetative growth	Flowering	Siliqua formation	Seed development	Maturity
for better yield				-	_	v
Tmax (°c)	30–35°C	25–30°C	20–25°C	18–24°C	20–25°C	25–30°C
Tmin (⁰ c)	18–22°C	12–16°C	8–12°C	8–10°C	10–15°C	12–18°C
RHm(%)	80–85%	75–80%	70–80%	70–75%	65–70%	60–65%
RHe(%)	60–70%	55–65%	50–60%	50–55%	45–50%	40–50%
Rainfall (mm)	5–10 mm	<5 mm	<5 mm	Nil–2 mm	2–5 mm	Nil
Congenial	Aphids (Lipaphis erysimi)	Tmax: 20–25°C - RH: 70–80	0% - Cloudy weather with light	nt drizzle (Flowering to seed	formation)	
weather for pest/diseases	White Rust (Albugo candida)	Tmin: 10–15°C - RH: >90%	- Frequent dew/fog, wet leav	es (Flowering to pod formati	ion)	
	Downy Mildew	Cool, moist conditions - RH	>85% - Intermittent light rain	ns (Vegetative to early flower	ring)	
	Alternaria Blight (A. brassicae)	Tmax: 20–28°C - RH >85%	- Prolonged cloudy weather (Pod formation to maturity)		

Crop-weather calendar of Maize (Zea Mays)

	Cro	p- Mai	ze (Kh	arif)							Du	ration	_	110-2	120 (Da	ys)		
Clima e 4i e	Month		Jun	ne e				July				Aug	ust			Se	eptember	
Climatic Normal	Std. week	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Normai	Tmax (⁰ c)	39.9	42.2	34.7	33.8	33.3	33.9	34.9	35.6	33.0	33.4	33.5	32.2	35.0	33.5	32.9	33.6	34.3
	Tmin (°c)	24.8	29.8	27.6	25.9	26.5	26.0	27.2	28.9	26.0	26.6	26.4	25.6	25.9	24.8	25.5	24.6	23.7
	RHm(%)	52	48	79	89	92	92	80	80	88	81	81	87	80	82	92	87	85
	RHe(%)	29	29	69	72	68	71	65	57	73	65	70	79	64	67	72	69	56
					107						A PARTIES	AUG.	V	はなべる				
Phenophase wise weather for better yield	Sowing to 6	emergence	e	Knee	heigh	t		Ta	sselin	g		Silk	forma	ation		Cob fill	ling	Physiological maturity
Tmax (°c)	28–32	2°C		30-	35°C			30)–35°C	1		3	30–34°	C		28–32	°C	25-30°C
Tmin (°c)	20–24				26°C				2–26°C				22–26°			20–24		18–22°C
RHm(%)	85–9	0%		80–	85%			75	5-80%				75–80%	6		70–75	%	65–70%
RHe(%)	70–8	0%		65–	75%			60	0–70%			(50–70%	6		55–65	%	50–60%
Rainfall (mm)	40–60	mm		30–5	0 mm			20-	–40 mr	n		20	0–30 m	ım		15–25 1	mm	<10 mm (dry harvest)
Congenial weather for	Stem E (Chilo po		Tm	nax: 30–	35°C R	H: 70–	80% F1	requent	light ra	ain (Ear	ly veget	ative to	tasselin	ng)				
pest/diseases	Fall Arm (Spodoptera)	frugiperda))	nax: 28–	34°C R	H: 70–	80% Sı	udden s	showers	after d	ry spells	(Emerg	gence to	cob for	rmation)			
	Turcicum L (Exserohilum		1 m	nax: 20–			•					•	uctive)					
	Downy N		Tn	nax: 22–2	28°C R	H >90°	% Clou	dy, wet	t spells	(Seedli	ng stage)						
	Stem E (Chilo pa		Tm	nax: 30–3	35°C R	H: 70–	80% F1	requent	light ra	ain (Ear	ly veget	ative to	tasselin	ng)				

Crop-weather calendar of Maize (Zea Mays)

	Crop- M	aize (Zaid)								Dura	tion –	11	0-120	(Days))				
CII. 41	Month	Feb	ruary]	Marc	h			A	pril			Ma	y			Ju	ine	
Climatic Normal	Std. week	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Normal	Tmax (⁰ c)	26.2	25.5	26.4	30.0	30.8	35.8	37.4	38.8	39.0	40.1	39.7	36.9	43.0	41.2	44.8	43.0	44.8	40.2	32.7
	Tmin (⁰ c)	11.6	13.5	10.8	13.3	14.0	20.0	18.6	20.6	23.0	22.0	21.2	25.2	26.4	28.5	29.4	27.5	30.9	28.5	25.8
	RHm(%)	87	83	73	78	75	67	50	52	41	42	36	63	48	58	45	42	35	62	81
	RHe(%)	45	51	40	36	37	31	20	28	21	18	16	39	20	33	19	21	17	39	74
		THE SECTION SE				TOWN		N. SERVICE.	0	K		The E	101	V						I
Phenophase wise weather for better yield	Sowing to emergence		K	nee h	eight			7	Γasseli	ng		S	ilk forr	nation		C	ob filling		Physiol matu	_
Tmax (°c)	28–32°C			30–35	5°C				30–35°	С			30–34	l°C			28–32°C		25–30	0°C
Tmin (°c)	15–20°C			18-22	2°C				20–24°	С			20-24	ŀ°C			18–22°C		16–20	0°C
RHm(%)	70–80%			65–7:	5%				60–709	%			60–70	0%			55–65%		50–6	0%
RHe(%)	50-60%			45–5	5%				40-509	%			40–50	0%			35–45%		30–4	0%
Rainfall (mm)	20–30 mm			15–25	mm				10–15 m	nm			10–15	mm			5–10 mm		<5 mm (
Congenial weather for	Stem Borer (Chilo partellu		Tmax: 30	0–35°C	- RH:	60–70%	6 - Inte	rmitten	t showe	rs + clo	oudy day	s (Early v	egetative	to tasseli	ng)					
pest/diseases	Fall Armywor (Spodoptera frugip	erda)	Tmax: 28	8–34°C	: - RH:	60–80%	6 - Brig	ght, dry	days fo	llowed	by rain (Emergen	ce to cob	formation	1)					
	Turcicum Leaf B (Exserohilum turci	icum)	Tmax: 20	0–30°C	: - High	n humid	ity >90	% - Fre	equent d	ew/fog	(Vegeta	tive to rep	oroductiv	re)						
	Maydis Leaf Bli (Bipolaris maya	lis)	Warm ar																	
	Downy Milder	W	RH >909	% - Lov	v temp	eratures	$(18-\overline{22})$	2°C) - F	Prolonge	d dew	(Young s	seedling s	stage)					·		

Crop-weather calendar of Chickpea (*Cicer Arietinum*)

					Crop	o- Cl	hickpe	ea (Ti	mely	sown)	I	Durat	ion -1	130-1	40 (D	ays)				
Climatic	Month		Novemb	oer			ember			Januar				Febru				Mar	ch		
Normal	Std. week	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11
1101	Tmax (°c)	31.5	30.4	27.5	26.8	25.2	24.2	24.6	22.7	19.9	16.8	16.4	12.5	17.7	23.1	21.5	26.0	26.2	25.5	26.4	30.0
'	Tmin (⁰ c)	15.2	14.6	12.9	11.4	12.7	13.2	8.4	7.6	8.3	10.0	5.5	5.3	5.1	9.0	9.3	10.1	11.6	13.5	10.8	13.3
'	RHm(%)	93	92	93	94	94	92	94	90	95	95	96	92	95	92	88	92	87	83	73	78
'	RHe(%)	41	45	62	54	61	65	46	47	69	81	72	77	63	55	54	48	45	51	40	36
'	Rain(mm/week)	0.0	0.0	0.0	0.0	6.6	11.8	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	26.8	0.0	0.6	32.2	0.0	0.0
														e Ca					M.		
Phenophase wise weather for better yield	Sowing & emergence	Veį	getative G				vering				Forma				Pod I	Filling		Phys	siologica	al Mat	urity
Tmax (⁰ c)	25–30°C		22–28°				-25°C				20–25°C					25°C			25–3		
Tmin (°c)	10–15°C		10–15°				-12°C				8–12°C					12°C				15°C	
RHm(%)	80–90%		70–80%				-70%				60–70%					65%			50–6		
RHe(%)	50–60%		45–55%	<u>/o</u>	-10		-50%	11	<10		40–50%			M		45%	1.4	NE1 (4	30–4		1 600
Rainfall (mm)	20–30 mm/week	1.	5–25 mm/	/week	<10		eek (dry eded)	spen	<10		eek (too ses dise	oo much ease)	i fain			(only light if need)	_	INII (d	dry weat harv	itner ide vest)	al for
	Fusarium Wilt	Soil to	emperatu	ıre: 20–25°	C - Dry			moisture	e - Pooi				getative								
Congenial weather for pest/diseases	Pod Borer (Helicoverpa armigera)	Tmax	.: 25–30°C	C - Low to r	moderat	e rainfa	ıll - RH:	: 40–60°	% - Bri	ght sun	ıny day	ys (Flov	wering	to pod	develo	pment	stage ((60–110) DAS))	
	Grey Mould (Botrytis cinerea)	Tmin:	: 12–20°C	C - RH: >90	1% - Clo	udy, fo	ggy, dri	zzly we	ather -	Dense	canopy	y (Flow	vering 1	to pod 1	filling	stage)					

Crop-weather calendar of Potato (*Solanum tuberosum L.***)**

	Crop-	Potat	0						D	urati	on –	11	10-12	0 (Day	ys)					
Clima e 4	Month	Oct	ober		No	vemb	er		Dece	mbei	r			Janua	ary			Feb	ruary	
Climatic Normal	Std. week	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9
Normai	Tmax (⁰ c)	31.4	31.5	30.4	27.5	26.8	25.2	24.2	24.6	22.7	19.9	16.8	16.4	12.5	17.7	23.1	21.5	26.0	26.2	25.5
	Tmin (⁰ c)	14.5	15.2	14.6	12.9	11.4	12.7	13.2	8.4	7.6	8.3	10.0	5.5	5.3	5.1	9.0	9.3	10.1	11.6	13.5
	RHm(%)	83	93	92	93	94	94	92	94	90	95	95	96	92	95	92	88	92	87	83
-	RHe(%)	37	41	45	62	54	61	65	46	47	69	81	72	77	63	55	54	48	45	51
	Rain(mm/week)	0.0	0.0	0.0	0.0	0.0	6.6	11.8	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	26.8	0.0	0.6	32.2
Phenophase wise weather	Service 8 man		V		41-		1				Citi				Contraction					
for better yield	Sowing & emer	gence	vege		growth			lower			Siliq	ua for		1 ,	Seed de		шепі		Matur	
$\frac{\operatorname{Tmax} (^{0}\mathbf{c})}{\operatorname{Tr} \cdot (^{0}\mathbf{c})}$	20–25°C			20–25°				18-22°				18-22				<u>−25°C</u>			20–25	
Tmin (°c) RHm(%)	10–15°C 85–90%			12–16°				10–14°				10–14°				<u>−16°C</u> 5–85%			10–15 85–90	
RHe(%)	60–70%			60–70				65–759				60–70				6-65%			60–70	
Rainfall (mm)	15–25 mm			10–20 r	nm			5–15 m				5–10 m			<5 mm		eriod		15–25 1	
Congenial	Late Bligh (Phytophthora inf		Tmax:	18–22°C	C - RH: >	90% - (Cloudy	, humid	l, and ra	iny we	ather (Γuber ir	nitiation	to bulk	king)					
weather for pest/diseases	Early Bligh (Alternaria sol				C - RH: 7				•		,			• •						
	Aphids		Tmax: 2	20–28°C	C - RH: 7	0-85%	- Dry,	warm v	veather	with te	nder fo	liage (V	/egetati	ve to fl	owering)				
	White Grub Cutworms		Tmax: 2	25–30°C	C - Soil n	noisture	> field	l capaci	ity - Clo	oudy, w	et cond	itions (Sowing	to eme	ergence)					

Crop-weather calendar of Groundnut (Arachis hypogaea L.)

	Crop-	Gro	undnı	ıt (Kl	narif)						Dur	ation	n —		120-	130 (I	Days))				
	Month		J	une				Ju	ly			A	ugus	st			Septe	mbe	r		Octo	ber	
Climatic	Std. week	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Normal	$Tmax (^{0}c)$	42.2	34.7	33.8	33.3	33.9	34.9	35.6	33.0	33.4	33.5	32.2	35.0	33.5	32.9	33.6	34.3	33.7	35.4	31.7	31.4	31.5	30.4
110111111	Tmin (⁰ c)	29.8	27.6	25.9	26.5	26.0	27.2	28.9	26.0	26.6	26.4	25.6	25.9	24.8	25.5	24.6	23.7	22.1	20.5	17.3	14.5	15.2	14.6
	RHm(%)	48	79	89	92	92	80	80	88	81	81	87	80	82	92	87	85	82	77	83	83	93	92
	RHe(%)	29	69	72	68	71	65	57	73	65	70	79	64	67	72	69	56	58	42	42	37	41	45
	SS (hr./day)	9.6	4.3	4.3	3.0	2.2	7.0	7.0	2.1	2.8	3.2	2.6	2.6	5.6	2.2	3.6	7.5	7.3	9.1	7.5	8.8	2.3	0.2
	Rain(mm/week)	0.0	128.6	106.8	40.6	47.4	65.0	8.1	38.0	0.0	16.4	128.0	0.0	25.6	79.2	45.0	0.0	15.7	0.0	3.4	0.0	0.0	0.0
Phenophase wise weather for													Ala Maria						***		E		
better yield	Weather Parameter	So	wing to	o Eme	rgenc	e	Veg	etativ	e Gro	wth	F	lowerii	ng &	Peggi	ng	De	Pod velopm	ent	See	ed Filli	ng	Matu	ırity
	Tmax (⁰ c)		28	3–32°C				28–3	2°C			2	6–30°C	C			25–30°C	C	2	24–28°C	,	28–3	2°C
	Tmin (⁰ c)		20)–24°C				22–2	5°C			2	2–24°0	C			20–22°C	7	1	8-22°C	,	18–2	2°C
	RHm(%)		85	5-90%				80–8	35%			7	5-80%	ó			70–80%)	(55–75%		60–7	'0%
	RHe(%)		70)–75%				65–7	′0%			6	60–70%	ó			55–65%	1	4	50–60%		45–5	55%
	SS (hr./day)		5-	–6 hrs				6–7	hrs			(5–7 hrs	3			7–8 hrs			8 hrs		8–9	hrs
	Rainfall (mm)		30-	-50 mm				25–40) mm			20)–30 m	m		1	.5–25 mi	m	5	-10 mm	1	<5 mm need	
Congenial	Leaf Miner		Tma	x: 28–3	2°C R	H: 70	-80%	Intermi	ttent s	hower	s (Veg	getative	to flov	wering)								
weather for	White Grub)	Tma	x: 28–3	5°C N	loist s	oils, cl	oudy w	veathe	r (Sow	ing to	early p	egging	g)									
pest/diseases	Tikka Leaf S _I	oot	RH >	>85% T	max:	26–30	°C Clo	oudy, m	oist c	onditio	ons (V	egetativ	e to po	od filli	ng)								
	Collar Rot / Ster	n Rot	Soil	temp: 2	8-32°	C Wa	terlogg	ging or	poorly	drain	ed soil	l (Germ	inatio	n to ea	rly peg	ging)							
	Rust (Puccinia arach	idis)	RH:	- 80–90%	6 Tem	p: 25-	-30°C	Foggy/	cloudy	/ morn	ings (Floweri	ng to s	seed fi	lling)	-							

Crop-weather calendar of Groundnut (Arachis hypogaea L.)

				Crop	o- Gro	undn	ut (Za	id)					Dura	ation –	80-8	5 (Day	s)
Clima e 4i e	Month]	F <mark>ebru</mark> a:	ry		Ma	arch				April				Ma	ay	
Climatic Normal	Std. week	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Normai	Tmax (⁰ c)	26.7	26.2	25.5	26.4	30.0	30.8	35.8	37.4	38.8	39.0	40.1	39.7	36.9	43.0	41.2	44.8
	Tmin (⁰ c)	11.1	11.6	13.5	10.8	13.3	14.0	20.0	18.6	20.6	23.0	22.0	21.2	25.2	26.4	28.5	29.4
	RHm(%)	83	87	83	73	78	75	67	50	52	41	42	36	63	48	58	45
	RHe(%)	50	45	51	40	36	37	31	20	28	21	18	16	39	20	33	19
	SS (hr./day)	8.0	7.1	8.0	7.1	5.8	5.9	7.3	8.8	8.3	7.6	7.0	6.9	10.7	9.8	9.9	9.5
	Rain(mm/week)	0.0	0.0	0.0	0.0	6.4	11.6	39.2	0.0	0.0	0.0	14.6	75.8	0.0	0.0	9.0	0.8
	<u>/</u>													3. X.	Victoria		
Phenophase wise weather for better yield	Sowing to Emergence		Vegeta	tive Gr	owth	F	lowerir	ng & Peg	ging	Poo	d Develop	ment		Seed Fi	lling	Mat	turity
Tmax (°c)	32–36°C		3	4–38°C			30	–35°C			30–34°C			28–32	L°C	32-	-36°C
Tmin (°c)	20–24°C		2	2–26°C			22	2–25°C			20–24°C	C		18–22	L°C	20-	-24°C
RHm(%)	60–70%			5-65%)–70%			55–65%			50–60			-55%
RHe(%)	40–50%			5–45%)–50%			35–45%)		30–40			-35%
SS (hr./day)	8–9			9–10				8–9			8–9			9–1	0	10	<u>–11</u>
Rainfall (mm)	10–15 mm		5-	–10 mm			5–	10 mm			2–5 mm	ı		<5 m	m	1	Vil
Congenial weather for	Leaf Miner	r	Tmax: 30)–38°C I	RH: 55-	-70% E	Bright su	ınny day	s with o	ccasiona	l humidity	(Vegeta	tive to f	lowering	g)		
pest/diseases	White Grub Cutworm								•	`	ing to earl						
	Tikka Leaf S	pot	Tmax: $\overline{28}$	3–32°C I	RH: > 70)% Inte	rmitten	t irrigati	on or sur	nmer sh	owers (Ve	getative	to pod c	levelopn	nent)		
	Rust (Puccinia)		RH >75%	6 Warm	humid	conditi	ons dur	ing late f	lowering	g and see	ed filling (Flowerin	g to see	d filling)		

Crop-weather calendar of Black Gram (Vigna mungo)

				Crop-	Black	Gram (Kharif)			Du	ıration -	- 95-1	00 (Day	ys)
Cli4i	Month		July			Aı	ugust			Septen	nber		0	ctober	
Climatic Normal	Std. week	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Norman	Tmax (⁰ c)	26.7	26.2	25.5	26.4	30.0	30.8	35.8	37.4	38.8	39.0	40.1	39.7	35.4	31.7
	Tmin (⁰ c)	11.1	11.6	13.5	10.8	13.3	14.0	20.0	18.6	20.6	23.0	22.0	21.2	20.5	17.3
	RHm(%)	83	87	83	73	78	75	67	50	52	41	42	36	77	83
	RHe(%)	50	45	51	40	36	37	31	20	28	21	18	16	42	42
	SS (hr./day)	8.0	7.1	8.0	7.1	5.8	5.9	7.3	8.8	8.3	7.6	7.0	6.9	9.1	7.5
	Rain(mm/week)	0.0	0.0	0.0	0.0	6.4	11.6	39.2	0.0	0.0	0.0	14.6	75.8	0.0	3.4
	THE PERSON NAMED IN								A STATE OF THE PARTY OF THE PAR	OF EN		No.	(A)		2
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Phenophase				Vegetati	ive										
Phenophase wise weather for better yield	Sowing to En	nergence	•	Vegetati Growt			Floweri	ng	Pod F	ormation	1	Seed Dev	velopment	Mat	turity
wise weather				0	h		Floweri			ormation –30°C	1		velopment 30°C		turity -32°C
wise weather for better yield Tmax (°c) Tmin (°c)	28–32° 22–25°	C C		Growt 30–34° 22–26°	h C C		28–32° 22–24°	C C	26-	−30°C −22°C		25–3 20–2	30°C 22°C	28- 22-	-32°C -24°C
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%)	28–32° 22–25° 85–909	C C C W		Growt 30–34° 22–26° 80–859	h C C %		28–32° 22–24° 85–90°	C C %	26 20 80	–30°C –22°C –85%		25–2 20–2 75–	30°C 22°C 80%	28- 22- 70-	-32°C -24°C -75%
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%)	28–32° 22–25° 85–909 70–809	C C C W		30–34° 22–26° 80–859 65–759	h C C %		28–32° 22–24° 85–90° 70–80°	C C %	26 20 80 65	-30°C -22°C -85% 5-75%		25–2 20–2 75– 60–	30°C 22°C 80% 70%	28- 22- 70- 55-	-32°C -24°C -75% -65%
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) SS (hr./day)	28–32° 22–25° 85–909	C C C W		Growt 30–34° 22–26° 80–859	h C C %		28–32° 22–24° 85–90°	C C %	26 20 80 65	–30°C –22°C –85%		25–2 20–2 75– 60–	30°C 22°C 80%	28- 22- 70- 55-	-32°C -24°C -75%
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%)	28–32° 22–25° 85–909 70–809	CC CC %		30–34° 22–26° 80–859 65–759	h C C %		28–32° 22–24° 85–90° 70–80°	C C C W C C W C C C C C C C C C C C C C	26 20 80 65	-30°C -22°C -85% 5-75%		25-3 20-2 75- 60- 6-	30°C 22°C 80% 70%	28- 22- 70- 55-	-32°C -24°C -75% -65%
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) SS (hr./day) Rainfall (mm) Congenial	28–32° 22–25° 85–909 70–809 4–5 40–60 n	PC P		30–34° 22–26° 80–859 65–759 3–5 30–50 m	h C C % %	· 60–70%	28–32° 22–24° 85–90° 70–80° 4–5	CC % %	26 20 80 65	-30°C -22°C -85% 5-75% 5-6		25-3 20-2 75- 60- 6-	30°C 22°C 80% 70%	28- 22- 70- 55-	-32°C -24°C -75% -65%
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) SS (hr./day) Rainfall (mm) Congenial weather for	28–32° 22–25° 85–909 70–809 4–5 40–60 n Whitef	CC CC % %	Tma	Growt 30–34° 22–26° 80–859 65–759 3–5 30–50 m	h C C % %		28–32° 22–24° 85–90° 70–80° 4–5 20–30 n	C % % nm ls during rain	26 20 80 65 15– ny season (A	-30°C -22°C -85% -75% 5-6 -25 mm ny stage)		25-3 20-2 75- 60- 6-	30°C 22°C 80% 70%	28- 22- 70- 55-	-32°C -24°C -75% -65%
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) SS (hr./day) Rainfall (mm) Congenial	28–32° 22–25° 85–909 70–809 4–5 40–60 n Whitef (YMV vec	CC CC % % mm Cly ctor) Aphids	Tma	Growt 30–34° 22–26° 80–859 65–759 3–5 30–50 m ax: 28–33	h C C % % mm 5°C RH 2°C RH	: 65–80%	28–32° 22–24° 85–90° 70–80° 4–5 20–30 n Dry spel	C % % nm ls during rain ent rains (Ve	26 20 80 65 15– ny season (A	-30°C -22°C -85% 6-75% 5-6 -25 mm ny stage)		25-3 20-2 75- 60- 6-	30°C 22°C 80% 70%	28- 22- 70- 55-	-32°C -24°C -75% -65%
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) SS (hr./day) Rainfall (mm) Congenial weather for	28–32° 22–25° 85–909 70–809 4–5 40–60 n Whitef (YMV vec Thrips & A	CC CC % % mm Cly ctor) Aphids Leaf Spot	Tma Tma t RH:	Growt 30–34° 22–26° 80–859 65–759 3–5 30–50 m ax: 28–35 ax: 28–35	h C C % % 5°C RH 2°C RH	: 65–80% ness >10 h	28–32° 22–24° 85–90° 70–80° 4–5 20–30 n Dry spel Intermitters Tmax:	CC % % mm ds during rain ent rains (Vector 26–30°C (Vector Vector Vecto	26 20 80 65 15– ny season (A egetative to feegtative to	-30°C -22°C -85% 6-75% 5-6 -25 mm ny stage) lowering) pod fillin		25-3 20-2 75- 60- 6-	30°C 22°C 80% 70%	28- 22- 70- 55-	-32°C -24°C -75% -65%
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) SS (hr./day) Rainfall (mm) Congenial weather for	28–32° 22–25° 85–909 70–809 4–5 40–60 n Whitef (YMV vec	CC CC % % mm Cly ctor) Aphids Leaf Spot	Tma Tma Tma War	Growt 30–34° 22–26° 80–859 65–759 3–5 30–50 m ax: 28–33 >85% La m days -	h C C % % 5°C RH 2°C RH eaf wetr + humid	: 65–80% ness >10 h	28–32° 22–24° 85–90° 70–80° 4–5 20–30 n Dry spel Intermitt rs Tmax: nax: 28–3	CC % % mm ds during rain ent rains (Vector 100 to	26 20 80 65 15– ny season (A	-30°C -22°C -85% 5-75% 5-6 -25 mm ny stage) lowering) pod filling rity)		25-3 20-2 75- 60-	30°C 22°C 80% 70%	28- 22- 70- 55-	-32°C -24°C -75% -65%

Crop-weather calendar of Black Gram (Vigna mungo)

				Crop	- Bla	ck Gram	(Zaid)		Duratio	n - 75-80	(Days)		
Clim - 4i -	Month	Fe	bruar	:y		M	arch				Apri	l	
Climatic Normal	Std. week	7	8	9	10	11	12	13	14	15	16	17	18
TOTHE	Tmax (°c)	26.7	26.2	25.5	26.4	30.0	30.8	35.8	37.4	38.8	39.0	40.1	39.7
	Tmin (⁰ c)	11.1	11.6	13.5	10.8	13.3	14.0	20.0	18.6	20.6	23.0	22.0	21.2
	RHm(%)	83	87	83	73	78	75	67	50	52	41	42	36
	RHe(%)	50	45	51	40	36	37	31	20	28	21	18	16
	SS (hr./day)	8.0	7.1	8.0	7.1	5.8	5.9	7.3	8.8	8.3	7.6	7.0	6.9
	Rain(mm/week)	0.0	0.0	0.0	0.0	6.4	11.6	39.2	0.0	0.0	0.0	14.6	75.8
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是代表的			東		95			上的政	Art Volk				
100	14.3					4-3		11				13.51	
	is white	过多数		639	10	SE J	(de)			10	-7/6		
THE RESERVE TO A PARTY OF THE P		ALC: U	*	The last		THE PARTY	***	TO THE					
Phenophase wise weather for better yield	Sowing to Em	ergence	1	Vegetati Growt			Floweri	ng	Pod Fo	ormation	Seed I	Development	Maturity
Tmax (⁰ c)	32–36°	С		34–38°	С		32–36°	С	30-	-34°C	3	0–34°C	34–38°C
Tmin (°c)	20–24°	С		22–26°	С		22–25°	С	20-	-24°C	2	0–22°C	22–26°C
RHm(%)	60–70%			55–65%			60–709			-65%		50–60%	45–55%
RHe(%)	40–509	6		35–45%	6		40–509	%	35-	-45 %	3	30–40%	25–35%
SS (hr./day)	8–9			9–10			8–9		8	8–9		9–10	10–11
Rainfall (mm)	10–20 m	ım		5–10 m	m		5–10 m	m	5–1	0 mm		<5 mm	Nil
Congenial	Whitef	ly	Tma	x: 32–38	3°C RH	: 50–60%	Dry weat	her (Vegeta	tive to flower	ring)			
weather for pest/diseases	Thrips & A	phids	Tma	x: 30–35	5°C RH	: 60–70%	Moist bu	t not rainy c	onditions (Ve	egetative to	od formation	n)	
pesituiseases	YMV (Yellow Mosai		Spre	ad by wl	hitefly;	hot and dr	y conditi	ons High du	ring 30–38°C	C Tmax & lo	w RH (Any s	stage)	
	(10110 11 1110000	ic viii cib)											
	Powdery M			x: 28–32	2°C RH	>70% Dry	y days fo	llowed by li	ght showers (Pod develop	ment to matu	urity)	

Crop-weather calendar of Green Gram (Vigna radiata L.)

				Crop-	Green	Gram (Kharif)			Dura	ation –	70	-75 (Da	ays)		
	Month	Ju	ly		Au	igust			Septen	nber			Oct	ober			
Climatic Normal	Std. week	30	31	32	33	34	35	36	37	38	39	40	41	42	43		
Normai	Tmax (⁰ c)	35.6	33.0	33.4	33.5	32.2	35.0	33.5	32.9	33.6	34.3	33.7	35.4	31.7	31.4		
	Tmin (⁰ c)	28.9	26.0	26.6	26.4	25.6	25.9	24.8	25.5	24.6	23.7	22.1	20.5	17.3	14.5		
	RHm(%)	80	88	81	81	87	80	82	92	87	85	82	77	83	83		
	RHe(%)	57	73	65	70	79	64	67	72	69	56	58	42	42	37		
	SS (hr./day)	7.0	2.1	2.8	3.2	2.6	2.6	5.6	2.2	3.6	7.5	7.3	9.1	7.5	8.8		
	Rain(mm/week)	8.1	38.0	0.0	16.4	128.0	0.0	25.6	79.2	45.0	0.0	15.7	0.0	3.4	0.0		
1-1/2		12.	(RAID)			17.7	2.1	1					n.		1		
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					erta i	L 191		4 100	The state of				an A				
	I BE																
			M -							OF THE			The Carlo				
Phenophase wise weather for better yield	Sowing to En	nergence		Vegetati Growt			Flower	ng	Pod F	ormation	ı	Seed Fil	ling	N	Iaturity		
Tmax (°c)	28–32°	C		30–34°	C		28–32°	C	26	-30°C		26–30°	°C	3	0–34°C		
Tmin (°c)	22–25°			22–26°			22–24°			-22°C		20–22°			2–24°C		
RHm(%)	85–909	%		80–85%	6		85–90	%	80)–85%		75–80	%	7	70–75%		
RHe(%)	70–809	%		65–75%	6		70–80	%	65	5–75%		60–70	%	5	55–65%		
SS (hr./day)	4–5			3–5			4–5			5–6		6–7			7–8		
Rainfall (mm)	40–60 n	nm		30–50 m	ım		20–30 n	nm	15-	-25 mm		10–20 r	nm	<	<10 mm		
Congenial weather for	Whitefly (vector		Tma	ıx: 30–35	5°C RH	: 60–70%	Dry brea	ks during m	onsoon (Any	stage)				·			
pest/diseases		/	Tma	x: 28–32	2°C RH	: 65–75%	Cloudy,	humid weath	ner (Vegetati	ve to flow	rering)						
	Powdery M								ty (Pod deve								
	Cercospora L	eaf Spot	RH	>85% Le	eaf wetn	ess >10 hi	rs Cloud	y spells (Veg	getative to po	d formation	on)						
	Root R	ot				High raint											

Crop-weather calendar of Green Gram (Vigna radiata L.)

	Crop- Greem	Gram (Z	Zaid)				Durat	ion – 65-	70 (Days)		
Climatia	Month	I	Tebruar	y		M	arch			April	
Climatic Normal	Std. week	11	12	13	14	15	16	17	18	19	20
Normal	Tmax (⁰ c)	30.0	30.8	35.8	37.4	38.8	39.0	40.1	39.7	36.9	43.0
	Tmin (⁰ c)	13.3	14.0	20.0	18.6	20.6	23.0	22.0	21.2	25.2	26.4
	RHm(%)	78	75	67	50	52	41	42	36	63	48
	RHe(%)	36	37	31	20	28	21	18	16	39	20
	SS (hr./day)	8.1	7.6	6.8	6.5	6.9	7.7	8.2	9.0	7.5	8.4
	Rain(mm/week)	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
	BOOL STATE OF THE										
Phenophase wise weather for better yield	Sowing to Em	ergence	Veg	getative G	rowth	Flowe	ring	Pod Formation	Seed 1	Filling	Maturity
Tmax (°c)	32–36°										
Tmin (⁰ c)		C		34–38°C		32–3	6°C	30–34°C	28–3	32°C	34–38°C
	20–24°	С		22–26°C	7	22–2	4°C	20–22°C	18–2	22°C	22–26°C
RHm(%)	55–65%	C 6		22–26°C 50–60%		22-2- 55-6	4°C 5%	20–22°C 50–60%	18-7 45-	22°C 55%	22–26°C 40–50%
RHm(%) RHe(%)		C 6		22–26°C		22–2	4°C 5%	20–22°C	18-7 45-	22°C	22–26°C
` ,	55–659 35–459 8–9	C 6 6		22–26°C 50–60%		22-2- 55-6	4°C 5% 5%	20–22°C 50–60%	18–2 45– 25–	22°C 55%	22–26°C 40–50%
RHe(%)	55–65% 35–45%	C 6 6		22–26°C 50–60% 30–40%		22-2- 55-6 35-4	4°C 5% 5%	20–22°C 50–60% 30–40%	18-2 45- 25- 9-	22°C 55% 35%	22–26°C 40–50% 20–30%
RHe(%) SS (hr./day) Rainfall (mm) Congenial	55–659 35–459 8–9 5–15 mm (mostl	C 6 6 y irrigated		22–26°C 50–60% 30–40% 9–10 5–10 mm	n	22-2- 55-6 35-4 8- 5-10	4°C 5% 5% 9 mm	20–22°C 50–60% 30–40% 9–10	18-2 45- 25- 9- <5	22°C 55% 35% -10	22–26°C 40–50% 20–30% 10–11
RHe(%) SS (hr./day) Rainfall (mm) Congenial weather for	55–659 35–459 8–9 5–15 mm (mostl crop)	C 6 6 y irrigated V vector)	Tmax	22–26°C 50–60% 30–40% 9–10 5–10 mm	n RH: 40–	22-2- 55-6 35-4 8- 5-10 60% Dry, wa	4°C 5% 5% 9 mm	20–22°C 50–60% 30–40% 9–10 <5 mm	18-2 45- 25- 9- <5	22°C 55% 35% -10 mm	22–26°C 40–50% 20–30% 10–11 Nil
RHe(%) SS (hr./day) Rainfall (mm) Congenial	55–659 35–459 8–9 5–15 mm (mostl crop) Whitefly (YM)	C 6 7 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Tmax Tmax	22–26°C 50–60% 30–40% 9–10 5–10 mm : 32–38°C : 30–35°C	n RH: 40– RH: 55–	22-2- 55-6 35-4 8- 5-10 60% Dry, wa	4°C 5% 5% 9 mm rm conditi + humid w	20–22°C 50–60% 30–40% 9–10 <5 mm ons (Any stage	18-2 45- 25- 9- <5	22°C 55% 35% -10 mm	22–26°C 40–50% 20–30% 10–11 Nil
RHe(%) SS (hr./day) Rainfall (mm) Congenial weather for	55–659 35–459 8–9 5–15 mm (mostl crop) Whitefly (YM) Thrips & A	y irrigated V vector) phids lildew eaf Spot	Tmax Tmax Tmax	22–26°C 50–60% 30–40% 9–10 5–10 mm : 32–38°C : 30–35°C : 28–32°C	RH: 40– RH: 55– High day	22–2 55–6 35–4 8– 5–10 60% Dry, wa 65% Cloudy temp + cool	4°C 5% 5% 9 mm rm conditi + humid w nights + le	20–22°C 50–60% 30–40% 9–10 <5 mm ons (Any stage yeather after irri	18-2 45- 25- 9- <5 gation (Vegetat	22°C 55% 35% -10 mm ive to flowering	22–26°C 40–50% 20–30% 10–11 Nil

Crop-weather calendar of Sesame (Sesamum indicum L.)

		Cr	<u>op-1</u>	<u>weat</u>	ner (<u>carer</u>	<u>luar</u>	<u>01 Ses</u>	ame (<u>Sesa</u>	<u>ımul</u>	<u>m ınaı</u>	<u>cum</u>	<u>L.)</u>		
		Cro	p- Ses	same (Till)			Du	ıration -	- 9	00-100	(Days)				
	Month			July				Aug	ust			Septe	ember		O	ctober
Climatic	Std. week	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Normal	Tmax (°c)	33.3	33.9	26.7	26.2	25.5	26.4	30.0	30.8	35.8	37.4	38.8	39.0	40.1	39.7	35.4
	Tmin (⁰ c)	26.5	26.0	11.1	11.6	13.5	10.8	13.3	14.0	20.0	18.6	20.6	23.0	22.0	21.2	20.5
	RHm(%)	92	92	83	87	83	73	78	75	67	50	52	41	42	36	77
	RHe(%)	68	71	50	45	51	40	36	37	31	20	28	21	18	16	42
	SS (hr./day)	3.0	2.2	8.0	7.1	8.0	7.1	5.8	5.9	7.3	8.8	8.3	7.6	7.0	6.9	9.1
	Rain(mm/week)	40.6	47.4	0.0	0.0	0.0	0.0	6.4	11.6	39.2	0.0	0.0	0.0	14.6	75.8	0.0
Phenophase weather for better yiel	or Sowi	owing to														laturity
Tmax (°c		35°C			32–38				0–34°C			28–3				32°C
Tmin (°c	<i>'</i>	26°C			24–28				4–26°C			22–2				24°C
RHm(%	·				65–75				70–80%			65–7				70%
RHe(%)					55–65			(50–70%			55–6				60%
SS (hr./da	(y) 6-	- 7			7–9)			6–7			7–	-8		8	_9
Rainfall (m	m) 30–40	0 mm			25–35	mm		15	5–25 mm			10–15	5 mm		<10	mm
Congenial weather fo	Leaf Roller Bo		J					ntermitten	`			•	ge)	·		
pest/diseas]	Гтах: 2	8–32°C	RH > 7	5% Moi	st condition	ns (Veget	ative to	flower	ring)				
	Phyl (Mycor		S	Spread b	y leafh	opper u	nder wa	rm and dry	condition	ıs (Any	stage	(appears a	t floweri	ng))		

RH >80% Prolonged leaf wetness Temp: 25–30°C (Vegetative to flowering)

Tmax: 30–35°C RH: 60–70% Intermittent rainfall (Flowering to capsule stage)

RH >85% Rain splashes + wounds (Pod development)

Alternaria Leaf Spot

Bacterial Blight
Leaf Roller & Capsule

Borer







Crop Weather Calendar of Auraiya District, Uttar Pradesh

Agro-climatic Zone

Main Crops

Soil Type

Middle Gangetic Plain Region

Paddy, Wheat, Maize, Pulses, Oilseeds (Mustard), Vegetables Alluvial Soil (Sandy Loam to Clayey Loam)









Developed by

Chandra Shekhar Azad University of Agriculture & Technology, Kanpur (U.P.)

Under Gramin Krishi Mausam Sewa (GKMS), AMFU Kanpur

Crop-weather calendar of Rice (*Oryza Sativa* L.)

	Cr	op-	I	Rice]	Dura	ation	-120	- 135	(Days	s)					
	Month			June				Jul	l y				ugus				Septe		r		Oct	ober	
Climatic	Std. week	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Normal	Tmax (⁰ c)	32.4	31.6	31.1	30.9	30.8	30.7	31.0	31.2	31.4	30.8	30.9	31.2	31.0	30.8	30.7	30.2	30.7	30.2	30.1	29.2	28.8	28.5
110111111	Tmin (⁰ c)	23.7	23.8	23.9	23.9	24.0	24.0	24.1	24.2	24.2	24.0	23.9	24.0	23.6	23.4	23.2	22.6	22.3	21.5	20.3	18.7	17.7	16.5
	Rain(mm/week)	55.5	85.2	88.3	105.6	129.3	101.1	73.9	72.8	70.0	98.5	73.0	74.1	66.0	63.3	67.4	79.8	39.0	29.2	14.1	4.7	1.6	2.4
	RH(%)	74.4	76.9	78.0	78.9	79.7	79.3	78.4	78.0	77.5	79.0	78.1	77.7	77.5	77.5	77.5	77.8	75.4	75.1	73.2	72.3	71.4	70.3
Phenophase wise								· A	e !			W		P)	-						Physiol	ogical
weather for	SAMO.		S	owing			Tr	anspla	nting			Active	tilleri	ng		Flowe	ring		Grai	in fillin	g	matu	rity
better yield	Tmax (°c)			32–36				30-	-34				28–3	2			26–30			25–30		24-	-28
	Tmin (⁰c)			24–26				23-					22-2				20–22			18–21		16-	
	RHm(%)			80–90				85-					85–9.				90–95			80–90			-80
	RHe(%)			70–80				75-					75–8				75–85			65–75		60-	
	Rainfall (mm)		4	40–60				60-					60–9				50–70			30–50		<2	20
Componial	Seed rot,	Damp	ing off	Î	So	il temp	: 30–3	5°C H	igh so	oil mo	isture	Poor d	lraina	ge									
Congenial weather for	Bacterial leaf b	o <mark>light,</mark> I spot	Blast, l	Brown	RF	H > 859	% Tma	x: 30–	34°C	Stagn	ant w	ater											
pest/diseases	Sheath blight folder,	•	<u> </u>	Leaf	RI	H > 859	% Clou	ıdy ski	es Tn	nax: 2	8–32°	С											
	Neck blast, Fal	<mark>se sm</mark> u	t, Shea	ath ro	t RF	I > 909	% Freq	uent li	ght ra	in Tm	ax: 20	5–3 <u>0°</u> C											
	Ear head bug, Ste	Grain o m bore		ration	RI	H: 80–9	00% In	termitt	ent ra	in Tn	nax: 2:	5–30°C											
	Dirty panicle, A	Asperg ungi)	illus (s	torage	RF	H > 809	% Dela	yed ha	ırvest	Fogg	y/clou	dy day	'S										

Crop-weather calendar of Wheat (*Triticum Aestivum***)**

		Crop-	Whea	at (Tim	ely so	wn) _						Dι	ıratio	n – _	12:	5-130	(Day	s) _		
	Month	Nove	mber		Decen	nber			Janu	ary]	Febru	ary			Mar	ch		
Climatic Normal	Std. week	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13
Normai	Tmax (°c)	26.6	25.9	24.9	23.5	22.6	22.1	21.3	20.8	21.0	21.4	22.6	23.7	24.7	25.9	26.7	28.1	29.1	30.6	30.8
	Tmin (⁰ c)	13.9	12.7	11.9	10.9	10.1	9.2	9.0	8.4	8.7	9.1	9.8	10.9	11.8	12.7	13.7	14.4	15.4	16.8	17.9
	Rain(mm/week)	0.6	0.6	0.6	1.3	0.4	1.5	1.4	1.3	3.2	2.0	2.3	1.8	2.9	2.0	2.0	1.5	1.6	2.6	5.8
	RH(%)	70.4	69.9	70.6	72.1	72.8	72.5	73.8	74.0	73.9	73.7	72.4	71.6	71.1	70.0	69.7	67.9	67.4	66.3	67.8
				W		M	À		W				1	į	į		N (c)	The second second		
Phenophase wise weather for better yield	Sowing & emerg	gence	Eme	ergence	to tiller	ring	Till	ering t	o head	ling	Н	eading fill	to gra	iin	for	Grain mation naturit			ysioloş Maturi	
Tmax (°c)	24–28			22-	26			20-	-25			22-	-26			26–30			28–32	2
Tmin (⁰ c)	12–16			10–				8–					-14			12-16			14–18	
RHm(%)	75–85			70–				65-					-80			60–70			50–60	
RHe(%)	60–70			60-				55-					-70			50–60			40–50	
Rainfall (mm)	10–20			<1			-	<.				10-	-20			<10			Nil or <	<5
Congenial	Seed rot, Dampi	ng off	Soil ten	np: 24–2	28°C Hi	gh soil :	moistu	re Poo	r draina	age										
weather for	Aphids, Early b	light	Tmax:	22–26°C	CRH: 70	0–80%	Cool, r	noist n	norning	gs										
pest/diseases	Leaf rust, Stripe Aphids	rust,	Tmax:	20–25°C	C RH: 6:	5–75%	Interm	ittent d	ew or	light sl	howers	S								
	Powdery mildew smut, Rusts	S	Tmax:	22–26°C	C RH > '	75% Lig	ght raiı	n & clo	oudy w	eather										
	Root rot, Lodging rain), Foliar bl	ight	Tmax:	26–30°C	CRH: 60	0–70%	Dry we	eather _l	orefera	ble										
	Grain discolora Ear head infec	/	Tmax:	28–32°C	C RH: 50	0–60%	Fog or	dew d	uring n	naturit	У									
	Seed rot, Dampi	ng off	Soil ten	np: 24–2	28°C Hi	gh soil	moistu	re Poo	r drain	age										

Crop-weather calendar of Mustard (Brassica spp.)

		<u>C</u> 1	rop-v	<u>veat</u>	<u>ner c</u>	<u>cale</u> i	<u>ndai</u>	c of	<u>Mu</u>	<u>star</u>	d (<i>E</i>	<u>sras</u> ,	<u>sica</u>	spp.	<u>.)</u>					
	Crop-	Musta	rd						Γ	Ourati	ion –	1	25-13	0 (Day	vs)					
	Month		ober		No	vemb	er			ember				Janua				Feb	ruary	
Climatic Jormal	Std. week	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9
ormai	Tmax (⁰ c)	29.2	28.8	28.5	27.3	26.6	25.9	24.9	23.5	22.6	22.1	21.3	20.8	21.0	21.4	22.6	23.7	24.7	25.9	26
	Tmin (⁰ c)	18.7	17.7	16.5	15.4	13.9	12.7	11.9	10.9	10.1	9.2	9.0	8.4	8.7	9.1	9.8	10.9	11.8	12.7	13.
	Rain(mm/week)	4.7	1.6	2.4	1.0	0.6	0.6	0.6	1.3	0.4	1.5	1.4	1.3	3.2	2.0	2.3	1.8	2.9	2.0	2.
	RH(%)	72.3	71.4	70.3	71.0	70.4	69.9	70.6	72.1	72.8	72.5	73.8	74.0	73.9	73.7	72.4	71.6	71.1	70.0	69.
Phenophase wise weather for better yield	Sowing & emerg	gence	Vegetar	tive gro		F	(15-2) loweri	o days) ng	AII .	T	(25-30 Siliqua	form:	ation	S	eed dev		nent	Matu	ırity	
Tmax (⁰ c)	24–28			22–2	6			20-24	1			20–2	5		2	4–28			28–30)
Tmin (°c)	12–16			10–1	4			8–12				10–1	4		1	2–16			14–18	
RHm(%)	70–80			65–7	5			60–70)			60–7	0		5	5–65			50-60)
RHe(%)	60–70			55–6	5			50–60)			50–6	0		4	5–55			40–50)
Rainfall (mm)	5–10			<10				<5				<10			Ni	l or <5			Nil	
ongenial eather for	Seed rot, Dam Aphids, Alterr spot		of.		erature 2–26°C l							ge								
est/diseases	White rust, P	•	T ₁	max: 20)–24°C I	RH: 60	<u>-70%</u>	Cloudy	with	dew fo	rmatic	n								

Crop-weather calendar of Potato (*Solanum tuberosum L.***)**

	Crop-	Potat	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \																	
	Month	Oct	ober		No	vemb	er		Dece	mber	r			Janua	ary			Feb	ruary	
Climatic Normal	Std. week	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9
110111111	Tmax (⁰ c)	29.2	28.8	28.5	27.3	26.6	25.9	24.9	23.5	22.6	22.1	21.3	20.8	21.0	21.4	22.6	23.7	24.7	25.9	26.7
	Tmin (⁰ c)	18.7	17.7	16.5	15.4	13.9	12.7	11.9	10.9	10.1	9.2	9.0	8.4	8.7	9.1	9.8	10.9	11.8	12.7	13.7
	Rain(mm/week)	4.7	1.6	2.4	1.0	0.6	0.6	0.6	1.3	0.4	1.5	1.4	1.3	3.2	2.0	2.3	1.8	2.9	2.0	2.0
	RH(%)	72.3	71.4	70.3	71.0	70.4	69.9	70.6	72.1	72.8	72.5	73.8	74.0	73.9	73.7	72.4	71.6	71.1	70.0	69.7
		· ·		The state of the s	3	A CONTRACTOR OF THE PROPERTY O	To the second	A. A.	THE STATE OF THE S	A CONTRACTOR OF THE PARTY OF TH		The same of the sa		N. Company		1			Y	
Phenophase wise weather for better yield	Sowing & emerg	gence	Vege	etative	growth		F	lower	ing		Tuk	oer Ini	tiation	l	Tuber	r Bulki	ing	N	Iaturi t	y
Tmax (⁰ c)	24–28			20–2				20–25				18–2				0–24			24–28	
Tmin (°c)	12–16			10–1				10–12				10–1				0–14			12–16	
RHm(%)	75–85			80–9				80–83				85–9				0–85			65–75	
RHe(%) Rainfall (mm)	65–75 5–10			70 <u>-8</u>				65–75 <5	5			70 <u>-8</u> <10				5–70 <10			55–65 Vil or <	
Kaiman (mm)	Seed rot, Dampi	ing off	Soil ter		–28°C H	igh so	il mois		or dra	inage		<10				<10		Γ	N11 OF <	3
Congenial weather for	Early bligh Cutworms, Ap	t,		-	°C RH >															
pest/diseases	Late blight, Whi	iteflies	Tmax:	20–25°	°C RH: 8	30–85%	% Dew	or ligh	nt drizz	le										
	Late blight, Roo nematodes	S	Tmax:	18–22°	°C RH >	90% (Overca	st + dr	izzles											
	Rhizoctonia (b scurf), Aphi		Tmax:	20–24°	°C RH: 8	80–85%	% Inter	mitten	t irriga	tion										
	Soft rot, Dry (storage fun		Tmax:	24–28°	°C RH: 6	55–75%	% Dry,	warm	days	_	_	_		_	_	_		_	_	_







Crop Weather Calendar of Kannauj District, Uttar Pradesh

Agro-climatic Zone

Main Crops

Soil Type

Middle Gangetic Plain Region

Paddy, Wheat, Maize, Pulses, Oilseeds (Mustard), Vegetables Alluvial Soil (Sandy Loam to Clayey Loam)









Developed by

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Under Gramin Krishi Mausam Sewa (GKMS), AMFU Kanpur

Crop-weather calendar of Rice (Oryza Sativa L.)

	Cr	op-	ŀ	Rice]	Dura	tion	-120	- 135	(Days	s)					
	Month			June				Jul	l y			A	ugus	st			Septe	mbe	r		Oct	ober	
Climatic	Std. week	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Normal	Tmax (⁰ c)	39.1	37.9	36.3	35.7	34.3	33.9	33.3	33.2	33.2	32.8	33.1	33.4	33.2	33.1	33.2	33.5	33.6	33.6	32.8	32.1	31.3	30.3
110111111	Tmin (⁰ c)	27.5	27.1	26.8	26.7	26.3	26.1	26.0	25.9	26.0	25.7	25.5	25.7	25.2	24.9	24.6	23.6	22.8	21.3	19.5	17.9	16.6	15.4
	Rain(mm/week)	1.6	3.3	5.6	5.0	8.4	7.1	7.2	5.6	5.4	8.4	5.8	4.7	6.4	6.6	3.9	1.2	1.7	0.8	0.3	0.1	0.0	0.0
	RH(%)	58.2	61.5	66.1	67.7	71.8	72.6	74.0	73.7	73.9	75.0	73.4	72.5	72.5	72.4	70.6	67.3	65.5	62.4	61.1	60.2	59.9	60.5
Phenophase wise weather for		1	S	owing			Tra	anspla	nting			Active	tilleri	ng)	Flowe	ring		Grai	in fillin		Physiolo matu	_
better yield	Tmax (°c)			30–34				28-	-32				30–33	3			28–32			27–31		25-	-30
	Tmin (°c)		,	24–26				23-	-25				23-25	5			22–24			20–22		18-	-20
	RHm(%)		,	70–80				80-	-85				80–85	5			85–90			80–85		70-	-75
	RHe(%)		:	55–65				65-	-70				65–70)			70–75			65–70		55-	-60
	Rainfall (mm)		10	00–150)			150-	-200				120–15	50			100–120)	8	30–100		<.	50
	Ste	m bore	r		28	−35 °C,	RH 80	–90% ,	cloudy	y weat	her wi	th inter	mittent	t rain									
Congenial weather for	Gui	ndhi bu	g		25-	−30 °C,	RH 60	-75%,	dry to	cloud	y weat	her wit	h little	rain									
pest/diseases	Leaf folde	er / Lea	f roller		30	−35 °C,	RH >8	35%, clo	oudy &	k hum	id wea	ther											
F 120, data cases	Brown plai	nthoppe	er (BPF	<u>I)</u>	28-	−32 °C,	RH >8	80%, clo	oudy v	veathe	r, wate	erlogged	d fields	S									
	Sheath blight (Rhizoc	tonia so	olani)	Tn	nin 20–2	25 °C, 1	RH >90)%, co	ntinuc	us clo	udy/raiı	ny day	s, pooi	r air cir	culatio	on						
	Blast (Pyri	cularia	oryzae	<u>e)</u>		−28 °C,							<u> </u>										
	Bacterial le					-34 °C,																	
		lse smu			25	−30 °C,	RH >9	00%, clo	oudy &	k hum	id wea	ther, in	termitt	ent rai	in								

Crop-weather calendar of Wheat (Triticum Aestivum)

		Crop-	Whea	at (Tim	ely so	wn)						Dι	ıratio	n –	12:	5-130	(Day	s)		
CII	Month	Nove	mber		Decen	nber			Janu	ary]	Febru	ary			Mar	ch		
Climatic Normal	Std. week	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13
TOTIME	Tmax (⁰ c)	28.0	27.0	25.9	24.2	23.1	21.7	20.0	20.7	20.8	22.3	23.5	24.3	25.8	27.6	28.4	29.9	31.3	33.8	35.4
	Tmin (⁰ c)	12.7	11.6	10.5	9.8	8.7	7.9	7.8	7.5	8.0	8.4	9.3	10.3	11.4	12.3	13.2	14.2	15.5	17.1	18.4
	Rain(mm/week)	0.1	0.1	0.0	0.2	0.0	0.2	0.4	0.2	0.6	0.4	0.2	0.9	0.6	0.3	0.7	0.2	0.3	0.2	0.1
	RH(%)	62.0	63.2	64.4	67.9	69.0	71.7	76.4	73.9	74.5	71.0	69.0	68.6	66.6	62.8	62.2	59.4	57.6	53.4	51.4
	CHARRY.		N.	W.			A.	444	MA	建			0			S. A.	301			
Phenophase wise weather for better yield	Sowing	& eme	rgence		Eı	mergen tillerii			illering headir	_	Н	eading fill	to gra	iin	for	Grain mation naturit	1 to		ysioloą Maturi	_
Tmax (°c)		22–26				18–22	2		20–24				-26			26–30			28–32	
Tmin (°c)		8–12				6–8			8–10				-12			12–15			14–16	
RHm(%)		65–70				70–75			65–70			60-				55–60			50-55	
RHe(%)		50–55				55–60			50-55			45-				40–45			35–40)
Rainfall (mm)	Brown rust	20–30	recondit	<u>a)</u>	18_2	10–20 2 °C, RH		cloudy y	20–30		in/dew	20-	-25			10–15			<10	
Congenial	Yellow rust (5 °C, hig						ns								
weather for pest/diseases	Karnal bu	nt (Tillet	ia indica)		18-24	4 °C, RH	70–80%	6, cloud	v weath	er with i	intermit	tent rain								
pest/uiseases	Loose smu				_	2 °C, RH			-											
	Powdery milde		,	inis)		0 °C, RH														
		rnaria bli	. 0		20–2:	5 °C, RH	>80%,	cloudy v	veather	with lig	ht rain									
	Aphids (Sitobion av		0	um spp.)		5 °C, RH														
	ŗ	Fermites			25–30	0°C, dry	soil con	ditions,	sandy s	oils										
	Armyw	orm / Cu	tworm		20–2	8 °C, RH	70-80%	6, cloud	y weath	er with	light rai	n								
		Shoot fly			25-30	0°C, RH	60-70%	6, intern	nittent ra	ainfall										

Crop-weather calendar of Mustard (Brassica spp.)

	Crop-	Musta	rd						D	urati	ion –	12	25-1 <u>3</u>	0 (Day	ys)					
	Month	Oct	ober		No	vemb	er		Dece	ember	r			Janua				Feb	ruary	
Climatic Normal	Std. week	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9
(Of Illa)	Tmax (°c)	32.1	31.3	30.3	29.2	28.0	27.0	25.9	24.2	23.1	21.7	20.0	20.7	20.8	22.3	23.5	24.3	25.8	27.6	28.4
	Tmin (⁰ c)	17.9	16.6	15.4	14.3	12.7	11.6	10.5	9.8	8.7	7.9	7.8	7.5	8.0	8.4	9.3	10.3	11.4	12.3	13.2
	Rain(mm/week)	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.2	0.0	0.2	0.4	0.2	0.6	0.4	0.2	0.9	0.6	0.3	0.7
	RH(%)	60.2	59.9	60.5	61.5	62.0	63.2	64.4	67.9	69.0	71.7	76.4	73.9	74.5	71.0	69.0	68.6	66.6	62.8	62.2
Phenophase wise weather	Sowing & emerg	gence	Vegetat	ive gro	wth	F	loweri				Siliqua		ation	S	eed dev		nent	Matu	ırity	
wise weather or better yield	J	gence	Vegetat			F	loweri	ng)			forma		S	eed dev	elopm	nent	Matu		
wise weather for better yield Tmax (°c)	25–30	gence	Vegetat	20–25	5	F	loweri	ng 18–22				1 forma	4	S	eed dev	v elopm 2–26	nent	Matu	26–30	
wise weather for better yield	J	gence	Vegetat		5	F	loweri	ng				forma	4	S	eed dev 2 1	elopm	nent	Matu		
wise weather for better yield Tmax (°c) Tmin (°c)	25–30 12–16	gence	Vegetat	20–25 8–12	5	F	loweri	ng 18–22 6–10)			20–2- 8–12	4 2 5	S	2 1 6	v elopm 2–26 0–14	nent	Matu	26–30 12–16	
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%)	25–30 12–16 65–70	gence	Vegetat	20–25 8–12 70–75	5	F	loweri	ng 18–22 6–10 75–80)			20–2- 8–12 70–7-	4 2 5 0	S	2 1 6 5	2–26 0–14 5–70	nent	Matu	26–30 12–16 55–60	
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) Rainfall (mm)	25–30 12–16 65–70 50–55 20–30 Aphids (L	ipaphis	erysimi)	20–25 8–12 70–75 55–60 10–20	5 5 0 18–25	°C, RH	I 65–80 ¹	18–22 6–10 75–80 60–65 20–30 %, clou) 5) idy & h	sumid w	Siliqua veather,	20–2-8–12-70–7-55–6-10–2-1	4 2 5 0	S	2 1 6 5	velopm 2–26 0–14 5–70 0–55	nent	Matu	26–30 12–16 55–60 40–45	
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) Rainfall (mm)	25–30 12–16 65–70 50–55 20–30 Aphids (L Painted bug	ipaphis (Bagrae	erysimi) da hilaris	20–25 8–12 70–75 55–60 10–20	5 5 0 18–25	°C, RH		18–22 6–10 75–80 60–65 20–30 %, clou) 5) idy & h	sumid w	Siliqua veather,	20–2-8–12-70–7-55–6-10–2-1	4 2 5 0		2 1 6 5	velopm 2–26 0–14 5–70 0–55	nent	Matu	26–30 12–16 55–60 40–45	
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) Rainfall (mm) Congenial weather for	25–30 12–16 65–70 50–55 20–30 Aphids (L Painted bug Mustard saw	ipaphis (Bagrao	erysimi) da hilaris	20–25 8–12 70–75 55–60 10–20	5 5 0 18–25 25–30	°C, RH	I 65–80 ¹	18–22 6–10 75–80 60–65 20–30 %, clou) 5) idy & h bright s	aumid w	Siliqua veather,	20–24 8–12 70–7 55–6 10–24 dry spo	4 2 5 0		2 1 6 5	velopm 2–26 0–14 5–70 0–55	nent	Matu	26–30 12–16 55–60 40–45	
wise weather for better yield Tmax (°c) Tmin (°c) RHm(%) RHe(%) Rainfall (mm) Congenial	25–30 12–16 65–70 50–55 20–30 Aphids (L Painted bug Mustard saw	ipaphis (Bagrae fly (Athroxima)	erysimi) da hilaris alia luge	20–25 8–12 70–75 55–60 10–20	18–25 25–30 20–28	°C, RH °C, low	I 65–80° v RH (<	18–22 6–10 75–80 60–65 20–30 %, clou 50%),	o) oldy & h bright s dy wea	umid w	veather, veather ith light	20–24 8–12 70–7 55–6 10–24 dry spo	4 2 5 0		2 1 6 5	velopm 2–26 0–14 5–70 0–55	nent	Matu	26–30 12–16 55–60 40–45	

15–20 °C, RH >90%, cloudy & wet weather

10–18 °C, RH >85%, cloudy & moist conditions

15–20 °C, RH >90%, prolonged cloudy & wet conditions

18–25 °C, RH 60–70%, cloudy & dry weather

White rust (Albugo candida)

Downy mildew (Peronospora parasitica)

Powdery mildew (Erysiphe

cruciferarum)
Sclerotinia stem rot (Sclerotinia

sclerotiorum)

Crop-weather calendar of Potato (*Solanum tuberosum L.***)**

	Crop-	Potat	. 0						D	uratio	on –	11	0-120	(Days	s)					
	Month	Oct	ober		Nov	emb	er		Dece	embe	r			Janua	,			Feb	ruary	,
Climatic Normal	Std. week	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9
Normai	Tmax (⁰ c)	32.1	31.3	30.3	29.2	28.0	27.0	25.9	24.2	23.1	21.7	20.0	20.7	20.8	22.3	23.5	24.3	25.8	27.6	28.4
	Tmin (⁰ c)	17.9	16.6	15.4	14.3	12.7	11.6	10.5	9.8	8.7	7.9	7.8	7.5	8.0	8.4	9.3	10.3	11.4	12.3	13.2
	Rain(mm/week)	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.2	0.0	0.2	0.4	0.2	0.6	0.4	0.2	0.9	0.6	0.3	0.7
	RH(%)	60.2	59.9	60.5	61.5	62.0	63.2	64.4	67.9	69.0	71.7	76.4	73.9	74.5	71.0	69.0	68.6	66.6	62.8	62.2
		F	No.		- 2	The second second						The same of the sa		THE STATE OF THE S		かる				
Phenophase wise weather for better yield	Sowing & emera	gence	Vege	etative	growth		F	lower	ing		Tub	er Ini	tiation	1	Tube	r Bulki	ing	N	Iaturi t	t y
Tmax (°c)	25–30			20–24				18-22				16–2				8-22			22-26	
Tmin (°c)	12–16			8–12				6–10				4–8				6–10			8–12	
RHm(%)	65–70			70–75				75–80				80–8				75–80			65–70	
RHe(%)	50–55			55-60				60–65				65–7				50-65			50–55	
Rainfall (mm)	20–30	4 o la 4 la	ana in Cast	10–20		OC DII	> 000/	20–30		a	4:	20–2		or intern		5-20			<10	
Congenial	Late blight (Phy				24–30 °								w/log (or miern	nuem ra	ıms				
weather for	Black scurf (1	·			18–22 °						wet sp	CHS								
pest/diseases	Common scab (S				20–28						line soi	ls								
	Brown rot / Bac solar	cterial w	vilt (Ralst m)		25–30 °					•										
	Soft rot				20–28 °				ogging	+ warr	n humi	d condi	tions							
	Potato cyst nema				15–20 °				1 0 1											
	Aphids (Myzus po Whitefly (ssypii)	18–25 ° 25–30 °				-		veather									
	Cutworn				25–30						ith light	raine								
	Cutworn	I / Allil	y W OI III		20-28	C, KII	70-00	70, CIUL	iay wee	unci W.	ını ngılı	. railis								







Crop Weather Calendar of Mainpuri District, Uttar Pradesh

Agro-climatic Zone

Middle Gangetic Plain Region **Main Crops**

Paddy, Wheat, Maize, Pulses, Oilseeds (Mustard), Vegetables **Soil Type**

Alluvial Soil (Sandy Loam to Clayey Loam)









Developed by

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Crop-weather calendar of Rice (Oryza Sativa L.)

	Cr	op-	ŀ	Rice]	Dura	tion	-120	- 135	(Days	s)					
	Month			June				Ju	ly			A	ugus	st			Septe	mbe	r		Oct	ober	
Climatic	Std. week	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Normal	Tmax (⁰ c)	34.5	33.0	32.1	31.6	31.0	30.5	30.5	30.3	30.3	30.5	30.6	30.6	30.6	31.1	31.2	31.9	31.6	31.5	31.3	31.0	30.2	30.1
TOTIM	Tmin (⁰ c)	25.2	24.9	24.4	24.3	24.0	23.8	23.6	23.7	23.7	23.7	23.7	23.6	23.7	23.6	23.6	23.5	23.2	22.8	22.1	21.2	20.5	19.7
	Rain(mm/week)	7.9	7.4	8.6	8.8	8.9	12.6	11.2	12.7	12.0	10.6	9.2	10.8	10.2	8.6	10.2	4.7	6.3	5.6	3.1	3.2	2.2	1.5
	RH(%)	76.8	78.9	79.9	80.4	81.2	82.4	81.7	82.5	82.5	82.0	81.3	81.5	81.4	80.2	80.3	77.8	77.9	77.3	75.7	74.7	74.6	73.0
Phenophase wise weather for			S	owing			Tr	ranspla	inting			Active	tilleri	ng)	Flowe	ring	1	Grai	in fillin		Physiol matu	_
better yield	Tmax (⁰ c)		,	30–32				28-	-32				28–30)			26–28			25–27		28-	-30
	Tmin (°c)			22–24					-25				22-24				20–22			18–20			-18
	RHm(%)		,	75–85				80-	-90				75–85	5			80–85			70–75		60-	
	RHe(%)			65–70				65-	-70				60–65	5			65–70			55–60		50-	-55
	Rainfall (mm)		4	40–60				80-	-120				60-80	O			70–90			30–40		<	10
Congenial	Ste	m bore	er			max: 2 getativ			_					•		vith in	termitt	ent rai	in				
weather for pest/diseases	Gur	ndhi bu	ıg		Tr.	nax: 25 owerin	5–30 °C g to do	C – RF ough st	I: 60– age	75% -	- Dry,	cloudy	y weat	ther w	ith litt	le rain	1						
	Lea	af rolle	r		Ti	nax: 30 <i>llering</i>	to ear	ly pani	cle en	iergei	ıce												
	Sheath blight (Rhizod	ctonia s	solani	Til	llering	to hea	ding							•		air circu						
	Blast (Le	af/Necl	k blast)		nax: 25 <i>ırser</i> y,						I >85%	5 – Int	ermit	tent dr	izzles	& clou	dy we	eather				
	Bacterial Lo	eaf Blig	ght (BI	LB)	Ti	llering	to flov	vering	stage					•		•	y weath						
	Fal	se smu	ıt		Tr		5–30 °C	C - RF	I: >85		loudy	, humi	d con	dition	s with	intern	nittent 1	rain					

Crop-weather calendar of Wheat (*Triticum Aestivum***)**

		Crop-	Whea	at (Tim	ely so						Dι	ıratio	n –	125	5-130	(Day	s)			
CII	Month	Nove	mber		Decen	nber			Janu	ary]	Febru	ıary			Mar	ch		
Climatic Normal	Std. week	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13
Norman	Tmax (⁰ c)	29.6	29.2	28.7	28.5	27.8	27.8	27.8	28.0	28.5	28.9	29.5	30.2	31.0	32.1	32.7	33.2	33.8	34.9	35.2
	Tmin (°c)	18.1	16.7	16.2	16.1	15.1	14.7	14.8	15.0	15.3	15.9	16.3	17.2	18.0	18.7	19.3	20.4	21.1	21.9	22.9
	Rain(mm/week)	0.7	0.1	0.4	0.2	0.8	0.1	0.1	0.4	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.6	0.6	0.4	0.8
	RH(%)	70.6	68.6	68.5	68.6	68.0	67.2	67.5	67.4	67.0	67.4	67.0	67.5	67.7	67.1	67.0	68.2	68.6	68.2	69.6
	THE REAL PROPERTY.	ALL AND SHEET STATES								1000			1	ı			N West			
Phenophase wise weather for better yield	Sowing & emerg	gence	Eme	Till	ering t	o head	ling	Н	_	to gra	iin	Grain formation to maturity			Physiological Maturity					
Tmax (°c)	22–25		18–22					20-	-24		22–26				26–30			28–32		
Tmin (⁰ c)	10–12			8–10			8–12				10–14				12–16			14–18		
RHm(%)	70–80			75–				70-			65–75					55–65			50–60	
RHe(%)	60–65			65–	70		60–65				55–60				45–50				40–45	5
Rainfall (mm)	20–30			10-1	20		15–25 10–15 <10 N											Nil		
Congenial	Brown rust (Pucorecondita)	cinia	Tmax: 1	8–25 °C	Tmin: 8	3–12 °C,	°C, RH >70%, cloudy & moist with dew													
weather for pest/diseases	Yellow rust (Puc striiformis)	cinia	Tmax: 1	0–15 °C.	Tmin: 5	5–8 °C, 1	RH >80%, cloudy & wet													
pestruseases	Black rust (Puco graminis)	inia	Tmax: 2	25–30 °C.	RH 60-	-70%, cl	ear war	m days	after c	ool nig	hts									
	Powdery mildo (Erysiphe grami		Tmax: 1	5–20 °C.	RH 70-	-80%, cl	oudy &	humid	with p	oor air	circula	tion								
	Karnal bunt (Til		Tmax: 1	8–24 °C.	RH 80-	-90%, cl	oudy w	ith ligh	t rain/h	igh soil	l moisti	ure								
	Loose smut (Usti tritici)	lago	Cool mo	oist weath	ner, Tmi	n: 10–15	°C, RI	H >80%)											
	Aphids (Sitobion a	venae)	18–25 °	C, RH 65	5–75 %, c	loudy &	humid													
	Termites		Warm, o	lry weath	er with	low soil	moistu	re												

Crop-weather calendar of Mustard (Brassica spp.)

	Crop-	Musta	rd						Г	urati	on _	1′	25_13	0 (Da	vc)						
	Month		tober		No	<mark>vemb</mark>	er			mbei		1.	23-13	Janu	, <i>,</i>		February				
Climatic Normal	Std. week	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	
Normai	Tmax (⁰ c)	31.0	30.2	30.1	29.7	29.6	29.2	28.7	28.5	27.8	27.8	27.8	28.0	28.5	28.9	29.5	30.2	31.0	32.1	32.7	
	Tmin (⁰ c)	21.2	20.5	19.7	18.7	18.1	16.7	16.2	16.1	15.1	14.7	14.8	15.0	15.3	15.9	16.3	17.2	18.0	18.7	19.3	
	Rain(mm/week)	3.2	2.2	1.5	1.1	0.7	0.1	0.4	0.2	0.8	0.1	0.1	0.4	0.1	0.2	0.2	0.2	0.3	0.3	0.3	
	RH(%)	74.7	74.6	73.0	71.7	70.6	68.6	68.5	68.6	68.0	67.2	67.5	67.4	67.0	67.4	67.0	67.5	67.7	67.1	67.0	
Phenophase wise weather Sowing & seedling establishment (15-21 days) Phenophase wise weather Sowing & emergence Volume of the			(25-	Vegetative (25-30 days)			Flowering (15-20 days)				Pod development (25-30 days)			S	Maturity (15-30 days)		nent	nt Maturity			
for better yield Tmax (°c)	22. 25		18–22				16–20				18–22				22–26				28–32		
$\frac{\text{Tmax} (c)}{\text{Tmin} ({}^{0}\mathbf{c})}$	22–25 10–12			6-10				5-8)	6–10					8–12			12–16			
RHm(%)	70–80			70–75				75–85	 5	65–7					60–70			55–60			
RHe(%)	60–65			55–60				60–63	5		55–60				5	50–55			45–50		
Rainfall (mm)	20–30			10–1:	5			10-20)		5–10				<10			Nil			
Congenial weather for	owio		RH 65–																		
pest/diseases	brassica						•	•			es										
	White rust (Albust Powdery mildew cruciferary	(Erysi)	ho		, RH 80- RH 60-		•				r circula	ation									
	Downy mi		15	–22 °C,	RH >85	%, clou	ıdy & w	vet cond	ditions												
	Painted bug (I hilaris		28	–32 °C,	dry wea	ther, lo	w soil r	noistur	e												

18-22 °C, RH >90%, prolonged cloudy/rainy weather

Stem rot (Sclerotinia

sclerotiorum)

Crop-weather calendar of Potato (*Solanum tuberosum L.***)**

	Crop-	Potat	:0						D	uratio	on –	11	0-120	(Days	s)					
	Month	Oct	tober		Nov	vemb	er		Dece	mber	•			Janua	ary			Feb	ruary	
Climatic Normal	Std. week	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9
Normai	Tmax (⁰ c)	31.0	30.2	30.1	29.7	29.6	29.2	28.7	28.5	27.8	27.8	27.8	28.0	28.5	28.9	29.5	30.2	31.0	32.1	32.7
	Tmin (⁰ c)	21.2	20.5	19.7	18.7	18.1	16.7	16.2	16.1	15.1	14.7	14.8	15.0	15.3	15.9	16.3	17.2	18.0	18.7	19.3
	Rain(mm/week)	3.2	2.2	1.5	1.1	0.7	0.1	0.4	0.2	0.8	0.1	0.1	0.4	0.1	0.2	0.2	0.2	0.3	0.3	0.3
	RH(%)	74.7	74.6	73.0	71.7	70.6	68.6	68.5	68.6	68.0	67.2	67.5	67.4	67.0	67.4	67.0	67.5	67.7	67.1	67.0
						To the second		· ·	A AND AND AND AND AND AND AND AND AND AN	No.				天	2	がな				
Phenophase wise weather for better yield	Sowing & emer	gence	Vege	egetative growth Flo					wering			er Ini	tiation	l	Tuber	Bulki	ing Maturit			y
Tmax (°c)	22–25		20–24									16–20)			8–22		24–28		
Tmin (°c)	12–15		10–12			8–10					7–9					3–10	10–1			
RHm(%)	75–80			70–80				75–85					80–90		75–8				60–70	
RHe(%)	60–65			60–65			65–70				65–70			60–65			50–55			
Rainfall (mm)	20–30			10-20	_			10–15				10-20				<10			Nil	
Congenial weather for		ytophtho ly bligh naria sol	ıt	tans)	Tmax: 18–22 °C, Tmin: 7–10 °C – RH >90% – Continuous cloudy/rainy weather with dew 24–28 °C – Moderate RH (70–80%) – Warm, humid conditions with intermittent rain															
weather to					Cool (15–20 °C), moist soil – High soil moisture at planting															
pest/diseases	Black scur (Rhizod	f & sten ctonia sc	n canker olani)		· ·							•								
	Black scur (Rhizod Bacterial wilt (Ra	f & sten ctonia so alstonia	n canker olani) solanace		28–32	$^{\circ}C-R$	H 80–9	0% – H	ligh rai	nfall &	poorly	drained	soils							
	Black scur (Rhizod Bacterial wilt (Ra Common scab (S	f & sten etonia so alstonia Streptor	n canker olani) solanace nyces sca	bies)	28–32	$^{\circ}C - R$	H 80–9 ry soil v	0% – H with lov	ligh rain w moist	nfall & ure dur	poorly ing tub	drained er form	l soils ation	41						
	Black scur (Rhizod Bacterial wilt (Ra Common scab (S Potato virus di	f & sten ctonia so alstonia Streptor seases (l	n canker blani) solanace nyces sca PVY, PL	abies) RV)	28–32 20–25 15–25	${^{\circ}C - R}$ ${^{\circ}C - D}$ ${^{\circ}C - S}$	H 80–9 ry soil v	0% – H with lov	ligh rain w moist by aphic	nfall & ure dur d activi	poorly ing tub	drained er form ool, hum	l soils ation	ther						
	Black scur (Rhizod Bacterial wilt (Ra Common scab (S	f & sten etonia so alstonia Streptor seases (l ersicae,	n canker blani) solanace nyces sca PVY, PL Aphis go	abies) RV)	28–32	$^{\circ}C - R$ $^{\circ}C - D$ $^{\circ}C - S$ $^{\circ}C - R$	H 80–9 ry soil v oread fa H 65–8	0% – H with lov wored b	ligh rain w moist by aphic	nfall & ure dur d activi	poorly ing tub ty in co weathe	drained er form ool, hum	l soils ation	ther						

Crop-weather calendar of Groundnut (Arachis hypogaea L.)

	Crop-	undnı	ıt (Kh	arif)					Duration – 1						130 (I	Days))					
	Month		J	lune				Ju	ly			A	ugus	st			Septe	mbe	r		Oct	ober	
Climatic	Std. week	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Normal	Tmax (⁰ c)	34.5	33.0	32.1	31.6	31.0	30.5	30.5	30.3	30.3	30.5	30.6	30.6	30.6	31.1	31.2	31.9	31.6	31.5	31.3	31.0	30.2	30.1
	Tmin (°c)	25.2	24.9	24.4	24.3	24.0	23.8	23.6	23.7	23.7	23.7	23.7	23.6	23.7	23.6	23.6	23.5	23.2	22.8	22.1	21.2	20.5	19.7
	Rain(mm/week) RH (%)	7.9 76.8	7.4 78.9	8.6 79.9	8.8	8.9 81.2	12.6 82.4	11.2 81.7	12.7 82.5	12.0 82.5	10.6 82.0	9.2 81.3	10.8	10.2	8.6 80.2	10.2	4.7 77.8	6.3 77.9	5.6 77.3	3.1 75.7	3.2 74.7	2.2 74.6	1.5 73.0
Phenophase wise weather for	KII (/a)	70.8	78.9	19.9	60.4	81.2	02.4	81.7	82.3	62.3													
better yield	Weather Parameter	So	owing t	o Eme	rgenc	ee	Veg	etativ	e Gro	wth	Flowering & Pegging					Pod Development			Seed Filling			Maturity	
	Tmax (⁰ c)			28–32			28–30				26–30					27–31			28–32			30–34	
	Tmin (⁰ c)			20–22			20–22 70–80				20–22					20–23			18–20			16–18	
	RHm(%)			75–85									75–85			70–80			65–75			55–65	
	RHe(%)			65–70				60–65					65–70			55–60				50–55		45–	
	SS (hr./day)			4–5				5-			6–7					6–7			7–8			8–9 <20	
	Rainfall (mm) Leaf spot (Early	. O. T. o.		50–80				80–	100			9	90–120)			70–90			40–60		<2	.0
Congenial	(Cercospora	spp.)	Í		5–30 °C, RH >85%, cloudy weather with intermittent rains																		
weather for	Rust (Puccinia a				3–28 °C, RH >80%, frequent dew & cloudy weather																		
pest/diseases	Collar rot (Asperg	,	0 ,	28–32	°C, dr	y soil	conditi	ions af	ter sov	ving –	low so	oil mois	ture										
	Aflatoxin conta (Aspergillus f	flavus)		28–32	2–32 °C, dry soil conditions after sowing – low soil moisture 3–32 °C, RH 65–75%, drought stress followed by rain at maturity																		
	Stem rot / Sclero (Sclerotium 1		vilt	25–30	°C, Rl	H >85	%, higl	h soil r	noistu	re & co	ontinu	ous rain	ı										
	White grub (Holot			25-30																			
	Termite			28–32		• •																	
	Aphids (Aphis ca			20–28																			
	Jassids (Empoas			26–30	°C, m	oderat	e humi	dity (6	0-709	6), clo	udy &	humid	weath	er									
	Spodoptera (Le caterpilla		ng	25–30	°C, Rl	H 70–8	80%, c	ontinu	ous clo	oudy w	eather	ſ											

Crop-weather calendar of Groundnut (Arachis hypogaea L.)

				Crop-	Grou	ndnut	(Zaid	l)					Dura	Ouration – 80-85 (Days)				
	Month	Fel	bruary				arch				April				M	ay		
Climatic Normal	Std. week	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Normai	Tmax (°c)	31.0	32.1	32.7	33.2	33.8	34.9	35.2	35.7	36.0	36.4	36.8	37.1	37.4	37.6	38.0	37.5	
	Tmin (⁰ c)	18.0	18.7	19.3	20.4	21.1	21.9	22.9	23.5	23.9	24.5	24.8	25.3	25.8	25.9	26.4	26.2	
	Rain(mm/week)	0.3	0.3	0.3	0.6	0.6	0.4	0.8	1.4	1.1	1.5	1.7	1.9	2.4	2.0	2.6	2.7	
	RH (%)	67.7	67.1	67.0	68.2	68.6	68.2	69.6	70.0	70.1	70.6	70.6	71.0	71.5	71.2	71.6	72.1	
Phenophase	92							V.							\$ \$			
wise weather for better yield		Veget	ative Gr	rowth	F	lowerir	ng & Peg	gging	Poo	d Develop	ment		Seed Fi	Maturity				
Tmax (°c)	30–34		32–36					30–34			32–36			30–3	4	32	2–36	
Tmin (°c)	18–20			20–22				20–22			22–24			22–2			l–26	
RHm(%)	60–70			55–65				50–70			55–65			60–7		55	5–60	
RHe(%)	45–50)		40–45			2	15–50			40–45			45–50)–45	
SS (hr./day)	8–9		9–10					8–9			9–10		7–8			8	3–9	
Rainfall (mm)	20–30)		30–40		40–6	0 (with	irrigation	support)		30–40		50-	-70 (early showers	<20			
Congenial	Leaf spot (Cercos		25–30 °C, RH >85%, cloudy/humid weather, intermittent irrigation or showers 23–28 °C, RH >80%, frequent dew deposition, cloudy weather															
weather for	Rust (Puccinia ara									ther								
pest/diseases	Collar rot (Asperg	0 ,	28–32 °C, dry soil after sowing, low soil moisture stress															
	Aflatoxin contami (Aspergillus flavu	ıs)	28–32 °C, RH 65–75%, drought stress followed by irrigation or pre-monsoon rain															
	Stem rot / Scleroti (Sclerotium rolfsi	i)	25–30 °C, RH >85%, heavy irrigation or continuous moist soil															
	White grub (Holo spp.)	trichia	25–30 °	C, moist	soil afte	r pre-m	onsoon	showers										
	Termites		28–32 °	C, prolon	ged dry	spells,	sandy so	oil with lo	ow moistu	re								
	Aphids (Aphis cra	accivora)	20–28 °	C, RH 70	–80%, c	cloudy l	numid w	eather			<u> </u>			·	<u> </u>			
	Jassids (Empoasc	a kerri)	26–30°	C, RH 60	–70 %, ł	not & h	umid co	nditions v	with interi	nittent ra	ins							
	Spodoptera (Leaf-eating cater	rpillar)	25–30°	C, RH 70)–80%, c	continu	ous clou	dy weath	er, freque	nt irrigati	ion							