







CROP WEATHER CALENDAR AMFU KANPUR, U.P.

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Developed by
Chandra Shekhar Azad University of
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Under Gramin Krishi Mausam Sewa (GKMS)







Crop Weather Calendar of AMFU Kanpur, 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	vs)					
	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 (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 better			S	owing			Т	ranspl	anting	g		Active	tilleri	ng)	Flowe	ring		ing	Physio matu	_		
yield	Tmax (°c)		30)–35°C				28–	32°C			3	30–34°	°C		,	28–32°C	C	2	5–30°C	1	22-23	8°C
	Tmin (⁰ c)		20)–25°C				22-	26°C			4	20–25°	°C		,	20–25°C	C	1	8–22°C	7	18–20	0°C
	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	y			4–5 h	rs/day	7		5-	-6 hrs/	day		6-	-7 hrs/d	ay	7–3	8 hrs/da	ay	8–9 hr	s/day
	Rainfall (mm)		30-	–50 mm	1			40–6	0 mm			4	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 sta	ge)
weather for	Gundhi bug	Tn	nax: 25-	-30°C -	RH: 6	0-759	6 - Dr	y, cloud	dy wea	ather w	ith lit	le rain	(Flow	ering t	o doug	h stag	e)						
pest/diseases	Leaf roller	Tn	nax: 30-	-35°C -	High	RH (>	85%)	- Cloud	ly, hur	nid we	eather	Tillerir	ng to ea	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	<u>;</u>)					

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

		Crop-	Whea	at (Tim	ely so	wn)						Dı	ıratio	n –	12:	5-130	(Day	(s)		
CII.	Month	Nove	mber		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
Normai	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.
	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
			1	W		11	À	144		White State of the last of the			4	1	1		100	-		
Phenophase wise weather for better yield	Sowing & emerg	gence	Eme	ergence	to tiller	ing	Till	ering t	to head	ling	Н	eading fill	to gra	in	for	Grain mation naturit	n to		ysiolog Maturi	
Tmax (°c)	24–28°C			20–25	5°C			20–2	25°C			22-2	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%			70–8	80%			65–	75%			60–70%	,)		50-609	6
RHe(%)	60–70%			55–6	5%			50-	60%			45-	55%			40–50%	,)		30–40%	
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	mis)		0–20°C - 1									`					(Dec-F	eb))	
veather for best/diseases	Brown Rust (Puccinia tritici			0–25°C - I				•		•			,							
	Loose smut (Ustilago tritic		Temp: 13	8–24°C - I ice	Hígh soil	and air n	noisture	during f	lowerin	g - Infe	cted see	d is maj	or sourc	e Infecti	ion at fl	owering	stage;	sympton	ns appea	r at e a

Crop-weather calendar of Mustard (Brassica spp.)

			rop-v	<u>veat</u>	ner (care	<u>llual</u>	01	<u> 1V1 U.</u>	<u>star</u>	u (D	rusi	<u>sicu</u>	Spp.	<u>.)</u>					
	Crop-	Musta	rd						Г	Ourati	ion –	12	25-13	0 (Day	vs)					
CIP 4"	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)		Vegetative (25-30 days)				vering 0 days)			d devel (25-30 d		,		Matu (15-30			200	B. C.		
Phenophase wise weather for better yield	Sowing & emerg	gence	Vegetative growth			F	loweri	ing		;	Siliqua	forma	ation	S	eed dev	velopm	nent	Matu	ırity	
Tmax (⁰ c)	30–35°C		25–30°C				20–25°				18–24			20	–25°C			25–30°		
Tmin (°c)	18–22°C		12–16°C				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			Nii 2 r	nm		2	5 mm			Nii	

wise weather	Sowing & emergence	Vegetative growth	Flowering	Siliqua formation	Seed development	Maturity								
for better yield)	_	_	-								
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								
	Aphids	Tmay: 20, 25°C, PH: 70, 80	55–65% 50–60% 50–55% 45–50% 40–50% < 5 mm											
Congenial	(Lipaphis erysimi)	Tmax: 20–25°C - RH: 70–80% - Cloudy weather with light drizzle (Flowering to seed formation)												
weather for	White Rust	Tmin: 10, 15°C, DH: > 00%	Eroquant days/foo wat look	vas (Elawarina to nod formati	on)									
pest/diseases	(Albugo candida)	1111111. 10–13 C - KH. >90%	- Frequent dew/rog, wet leav	es (Flowering to pod formati	OII)									
	Downy Mildew	Cool, moist conditions - RH	>85% - Intermittent light rain	ns (Vegetative to early flower	ring)									
	Altomonio Dlight	Tmax: 20–25°C - RH: 70–80% - Cloudy weather with light drizzle (Flowering to seed formation) Tmin: 10–15°C - RH: >90% - Frequent dew/fog, wet leaves (Flowering to pod formation) Cool, moist conditions - RH >85% - Intermittent light rains (Vegetative to early flowering)												
	Alternaria Blight	<5 mm												

Crop-weather calendar of Maize (Zea Mays)

	Cro	p- Mai	ze (Kh	arif)							Du	ration	_	110-	120 (Da	ys)		
Clima 4i a	Month		Jur	1e				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	100					A PARTIES	AUG.	V	を表の				
Phenophase wise weather for better yield	Sowing to 6	emergenc	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			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%	%		70–75	5%	65–70%
RHe(%)	70–8	0%		65–	75%			60	0-70%			(50–709	%		55–65	5%	50–60%
Rainfall (mm)	40–60	mm		30–5	0 mm			20-	–40 mr	n		20	0–30 m	nm		15–25 1	mm	<10 mm (dry harvest)
Congenial weather for	Stem E (Chilo po																	
pest/diseases	Fall Arm (Spodoptera)	frugiperda)	nax: 28–	34°C R	:H: 70–	-80% Sı	udden s	showers	after d	ry spells	s (Emerg	gence to	cob for	rmation)			
	Turcicum L (Exserohilum		1 m	nax: 20–			•					•	uctive)					
	Downy N		Tn	nax: 22–2	28°C R	H >909	% Clou	dy, wet	spells	(Seedli	ng stage)						
	Stem E (Chilo pa		Tn	nax: 30–2	35°C R	:H: 70–	-80% F1	requent	light ra	ain (Ear	ly veget	ative to	tasselir	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			Jı	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
		AL PROPERTY OF THE PARTY OF THE				TOWN		N. O. W. S. W. S. W.	0	J.		The E	101	V						I
Phenophase wise weather for better yield	Sowing to emergence		K	Tasseling Silk formation Coo filling m												Physiol matu	_			
Tmax (°c)	28–32°C			30–35	5°C				30–35°	С			30–34	l°C			28–32°C		25–30)°C
Tmin (°c)	15–20°C			18-22	2°C				20-24°	С			20-24	l°C			18–22°C		16–20)°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	productiv	re)						
	Maydis Leaf Bli (Bipolaris maya	lis)	Warm ar																	
	Downy Milde	w	RH >909	% - Lov	v temp	<u>eratur</u> es	(18-22)	2°C) - F	Prolonge	d dew	(Young s	seedling s	tage)							

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

					Crop	o- Ch	ickpe	a (Tir	nely s	sown))	D	urat	ion -1	30-1	40 (D	ays)				
Climatic	Month		Novemb	er		Dece	mber			Januar	y			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
1 (01 11111	Tmax (⁰ 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 (°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
等数														e.		意味					
Phenophase wise weather for better yield	Sowing & emergence	Veg	getative G	Frowth		Flow	ering			Pod	Forma	ation			Pod F	Filling		Phys	iologic	al Mat	urity
Tmax (°c)	25–30°C		22–28°			20–2					0–25°C				20–2				25–3		
Tmin (⁰ c)	10–15°C		10–15°				12°C				3–12°C				8–1				10–1		
RHm(%)	80–90%		70–80%			60–					50-70%				55–				50–6		
RHe(%)	50–60%		45–55%	<u> </u>		40-					10–50%				35–				30–4		
Rainfall (mm)	20–30 mm/week	15	5–25 mm/	week	<10	mm/we need	ek (dry ded)	spell	<10		eek (too ses dise	o much ase)	rain			only li if need	_	Nil (d	ry wear harv		eal for
	Fusarium Wilt	Soil te	emperatu	re: 20–25°	C - Dry	soil , lo	w soil r	noisture	- Poor	draina	ge (Ea	rly veg	etative	to flov	vering	stage)					
Congenial weather for pest/diseases	Pod Borer (Helicoverpa armigera)	Tmax:	: 25–30°C	- Low to r	noderat	e rainfa	ll - RH:	40–60%	% - Briş	ght sun	ny day	s (Flow	vering	to pod	develo	pment	stage (60–110) DAS))	
	Grey Mould (Botrytis cinerea)	Tmin:	12–20°C	- RH: >90	% - Clo	udy, fog	ggy, driz	zzly we	ather -	Dense	canopy	(Flow	ering t	o pod i	filling s	stage)					

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

	Crop-	Potat	0						D	urati	on –	11	10-12	0 (Day	ys)					
Clima 4	Month	Oct	ober		No	vemb	er		Dece	mbei	<u>.</u>			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
Normal	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	Sowing & emer	· ·	Vogo	totivo	growth		1	loweri			Cilia	ua for	matic		Seed de	valory	mont		Matur	
for better yield	20–25°C	gence	vege	20–25°			1	18–22°			Siliq	18–22°		1 ,			inciit		20–25	
Tmax (°c) Tmin (°c)	10–15°C			12–16°				18–22° 10–14°				10–14°				<u>−25°C</u> −16°C			10–25	
RHm(%)	85–90%			80–90				85–959				80–90				5–85%			85–90	
RHe(%)	60–70%			60–70	%			65–759	%			60–70	%		55	5–65%			60–70	%
Rainfall (mm)	15–25 mm			10–20 r	nm			5–15 m	ım			5–10 m	nm		<5 mm	(dry pe	eriod		15–25 1	nm
Congenial	Late Bligh (Phytophthora inf		Tmax: 1	18–22°C	C - RH: >	90% - 0	Cloudy	, humid	l, and ra	iny we	ather (7	Γuber ir	nitiation	to bulk	king)					
weather for pest/diseases	Early Bligh (Alternaria sol				C - RH: 7						`			• •						
obbi dibetibeb	Aphids		Tmax: 2	20–28°C	C - RH: 7	0-85%	- Dry,	warm v	veather	with te	nder fo	liage (\	/egetati	ve to fl	owering)				
	White Grub Cutworms		Tmax: 2	25–30°C	C - Soil n	noisture	> field	capaci	ty - Clo	oudy, w	et cond	itions (Sowing	to eme	rgence)					

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	ee	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	50–70%	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-	85–90% 80–85% 75–80% 70–80% 65–75% 70–75% 65–70% 60–70% 55–65% 50–60% 5–6 hrs 6–7 hrs 6–7 hrs 7–8 hrs 8 hrs 30–50 mm 25–40 mm 20–30 mm 15–25 mm 5–10 mm										1	<5 mm need								
Congenial	Leaf Miner		Tma	x: 28–3	2°C R	65-70% 60-70% 55-65% 50-60% 45 6-7 hrs 6-7 hrs 7-8 hrs 8 hrs 8- 25 40 mm 20 30 mm 15 25 mm 5 10 mm < 5 1																	
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	85 (Day	s)
Cli4i	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 36 63 48 16 39 20 6.9 10.7 9.8 75.8 0.0 0.0 Seed Filling 28–32°C 18–22°C 50–60% 30–40% 9–10 <5 mm tive to flowering)		26.4	28.5	29.4
	RHm(%)	83	87	83	73	78	75	67	50	52	41	42				58	45
	RHe(%)	50	45	51	40	36	37	31	20	28	21	18				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				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>	A CHARLES												3			
Phenophase wise weather for better yield	Sowing to Emergence		Vegeta	tive Gr	owth	F	lowerin	ng & Peg	gging	Po	d Develop	ment		Seed Fi	Ma	turity	
Tmax (°c)	32–36°C		3-	4–38°C			30	–35°C			30–34°C			28–32	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%						-55%
RHe(%)	40–50%			5–45%)–50%			35–45%)					-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	l		<5 m	m	1	Nil
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 ear						
	Tikka Leaf S	pot	Tmax: 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	ed filling)		

Crop-weather calendar of Black Gram (Vigna mungo)

				Crop-	Black	Gram (Kharif)			Du	ration -	- 95-1	00 (Day	ys)
CII	Month		July			Aı	ıgust			Septen	ıber		0	ctober	
Climatic Normal	Std. week	29	30	31	32	33	34	35	36	37	38	39	40	41	42
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	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
	STATE OF THE PARTY								A Property	OF N			TAX A		2 4
製作是實施	经验证				The same of the sa	#2/20/20 TO		上海		V	T				-
	1. 化二十二				-	-	No.	Tree Section		77			17.3	Do	SON!
10000000000000000000000000000000000000	S ALICE AND A	2000	293	100	- W					A.			The Asset	1	
Section 1		The second	*	TIC	File	E TOP	-	STATE OF THE		$\geqslant \not\models$					
Phenophase			1	Vegetati	ve							S. Commission of the Commissio			
wise weather for better yield	Sowing to Em	nergence		Growt			Floweri	ng	Pod F	ormation	1	Seed Dev	elopment	Mat	turity
Tmax (°c)	28–32°	°C		30–34°	С		28–32°	С	26	−30°C		25–3	30°C	28-	32°C
Tmin (°c)	22–25°			22-26°			22–24°			–22°C			22°C		24°C
RHm(%)	85–909			80–85%			85–909			-85%		75–			-75%
RHe(%)	70–809	%		65–75%	6		70–809	%		-75 %			70%		-65%
SS (hr./day)	4–5			3–5			4–5			5–6		6-	_7	7	<u>-8</u>
Rainfall (mm)	40–60 m	nm	3	30–50 m	ım		20–30 n	nm	15–	-25 mm		10–20	0 mm	<10) mm
Congenial	Whitef	· ·	Tmax	x: 28–35	5°C RH:	60-70%	Dry spel	ls during rain	ny season (A	nv stage)					
weather for	(YMV vec						, i		<u> </u>						
pest/diseases									egetative to f						
	Cercospora L							,	Vegetative to	1 '	g)				
	Powdery M								lling to matu						
	Root Rot / Co	mar Kot	Satui	rated soi	1, poor (ıramage 1	emp: 28	-32°C (30W	ing to early g	growtn)					

Crop-weather calendar of Black Gram (Vigna mungo)

				Crop	- Bla	ck Gram	(Zaid)		Duratio	n – 75-80	(Days)									
Clima e 4	Month	Fe	ebruai	ry		M	arch				April	l								
Climatic Normal	Std. week	7	8	9	10	11	12	13	14	15	16	17	18							
	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							
	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							
	LA TON		Tank at						1000											
第八段等的			東地	The Land	95.30			149	Art Volk	State Of	127									
	143					4-3					n Seed Development Maturit									
10000000000000000000000000000000000000	is white the			130	70	TE S	(4) L			10	•									
Sept 1		ALC: N	关	The same		END TO	***	TA THE				30–34°C 34–38°C 20–22°C 22–26°C								
Phenophase wise weather for better yield	Sowing to Em	ergence	:	Vegetati Growt			Floweri	ng	Pod Fo	ormation	Seed I	Seed Development Maturity 30-34°C 34-38°C 20-22°C 22-26°C 50-60% 45-55%								
Tmax (°c)	32–36°	С		34–38°	С		32–36°	C	30-	-34°C	3	Seed Development Matur 30-34°C 34-38 20-22°C 22-26 50-60% 45-55 30-40% 25-35								
Tmin (°c)	20–24°	С		22–26°	С		22–25°	C	20-	-24°C	2	30–34°C 34–38°C 20–22°C 22–26°C								
RHm(%)	60–70%			55–65%			60–709			-65%			45–55%							
RHe(%)	40–50%	6			6		40–509	%	35-	-45 %	3	80–40%	25–35%							
SS (hr./day)	8–9			9–10			8–9		8	8–9		9–10	10–11							
Rainfall (mm)	10–20 m	nm		5–10 m	m		5–10 m	m	5–1											
Congenial	Whitef	ly	Tma	x: 32–38	9–10 8–9 9–10 10–11															
weather for	Thrips & A	phids	Tma	x: 30–35	5°C RH	: 60–70%	Moist bu	t not rainy c	onditions (Ve	egetative to p	od formation	n)								
pest/diseases	YMV (Yellow Mosai	•	Spre	ad by wl	hitefly;	hot and dr	y conditi	ons High du	ring 30–38°C	Tmax & lo	w RH (Any s	stage)								
	Powdery M	lildew	Tma	x: 28–32	2°C RH	>70% Dry	y days fo	llowed by li	ght showers (Pod develop	ment to matu	ırity)								

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

				Dura	Duration – 70-75 (Days)										
	Month	Ju	ly	y Au					Septen				October		
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						了法	12.1	A TOWN	D. J.				点		
11 200						三 产生				A STA		EVA			
10 17 9				Control of the Contro									O.A.		
						The Marie Town									
Phenophase wise weather for better yield	wise weather Sowing to Emergence			Vegetati Growt		Flowering			Pod F	Pod Formation			Seed Filling		
Tmax (°c)	28–32°	°C		30–34°	С		28–32°	C	26	−30°C		26–30°	°C	3	0–34°C
Tmin (°c)	22–25°	°C		22–26°	С		22–24°	C	20	−22°C		20–22°	°C	2	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-		10–20 mm			<10 mm	
Congenial weather for	Whitefly (vector		Tma	x: 30–35	5°C RH	: 60–70%	Dry brea	ks during m	onsoon (Any	stage)					
pest/diseases	Thrips & A	phids	Tma	x: 28–32	2°C RH	: 65–75%	Cloudy,	humid weath	ner (Vegetati	ve to flow	rering)				
	Powdery M	Iildew	Tma	x: 25–30)°C RH	>70% Dry	y days +	high humidi	ty (Pod deve	lopment to	o maturity)				
	Cercospora L	eaf Spot							getative to po						
	Root R	ot	Poor	ly draine	ed soils	High rainf	fall + hig	h temp $(28-$	32°C) (Sowi	ng to early	y growth)				

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

	Crop- Greem	Gram (Z	Zaid)	id) Duration – 65-70 (Days)												
Climatia	Month	Month Fel				M	larch		April							
Climatic Normal	Std. week	11	12	13	14	15	16	17	18	19	20					
Normai	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					
		1000														
Phenophase wise weather for better yield	Sowing to Em	ergence	Ve	getative G	rowth	Flowe	ering	Pod Formation	Seed 1	Filling	Maturity					
Tmax (°c)	32–36°	С		34–38°C		32–3	6°C	30–34°C	28–2	32°C	34–38°C					
Tmin (°c)	20–24°	C		22–26°C	2	22–2	4°C	20–22°C	18–2	22°C	22–26°C					
RHm(%)	55–65%	6		50-60%)	55–6	55%	50-60%	45–	55%	40–50%					
RHe(%)	35–45%	6		30–40%)	35–4	-5%	30–40%	25–	35%	20–30%					
SS (hr./day)	8–9			9–10		8–9		9–10	9–10		10–11					
Rainfall (mm)	5–15 mm (mostl crop)	y irrigated		5–10 mm	n	5–10 mm			<5 mm <5 mr		Nil					
Congenial weather for	Whitefly (YM)	Tmax	Tmax: 32–38°C RH: 40–60% Dry, warm conditions (Any stage)													
pest/diseases	Thrips & A		Tmax: 30–35°C RH: 55–65% Cloudy + humid weather after irrigation (Vegetative to flowering)													
Post diseases	Powdery M						•	rmation to matu								
	Cercospora L		RH >65% Warm, humid spells (especially under irrigation) (Vegetative to pod development)													
	Root R	Root Rot			Soil temp: >30°C Poor drainage or excess irrigation (Early stages)											

Crop weather calendar of Cocome (Cocome indicare I)

		<u>Cr</u>	op-v	<u>weat</u>	<u>her (</u>	<u>caler</u>	<u>ıdar</u>	of Ses	<u>ame (</u>	<u>Sesa</u>	ımuı	<u>m indi</u>	<u>cum</u>	<u>L.)</u>			
		Cro	p- Se	same (Till)			Du	ıration –	. 9	0-100	(Days)					
C714 .4	Month					July			August						October		
Climatic Normal	Std. week	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
	Tmax (⁰ 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 f better yie	or Sowi	ing to		Veg	etative	Growt	h	F	owering			Capsule F	ormatio	n	Seed M	laturity	
Tmax (°		35°C		32–38°C				30–34°C			28–32°C				28–32°C		
Tmin (°c	c) 22–2	26°C			24–28	3°C		24–26°C				22–24°C			20–24°C		
RHm(%	70–	80%		65–75%				70–80%			65–75%				60–70%		
RHe(%	60–	60–70%		55–65%				60–70%			55–65%				50-60%		
SS (hr./da	ay) 6-	7-9			6–7			7–8				8–9					
Rainfall (n	nm) 30–4	0 mm		25–35 mm				15–25 mm				10–15	5 mm		<10 mm		
Congenial weather for		: & Cap	J					ntermitten					ge)				
pest/diseas		l Fly	7	Γmax: 2	8–32°C	RH > 7	5% Mo	ist condition	ns (Veget	ative to	flower	ring)					

Tmax: 28–32°C RH >75% Moist conditions (Vegetative to flowering) Gall Fly Phyllody Spread by leafhopper under warm and dry conditions (Any stage (appears at flowering)) (Mycoplasma) Alternaria Leaf Spot RH >80% Prolonged leaf wetness Temp: 25–30°C (Vegetative to flowering) **Bacterial Blight** RH >85% Rain splashes + wounds (Pod development) Leaf Roller & Capsule Tmax: 30–35°C RH: 60–70% Intermittent rainfall (Flowering to capsule stage) Borer