



ગ્રામીણ કૃષિ મૌસમ સેવા

હવામાન આગાહી આધારીત કૃષિસલાહ બુલેટીન
ઉત્તર સૌરાષ્ટ્ર ખેત આબોહવાકીય વિભાગ
તા.૨૦-૧૧-૨૦૧૯ થી તા.૨૪-૧૧-૨૦૧૯



(ગ્રામીણ કૃષિ મૌસમ સેવા, સૂકી ખેતી સંશોધન કેન્દ્ર, જી.કૃ.યુ., તરઘડિયા અને ભારત મૌસમ વિભાગ દ્વારા સંપન્ન)

કૃષિહવામાન બુલેટીન નં. ૬૭/૨૦૧૯

પાછલા અઠવાડિયાનું રાજકોટનું હવામાન

હવામાન પરિબલો	
વરસાદ(મી.મી)	0.0
મહત્તમ તાપમાન (સે.ગ્રે)	30.0-33.1
લઘુત્તમ તાપમાન (સે.ગ્રે)	16.2-18.5
ભેજ(%) સવાર	73-83
ભેજ(%) બપોરબાદ	48-64
પવનની ગતિ (કિમી/કલાક)	2.1-4.7

હવામાન આગાહી: પત્રક-૬

ઉત્તરસૌરાષ્ટ્ર ખેત આબોહવાકીય વિભાગ-હવામાન આગાહી

તા.૨૦-૧૧-૨૦૧૯ થી ૨૪-૧૧-૨૦૧૯

કૃષિ સલાહ:

સામાન્ય	<p>➤ ભારત સરકારશ્રીના હવામાન ખાતા તરફથી મળેલ હવામાન માહિતી અનુસાર અત્રેના ગ્રામીણકૃષિ મૌસમ સેવા વિભાગ, જુનાગઢ કૃષિ યુનિવર્સિટી, તરઘડિયા તરફથી જણાવવામાં આવે છે કે, ઉત્તર સૌરાષ્ટ્ર ખેત આબોહવાકીય વિસ્તારના પશ્ચિમ રાજકોટ: જીલ્લામાં આગામી તા.૨૦-૧૧-૨૦૧૯ થી તા.૨૪-૧૧-૨૦૧૯ દરમિયાન હવામાન હુંફાળું, ભેજવાળું અને વાદળછાયું રહેશે. પવનની દિશા ઈશાનની રહેવાની અને પવનની ઝડપ ૭ થી ૧૧ કીમી/કલાક રહેવાની શક્યતા છે. આ સમય ગાળામાં મહત્તમ તાપમાન દિવસ દરમિયાન ૩૨-૩૪ ડીગ્રી સેલ્શિયસ જેટલું તેમજ લઘુત્તમ તાપમાન રાત્રી દરમિયાન ૧૬-૧૮ ડીગ્રી સેલ્શિયસ જેટલું રહેવાની સંભાવના છે.</p>					
તારીખ	દિવસ-૧	દિવસ-૨	દિવસ-૩	દિવસ-૪	દિવસ-૫	
પેરામીટર	૨૦-૧૧-૧૯	૨૧-૧૧-૧૯	૨૨-૧૧-૧૯	૨૩-૧૧-૧૯	૨૪-૧૧-૧૯	
વરસાદ(મી.મી)	0	0	0	0	0	
મહત્તમતાપમાન (સે.ગ્રે)	32	32	33	34	33	
લઘુત્તમતાપમાન (સે.ગ્રે)	16	17	18	18	18	
વાદળનીસ્થિતિ(ઓકટા)	8	5	1	7	7	
મહત્તમભેજ(%) સવાર	50	46	50	52	50	
લઘુત્તમભેજ (%) બપોરબાદ	28	27	25	30	31	

પવનનીગતિ(કિમી/કલાક)	7	9	10	11	10
પવનનીદિશા(ડીગ્રી)	35	42	39	39	34

મોરબી : જીલ્લામાં આગામી તા.૨૦-૧૧-૨૦૧૯ થી તા.૨૪-૧૧-૨૦૧૯ દરમ્યાન હવામાન હુંફાળું, ભેજવાળું અને વાદળછાયું રહેશે. પવનની દિશા ઈશાન અને પૂર્વની રહેવાની અને પવનની ઝડપ ૪ થી ૯ કીમી/કલાક રહેવાની શક્યતા છે. આ સમય ગાળામાં મહત્તમ તાપમાન દિવસ દરમ્યાન ૩૨-૩૪ ડીગ્રી સેલ્શીયસ જેટલું તેમજ લઘુત્તમ તાપમાન રાત્રી દરમ્યાન ૧૬-૧૮ ડીગ્રી સેલ્શીયસ જેટલું રહેવાની સંભાવના છે.

તારીખ	દિવસ-૧	દિવસ-૨	દિવસ-૩	દિવસ-૪	દિવસ-૫
પેરામીટર	૨૦-૧૧-૧૯	૨૧-૧૧-૧૯	૨૨-૧૧-૧૯	૨૩-૧૧-૧૯	૨૪-૧૧-૧૯
વરસાદ(મી.મી)	0	0	0	0	0
મહત્તમતાપમાન (સે.ગ્રે)	32	32	33	34	33
લઘુત્તમતાપમાન (સે.ગ્રે)	16	17	18	18	18
વાદળનીસ્થિતિ(ઓકટા)	7	7	1	5	8
મહત્તમભેજ(%) સવાર	47	55	54	53	51
લઘુત્તમભેજ (%) બપોરબાદ	27	31	32	33	33
પવનનીગતિ(કિમી/કલાક)	4	9	8	6	9
પવનનીદિશા(ડીગ્રી)	61	92	101	84	95

જામનગર: જીલ્લામાં આગામી તા.૨૦-૧૧-૨૦૧૯ થી તા.૨૪-૧૧-૨૦૧૯ દરમ્યાન હવામાન હુંફાળું, ભેજવાળું અને વાદળછાયું રહેશે. પવનની દિશા ઉત્તર અને ઈશાનની રહેવાની અને પવનની ઝડપ ૧૦ થી ૧૭ કીમી/કલાક રહેવાની શક્યતા છે. આ સમય ગાળામાં મહત્તમ તાપમાન દિવસ દરમ્યાન ૩૩-૩૪ ડીગ્રી સેલ્શીયસ જેટલું તેમજ લઘુત્તમ તાપમાન રાત્રી દરમ્યાન ૧૯-૨૦ ડીગ્રી સેલ્શીયસ જેટલું રહેવાની સંભાવના છે.

તારીખ	દિવસ-૧	દિવસ-૨	દિવસ-૩	દિવસ-૪	દિવસ-૫
પેરામીટર	૨૦-૧૧-૧૯	૨૧-૧૧-૧૯	૨૨-૧૧-૧૯	૨૩-૧૧-૧૯	૨૪-૧૧-૧૯
વરસાદ(મી.મી)	0	0	0	0	0
મહત્તમતાપમાન (સે.ગ્રે)	33	33	34	34	34
લઘુત્તમતાપમાન (સે.ગ્રે)	19	19	20	20	20
વાદળનીસ્થિતિ(ઓકટા)	8	5	1	7	6
મહત્તમભેજ(%) સવાર	53	56	58	58	57
લઘુત્તમભેજ (%) બપોરબાદ	35	36	35	39	43
પવનનીગતિ(કિમી/કલાક)	10	11	13	15	17
પવનનીદિશા(ડીગ્રી)	57	42	22	33	34

દેવભૂમિ દ્વારકા: જીલ્લામાં આગામી તા.૨૦-૧૧-૨૦૧૯ થી તા.૨૪-૧૧-૨૦૧૯ દરમ્યાન હવામાન હુંફાળું, ભેજવાળું અને વાદળછાયું રહેશે. પવનની દિશા ઈશાન અને ઉત્તરની રહેવાની અને પવનની ઝડપ ૧૧ થી ૧૬ કીમી/કલાક રહેવાની શક્યતા છે. આ સમય ગાળામાં મહત્તમ તાપમાન દિવસ દરમ્યાન ૩૧-૩૨

ડીગ્રી સેલ્શીયસ જેટલું તેમજ લઘુતમ તાપમાન રાત્રી દરમ્યાન ૨૧-૨૨ ડીગ્રી સેલ્શીયસ જેટલું રહેવાની સંભાવના છે.

તારીખ	દિવસ-૧	દિવસ-૨	દિવસ-૩	દિવસ-૪	દિવસ-૫
પેરામીટર	૨૦-૧૧-૧૯	૨૧-૧૧-૧૯	૨૨-૧૧-૧૯	૨૩-૧૧-૧૯	૨૪-૧૧-૧૯
વરસાદ(મી.મી)	0	0	0	0	0
મહત્તમતાપમાન (સે.ગ્રે)	31	31	32	32	32
લઘુતમતાપમાન (સે.ગ્રે)	21	21	22	22	22
વાદળનીસ્થિતિ(ઓકટા)	8	4	1	7	5
મહત્તમભેજ(%) સવાર	55	63	62	59	60
લઘુતમભેજ (%) બપોરબાદ	37	36	33	37	40
પવનનીગતિ(કિમી/કલાક)	11	11	12	14	16
પવનનીદિશા(ડીગ્રી)	25	43	22	31	30

અમરેલી: જીલ્લામાં આગામી તા.૨૦-૧૧-૨૦૧૯ થી તા.૨૪-૧૧-૨૦૧૯ દરમ્યાન હવામાન હુંફાળું, ભેજવાળું અને વાદળછાયું રહેશે. પવનની દિશા ઉતર, ઈશાન, નૈઋત્ય અને પૂર્વની રહેવાની અને પવનની ઝડપ ૮ થી ૧૧ કીમી/કલાક રહેની શક્યતા છે. આ સમય ગાળામાં મહત્તમ તાપમાન દિવસ દરમ્યાન ૩૧-૩૨ ડીગ્રી સેલ્શીયસ જેટલું તેમજ લઘુતમ તાપમાન રાત્રી દરમ્યાન ૧૮-૨૦ ડીગ્રી સેલ્શીયસ જેટલું રહેવાની સંભાવના છે.

તારીખ	દિવસ-૧	દિવસ-૨	દિવસ-૩	દિવસ-૪	દિવસ-૫
પેરામીટર	૨૦-૧૧-૧૯	૨૧-૧૧-૧૯	૨૨-૧૧-૧૯	૨૩-૧૧-૧૯	૨૪-૧૧-૧૯
વરસાદ(મી.મી)	0	0	0	0	0
મહત્તમતાપમાન (સે.ગ્રે)	31	31	32	32	32
લઘુતમતાપમાન (સે.ગ્રે)	18	18	18	20	19
વાદળનીસ્થિતિ(ઓકટા)	7	7	1	6	6
મહત્તમભેજ(%) સવાર	53	50	52	56	56
લઘુતમભેજ(%) બપોરબાદ	30	31	32	38	37
પવનનીગતિ(કિમી/કલાક)	11	11	8	10	9
પવનનીદિશા(ડીગ્રી)	21	33	231	105	22


સુરેન્દ્રનગર: જીલ્લામાં આગામી તા.૨૦-૧૧-૨૦૧૯ થી તા.૨૪-૧૧-૨૦૧૯ દરમ્યાન હવામાન હુંફાળું, ભેજવાળું અને વાદળછાયું રહેશે. પવનની દિશા ઉતર અને ઈશાનની રહેવાની અને પવનની ઝડપ ૭ થી ૧૦ કીમી/કલાક રહેવાની શક્યતા છે. આ સમય ગાળામાં મહત્તમ તાપમાન દિવસ દરમ્યાન ૩૨-૩૪ ડીગ્રી સેલ્શીયસ જેટલું તેમજ લઘુતમ તાપમાન રાત્રી દરમ્યાન ૧૬-૧૮ ડીગ્રી સેલ્શીયસ જેટલું રહેવાની સંભાવના છે.

તારીખ	દિવસ-૧	દિવસ-૨	દિવસ-૩	દિવસ-૪	દિવસ-૫
પેરામીટર	૨૦-૧૧-૧૯	૨૧-૧૧-૧૯	૨૨-૧૧-૧૯	૨૩-૧૧-૧૯	૨૪-૧૧-૧૯
વરસાદ(મી.મી)	0	0	0	0	0

મહત્તમતાપમાન (સે.ગ્રે)	32	32	33	34	33
લઘુત્તમતાપમાન (સે.ગ્રે)	16	17	18	18	18
વાદળનીસ્થિતિ(ઓકટા)	8	5	1	7	7
મહત્તમભેજ(%) સવાર	48	46	53	53	51
લઘુત્તમભેજ(%) બપોરબાદ	30	28	31	35	34
પવનનીગતિ(કિમી/કલાક)	7	9	10	9	10
પવનનીદિશા(ડીગ્રી)	21	43	42	46	40






➤ ૨૦ થી ૨૪-નવેમ્બર-૨૦૧૯ હવામાન હુંફાળું, ભેજવાળું અને વાદળછાયું રહશે. પવનની દિશા ઉત્તર અને ઈશાનની મોટાભાગે રહેવાની અને પવનની ઝડપ ૪ થી ૧૭ કીમી/કલાક રહેવાની શક્યતા છે. આ સમયગાળામાં મહત્તમ તાપમાન દિવસ દરમિયાન ૩૧-૩૪ ડીગ્રી સેલ્સીયસ જેટલું તેમજ લઘુત્તમ તાપમાન રાત્રી દરમિયાન ૧૬-૨૦ ડીગ્રી સેલ્સીયસ જેટલું રહેવાની સંભાવના છે.


- હાલ ચોમાસું પાકોની કાપણી થય ગયેલ હોય તો તે જમીનમાં શિયાળુ પાકો જેવા કે ચણા, ઘઉં, જીરું, ધાણાના પાકનું પસંદગી મુજબ વાવેતર કરવું.
- હાલ પિયતની સગવડવાળા વિસ્તારમાં શિયાળુ પાકોનું વાવેતર ચાલુ હોય ખેડૂતભાઈઓને ખાસ જણાવવાનું કે દરેક પાકના બીજને થાયરમ અથવા મેન્કોઝેબ અથવા કર્બેન્ડાઝીમ માંથી કોઈ પણ એક દવાનો ૨-૩ ગ્રામ દવા પ્રતિ ૧ કી.ગ્રા. બીજ મુજબ પટ આપવો. તેમજ અસરકારક નિદામણ નિયંત્રણ માટે ચણા, જીરું અને ધાણાના પાકમાં, પાક અને નીંદણના સ્કુરણ પહેલા પેન્ડીમેથાલીન (સ્ટોમ્પ ૩૦ ઈ.સી.) ૬૦ મિલી ૧૦ લીટર પાણીમાં મિશ્ર કરી છાંટવી , ઘઉંના પાકમાં પેન્ડીમેથાલીન (સ્ટોમ્પ ૩૦ ઈ.સી.) ૩૦ મિલી ૧૦ લીટર પાણીમાં મિશ્ર કરી છાંટવી, લસણ અને ડુંગળીના પાકમાં ઓક્સીફલુઓરફેન (૨૩.૫ ઈ.સી.) ૨૦ મિલી ૧૦ લીટર પાણીમાં મિશ્ર કરી છાંટવી અને ઈસબગુલના પાકમાં આઈસોપ્રોટ્યુરોન (કનક ૫૦ ઈ.સી.) ૨૦ ગ્રામ ૧૦ લીટર પાણીમાં મિશ્ર કરી છાંટવી જેથી નિંદામણનો મજૂરી ખર્ચ બચાવી શકાય અને પાક નિંદણ મુક્ત રાખી શકાય .
- બિનપિયત વિસ્તારમાં માવહું થયેલ હોય ત્યાં સારી ભેજ સંગ્રહ ધરાવતી જમીનમાં ચારાની જુવાર અને બિનપિયત ચણા ગુજરાત-૨ નું વાવેતર કરી શકાય.

મુખ્ય પાક	પાક અવસ્થા	રોગ/જીવાત/જાત	કૃષિ સલાહ (૧૦ લીટરપાણીમાં મિશ્ર કરી ભલામણ કરેલ દવા છાંટવી)
લસણ	વાવેતર/ 	ગુજરાત લસણ-૫, યમુના સફેદ-૩ (જી-૨૮૨) અથવા સ્થાનિક જાત	લસણનું વાવેતર પૂર્ણ કરવું. પાયામાં ૧૦૯ કી.ગ્રા. ડી.એ.પી., ૬૬ કી.ગ્રા. યુરીયા , ૮૩ કી.ગ્રા. મ્યુરેટ ઓફ પોટાશ અને ૨૫૦ કી.ગ્રા. એરંડીનો ખોળ પ્રતિ હેક્ટર મુજબ આપી વાવણી કરવી.
ચણા	વાવેતર/ઊગાવો	ગુજરાત ચણા-૨, ગુજરાત જુનાગઢ ચણા-૩	પાયામાં ૨૦ કી.ગ્રા. નાઈટ્રોજન, ૪૦ કી.ગ્રા. ફોસ્ફોરસ, પ્રતિ હેક્ટર મુજબ આપી ચણાની વાવણી કરવી.ચણાના પાક માટે બીચારણનો જથ્થો ૬૦ થી ૭૫ કી.ગ્રા./ હે. રાખવો. વાવેતર સમયે ૨ થી ૨.૫ ગ્રામ /કી.ગ્રા. બીજને કેપ્ટન અથવા થાઈરમનો પટ આપવો અને પાયામા

			<p>રાસાયણિક ખાતર ૮૭ કી.ગ્રા. ડી.એ.પી. અને ૧૦ કી.ગ્રા. યુરીયા/હે. આપવું.</p> <p>વાવેતર વખતે ચણાના બીજને ૨૫૦ ગ્રામ રાઈઝોબીયમ અને ફોસ્ફેટ કલ્ચરનો પ્રતિ ૧૦ કી.ગ્રા. મુજબ પટ આપવો</p>
ધાણા	વાવેતર	ગુજરાત ધાણા-૨	<p>પાયામાં ૨૨ કી.ગ્રા. ડી.એ.પી. અને ૧૩ કી.ગ્રા. યુરીયા પ્રતિ હેક્ટર મુજબ આપી ધાણાની વાવણી કરવી.</p> <p>વાવેતર વખતે ધાણાના બીજને થાયરમ ૨ ગ્રામ પ્રતિ ૧ કી.ગ્રા. મુજબ પટ આપવો.</p>
જીરું	વાવેતર	ગુજરાત જીરું-૪	<p>પાયામાં ૩૩ કી.ગ્રા. ડીએપી પ્રતિ હેક્ટર મુજબ આપી જીરૂની વાવણી કરવી.</p> <p>વાવેતર વખતે જીરૂના બીજને થાયરમ ૨ ગ્રામ પ્રતિ ૧ કી.ગ્રા. મુજબ પટ આપવો.</p>
ઘઉં	વાવેતર	લોક-૧, જી.ડબ્લ્યુ-૪૯૬	<p>ઘઉંના પાક માટે બીયારણનો જથ્થો ૧૦૦ થી ૧૨૫ કી.ગ્રા.પ્રતિ હેક્ટર રાખવો.પાયામાં ૧૩૦ કી.ગ્રા. ડીએપી, ૮૦ કી.ગ્રા. યુરીયા અને ૨૫ કી.ગ્રા. ઝીંક સલ્ફેટ પ્રતિ હેક્ટર મુજબ આપી ઘઉંની વાવણી કરવી. જ્યાં ઉધયનો ઉપદ્રવ રહેતો હોય ત્યાં ક્લોરપાયરીફોસ ૨૦ ટકા એ.સી. ૫ લીટર દવા પ્રથમ પિયત પાણી સાથે આપવી.</p>
રાયડી	વાવેતર	રાય વરુણા, ગુજરાત -૩ અને ૪	<p>પાયામાં ૩૦ કી.ગ્રા. નાઈટ્રોજન, ૩૦ કી.ગ્રા. ફોસ્ફોરસ, પ્રતિ હેક્ટર મુજબ આપી રાયડાની વાવણી કરવી.</p>
કપાસ	ફૂલ /જીન્ડવા	<p>તડતડીયા અને સફેદ માખી</p> <p>પાનના ટપકા</p> <p>ગુલાબી ઈયળ</p>	<ul style="list-style-type: none"> ➤ કપાસમાં તડતડીયા અને સફેદ માખીના નિયંત્રણ માટે લીંબોળીનું તેલ ૫૦ મિલિ અથવા લીંબોળીના મીંજનું ૫ ટકા અર્કનું દ્રાવણ ૫૦૦ મીલી અને ડાયફેન્થાયુરોન ૫૦ ટકા વે.પા. ટકા ૧૬ ગ્રામ પ્રતિ ૧૦ લીટર પાણીમાં નાખીને છંટકાવ કરવો. ➤ કપાસમાં યુરીયા અને એમોનિયમ સલ્ફેટ અને મ્યુરેટ ઓફ પોટાશ દરેક ૩૦ કી.ગ્રા./હે. પુરતી ખાતર તરીકે આપવું. ➤ કપાસમાં સતત વરસાદી હવામાને કારણે પાન ટપકા રોગનો ઉપદ્રવ વધે નહિ તે માટે મેન્કોઝેબ ૨૭ ગ્રામ અથવા હેક્ઝાકોનાઝોલ ૧૫ મિલી પ્રતિ ૧૦ લીટર પાણીમાં નાખીને છંટકાવ કરવો. ➤ કપાસમાં ગુલાબી ઈયળના નર કુદાને એકત્રીત કરવા માટે હેક્ટરે ૪૦ ની સંખ્યામાં ફેરોમેન ટ્રેપ ગોઠવવાથી ઈયળોનું શરૂઆતની અવસ્થાથી જ નિયંત્રણ કરી શકાય. કપાસમાં ગુલાબી ઈયળથી નુકશાન પામેલ ફૂલ અને યાપવા તોડીને જમીનમાં દાટી દેવા. વધુ નુકશાન હોય તો પ્રોફેનોફોસ ૫૦%

			ઇ.સી. ૨૦ મી.લી. અથવા સાયપરમેથ્રીન ૧૦ મિલી બીવેરીયા બાસીઆના ફૂગનો પાઉડર ૪૦ ગ્રામ ૧૦ લીટર પાણીમાં મિશ્ર કરી છંટકાવ કરવો.
દિવેલા	વૃદ્ધિ/કુલ	લીલી પોપટી, સફેદ માખી ઘોડિયા અને લશ્કરી	<ul style="list-style-type: none"> ➤ સફેદ માખી અને લીલી પોપટીનો વધુ ઉપદ્રવ જોવા મળે છે. જેના નિયંત્રણ માટે એસીટામાપ્રીડ ૨૦ ટકા ૫ ગ્રામ અને ઈમીડાકલોપ્રીડ ૩૦.૫ % ૩ મિલી સાથે લીંબોળીનું તેલ ૫૦ મીલી અથવા લીંબોળીના મીંજનું ૫ ટકા અર્કનું દ્રાવણ ૫૦૦ મીલી/૧૦ લિટર પાણીમાં મિશ્ર કરી છંટકાવ કરવો. ➤ ઘોડિયા અને લશ્કરી ઈયળના નિયંત્રણ માટે ક્લોરોપાયરીફોસ ૨૫ મિલી/૧૦ લીટર પાણીમાં મિશ્ર કરી છંટવી.
ચોમાસું ડુંગળી	દડાનો વિકાસ	પાનનો સુકારો	<ul style="list-style-type: none"> ➤ ચોમાસુ ડુંગળીના પાકમાં પાનનાં સુકારાના નિયંત્રણ માટે મેન્કોઝેબ ૪૦ ગ્રામ અથવા હેક્ઝાકોનાઝોલ ૨૦ મિલી ૧ પમ્પમાં નાખીને ૧૦ દિવસના અંતરે ૩ છંટકાવ કરવા. ➤ નાઈટ્રોજન યુક્ત એમોનિયમ સલ્ફેટ ખાતરનો પુરતી ડોઝ ૩૦ કીલો ગ્રામ પ્રતિ હે. આપવો.
તુવેર	ફૂલ	-	ફૂલ અવસ્થાએ પિયત આપવું.
વટાણા ગાજર	વાવેતર	શાકભાજી માટે વટાણાની પુસા પ્રગતિ અને ગાજરની પુસા રુધીરા અને પુસા કેસર જાતો પસંદ કરવી.	
કોબી અને ફલાવર	વૃદ્ધિ/દડા	હિરાફૂદુ	કોબી અને ફલાવરમાં હિરાફૂદાના નિયંત્રણ માટે સ્પીનોસાઇ ૩ મિલી/૧૦ લીટર પાણીમાં મિશ્ર કરી છંટકાવ કરવો.
ભીંડા	ફૂલ/ફળ	તડતડીયા અને સફેદ માખી શીગ કોરી ખાનાર ઈયળ પાન કથીરી	<ul style="list-style-type: none"> ➤ ભીંડામાં તડતડીયા અને સફેદ માખીના નિયંત્રણ માટે લીંબોળીનું તેલ ૫૦ મિલિ અથવા લીંબોળીના મીંજનું ૫ ટકા અર્કનું દ્રાવણ ૫૦૦ મીલી અને ડાયકેન્યાયુરોન ૫૦ ટકા વે.પા. ટકા ૧૬ ગ્રામ અથવા દ્રાયઝોફોસ ૪૦ ઈસી ૨૫ મિ.લી. દવાને ૧૦ લીટર પાણીમાં મિશ્ર કરીને છંટકાવ કરવો. ➤ તેના ફળ અને ડોકા કોરી ખાનાર ઈયળનો ઉપદ્રવ વધુ હોય તો સ્પીનોસાઇ ૩ મિલી /૧૦ લીટર પાણીમાં ઓગાળી છંટકાવ કરવો. ➤ જો પાનકથીરીનો ઉપદ્રવ હોય તો ઇથીઓન ૩૦ મિલી પ્રતિ પંપ છંટકાવ કરવો. <p>ભીંડાની વીણી બાદ પ્રતિ એકરે ૫-૭ કી.ગ્રા. યુરિઆ ખાતર આપવું.</p>
રીંગણી અને ટમેટી	ફૂલ/ફળ	તડતડીયા અને સફેદ માખી	<ul style="list-style-type: none"> ➤ તડતડીયા અને સફેદ માખીના નિયંત્રણ માટે લીંબોળીનું તેલ ૫૦ મિલિ અથવા લીંબોળીના મીંજનું ૫ ટકા અર્કનું દ્રાવણ ૫૦૦ મીલી અને ડાયકેન્યાયુરોન ૫૦ ટકા વે.પા. ૧૬ ગ્રામ

		<p>ડુંખ અને→ ફળ કોરી ખાનાર ઈયળ</p> <p>પાન કથીરી</p>	<p>અથવા ટ્રાયઝોફોસ ૪૦ ઈસી ૨૫ મિ.લી. દવાને ૧૦ લીટર પાણીમાં મિશ્ર કરીને છંટકાવ કરવો.</p> <p>➤ ફળ અને ડોકાની ઈયળોનો ઉપદ્રવ હોય તો નુકશાન પામેલ ફળ અને ડોકા તોડીને જમીનમાં દાંટી દેવા અને ક્લોરોનટ્રાનીલીપ્રોલ ૧૮.૫ એસ.સી (રીનાક્ષીપાયર) દવા ૩ મિલી અથવા ડીડીવીપી ૭૬ ઈસી મિલી ૧૦ લીટર પાણીમાં મિશ્ર કરીને છંટકાવ કરવો.</p> <p>➤ જો પાનકથીરીનો ઉપદ્રવ હોય તો પ્રોપરગાઈટ ૫૭ ઈ.સી. ૧૫ મિલી પ્રતિ પંપ છંટકાવ કરવો.</p>
મરચી	વૃદ્ધિ/કુલ/ફળ	<p>થ્રીપ્સ, સફેદ માખી</p>  <p>કાલવ્રણ →</p> 	<p>➤ પ્રોફેનોફોસ ૨૦ મીલી અને લીંબોળીનું તેલ ૫૦ મિલી અથવા લીંબોળીના મીંજનું ૫ ટકા અર્કનું દ્રાવણ ૫૦૦ મિલી ૧૦ લી. પાણીમાં મિશ્ર કરી છંટકાવ કરવો. થ્રીપ્સનો વધુ ઉપદ્રવ હોય તો સ્પીનોસાઈ અથવા સ્પીનેટોરમ દવા ૫ મિલી. પ્રતિ પંપ છાંટવી.</p> <p>➤ કાલવ્રણ રોગના નિયંત્રણ માટે મેન્કોઝેબ ૨૭ ગ્રામ અથવા ક્લોરોથેલોનીલ ૨૭ ગ્રામ અથવા ફોઝેટાઈલ ૨૦ ગ્રામના ૧૫ દિવસના અંતરે ત્રણ છંટકાવ કરવા.</p>
લીંબુ	ફળનો વિકાસ	<p>પાન કથીરી</p>   <p>સાયલા અને થ્રીપ્સ</p>	<p>લીંબુના બગીચામાં પાન કથીરીનો ઉપદ્રવ વધુ હોય તો તેના નિયંત્રણ માટે પ્રોપરગાઈટ દવા ૧૦ મિલી ૧૦ લીટર પાણીમાં મિશ્ર કરી છંટકાવ કરવો.</p> <p>તેના નિયંત્રણ માટે ઈમીડાક્લોપ્રીડ ૩૦.૫ ટકા ૫ મીલી અને લીંબોળીનું તેલ ૫૦ મીલી અથવા લીંબોળીના મીંજનું ૫ ટકા અર્કનું દ્રાવણ ૫૦૦ મીલી/૧૦ લિટર પાણીમાં મિશ્ર કરી છંટકાવ કરવો. વધુ ઉપદ્રવ હોય તો ટ્રાયઝોફોસ ૪૦ ટકા ૨૦/૧૦ લિટર પાણીમાં મિશ્ર કરી છંટકાવ કરવો.</p> 

		બદામી ટપકાં	બદામી ટપકાના નિયંત્રણ માટે કોપર ઓક્સીક્લોરાઈડ ૪૦ ગ્રામ અને ૧.૫ ગ્રામ સ્ટ્રેપ્ટોસાયક્લીનના બે છંટકાવ ૧૫ દિવસના ગળે કરવા.
		પાનકોરીયુ હસ્ત બહાર	પાનકોરીયુના નિયંત્રણ માટે ડીડીવીપી ૧૦ મી.લી. ૧૦ લિટર પાણીમાં મિશ્ર કરીને છાંટવી. લીંબુના પાકમાં ઉનાળામાં વધુ ફળ લેવા માટે વરસાદની ઋતુ પછી વાડીને ૧૦-થી-૧૫ સે.મી. ઊંડાઈ સુધી ગોડ કરી ઝીણી મૂળ ઝાળ કાપી નાખવી અને પાંદડા ખરવા માંડે પછી પુખ્ત ઝાડ દીઠ ૫૦ કી.ગ્રા. છાણીયું ખાતર, યુરિઆ ૩૦૦ ગ્રામ, એમોનિયમ સલ્ફેટ ૫૦૦ ગ્રામ, ડી.એ.પી. ૧.૫ કી.ગ્રા. અને મ્યુરેટ ઓફ પોટાશ ૩૦૦ ગ્રામ આપી પિયત આપવું.
પશુ/ મરઘા 			દુધાળા પશુના આઉને ઝીંક ઓક્સાઈડ અથવા બોરીક પાવડર થી બરાબર સાફ કરવું. તેમજ ઈતરડીના નિયંત્રણ માટે ડેલ્ટામેથ્રીન અથવા એમીટ્રાલ ૨ મી.લી. એક લીટર પાણીમાં નાખીને છાંટવી. પશુઓમાં ખરવા મોવાના રોગનું રસીકરણ કરાવવું. ઉછરતા પશુઓમાં કરમીયાની ગોળી આપવી. પશુને ૬ થી ૮ કી.ગ્રા. સુકો અને ૧૫ થી ૨૦ કી.ગ્રા. લીલો ચારો આપવો. ચોમાસા દરમ્યાન પશુઓના રહેઠાણની જગ્યાની વ્યવસ્થિત સફાઈ રાખવી અને માખીઓના ઉપદ્રવથી બચવા ફિનાઈલ છાંટવું. દુધાળા પશુઓને પ્રતિ લીટર દુધની ઊપજ હોય તેમને નિયમિત ૧ કી.ગ્રા. ફીડ + ૫૦ ગ્રામ ખનીજ તત્ત્વોનું મિશ્રણ આપવું.

જુકૃત્યુ/ટેકનિકલ ઓફિસર.(સુખે)/એગ્રોમેટ/બુલેટીન/ /૨૦૧૯
તરઘડિયા(રાજકોટ), તારીખ: ૧૯/૧૧/૨૦૧૯.

પ્રતિ,
તંત્રીશ્રી/ડાયરેક્ટરશ્રી,
રાજકોટ,

ઉપરોક્ત માહિતી આપના દૈનિક સમાચાર પત્રોમાં, રેડીયોમાં ગામના ચોરાના કાર્યક્રમમાં તથા ટીવીના ગ્રામ્ય કાર્યક્રમમાં વિના મૂલ્યે પ્રસિધ્ધ કરાવવા નમ્ર વિનંતી છે. સહકારની અપેક્ષા સહ આભાર.

ટેકનીકલ ઓફિસર
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Agro met Advisory Service bulletin No.67-for the Rajkot district

(Issued jointly by DFRS, J.A.U., Targhadia (Rajkot) and India Meteorological Department)

(Period 20 to 24-November- 2019)

Significant past weather for the preceding week of Rajkot

Rainfall (mm)	0.0
Maximum temperature (°C)	30.0-33.1
Minimum temperature (°C)	16.2-18.5
Relative Humidity (%) I	73-83
Relative Humidity (%) II	48-64
Wind speed (Kmph)	2.1-4.7

Weather forecast until 08-30 hrs.Of 24/11/2019

(1) RAJKOT DISTRICT:


	20/11/19	21/11/19	22/11/19	23/11/19	24/11/19
Rainfall (mm)	0	0	0	0	0
Max.Temp.(°C)	32	32	33	34	33
Min.Temp.(°C)	16	17	18	18	18
Total CC (octa)	8	5	1	7	7
RH-I (%)	50	46	50	52	50
RH-II (%)	28	27	25	30	31
Wind Speed (kmph)	7	9	10	11	10
Wind Direction(deg.)	35	42	39	39	34

Agro meteorological Advisories:





General Advice	<p>Rain fall: Warm, Humid and Generally cloudy to cloudy weather & No rainfall during 20 to 24-November forecasted.</p> <ul style="list-style-type: none"> • Temperature: Maximum and minimum temperature likely to be in range of 32-34°C and 16-18°C, respectively. • Relative Humidity: The RH-I and RH-II is likely to be in the range of 46-52% & 25-31, respectively. • Wind Direction and Speed: Direction and speed of wind is likely to be NE and 7-11 km/h, respectively. • Carry out sowing of rabi sorghum, garlic, chickpea and mustard, coriander and wheat where <i>kharif</i> crops harvested & irrigation facility available and also
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procure certified seeds for sowing in advance.

- For effective and economic weed control in cumin, chickpea and coriander make preemergence application of Pendimethalin 30 % EC @ 60 ml/10 liter of water and for wheat @ 30 ml/10 liter of water. For garlic use Oxyfluorfen 23.5 % EC @ 20 ml/ 10 liter of water as preemrgence and for Isabgol use Isoproturon 50 % WP @ 20 gm/10 litre of water as preemergence.
- Under rainfed condition where unseasonal rainfall occurred do sowing of fodder sorghum Gundari and chicke pea Jujarat Chana-2 under conserved soil moisture.

Crops	Stage	Insect/Pest/ Variety	Advisory
Garlic	Sowing/germination 	Gujarat Garlic-5, Yamuna Safed-3 (G-282) or Local	Carry out sowing of Garlic.Seed rate should be 500 to 700 bulb/ha and apply 109 kg DAP, 66 kg Urea, 83 kgMOP and 250 castor cake/ha fertilizer as basal dose.
Chick pea	Sowing/germination	Gujarat chana-2 (Unirrigated), Gujarat Junagadh chana-3 (irrigated)	Carry out sowing of Gram.Seed rate should be 60 to 75 kg/ha & seedshould be treated with fungicides captanorthiram 2 gm/kg of seeds and apply 87 kg DAP& 10 kg Urea/ha fertilizer at the time ofsowing. Before sowing, seed should be treated with Rhizobium culture and phosphorus solublesing bacteria
Cumin	Sowing	Gujarat cumin-4	Carry out sowing of cumin, If kharif crop is harvested. Seed must be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt.
Coriander	Sowing	Gujarat Coriander-1 , Gujarat Coriander-2	Carry out sowing of coriander&seed should be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt. Apply 22 kg DAP&13 kg Urea/haat the time of sowing.
Wheat	Sowing	Lok-1, GW-496	Carry out sowing of Wheat.Seed rate should be 100 to 125 kg/ha andapply 130 kg DAP,80 kg Ureaand 25 kg Zinc sulphatefertilizer/ha at the time of sowing.Application of Chlorpyriphos (20 EC) @ 5 litres per hectare with preirrigation is recommended before sowing in the fields having perennial problem of termite infestation.
Mustard	Sowing/germination	Varuna, Gujarat rai-3, 4	Carry out sowing of Mustard.Seed rate should be 15 to 20 kg/ha.

Cotton	Flowering-ball formation /development	Jassid&whitefly Pink ball worm	<ul style="list-style-type: none"> • Also spray Mencozeb75 % wp @ 27gm/10 litre of water for control alternaria&cercospora leaf spot in cotton. • For the monitoring of pink bollworm infestation in cotton crop farmers are advised to put pheromone traps 6-8/ha in early sown crop. If infestation found pick and burry the infested flowers/bolls in soil for control of pink bollworm infestation in cotton. Also make spray of profenofos 50 EC 20 ml or cypermethrin 10 ml in 10 liters of water. • Carry out picking in time.
Castor	Flowering/ capsule formation	Jassids& white fly→ Prodenia	<p>Spray Acetamiprid 20 % SP@ 5.0 gmORimidacloprid 30.5 % 3 ml with neem seed extract 500 ml or neem oil 40 mla / 10 lit of water ml/10 lit of water.</p> <p>For the control of prodenia spray Chlorpyriphos 25 ml in 10 liters of water.</p>
Pigeon pea	Flowering	-	Apply irrigation through drip system
Kharif Onion	Bulb development	Alternaria leaf spot/purple blotch	<p>For the control of purple blotch blight disease in kharif onion make 3 alternate spray of Mencozeb27 gm and thiophanate methyl 15 gm / 10 liter of water at 10 days interval.</p> <p>Apply supplementary dose of nitrogen (Urea 40 kg/ha) at 30 DAS under clear sky.</p>
Lady finger	Flowering/ fruiting	Jassids&white fly Shoot and fruit borer Mites	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid& white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthuron 50 %wp @ 16 gm / 10 lit of water. • For control of Shoot and fruit borer Sparyneem seed extract 500 ml or neem seed oil 50 ml in 10 litre of water at 15 days interval(4 spray).If pest population is high, spraying of Spinosad 48 EC @ 1 ml /4 litres of water is advised when sky remains clear. • Constant monitoring of lady finger crop against attack of mite is advised. If population is found more, then spraying of Ethion @ 1.5-2 ml/litre of water is advised when sky

			<p>remains clear.</p> <ul style="list-style-type: none"> After harvesting of mature okra application of urea @ 5-10 kg/ acre should be done.
Cluster bean	Growing/fruiting	Jassid/whitefly	<ul style="list-style-type: none"> Monitor the crop for infestation of jassid & white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.
Brinjal & Tomato	Flowering/fruiting	<p>Sucking pest →</p> <p>Shoot & Fruit borer</p>  <p>Mites</p>	<p>Monitor the crop for infestation of jassid & white fly in brinjal, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.</p> <p>In brinjal and tomato constant monitoring of borers by using pheromone traps 4-6 per acre is advised, If insect population is above ETL than spraying of chlorantraniliprole 18.5 % SC 3.0 ml or DDVP/10 litre of water is advised against fruit borer.</p> <p>If infestation is found, then make spraying of Propargite 57 % EC @ 10 ml/ 10litre of water for the control of Mites under clear sky.</p>
Chili	Flowering & fruiting	<p>Thrips →</p>  <p>Anthracnose →</p> 	<p>Under present weather conditions severe attack of thrips has been reported. Spray Profenofos 20 ml with 500 ml of 5 % neem seed extract or neem seed oil 50 ml in 10 litres of water. In case of heavy attack make spray of spinosad or spinetoram 3 ml per 10 liter of water.</p> <p>For the control of Anthracnose spray Mencozeb 27gm OR Chlorothalonil 27 gram OR Fosetyl 20 gm in 10 liters of water at 15 days interval.</p>
Lemon	Fruit development	<p>Psylla and thrips</p>  <p>Citrus canker</p>	<p>To prevent damage of psylla & thrips spray imidacloprid 30.5 % 5 ml / 10 lit of water ml/10 lit of water.</p> <p>Spray copper oxychloride 40 gm or streptocyclin 1.5 gm in 10 litre of water.</p>

		Leaf minor Hast Bahar	Spray Dichlorvos 10 ml or Quinalphos 20 ml in 10 litres of water for control of leafminor. For getting maximum fruit in summer, after last rainfall cultivate lemon orchard up to the depth of 10-15 cm for pruning of tiny small root and keep left until wilting & defoliation start, after that apply FYM @ 50 kg, Urea @ 300 gm, Ammonium sulphate @ 500 gm, DAP @ 1.5 kg & murate of potash 300 gm/tree.
Livestock & poultry 	Spray Deltamethrin or Amitraz 2 ml/litre of water for the control of tick and for prevention of foot & mouth disease in animals do vaccination with FMD vaccine. Provide 6-8 kg good quality dry roughage with 15-20 kg green fodder to the animals. Spray phenyl in the animal shed to avoid flies and mosquitoes. Keep animal shed hygienic and clean to avoid flies and mosquitoes. For milch animals, regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 liters of milk yield. Feed animals with a mixture of green grass + hay + minerals + dry feed.		

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Agro met Advisory Service bulletin No.-67 for the Morbi district

(Issued jointly by DFERS, J.A.U., Targhadia (Rajkot) and India Meteorological Department)

(Period 20 to 24-November- 2019)


Weather forecast until 08-30 hrs of 24/11/2019

(2) MORBI DISTRICT:





	20/11/19	21/11/19	22/11/19	23/11/19	24/11/19
Rainfall (mm)	0	0	0	0	0
Max. Temp.(°C)	32	32	33	34	33
Min. Temp.(°C)	16	17	18	18	18
Total CC (octa)	7	7	1	5	8
RH-I (%)	47	55	54	53	51
RH-II (%)	27	31	32	33	33
Wind Speed (kmph)	4	9	8	6	9
Wind Direction(deg.)	61	92	101	84	95


Agro meteorological Advisories:-

General Advice	<p>Rain fall: Warm, Humid and Generally cloudy to cloudy weather & No rainfall during 20 to 24-November forecasted.</p> <ul style="list-style-type: none"> • Temperature: Maximum and minimum temperature likely to be in range of 32-34°C and 16-18°C, respectively. • Relative Humidity: The RH-I and RH-II is likely to be in the range of 47-55% & 27-33, respectively. • Wind Direction and Speed: Direction and speed of wind is likely to be NE, E and 4-9 km/h, respectively. • Carry out sowing of rabi sorghum, garlic, chickpea and mustard, coriander and wheat where <i>kharif</i> crops harvested & irrigation facility available and also procure certified seeds for sowing in advance. • For effective and economic weed control in cumin, chickpea and coriander make preemergence application of Pendimethalin 30 % EC @ 60 ml/10 liter of water and for wheat @ 30 ml/10 liter of water. For garlic use Oxyfluorfen 23.5 % EC @ 20 ml/ 10 liter of water as preemrgence and for Isabgol use Isoproturon 50 % WP @ 20 gm/10 litre of water as preemergence. • Under rainfed condition where unseasonal rainfall occurred do sowing of fodder sorghum Gundari and chicke pea Jujarat Chana-2 under conserved soil
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	moisture.		
Crops	Stage	Insect/Pest/ Variety	Advisory
Garlic	Sowing/germination 	Gujarat Garlic-5, Yamuna Safed-3 (G-282) or Local	Carry out sowing of Garlic. Seed rate should be 500 to 700 bulb/ha and apply 109 kg DAP, 66 kg Urea, 83 kg MOP and 250 castor cake/ha fertilizer as basal dose.
Chick pea	Sowing/germination	Gujarat chana-2 (Unirrigated), Gujarat Junagadh chana-3 (irrigated)	Carry out sowing of Gram. Seed rate should be 60 to 75 kg/ha & seeds should be treated with fungicides captan or thiram 2 gm/kg of seeds and apply 87 kg DAP & 10 kg Urea/ha fertilizer at the time of sowing. Before sowing, seed should be treated with Rhizobium culture and phosphorus solubilizing bacteria
Cumin	Sowing	Gujarat cumin-4	Carry out sowing of cumin, If kharif crop is harvested. Seed must be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt.
Coriander	Sowing	Gujarat Coriander-1 , Gujarat Coriander-2	Carry out sowing of coriander & seed should be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt. Apply 22 kg DAP & 13 kg Urea/ha at the time of sowing.
Wheat	Sowing	Lok-1, GW-496	Carry out sowing of Wheat. Seed rate should be 100 to 125 kg/ha and apply 130 kg DAP, 80 kg Urea and 25 kg Zinc sulphate fertilizer/ha at the time of sowing. Application of Chlorpyrifos (20 EC) @ 5 litres per hectare with preirrigation is recommended before sowing in the fields having perennial problem of termite infestation.
Mustard	Sowing/germination	Varuna, Gujarat rai-3, 4	Carry out sowing of Mustard. Seed rate should be 15 to 20 kg/ha.
Cotton	Flowering-ball formation /development	Jassid & whitefly Pink ball worm	<ul style="list-style-type: none"> • Also spray Mencozeb 75 % wp @ 27 gm/10 litre of water for control alternaria & cercospora leaf spot in cotton. • For the monitoring of pink bollworm infestation in cotton crop farmers are advised to put pheromone traps 6-8/ha in early sown crop. If infestation found pick and bury the infested flowers/bolls in soil for control of pink bollworm infestation in cotton. Also make spray of profenofos 50 EC 20 ml or

			<p>cypermethrin 10 ml in 10 liters of water.</p> <ul style="list-style-type: none"> • Carry out picking in time.
Castor	Flowering/ capsule formation	Jassids& white fly→ Prodenia	<p>Spray Acetamiprid 20 % SP@ 5.0 gmORimidacloprid 30.5 % 3 ml with neem seed extract 500 ml or neem oil 40 mla / 10 lit of water ml/10 lit of water.</p> <p>For the control of prodenia spray Chlorpyriphos 25 ml in 10 liters of water.</p>
Pigeon pea	Flowering	-	Apply irrigation through drip system
Kharif Onion	Bulb development	Alternaria leaf spot/purple blotch	<p>For the control of purple blotch blight disease in kharif onion make 3 alternate spray of Mencozeb27 gm and thiophanate methyl 15 gm / 10 liter of water at 10 days interval.</p> <p>Apply supplementary dose of nitrogen (Urea 40 kg/ha) at 30 DASunder clear sky.</p>
Lady finger	Flowering/ fruiting	Jassids&white fly Shoot and fruit borer Mites	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid& white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthuiuron 50 %wp @ 16 gm / 10 lit of water. • For control of Shoot and fruit borer Sparyneem seed extract 500 ml or neem seed oil 50 ml in 10 litre of water at 15 days interval(4 spray).If pest population is high, spraying of Spinosad 48 EC @ 1 ml /4 litres of water is advised when sky remains clear. • Constant monitoring of lady finger crop against attack of mite is advised. If population is found more, then spraying of Ethion @ 1.5-2 ml/litre of water is advised when sky remains clear. • After harvesting of mature okra application of urea @ 5-10 kg/ acre should be

			done.
Cluster bean	Growing/fruiting	Jassid/whitefly	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid & white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.
Brinjal & Tomato	Flowering/fruiting	<p>Sucking pest →</p> <p>Shoot & Fruit borer</p>  <p>Mites</p>	<p>Monitor the crop for infestation of jassid & white fly in brinjal, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.</p> <p>In brinjal and tomato constant monitoring of borers by using pheromone traps 4-6 per acre is advised, If insect population is above ETL than spraying of chlorantraniliprole 18.5 % SC 3.0 ml or DDVP/10 litre of water is advised against fruit borer.</p> <p>If infestation is found, then make spraying of Propargite 57 % EC @ 10 ml/ 10litre of water for the control of Mites under clear sky.</p>
Chili	Flowering & fruiting	<p>Thrips →</p>  <p>Anthracnose →</p> 	<p>Under present weather conditions severe attack of thrips has been reported. Spray Profenofos 20 ml with 500 ml of 5 % neem seed extract or neem seed oil 50 ml in 10 litres of water. In case of heavy attack make spray of spinosad or spinetoram 3 ml per 10 liter of water.</p> <p>For the control of Anthracnose spray Mencozeb 27gm OR Chlorothalonil 27 gram OR Fosetyl 20 gm in 10 liters of water at 15 days interval.</p>
Lemon	Fruit development	<p>Psylla and thrips</p>  <p>Citrus canker</p> <p>Leaf minor</p> <p>Hast Bahar</p>	<p>To prevent damage of psylla & thrips spray imidacloprid 30.5 % 5 ml / 10 lit of water ml/10 lit of water.</p> <p>Spray copper oxychloride 40 gm or streptocyclin 1.5 gm in 10 litre of water.</p> <p>Spray Dichlorvos 10 ml or Quinalphos 20 ml in 10 litres of water for control of leaf minor.</p> <p>For getting maximum fruit in summer, after last rainfall cultivate lemon orchard up to the depth</p>

			<p>of 10-15 cm for pruning of tiny small root and keep left until wilting & defoliation start, after that apply FYM @ 50 kg, Urea @ 300 gm, Ammonium sulphate @ 500 gm, DAP @ 1.5 kg & murate of potash 300 gm/tree.</p>
<p>Livestock & poultry</p> 	<p>Spray Deltamethrin or Amitraz 2 ml/litre of water for the control of tick and for prevention of foot & mouth disease in animals do vaccination with FMD vaccine. Provide 6-8 kg good quality dry roughage with 15-20 kg green fodder to the animals. Spray phenyl in the animal shed to avoid flies and mosquitoes. Keep animal shed hygienic and clean to avoid flies and mosquitoes. For milch animals, regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 liters of milk yield. Feed animals with a mixture of green grass + hay + minerals + dry feed.</p>		

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Agro met Advisory Service bulletin No.-67 for the Jamnagar district

(Issued jointly by DFERS, J.A.U., Targhadia (Rajkot) and India Meteorological Department)

(Period 20 to 24-November- 2019)


Weather forecast until 08-30 hrs of 24/11/2019

(3) JAMNAGAR DISTRICT:





	20/11/19	21/11/19	22/11/19	23/11/19	24/11/19
Rainfall (mm)	0	0	0	0	0
Max. Temp.(°C)	33	33	34	34	34
Min. Temp.(°C)	19	19	20	20	20
Total CC (octa)	8	5	1	7	6
RH-I (%)	53	56	58	58	57
RH-II (%)	35	36	35	39	43
Wind Speed (kmph)	10	11	13	15	17
Wind Direction(deg.)	57	42	22	33	34


Agro meteorological Advisories:-

General Advice	<p>Rain fall: Warm, Humid and generally cloudy to cloudy weather & No rainfall during 20 to 24-November forecasted.</p> <ul style="list-style-type: none"> • Temperature: Maximum and minimum temperature likely to be in range of 33-34°C and 19-20°C, respectively. • Relative Humidity: The RH-I and RH-II is likely to be in the range of 53-58% & 35-43, respectively. • Wind Direction and Speed: Direction and speed of wind is likely to be N, NE and 10-17 km/h, respectively. • Carry out sowing of rabi sorghum, garlic, chickpea and mustard, coriander and wheat where <i>kharif</i> crops harvested & irrigation facility available and also procure certified seeds for sowing in advance. • For effective and economic weed control in cumin, chickpea and coriander make preemergence application of Pendimethalin 30 % EC @ 60 ml/10 liter of water and for wheat @ 30 ml/10 liter of water. For garlic use Oxyfluorfen 23.5 % EC @ 20 ml/ 10 liter of water as preemrgence and for Isabgol use Isoproturon 50 % WP @ 20 gm/10 litre of water as preemergence. • Under rainfed condition where unseasonal rainfall occurred do sowing of fodder sorghum Gundari and chicke pea Jujarat Chana-2 under conserved soil
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moisture.			
Crops	Stage	Insect/Pest/ Variety	Advisory
Garlic	Sowing/germination 	Gujarat Garlic-5, Yamuna Safed-3 (G-282) or Local	Carry out sowing of Garlic. Seed rate should be 500 to 700 bulb/ha and apply 109 kg DAP, 66 kg Urea, 83 kg MOP and 250 castor cake/ha fertilizer as basal dose.
Chick pea	Sowing/germination	Gujarat chana-2 (Unirrigated), Gujarat Junagadh chana-3 (irrigated)	Carry out sowing of Gram. Seed rate should be 60 to 75 kg/ha & seeds should be treated with fungicides captan or thiram 2 gm/kg of seeds and apply 87 kg DAP & 10 kg Urea/ha fertilizer at the time of sowing. Before sowing, seed should be treated with Rhizobium culture and phosphorus solubilizing bacteria
Cumin	Sowing	Gujarat cumin-4	Carry out sowing of cumin, If kharif crop is harvested. Seed must be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt.
Coriander	Sowing	Gujarat Coriander-1 , Gujarat Coriander-2	Carry out sowing of coriander & seed should be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt. Apply 22 kg DAP & 13 kg Urea/ha at the time of sowing.
Wheat	Sowing	Lok-1, GW-496	Carry out sowing of Wheat. Seed rate should be 100 to 125 kg/ha and apply 130 kg DAP, 80 kg Urea and 25 kg Zinc sulphate fertilizer/ha at the time of sowing. Application of Chlorpyrifos (20 EC) @ 5 litres per hectare with preirrigation is recommended before sowing in the fields having perennial problem of termite infestation.
Mustard	Sowing/germination	Varuna, Gujarat rai-3, 4	Carry out sowing of Mustard. Seed rate should be 15 to 20 kg/ha.
Cotton	Flowering-ball formation /development	Jassid & whitefly Pink ball worm	<ul style="list-style-type: none"> • Also spray Mencozeb 75 % wp @ 27 gm/10 litre of water for control alternaria & cercospora leaf spot in cotton. • For the monitoring of pink bollworm infestation in cotton crop farmers are advised to put pheromone traps 6-8/ha in early sown crop. If infestation found pick and bury the infested flowers/bolls in soil for control of pink bollworm infestation in cotton. Also make spray of profenofos 50 EC 20 ml or

			<p>cypermethrin 10 ml in 10 liters of water.</p> <ul style="list-style-type: none"> • Carry out picking in time.
Castor	Flowering/ capsule formation	Jassids& white fly→ Prodenia	<p>Spray Acetamiprid 20 % SP@ 5.0 gmORimidacloprid 30.5 % 3 ml with neem seed extract 500 ml or neem oil 40 mla / 10 lit of water ml/10 lit of water.</p> <p>For the control of prodenia spray Chlorpyriphos 25 ml in 10 liters of water.</p>
Pigeon pea	Flowering	-	Apply irrigation through drip system
Kharif Onion	Bulb development	Alternaria leaf spot/purple blotch	<p>For the control of purple blotch blight disease in kharif onion make 3 alternate spray of Mencozeb27 gm and thiophanate methyl 15 gm / 10 liter of water at 10 days interval.</p> <p>Apply supplementary dose of nitrogen (Urea 40 kg/ha) at 30 DASunder clear sky.</p>
Lady finger	Flowering/ fruiting	Jassids&white fly Shoot and fruit borer Mites	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid& white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthuiuron 50 %wp @ 16 gm / 10 lit of water. • For control of Shoot and fruit borer Sparyneem seed extract 500 ml or neem seed oil 50 ml in 10 litre of water at 15 days interval(4 spray).If pest population is high, spraying of Spinosad 48 EC @ 1 ml /4 litres of water is advised when sky remains clear. • Constant monitoring of lady finger crop against attack of mite is advised. If population is found more, then spraying of Ethion @ 1.5-2 ml/litre of water is advised when sky remains clear. • After harvesting of mature okra application of urea @ 5-10 kg/ acre should be

			done.
Cluster bean	Growing/fruiting	Jassid/whitefly	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid & white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.
Brinjal & Tomato	Flowering/fruiting	Sucking pest → Shoot & Fruit borer  Mites	<p>Monitor the crop for infestation of jassid & white fly in brinjal, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.</p> <p>In brinjal and tomato constant monitoring of borers by using pheromone traps 4-6 per acre is advised, If insect population is above ETL than spraying of chlorantraniliprole 18.5 % SC 3.0 ml or DDVP/10 litre of water is advised against fruit borer.</p> <p>If infestation is found, then make spraying of Propargite 57 % EC @ 10 ml/ 10litre of water for the control of Mites under clear sky.</p>
Chili	Flowering & fruiting	Thrips →  Anthracnose → 	<p>Under present weather conditions severe attack of thrips has been reported. Spray Profenofos 20 ml with 500 ml of 5 % neem seed extract or neem seed oil 50 ml in 10 litres of water. In case of heavy attack make spray of spinosad or spinetoram 3 ml per 10 liter of water.</p> <p>For the control of Anthracnose spray Mencozeb 27gm OR Chlorothalonil 27 gram OR Fosetyl 20 gm in 10 liters of water at 15 days interval.</p>
Lemon	Fruit development	Psylla and thrips Citrus canker Leaf minor Hast Bahar	 <p>To prevent damage of psylla & thrips spray imidacloprid 30.5 % 5 ml / 10 lit of water ml/10 lit of water.</p> <p>Spray copper oxychloride 40 gm or streptocyclin 1.5 gm in 10 litre of water.</p> <p>Spray Dichlorvos 10 ml or Quinalphos 20 ml in 10 litres of water for control of leaf minor.</p> <p>For getting maximum fruit in summer, after last rainfall cultivate lemon orchard up to the depth</p>

			<p>of 10-15 cm for pruning of tiny small root and keep left until wilting & defoliation start, after that apply FYM @ 50 kg, Urea @ 300 gm, Ammonium sulphate @ 500 gm, DAP @ 1.5 kg & murate of potash 300 gm/tree.</p>
<p>Livestock & poultry</p> 	<p>Spray Deltamethrin or Amitraz 2 ml/litre of water for the control of tick and for prevention of foot & mouth disease in animals do vaccination with FMD vaccine. Provide 6-8 kg good quality dry roughage with 15-20 kg green fodder to the animals. Spray phenyl in the animal shed to avoid flies and mosquitoes. Keep animal shed hygienic and clean to avoid flies and mosquitoes. For milch animals, regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 liters of milk yield. Feed animals with a mixture of green grass + hay + minerals + dry feed.</p>		

Technical Officer, GKMS Unit, DFRS, JAU, Targhadia.



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Agro met Advisory Service bulletin No.-67 for the Devbhumi Dwarka district

(Issued jointly by DFRS, J.A.U., Targhadia (Rajkot) and India Meteorological Department)

(Period 20 to 24-November- 2019)


Weather forecast until 08-30 hrs of 24/11/2019

(4) DEVBHUMI DWARKA DISTRICT:





	20/11/19	21/11/19	22/11/19	23/11/19	24/11/19
Rainfall (mm)	0	0	0	0	0
Max. Temp.(°C)	31	31	32	32	32
Min. Temp.(°C)	21	21	22	22	22
Total CC (octa)	8	4	1	7	5
RH-I (%)	55	63	62	59	60
RH-II (%)	37	36	33	37	40
Wind Speed (kmph)	11	11	12	14	16
Wind Direction(deg.)	25	43	22	31	30


Agro meteorological Advisories:-

General Advice	Rain fall: Warm, Humid and Partly cloudy to generally cloudy weather & No rainfall during 20 to 24-November forecasted.
	<ul style="list-style-type: none">• Temperature: Maximum and minimum temperature likely to be in range of 31-32°C and 21-22°C, respectively.• Relative Humidity: The RH-I and RH-II is likely to be in the range of 55-63% & 33-40, respectively.• Wind Direction and Speed: Direction and speed of wind is likely to be NE, N and 11-16 km/h, respectively.• Carry out sowing of rabi sorghum, garlic, chickpea and mustard, coriander and wheat where <i>kharif</i> crops harvested & irrigation facility available and also procure certified seeds for sowing in advance.• For effective and economic weed control in cumin, chickpea and coriander make preemergence application of Pendimethalin 30 % EC @ 60 ml/10 liter of water and for wheat @ 30 ml/10 liter of water. For garlic use Oxyfluorfen 23.5 % EC @ 20 ml/ 10 liter of water as preemrgence and for Isabgol use Isoproturon 50 % WP @ 20 gm/10 litre of water as preemergence.• Under rainfed condition where unseasonal rainfall occurred do sowing of fodder sorghum Gundari and chicke pea Jujarat Chana-2 under conserved soil

moisture.			
Crops	Stage	Insect/Pest/ Variety	Advisory
Garlic	Sowing/germination 	Gujarat Garlic-5, Yamuna Safed-3 (G-282) or Local	Carry out sowing of Garlic. Seed rate should be 500 to 700 bulb/ha and apply 109 kg DAP, 66 kg Urea, 83 kg MOP and 250 castor cake/ha fertilizer as basal dose.
Chick pea	Sowing/germination	Gujarat chana-2 (Unirrigated), Gujarat Junagadh chana-3 (irrigated)	Carry out sowing of Gram. Seed rate should be 60 to 75 kg/ha & seeds should be treated with fungicides captan or thiram 2 gm/kg of seeds and apply 87 kg DAP & 10 kg Urea/ha fertilizer at the time of sowing. Before sowing, seed should be treated with Rhizobium culture and phosphorus solubilizing bacteria
Cumin	Sowing	Gujarat cumin-4	Carry out sowing of cumin, If kharif crop is harvested. Seed must be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt.
Coriander	Sowing	Gujarat Coriander-1 , Gujarat Coriander-2	Carry out sowing of coriander & seed should be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt. Apply 22 kg DAP & 13 kg Urea/ha at the time of sowing.
Wheat	Sowing	Lok-1, GW-496	Carry out sowing of Wheat. Seed rate should be 100 to 125 kg/ha and apply 130 kg DAP, 80 kg Urea and 25 kg Zinc sulphate fertilizer/ha at the time of sowing. Application of Chlorpyrifos (20 EC) @ 5 litres per hectare with preirrigation is recommended before sowing in the fields having perennial problem of termite infestation.
Mustard	Sowing/germination	Varuna, Gujarat rai-3, 4	Carry out sowing of Mustard. Seed rate should be 15 to 20 kg/ha.
Cotton	Flowering-ball formation /development	Jassid & whitefly Pink ball worm	<ul style="list-style-type: none"> • Also spray Mencozeb 75 % wp @ 27 gm/10 litre of water for control alternaria & cercospora leaf spot in cotton. • For the monitoring of pink bollworm infestation in cotton crop farmers are advised to put pheromone traps 6-8/ha in early sown crop. If infestation found pick and bury the infested flowers/bolls in soil for control of pink bollworm infestation in cotton. Also make spray of profenofos 50 EC 20 ml or

			<p>cypermethrin 10 ml in 10 liters of water.</p> <ul style="list-style-type: none"> • Carry out picking in time.
Castor	Flowering/ capsule formation	Jassids& white fly→ Prodenia	<p>Spray Acetamiprid 20 % SP@ 5.0 gmORimidacloprid 30.5 % 3 ml with neem seed extract 500 ml or neem oil 40 mla / 10 lit of water ml/10 lit of water.</p> <p>For the control of prodenia spray Chlorpyriphos 25 ml in 10 liters of water.</p>
Pigeon pea	Flowering	-	Apply irrigation through drip system
Kharif Onion	Bulb development	Alternaria leaf spot/purple blotch	<p>For the control of purple blotch blight disease in kharif onion make 3 alternate spray of Mencozeb27 gm and thiophanate methyl 15 gm / 10 liter of water at 10 days interval.</p> <p>Apply supplementary dose of nitrogen (Urea 40 kg/ha) at 30 DASunder clear sky.</p>
Lady finger	Flowering/ fruiting	Jassids&white fly Shoot and fruit borer Mites	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid& white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthuiuron 50 %wp @ 16 gm / 10 lit of water. • For control of Shoot and fruit borer Sparyneem seed extract 500 ml or neem seed oil 50 ml in 10 litre of water at 15 days interval(4 spray).If pest population is high, spraying of Spinosad 48 EC @ 1 ml /4 litres of water is advised when sky remains clear. • Constant monitoring of lady finger crop against attack of mite is advised. If population is found more, then spraying of Ethion @ 1.5-2 ml/litre of water is advised when sky remains clear. • After harvesting of mature okra application of urea @ 5-10 kg/ acre should be

			done.
Cluster bean	Growing/fruiting	Jassid/whitefly	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid & white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.
Brinjal & Tomato	Flowering/fruiting	Sucking pest → Shoot & Fruit borer  Mites	<p>Monitor the crop for infestation of jassid & white fly in brinjal, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.</p> <p>In brinjal and tomato constant monitoring of borers by using pheromone traps 4-6 per acre is advised, If insect population is above ETL than spraying of chlorantraniliprole 18.5 % SC 3.0 ml or DDVP/10 litre of water is advised against fruit borer.</p> <p>If infestation is found, then make spraying of Propargite 57 % EC @ 10 ml/ 10litre of water for the control of Mites under clear sky.</p>
Chili	Flowering & fruiting	Thrips →  Anthracnose → 	<p>Under present weather conditions severe attack of thrips has been reported. Spray Profenofos 20 ml with 500 ml of 5 % neem seed extract or neem seed oil 50 ml in 10 litres of water. In case of heavy attack make spray of spinosad or spinetoram 3 ml per 10 liter of water.</p> <p>For the control of Anthracnose spray Mencozeb 27gm OR Chlorothalonil 27 gram OR Fosetyl 20 gm in 10 liters of water at 15 days interval.</p>
Lemon	Fruit development	Psylla and thrips  Citrus canker Leaf minor Hast Bahar	<p>To prevent damage of psylla & thrips spray imidacloprid 30.5 % 5 ml / 10 lit of water ml/10 lit of water.</p> <p>Spray copper oxychloride 40 gm or streptocyclin 1.5 gm in 10 litre of water.</p> <p>Spray Dichlorvos 10 ml or Quinalphos 20 ml in 10 litres of water for control of leaf minor.</p> <p>For getting maximum fruit in summer, after last rainfall cultivate lemon orchard up to the depth</p>

			<p>of 10-15 cm for pruning of tiny small root and keep left until wilting & defoliation start, after that apply FYM @ 50 kg, Urea @ 300 gm, Ammonium sulphate @ 500 gm, DAP @ 1.5 kg & murate of potash 300 gm/tree.</p>
<p>Livestock & poultry</p> 	<p>Spray Deltamethrin or Amitraz 2 ml/litre of water for the control of tick and for prevention of foot & mouth disease in animals do vaccination with FMD vaccine. Provide 6-8 kg good quality dry roughage with 15-20 kg green fodder to the animals. Spray phenyl in the animal shed to avoid flies and mosquitoes. Keep animal shed hygienic and clean to avoid flies and mosquitoes. For milch animals, regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 liters of milk yield. Feed animals with a mixture of green grass + hay + minerals + dry feed.</p>		

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Agro met Advisory Service bulletin No.-67 for the Amreli district

(Issued jointly by DFERS, J.A.U., Targhadia (Rajkot) and India Meteorological Department)

(Period 20 to 24-November- 2019)


Weather forecast until 08-30 hrs of 24/11/2019

(5) AMRELI DISTRICT:





	20/11/19	21/11/19	22/11/19	23/11/19	24/11/19
Rainfall (mm)	0	0	0	0	0
Max.Temp.(°C)	31	31	32	32	32
Min.Temp.(°C)	18	18	18	20	19
Total CC (octa)	7	7	1	6	6
RH-I (%)	53	50	52	56	56
RH-II (%)	30	31	32	38	37
Wind Speed (kmph)	11	11	8	10	9
Wind Direction(deg.)	21	33	231	105	22


Agro meteorological Advisories:

General Advice	<p>Rain fall: Warm, Humid and Generally cloudy weather & No rainfall during 20 to 24-November forecasted.</p> <ul style="list-style-type: none"> • Temperature: Maximum and minimum temperature likely to be in range of 31-32°C and 18-20°C, respectively. • Relative Humidity: The RH-I and RH-II is likely to be in the range of 50-56% & 30-38, respectively. • Wind Direction and Speed: Direction and speed of wind is likely to be N, NE, SW, E and 8-11 km/h, respectively. • Carry out sowing of rabi sorghum, garlic, chickpea and mustard, coriander and wheat where <i>kharif</i> crops harvested & irrigation facility available and also procure certified seeds for sowing in advance. • For effective and economic weed control in cumin, chickpea and coriander make preemergence application of Pendimethalin 30 % EC @ 60 ml/10 liter of water and for wheat @ 30 ml/10 liter of water. For garlic use Oxyfluorfen 23.5 % EC @ 20 ml/ 10 liter of water as preemrgence and for Isabgol use Isoproturon 50 % WP @ 20 gm/10 litre of water as preemergence. • Under rainfed condition where unseasonal rainfall occurred do sowing of fodder sorghum Gundari and chicke pea Jujarat Chana-2 under conserved soil
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moisture.			
Crops	Stage	Insect/Pest/ Variety	Advisory
Garlic	Sowing/germination 	Gujarat Garlic-5, Yamuna Safed-3 (G-282) or Local	Carry out sowing of Garlic. Seed rate should be 500 to 700 bulb/ha and apply 109 kg DAP, 66 kg Urea, 83 kg MOP and 250 castor cake/ha fertilizer as basal dose.
Chick pea	Sowing/germination	Gujarat chana-2 (Unirrigated), Gujarat Junagadh chana-3 (irrigated)	Carry out sowing of Gram. Seed rate should be 60 to 75 kg/ha & seeds should be treated with fungicides captan or thiram 2 gm/kg of seeds and apply 87 kg DAP & 10 kg Urea/ha fertilizer at the time of sowing. Before sowing, seed should be treated with Rhizobium culture and phosphorus solubilizing bacteria
Cumin	Sowing	Gujarat cumin-4	Carry out sowing of cumin, If kharif crop is harvested. Seed must be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt.
Coriander	Sowing	Gujarat Coriander-1 , Gujarat Coriander-2	Carry out sowing of coriander & seed should be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt. Apply 22 kg DAP & 13 kg Urea/ha at the time of sowing.
Wheat	Sowing	Lok-1, GW-496	Carry out sowing of Wheat. Seed rate should be 100 to 125 kg/ha and apply 130 kg DAP, 80 kg Urea and 25 kg Zinc sulphate fertilizer/ha at the time of sowing. Application of Chlorpyrifos (20 EC) @ 5 litres per hectare with preirrigation is recommended before sowing in the fields having perennial problem of termite infestation.
Mustard	Sowing/germination	Varuna, Gujarat rai-3, 4	Carry out sowing of Mustard. Seed rate should be 15 to 20 kg/ha.
Cotton	Flowering-ball formation /development	Jassid & whitefly Pink ball worm	<ul style="list-style-type: none"> • Also spray Mencozeb 75 % wp @ 27 gm/10 litre of water for control alternaria & cercospora leaf spot in cotton. • For the monitoring of pink bollworm infestation in cotton crop farmers are advised to put pheromone traps 6-8/ha in early sown crop. If infestation found pick and bury the infested flowers/bolls in soil for control of pink bollworm infestation in cotton. Also make spray of profenofos 50 EC 20 ml or

			<p>cypermethrin 10 ml in 10 liters of water.</p> <ul style="list-style-type: none"> • Carry out picking in time.
Castor	Flowering/ capsule formation	Jassids& white fly→ Prodenia	<p>Spray Acetamiprid 20 % SP@ 5.0 gmORimidacloprid 30.5 % 3 ml with neem seed extract 500 ml or neem oil 40 mla / 10 lit of water ml/10 lit of water.</p> <p>For the control of prodenia spray Chlorpyriphos 25 ml in 10 liters of water.</p>
Pigeon pea	Flowering	-	Apply irrigation through drip system
Kharif Onion	Bulb development	Alternaria leaf spot/purple blotch	<p>For the control of purple blotch blight disease in kharif onion make 3 alternate spray of Mencozeb27 gm and thiophanate methyl 15 gm / 10 liter of water at 10 days interval.</p> <p>Apply supplementary dose of nitrogen (Urea 40 kg/ha) at 30 DASunder clear sky.</p>
Lady finger	Flowering/ fruiting	Jassids&white fly Shoot and fruit borer Mites	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid& white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthuiuron 50 %wp @ 16 gm / 10 lit of water. • For control of Shoot and fruit borer Sparyneem seed extract 500 ml or neem seed oil 50 ml in 10 litre of water at 15 days interval(4 spray).If pest population is high, spraying of Spinosad 48 EC @ 1 ml /4 litres of water is advised when sky remains clear. • Constant monitoring of lady finger crop against attack of mite is advised. If population is found more, then spraying of Ethion @ 1.5-2 ml/litre of water is advised when sky remains clear. • After harvesting of mature okra application of urea @ 5-10 kg/ acre should be

			done.
Cluster bean	Growing/fruiting	Jassid/whitefly	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid & white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.
Brinjal & Tomato	Flowering/fruiting	<p>Sucking pest →</p> <p>Shoot & Fruit borer</p>  <p>Mites</p>	<p>Monitor the crop for infestation of jassid & white fly in brinjal, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.</p> <p>In brinjal and tomato constant monitoring of borers by using pheromone traps 4-6 per acre is advised, If insect population is above ETL than spraying of chlorantraniliprole 18.5 % SC 3.0 ml or DDVP/10 litre of water is advised against fruit borer.</p> <p>If infestation is found, then make spraying of Propargite 57 % EC @ 10 ml/ 10litre of water for the control of Mites under clear sky.</p>
Chili	Flowering & fruiting	<p>Thrips →</p>  <p>Anthracnose →</p> 	<p>Under present weather conditions severe attack of thrips has been reported. Spray Profenofos 20 ml with 500 ml of 5 % neem seed extract or neem seed oil 50 ml in 10 litres of water. In case of heavy attack make spray of spinosad or spinetoram 3 ml per 10 liter of water.</p> <p>For the control of Anthracnose spray Mencozeb 27gm OR Chlorothalonil 27 gram OR Fosetyl 20 gm in 10 liters of water at 15 days interval.</p>
Lemon	Fruit development	<p>Psylla and thrips</p>  <p>Citrus canker</p> <p>Leaf minor</p> <p>Hast Bahar</p>	<p>To prevent damage of psylla & thrips spray imidacloprid 30.5 % 5 ml / 10 lit of water ml/10 lit of water.</p> <p>Spray copper oxychloride 40 gm or streptocyclin 1.5 gm in 10 litre of water.</p> <p>Spray Dichlorvos 10 ml or Quinalphos 20 ml in 10 litres of water for control of leaf minor.</p> <p>For getting maximum fruit in summer, after last rainfall cultivate lemon orchard up to the depth</p>

			<p>of 10-15 cm for pruning of tiny small root and keep left until wilting & defoliation start, after that apply FYM @ 50 kg, Urea @ 300 gm, Ammonium sulphate @ 500 gm, DAP @ 1.5 kg & murate of potash 300 gm/tree.</p>
<p>Livestock & poultry</p> 	<p>Spray Deltamethrin or Amitraz 2 ml/litre of water for the control of tick and for prevention of foot & mouth disease in animals do vaccination with FMD vaccine. Provide 6-8 kg good quality dry roughage with 15-20 kg green fodder to the animals. Spray phenyl in the animal shed to avoid flies and mosquitoes. Keep animal shed hygienic and clean to avoid flies and mosquitoes. For milch animals, regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 liters of milk yield. Feed animals with a mixture of green grass + hay + minerals + dry feed.</p>		

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Agro met Advisory Service bulletin No.-67 for the Surendranagar district

(Issued jointly by DFERS, J.A.U., Targhadia (Rajkot) and India Meteorological Department)

(Period 20 to 24-November- 2019)


Weather forecast until 08-30 hrs of 24/11/2019

(6) SURENDRANAGAR DISTRICT:





	20/11/19	21/11/19	22/11/19	23/11/19	24/11/19
Rainfall (mm)	0	0	0	0	0
Max.Temp.(°C)	32	32	33	34	33
Min.Temp.(°C)	16	17	18	18	18
Total CC (octa)	8	5	1	7	7
RH-I (%)	48	46	53	53	51
RH-II (%)	30	28	31	35	34
Wind Speed (kmph)	7	9	10	9	10
Wind Direction(deg.)	21	43	42	46	40


Agro meteorological advisories:

General Advice	<p>Rain fall: Warm, Humid and Generally cloudy to cloudy weather & No rainfall during 20 to 24-November forecasted.</p> <ul style="list-style-type: none">• Temperature: Maximum and minimum temperature likely to be in range of 32-34°C and 16-18°C, respectively.• Relative Humidity: The RH-I and RH-II is likely to be in the range of 46-53% & 28-35, respectively.• Wind Direction and Speed: Direction and speed of wind is likely to be N, NE and 7-10 km/h, respectively.• Carry out sowing of rabi sorghum, garlic, chickpea and mustard, coriander and wheat where <i>kharif</i> crops harvested & irrigation facility available and also procure certified seeds for sowing in advance.• For effective and economic weed control in cumin, chickpea and coriander make preemergence application of Pendimethalin 30 % EC @ 60 ml/10 liter of water and for wheat @ 30 ml/10 liter of water. For garlic use Oxyfluorfen 23.5 % EC @ 20 ml/ 10 liter of water as preemergence and for Isabgol use Isoproturon 50 % WP @ 20 gm/10 litre of water as preemergence.• Under rainfed condition where unseasonal rainfall occurred do sowing of fodder
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sorghum Gundari and chicke pea Jujarat Chana-2 under conserved soil moisture.			
Crops	Stage	Insect/Pest/ Variety	Advisory
Garlic	Sowing/germination 	Gujarat Garlic-5, Yamuna Safed-3 (G-282) or Local	Carry out sowing of Garlic.Seed rate should be 500 to 700 bulb/ha and apply 109 kg DAP, 66 kg Urea, 83 kgMOP and 250 castor cake/ha fertilizer as basal dose.
Chick pea	Sowing/germination	Gujarat chana-2 (Unirrigated), Gujarat Junagadh chana-3 (irrigated)	Carry out sowing of Gram.Seed rate should be 60 to 75 kg/ha & seedshould be treated with fungicides captanorthiram 2 gm/kg of seeds and apply 87 kg DAP& 10 kg Urea/ha fertilizer at the time ofsowing. Before sowing, seed should be treated with Rhizobium culture and phosphorus solublesing bacteria
Cumin	Sowing	Gujarat cumin-4	Carry out sowing of cumin, If kharif crop is harvested. Seed must be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt.
Coriander	Sowing	Gujarat Coriander-1 , Gujarat Coriander-2	Carry out sowing of coriander&seed should be treated with fungicides Captan or Thiram or Carbendazim @ 2.0 gm/ kg to prevent wilt. Apply 22 kg DAP&13 kg Urea/haat the time of sowing.
Wheat	Sowing	Lok-1, GW-496	Carry out sowing of Wheat.Seed rate should be 100 to 125 kg/ha andapply 130 kg DAP,80 kg Ureaand 25 kg Zinc sulphatefertilizer/ha at the time of sowing.Application of Chlorpyriphos (20 EC) @ 5 litres per hectare with preirrigation is recommended before sowing in the fields having perennial problem of termite infestation.
Mustard	Sowing/germination	Varuna, Gujarat rai-3, 4	Carry out sowing of Mustard.Seed rate should be 15 to 20 kg/ha.
Cotton	Flowering-ball formation /development	Jassid&whitefly Pink ball worm	<ul style="list-style-type: none"> • Also spray Mencozeb75 % wp @ 27gm/10 litre of water for control alternaria&cercospora leaf spot in cotton. • For the monitoring of pink bollworm infestation in cotton crop farmers are advised to put pheromone traps 6-8/ha in early sown crop. If infestation found pick and burry the infested flowers/bolls in soil for control of pink bollworm infestation in cotton. Also make spray of profenofos 50 EC 20 ml or

			<p>cypermethrin 10 ml in 10 liters of water.</p> <ul style="list-style-type: none"> • Carry out picking in time.
Castor	Flowering/ capsule formation	Jassids& white fly→ Prodenia	<p>Spray Acetamiprid 20 % SP@ 5.0 gmORimidacloprid 30.5 % 3 ml with neem seed extract 500 ml or neem oil 40 mla / 10 lit of water ml/10 lit of water.</p> <p>For the control of prodenia spray Chlorpyriphos 25 ml in 10 liters of water.</p>
Pigeon pea	Flowering	-	Apply irrigation through drip system
Kharif Onion	Bulb development	Alternaria leaf spot/purple blotch	<p>For the control of purple blotch blight disease in kharif onion make 3 alternate spray of Mencozeb27 gm and thiophanate methyl 15 gm / 10 liter of water at 10 days interval.</p> <p>Apply supplementary dose of nitrogen (Urea 40 kg/ha) at 30 DASunder clear sky.</p>
Lady finger	Flowering/ fruiting	Jassids&white fly Shoot and fruit borer Mites	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid& white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthuiuron 50 %wp @ 16 gm / 10 lit of water. • For control of Shoot and fruit borer Sparyneem seed extract 500 ml or neem seed oil 50 ml in 10 litre of water at 15 days interval(4 spray).If pest population is high, spraying of Spinosad 48 EC @ 1 ml /4 litres of water is advised when sky remains clear. • Constant monitoring of lady finger crop against attack of mite is advised. If population is found more, then spraying of Ethion @ 1.5-2 ml/litre of water is advised when sky remains clear. • After harvesting of mature okra application of urea @ 5-10 kg/ acre should be

			done.
Cluster bean	Growing/fruiting	Jassid/whitefly	<ul style="list-style-type: none"> • Monitor the crop for infestation of jassid & white fly, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.
Brinjal & Tomato	Flowering/fruiting	Sucking pest → Shoot & Fruit borer  Mites	<p>Monitor the crop for infestation of jassid & white fly in brinjal, if require spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with diafenthiuron 50 %wp @ 16 gm / 10 lit of water.</p> <p>In brinjal and tomato constant monitoring of borers by using pheromone traps 4-6 per acre is advised, If insect population is above ETL than spraying of chlorantraniliprole 18.5 % SC 3.0 ml or DDVP/10 litre of water is advised against fruit borer.</p> <p>If infestation is found, then make spraying of Propargite 57 % EC @ 10 ml/ 10litre of water for the control of Mites under clear sky.</p>
Chili	Flowering & fruiting	Thrips →  Anthracnose → 	<p>Under present weather conditions severe attack of thrips has been reported. Spray Profenofos 20 ml with 500 ml of 5 % neem seed extract or neem seed oil 50 ml in 10 litres of water. In case of heavy attack make spray of spinosad or spinetoram 3 ml per 10 liter of water.</p> <p>For the control of Anthracnose spray Mencozeb 27gm OR Chlorothalonil 27 gram OR Fosetyl 20 gm in 10 liters of water at 15 days interval.</p>
Lemon	Fruit development	Psylla and thrips  Citrus canker Leaf minor Hast Bahar	<p>To prevent damage of psylla & thrips spray imidacloprid 30.5 % 5 ml / 10 lit of water ml/10 lit of water.</p> <p>Spray copper oxychloride 40 gm or streptocyclin 1.5 gm in 10 litre of water.</p> <p>Spray Dichlorvos 10 ml or Quinalphos 20 ml in 10 litres of water for control of leaf minor.</p> <p>For getting maximum fruit in summer, after last rainfall cultivate lemon orchard up to the depth</p>

			<p>of 10-15 cm for pruning of tiny small root and keep left until wilting & defoliation start, after that apply FYM @ 50 kg, Urea @ 300 gm, Ammonium sulphate @ 500 gm, DAP @ 1.5 kg & murate of potash 300 gm/tree.</p>
<p>Livestock & poultry</p> 	<p>Spray Deltamethrin or Amitraz 2 ml/litre of water for the control of tick and for prevention of foot & mouth disease in animals do vaccination with FMD vaccine. Provide 6-8 kg good quality dry roughage with 15-20 kg green fodder to the animals. Spray phenyl in the animal shed to avoid flies and mosquitoes. Keep animal shed hygienic and clean to avoid flies and mosquitoes. For milch animals, regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 liters of milk yield. Feed animals with a mixture of green grass + hay + minerals + dry feed.</p>		

Technical Officer, GKMS Unit, DFRS, JAU, Targhadia.