

ICAR-Central Institute for Cotton Research

Second Weekly Advisory for Cotton Cultivation from 1<sup>st</sup> to 11<sup>th</sup> August 2018

WEATHER ADVISORY

Date	ACTUAL RAINFALL In mm IMD					PREDICTED IMD						ADVISORY
	AUGUST 2018											
	01	02	03	04	05	06	07	08	09	10	11	
<b>PUNJAB</b>												
Ferozpur	0.0	0.0	0.0				7.0	0.0	7.0	10.0	37.0	<p>At Bhatinda, the crop is 80-90 days old at vegetative and flowering stage. <i>Digera arvensis</i>, <i>Trianthema monogyna</i>, <i>Amaranthus viridis</i> and <i>Madhana</i> were the major weeds noticed in the fields. Whitefly population varied from 1 -11 per three leaves. Jassid population 1- 16 per three leaves. Grade II injury equivalents were observed in few locations. Thrips incidence varied from 0 – 87 per 3 leaves. No incidence of diseases during the reporting period.</p> <p><b>Advisory:</b>  <b>Sprays of flonicamid @ 80 g or thiamethoxam @ 40 g per acre for jassids and thrips as recommended to be taken up. Micronutrient (13:0:45) has been recommended. Cotton crop to be irrigated.</b></p>
Faridkot	0.0	0.0	0.0	0.0	0.0		0.0	0.0	20.0	4.0	0.0	
Mukatsar			0.0		0.0		7.0	0.0	12.0	8.0	20.0	
Bhatinda	0.0	0.0	0.0	0.0	0.0		5.0	0.0	0.0	11.0	37.0	
Sangrur							3.0	6.0	13.0	14.0	18.0	
Ludhiana	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	15.0	22.0	
<b>HARYANA</b>												
Hissar	0.0					0.0	17.0	3.0	28.0	15.0	14.0	<p>At Sirsa, the crop is 75-95 days old at vegetative to reproductive stage. Whitefly ranged between 1-25/3leaves in initial stages but an upsurge in leafhopper population observed. Incidence of whitefly was below ETL. Thrips population below ETL. Leafhopper counts have increased and IIInd grade injury symptoms have been observed at many locations.</p> <p><b>Advisory: Wherever the population of leafhopper crossed ETL, application of Thiamethoxam @ 40g/acre or Imidacloprid @ 40ml/acre recommended. In case of mixed infestation of whitefly and leafhopper, spray of Flonicamid @ 80g/acre or Dinotefuran @ 60g/acre recommended. Application of N: P: K (13:0:45) @ 2/kg acre also advised as the crop is in full bloom stage.</b></p> <p>At Hisar, the crop is 80 to 90 days at vegetative to reproductive stage.. Condition of crop is good. Population of leafhopper crossed the ETL in few fields and whitefly population also increased. No incidence of wilt, bacterial blight, para wilt was observed at farmer's field but root rot was observed in traces. Incidence of cotton leaf curl virus disease was observed in few fields and expected its incidence is likely to increase in the coming period.</p> <p><b>Advisory:</b></p>
Jind							17.0	4.0	15.0	18.0	35.0	
Sirsa		0.0					0.0	10.0	14.0	14.0	4.0	
Rohtak	2.0	1.0		1.0	3.0		3.0	8.0	6.0	18.0	9.0	

													<p>The population of leafhopper is expected to increase in areas where humidity is more than 70 per cent. If population is more than 2 nymph &amp; adult per leaf (ETL), spray 40 ml Imidacloprid 200 SL or 40g Thiamethoxam 25WG in 120-150 litres of water per acre. In areas where dry spell of 15 days occurs, the whitefly population may increase. In case, the whitefly population is more than 6-8 adult/leaf (ETL), first spray should be done with Nimbecidine/Achook @ 1 litres/acre. If required, the second spray 250-350 ml of Dimethoate (Rogor) 30 EC in 120-150 litres of water per acre. For spotted bollworm in <i>desi</i> cotton (if &gt; 5% infested fruiting bodies), spray 600 ml Quinalphos (Ekalux) 25 EC or 600 ml Profenophos 50 EC or 75 ml Spinosad (Tracer) 45 SC using 150-175 litres of water per acre. Proper coverage of underside of leaves during the insecticidal sprays effectively reduces the population of insects. Farmers are advised to monitor their crop for insect pests and diseases regularly. Mixing of pesticides should be avoided. Advised the farmers to apply the drenching of Carbendazim @ 2g/litre in root rot affected field. In CLCuD affected fields, it is suggested not to apply excess nitrogen and undertake control measures for whitefly.</p>
<b>RAJASTHAN</b>													
Ajmer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	30.0	27.0	8.0	<p>At Banswara, the crop is 47days old at vegetative stage.. Most of the fields are free from weeds. At present, jassids infestation was recorded around ETL. No incidence of diseases. During last week, there were no rains so farmers carried out intercultural operations. At Sriganganagar, the crop is 77 to 105 days at boll formation stage. Need based irrigation applied, second recommended dose of fertilizer (Urea) also applied and first foliar application of Potassium nitrate 2% have been taken up. Weeds- Itsit (<i>Trianthema spp.</i>), tandra (<i>Digera arvensis</i>) Motha (<i>Cyperus rotundus</i>) have infested the crop. Hoeing to clean the crop. Jassid noticed below ETL level (0.67-1.00/3 leaves), Whitefly incidence below ETL Level (4.33-7.67/3leaves), Thrips population observed ranging from 20.17-45.33/ 3 leaves. Incidence of <i>Earias spp.</i> on desi and non- Bt American cotton have recorded 2.00-4.00 larvae/20 plants. 1.27-2.83 adult moth of pink boll worm catches per pheromone trap/ week. Occurrences of cotton leaf curl virus disease (CLCuD PDI 10-15 %) at farmers fields. Weed infestation was removed manually and by weedicide. Spray of neem based insecticides @ 5ml or Triazophos 40EC @ 2.5 ml or diafenthion 50WP @ 1.00g/lit. of water for whitefly was given.</p> <p><b>Advisory:</b> Farmers are advised to spray Flonicamid 50 WG @ 0.3g or Thiamethoxam 25 WG @ 0.5g or Ethion 50 EC @ 3.0 ml per liter of water, whenever the whitefly, jassid and thrips cross ETL level. Spray of Emamectin benzoate 5 SG @ 0.5g</p>	
Jodhpur						0.0	0.0	0.0	18.0	35.0	0.0		
Nagaur							0.0	0.0	43.0	40.0	19.0		
Pali						0.0	0.0	4.0	26.0	11.0	10.0		
Sri Ganganagar						0.0							
	0.0	0.0		0.0	0.0		0.0	7.0	21.0	7.0	0.0		

												or Spinosad 45 SC @ 0.33 ml per liter of water has been recommended for spotted bollworm.	
<b>ORRISA</b>													
Koraput			6.8			4.2	45.0	8.0	22.0	42.0	35.0	The crop is 37- 44 days old at vegetative stage. First top dressing of fertilizer and weeding were taken up. Crop is infested with all kinds of weeds like grassy, broad leaf and sedges. There is sporadic incidence of aphids and thrips. No occurrence of any kind of diseases in cotton crop. <b>Advisory:</b> Farmers advised to complete 1 <sup>st</sup> top dressing and weeding, incorporation of sun hemp as green manure, planting of castor, marigold and maize around as trap and eco-feast crop. As monsoon is active, farmers are advised to go for 1 <sup>st</sup> top dressing and earthing up. Drain out excess rain water from the cotton fields. To prevent sucking pest and foliage feeder infestation, spray neem pesticide @ 3 ml/litre of water. To prevent square and flower drop, spray Planofix (NAA) @ 3.5 ml/lit at 45 day after sowing.	
Kalahandi	2.0	6.0	5.0	2.0	0.0	0.0	85.0	7.0	41.0	51.0	45.0		
Balangir							40.0	8.0	14.0	35.0	39.0		
<b>GUJARAT</b>													
Amreli						0.0	3.0	4.0	4.0	4.0	10.0	At Surat, the crop is at vegetative stage. The cotton fields were infested with weeds like Chido ( <i>Cyprus rotundus</i> ), Satodi ( <i>Trianthema monogyna</i> ), Dhamdo ( <i>Amaranthus viridis</i> ) and others. Leafhopper ( <i>Amrasca biguttula biguttula</i> ) and Thrips ( <i>Thrips tabaci</i> ) were below ETL. BLB seen in the lower leaves of the plant. At Junagadh, the crop is 29 days old. Gap filling and intercultural operations were taken up. Weeds were controlled by spraying Quisalofop ethyl 0.05% (Targa super) 16 ml in 10 liter of water on weeds at 25-30 days after sowing. <b>Advisory:</b> For the control of grey weevil, White fly, thrips, spray <i>Beauveria bassiana</i> 60-80 g or Cartap hydrochloride 10 g or Difenthiuron 3-4 g or Imidachloprid 7-8 ml or Trizophos 40 EC 15-20 ml in 10 litres of water or use botanical pesticide Neem oil or NSKE. For the management of Bacterial leaf blight, spray copper oxychloride 40 gm + Streptocycline 1 g in 10 litres of water @ two sprays at 15 days interval. For Leaf spot of cotton, spray Matiran+ Pyroclosrobin (Cabariotap) 20g in 10 lit of water @ two sprays at 15 days interval. Spray Neem oil 1500 PPM @ 40-50 ml/10 lit. of water to control sucking pests. Advised spray of Thiamethoxam 25 WG or Flonicamid 50 WG @ 3 g/10 lit. water at ETL to control sucking pests. Install the pheromone traps (5 traps/ha) for monitoring of pink bollworm. In flowering stage to remove rosette flowering, spray Quinalphos 25 EC 20 ml or Profenophos 50 EC 15-20 ml in 10 litre of water.	
Bhavnagar			0.3			0.0	0.0	0.0	3.0	0.0	9.0		
Jamnagar						0.0	0.0	3.0	3.0	12.0	5.0		
Rajkot	0.0	0.0	0.0	0.0	0.0	0.0	3.0	4.0	4.0	6.0	6.0		
Broach	0.0	0.0	3.4	0.0		0.0	5.0	9.0	21.0	8.0	10.0		
Sabarkantha						0.0	4.0	5.0	0.0	0.0	8.0		
Surendranagar						0.0	0.0	3.0	0.0	6.0	8.0		
Ahmedabad						0.0	0.0	4.0	6.0	4.0	9.0		
Baroda	0.0	0.0	0.0	0.0	0.0	0.0	9.0	11.0	10.0	8.0	10.0		
Patan							0.0	0.0	0.0	0.0	0.0		
Mehsana							0.0	0.0	3.0	0.0	0.0		
<b>MP</b>													
Khargaon						0.0							At Khandwa, the crop is 40-80 days old at vegetative to flowering stage. <i>Cyprus rotundus</i> , <i>Euphorbia</i> , sp., <i>Cynadon dactylon</i> , <i>Physalis minima</i> , <i>Solanum nigrum</i> , <i>Echinocla</i> , <i>colona Commdina benghalensis</i> , <i>Commelina nuadiculus</i> , <i>Digera arrensis</i> , <i>Parthenium histero phorus</i> , <i>Achyranthus aspera</i> , <i>Phyllanthus nirum</i> etc.
Dhar						0.0	5.0	7.0	10.0	0.0	0.0		
Khandwa						0.0							

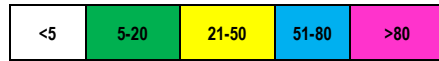
												<p>were the major weeds controlled as per the recommended practices. Incidence of Jassids and white fly noticed. No record of diseases. Performed intercultural and weeding operations during the reporting period.</p> <p><b>Advisory:</b>  <b>Apply N 40 kg/h , P 40 kg/ha and K 20kg/ha at 60 days. Apply N 40kg/ha at 90 days. Spray Imidacloprid or Acetamapird or Thiomethaxam for the control of sucking pest. Install pheromone traps for pink boll worm where flowering has initiated.</b></p>
<b>MAHARASHTRA</b>												
Dhule	0.0	0.0	0.0	0.0	0.0		4.0	10.0	16.0	6.0	0.0	<p>Currently the cotton crop is 50-60 days (Normal sown). Initiation of squares and flowers started in most of the fields. In the pre monsoon sown crops (sown between mid may and first week of June), opened flowers and boll formation is seen. In pre monsoon sown crop flowers were found infested with pink bollworm ranging from 5-15%.</p> <p><b>Advisory</b></p> <ul style="list-style-type: none"> <li>• <b>Remove and destroy rosette flowers. As cotton plant has indeterminate growth habit, the loss of flowers in the initial phase of growth may compensate in later part of season.</b></li> <li>• <b>Install pheromone traps @ 2/acre wherever not done.</b></li> <li>• <b>If average 8 moths per trap per night for 3 consecutive days are trapped, install 6 more pheromone traps per acre for mass trapping. Remove trapped moths at weekly interval and destroy.</b></li> <li>• <b>Go for botanical pesticide spray of NSKE 50ml + Neem oil 5 ml/ litre of water which has antifeedant properties, repeat at weekly interval once or twice.</b></li> <li>• <b>In pre-monsoon sown crop, spraying may be started with Quinolphos 25% AF 20 ml or Thiodicarb 75% WP 20 g or Chlorpyriphos 20% EC 25 ml per 10 liter water.</b></li> <li>• <b>Do not use insecticides belonging to synthetic pyrethroid group.</b></li> <li>• <b>At the early stage of crop it is advisable not to resort to cocktails of insecticides or ready mixed insecticides to avoid any resurgence of other pests and it may be more hazardous to environment.</b></li> <li>• <b>While our visit to Buldana, Jalgaon, Dhule districts it was found that farmers resort to mixtures of two or more insecticides, ready mix insecticides mixtures, growth regulators, fertilizers etc. This may be avoided at this stage.</b></li> <li>• <b>Farmers may be advised to use protective aids while handling pesticides which are being ignored by many farmers/ farm laborers.</b></li> </ul>
Nandurbar	1.0	1.0	0.0	2.0	1.0		10.0	13.0	11.0	7.0	7.0	
Jalgaon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	16.0	7.0	0.0	
Ahmednagar	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	
Aurangabad						0.0	15.0	18.0	8.0	16.0	33.0	
Jalna	0.0	0.0	0.0	0.0	0.0		0.0	0.0	10.0	3.0	3.0	
Beed							0.0	0.0	8.0	0.0	0.0	
Nanded	6.0	5.0	0.0	0.0	1.0	6.5	3.0	8.0	7.0	8.0	0.0	
Parbhani	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	8.0	0.0	0.0	
Hingoli			0.0	0.0	0.0		0.0	6.0	12.0	8.0	0.0	
Buldhana	0.0	0.0	0.0	0.0	1.0	0.0	0.0	8.0	16.0	3.0	0.0	
Akola	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0	10.0	0.0	0.0	
Washim	0.0	3.0			2.0	0.0	0.0	14.0	6.0	3.0	0.0	
Amravati		1.0				0.0	9.0	25.0	13.0	4.0	3.0	
Yavatmal	0.0	0.0	0.0	0.0	0.0		4.0	17.0	9.0	3.0	0.0	
Wardha	0.0	0.0	0.0	0.0	0.0	0.0	5.0	22.0	5.0	3.0	0.0	
Nagpur	0.0	0.0	0.0	0.0	0.0	0.0	8.0	21.0	13.0	5.0	0.0	
Chandrapur						0.0						
	0.0	1.0	0.0	0.0	0.0		9.0	20.0	9.0	13.0	12.0	
<b>TELANGANA</b>												
Adilabad	0.0	1.0	0.0	0.0	0.0	0.0	8.0	17.0	7.0	0.0	0.0	
Warangal						0.0	9.0	14.0	7.0	0.0	0.0	
Khammam	0.0	5.0	16.0	1.0	1.0	0.0	7.0	13.0	5.0	0.0	0.0	
Karimnagar	0.0	2.0	0.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	
Mahabubnagar	0.0	0.0	3.0	1.0	0.0	5.0	0.0	0.0	5.0	0.0	0.0	
<b>AP</b>												
												<p>The crop is around 30-65 days, reached flowering to boll formation stage in early sown crop (last week of May), whereas in flowering stage in June sown crop. Inter cultural operations are being carried out in farmers field, split application of urea and potash are being taken up. Drought management operations like spray of urea 2% and potassium nitrate 2% are being taken up by farmers due to prolonged dry spell in Kurnool district.</p>

Guntur	0.0	17.0	0.0	0.0	0.0	0.0	0.0	3.0	5.0	0.0	0.0	Cotton crop in surveyed farmers' fields is in withering stage due to moisture stress; Pink boll worm incidence was sporadic above ETL in the fields where cotton was sown during May. Pink bollworm incidence was not noticed or below ETL in the cotton crop sown in early June Regarding sucking pests, jassids have crossed ETL in all the villages surveyed (6-10 per leaf) where as white fly population was below ETL. Mealy bug incidence was noticed in some fields but not alarming. Magnesium deficiency was also noticed. <b>Advisory:</b> <b>Advised farmers to identify and destroy the rosette flowers. Suggested to spray urea 2% and potassium nitrate 2% alternately twice weekly intervals to tide over moisture stress. Suggested to erect pheromone traps @ 2 per acre for monitoring PBW incidence. Advised to spray insecticides for sucking pests where the cotton crop had crossed 60 days i.e spray of Imidaclopride 200 SL @ 80 ml or Difenthiuron @ 250 g or Flonicmide@ 60 g per acre ( sprays based on ETL). Suggested to spray Magnesium sulphate @ 10 g per lit of water for correcting magnesium deficiency at 45 and 75 DAS. Advised farmers to be vigilant on PBW activity by noticing moth trap catches and rosette flowers. Suggested to monitor for sucking pests especially mealy bug incidence. Inter-cultivation and first split application of fertilizers, wherever sufficient soil moisture is available.</b>
Prakasam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	8.0	14.0	0.0	
<b>KARNATAKA</b>												
Dharwad				1.0	1.0		0.0	3.0	4.0	0.0	0.0	Bt cotton crop sown during first week of June is at peak squaring and flowering initiation stage, and late sown crop is under growing stage (Vegetative). Early sown crop is 50-60 days old. At some locations the crop is 35-45 days old, wherein the sowing was delayed due to late onset of monsoon. Top dressing with Urea and Potassium was taken up. Intercultivation and hand weeding were done. . Monocot weeds were controlled by post emergent herbicide application of Quizolfop Ethyl @ 1 ml/lit of water. Shoot weevil was controlled by hand picking. Educated and motivated the farmers to install Pheromone traps for monitoring PBW (55-60 days crop). Collar rot of cotton seedlings was reported in some places and drenching the crop with Vitvax power fungicide was suggested. <b>Advisory:</b> <b>Top dressing of the crop with 25 kg urea and 25 kg MOP. Manual weeding, Intercultivation and earthing up to be taken up. Post emergent herbicide application of Quizolfop Ethyl @ 1 ml/lit of water and Pyriithiobac Sodium @ 0.5 ml/lit of water to control monocot and dicot weeds (Need based). Sucking pest management by spraying Acetamid 20 SP @ 0.2 g/lit of water. Foliar sprays of 19: 19:19 water soluble fertilizer (10g/lit of water) in 60-70 days old crop. Installation of pheromone traps for monitoring PBW (2 per acre). Spraying of Neem based insecticides at earlier stages, then with Quinolphos or chlorpyriphos @ 2 ml/lit of water.</b>
Haveri							0.0	0.0	0.0	0.0	0.0	
Mysore							0.0	4.0	3.0	4.0	5.0	
<b>TAMIL NADU</b>												
Perambur	0.0	0.0	0.0	0.0	0.0		8.0	7.0	8.0	10.0	5.0	Land preparation for sowing Is in progress.
Salem	3.0	0.0	1.0	0.0	3.0	0.0	0.0	9.0	14.0	22.0	22.0	

Trichy						0.0	4.0	7.0	8.0	5.0	10.0	
Virdhunagar	0.0	0.0	0.0	0.0	0.0		0.0	3.0	6.0	7.0	6.0	

Rainfall (mm)

Legend



0.0 mm rainfall ( no rainfall ) .Blank space express data Not available. Source : <http://imdagrmet.gov.in>