

ICAR-Central Institute for Cotton Research, Nagpur
XI Weekly Advisory for Cotton Cultivation from 2nd to 8th Sep '2019

	ACTUAL RAINFALL in mm IMD					PREDICTED RAINFALL in mm IMD						ADVISORY
	AUGUST-SEPTEMBER					SEPTEMBER						
Date	29	30	31	01	02	03	04	05	06	07	08	
PUNJAB												
Ferozpur						4	0	0	0	0	11	<p>At Faridkot, the crop is 112 days old at boll setting and development phase. Manual intercultural operations, irrigation and foliar fertilization of KNO₃ and Magnesium sulphate have been taken up. Thrips incidence was negligible. Jassid incidence was below ETL of second injury grade (JIG).</p> <p>At Bhatinda, the crop is 95 to 110 days old entered into flowering and boll formation stages. Field operation like application of 13:0:45 are in progress. Whitefly population varied from 2 - 12 per three leaves, jassid population 0-7 per three leaves and thrips 0-15 per three leaves. Leaf blight symptoms were observed at some locations. Overall good condition of the crop noticed.</p> <p>Advisory:</p> <p>Due to rainfall, manual operations were not feasible under wet conditions. Hence, farmers are advised to spray Paraquat 750-1000 ml/acre depending upon weed biomass within crop rows. Protective hood must be used for this kind of herbicide application to avoid drift/damage to cotton leaves. Farmers are advised to regularly monitor the crop. Spray Flonicamid 50WG @ 80 g per acre/ Thiamethoxam 25WG @ 40 g per acre/ Dinotefuran 20SG @ 60 g per acre to control jassid and profenophos 50EC @ 500 ml per acre or spinetoram 11.7SC @ 170 ml per acre for thrips control. Spray 2% solution of Potassium nitrate wherever flowering and boll formation has started. In case of fungal leaf blight spray carbendazim 50% WP @ 10 g in 10 litre of water. In case of bacterial blight, spray copper oxychloride 50% WP @ 25 g + streptocycline @ 1 g in 10 litres of water.</p>
Faridkot	0	0	0	6.6		0	0	0	0	0	11	
Mukatsar						4	0	0	0	0	4	
Bhatinda	0	0	0	6	3.8	3	0	0	0	0	5	
Sangrur						0	0	5	6	10	3	
Ludhiana	4	37.1	0	0	2	0	0	7	5	14	5	
HARYANA												
Hisar	0	0	0	0	0	3	0	0	7	7	7	<p>At Sirsa, the crop is in good condition at 110 to 120 days old at reproductive stage. Average whitefly population ranged between 6.0-11.9, thrips 1.0-2.3 and jassid 0.9-1.6/3leaves in surveyed locations. No pink bollworm (PBW) infestation in farmers' field has so far been reported but trap catches of PBW at a location in the vicinity of gineries in Sirsa and Jind districts have been recorded.</p> <p>At Hisar, the crop is 113 to 133 days at flowering to boll opening stage. The weather was clear during the week. Foliar application of fertilizers was given. Weed infestation is on the increase. Whitefly population ranged from 3.3 to 54.3 adults per 3 leaves, jassid from 0.0 to 7.5 per 3 leaves and thrips from 0.0 to 2.7 thrips per 3 leaves. As such, the whitefly and jassid population is on the decline.</p> <p>Advisory:</p> <p>The incidence of all sucking pests is below ETL. If observed above ETL (whitefly 6 adults/leaf, jassids 2 nymphs/leaf and thrips 10-20/leaf) and mixed infestation of whitefly and thrips is observed, apply Diafenthiuron @ 200 g/acre or Flonicamid @ 80 g/acre or</p>
Jind						0	0	6	14	16	3	
Sirsa						7	0	0	0	0	9	

Rohtak	2.2	0.4	0	0	0	0	0	4	6	10	0	Dinotefuran 60 g/acre in case the mixed infestations of whitefly and jassid is noticed. If higher population of eggs and nymphs are observed under the leaves, then application of Pyriproxifen (400-500 ml/acre) or Spiromesifen (250ml/ acre) is advisable. In arboreum (Desi) cotton, if the incidence of spotted bollworm is observed, apply Spinosad @ 50 ml/acre or Indoxacarb @ 100 ml/acre in 200 litres of water.
RAJASTHAN												
Ajmer	1.7	0	0	5.2	0	48	38	96	22	19	55	At Banswara, the crop is 61 days old at vegetative to flowering stage. Fields are full of weeds due to continuous rains. Intercultural operations could not be done. Jassid population seen above ETL level (3 jassid/leaf). Whitefly infestation observed below ETL. No bollworm incidence recorded. No incidence of diseases.
Jodhpur	63.9	0	0.5	15	0	18	14	32	32	0	18	At Sriganganagar, the crop is 95 to 120 days at boll formative stage. Need based irrigation applied, weed hoeing to clean the crop and first foliar application of potassium nitrate 2% have been done. Itsit (<i>Trianthema spp.</i>), tandla (<i>Digera arvensis</i>) Motha (<i>Cyperus rotundus</i>) have infested the crop. Jassid noticed below ETL level (0.33-0.67/3 leaves), Whitefly below ETL (5.67-12.33/3 leaves), thrips ranging from 3.33- 10.17/ 3 leaves. Incidence of <i>Earias sp.</i> on desi and non- Bt American cotton have been recorded at 1.00-2.33 larvae/20 plants. Pink boll worm (0.67-2.33 adult moth) caches per pheromone trap/ week recorded. Occurrence of cotton leaf curl virus disease (CLCuD PDI 10-15 %) noticed at farmers fields.
Nagaur						48	33	53	143	23	9	Advisory: Farmers are advised to make proper drainage system in their fields. For weed management, spray Quizalofop ethyl 5% EC @ 2ml/litres of water. Install pheromone traps for monitoring PBW (5/ha) and also remove rosette flowers due to PBW if any. Farmers are advised to spray any one of insecticide for the control of sucking pests if they reach above ETL: Acetamiprid 20 EC @40 ml/acre or Buprofezin 25 EC @ 200 ml /acre or Diafenthiuron 50 WP @ 240 g/acre or Flonicamid 50 WG @ 80 g/acre. Avoid tank mixture of two or more insecticides. At Sriganganagar, farmers are advised to spray Flonicamid 50 WG @ 80 g/acre or Thiamethoxam 25 WG @ 100 g/acre or Ethion 50 EC @ 600 ml/acre, whenever the whitefly, jassid and thrips crossed ETL. Spray of Emamectin benzoate 5 SG @ 100g/acre or Spinosad 45 SC @ 66 ml/acre is recommended for spotted bollworm. Measures suggested for whitefly control will take care of CLCuD disease management.
Pali	3	5	14	4	0	55	61	76	42	39	55	
Sri Ganganagar	0	0	0	9.8	7.8	4	0	0	0	0	0	
ORRISA												
Koraput	3.4	44.6	45.2	2.4	45.8	29	34	8	11	15	9	The crop is 77 to 87 days old at flowering and boll formation stages. The average crop condition is good in all the districts. Drainage of excess water from the cotton fields of the districts done wherever there has been continuous rainfall during the week. Regular monitoring for pest and disease incidence and plant protection measures going on. Weed infestation was reduced by taking control measures. Spotted bollworm, aphids, jassids and thrips infestation reported from all the cotton growing districts. Wilt and root rot has been brought under control in Kalahandi and Nuapara districts through control measures taken by the farmers. No other major cotton diseases are reported from any of the cotton growing districts.
Kalahandi	1.2	33	3	0	4	22	33	17	0	32	23	Advisory: Farmers are advised to regularly monitor the crop for any pest and diseases attack. If the

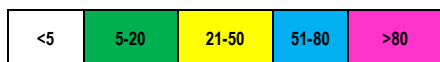
Balangir	4.5	0	0	0.1	2.2	22	36	19	4	35	26	population of sucking pests like aphids, jassid and thrips crosses ETL, spray any one of the following insecticides: Neem based pesticide @ 50 ml/10 litre of water/ Buprofezin 25 SC @ 10 ml/10 litre of water/ Flonicamid 50 WG @ 4 g/10 litre of water/ Or Thiamethoxam 25 WG @ 2 g/10 litre of water. Spotted bollworms can be controlled by spraying Chlorantraniliprole 18.5 SC@ 3 ml/10 lit water (ETL- 20 % plants showing one or more flared up squares). Provide adequate drainage channels to avoid water logging in the fields.
GUJARAT												
Amreli	0	0	0	37.6	4.6	26	55	28	26	36	29	At Junagadh, the crop is 78 days old at flowering stage. Weeding, earthing up and application of MOP and SSP done. Thrips and Jassid seen above ETL with high mealybug infestation in few farmers' field. Leaf spot, wilt and Bacterial blight were also observed. At Surat, the crop is 60 to 65 days old at vegetative stage. Weeding operations were taken up during the reporting period. Chido (<i>Cyprus rotundus</i>), Satodi (<i>Trianthema monogyna</i>), Dhamdo (<i>Amaranthus viridis</i>) and others have infested the fields. Low population of thrips and leaf hopper noticed. Bacterial leaf blight was noticed in some of the plants. Advisory: Farmers are advised to take up intercultural, weeding and earthing up operations.. Application of Urea and MOP during earthing up and spray of NAA 3 ppm or 19-19-19 (N-P-K-) water soluble fertilizer 1% to be done. If thrips and jassid go above ETL, spray flonicamid 50% WG @ 4 g/10 litre or Acetamiprid @ 2 g/10 liter of water. To manage foliar disease, spray Copper oxychloride 25 g + Streptocyclin 1 g or in 10 litres of water. At Surat, farmers are advised to maintain field sanitation. Spray neem oil 1500 ppm @ 50 ml/10 lit. of water to control sucking pest. Install pheromone traps (5 traps/ha) to monitor pink bollworm. Spray Copper oxychloride 25 g + Streptocycline 1 g for effective management of Bacterial leaf blight (BLB) disease.
Bhavnagar	30.7	0	18.6	0	21.6	41	55	28	29	43	71	
Jamnagar	30	0	0	0		31	24	44	31	26	18	
Rajkot	21	0.7	0	0	88.1	41	27	60	34	34	30	
Broach	0	0	0			16	41	85	20	60	111	
Sabarkantha						35	40	40	29	41	49	
Surendranagar	13.6	0.6	0	3.6	18.8	44	39	60	38	34	57	
Ahmedabad	0.5	0	0	22.2	0.4	44	32	51	26	34	115	
Baroda	59.4	1	0	12	44	10	65	46	21	29	168	
Patan						28	29	46	41	26	23	
Mehesana						25	23	37	14	34	44	
MP												
Khargaon	3.3	0	61	23	0	57	66	33	24	23	16	At Khandwa, the crop is 67-117 days old at vegetative to flowering and squaring to boll formation stages. The weather was mostly cloudy and rainy. Sucking pests attack is below ETL. Root rot seen in waterlogged areas controlled by drenching the crop with Carbendazim 2 g /lit particularly near the affected plants. Advisory: Weeding and intercultural operations may be performed during the week. Farmers are recommended to apply fertilizer @ 150:75:40 Kg/ha. 25% N may be applied to 90 days old crop. In the areas where jassid and white fly crosses ETL, apply Imidachlopid 17.8 SL @ 3 ml or Thiamethoxam 25 WG 2 g or Acetamiprid @ 2 g/10 lit of water. Install pheromone traps @ 5/ha for monitoring pink bollworm attack especially in areas where boll formation has initiated.
Dhar	0.5	0	0.3	10.8	0.5	38	47	27	11	20	36	
Khandwa	0	0	0	0	0	50	31	35	65	42	9	
MAHARASHTRA												
Dhule	0	0	3		0	26	42	14	23	24	18	At Akola, the crop is 66 days old at vegetative stage. Weeding, hoeing and spraying has been taken up. Weed infestation is high due to rains. Medium infestation of aphids and jassid noticed. Also <i>Helicoverpa</i> and pink bollworm infestation noticed in few fields in traces. Overall the crop growth is satisfactory. At Chandrapur, the crop is 60-70 days old at square to flowering stage. No pink bollworm incidence recorded. Thrips and jassids were above ETL. Whifely was below ETL. Minor
Nandurbar	0	0	0		1	22	49	74	47	86	38	
Jalgaon	0	0	0	0	0	34	26	21	21	18	9	
Ahmednagar	0	18.2				10	49	75	15	17	20	
Aurangabad	0	0	24	14	0.8	25	11	0	5	6	4	
Jalna	0	0	63	0	0	15	32	21	6	11	12	
Beed	2	0	0			15	17	42	37	7	4	

Nanded	0	0	0	40	19	36	53	44	10	17	14	<p>incidence of bacterial blight recorded in Bhadravati and Warora tehsils. Survey conducted in the districts Amravati, Washim, Buldana, Jalna, Aurangabad and Ahmednagar indicated negligible infestation of pink bollworm on flowers.</p> <p>Advisory: Farmers are advised to spray recommended insecticides if the sucking pest and bollworm infestation goes beyond ETL. Flonicamid 50% WG @ 4g/10 litre of water may be sprayed for control of sucking pests. Spray Copper oxychloride 25 g + Streptocycline 1 g for effective management of Bacterial leaf blight (BLB) disease.</p>
Parbhani	1.5	0.2	23	25.1	12.8	16	30	44	7	8	11	
Hingoli	0				1	12	36	44	7	8	11	
Buldhana	0	0	3	30	23	55	34	34	12	25	12	
Akola	0	0	0	22.8	0	68	36	36	25	25	13	
Washim	0	0	0	5.6	11	43	12	25	10	16	13	
Amravati	0	18	21.8	16.8	0	76	36	58	49	35	13	
Yavatmal	0	0	4.6	11.8	0	78	61	39	32	21	13	
Wardha	0	5	0	2.2	0	38	27	49	52	21	13	
Nagpur	0	19.8	20.8	18.8	5	38	48	49	54	29	18	
Chandrapur	0	0	51.3	11.2	5.1	34	47	39	32	30	19	
TELANGANA												
Adilabad	0	0	14.8	2.6	0		61	18	16	14	23	<p>At Guntur, the crop is up to 50 days old at vegetative to square initiation stage. Cloudy weather with intermittent rains during reporting period. First split application of fertilizers was given. Intercultivation and line weeding taken up.</p> <p>At Nandyal, the crop is up to 86 days old at vegetative to flowering and boll formation stage. The weather was humid with frequent rains. Grassy and broad leaved weeds have infested the cotton fields. Intercultivation, weeding and top dressing of fertilizers were taken up during the reporting period. Sucking pests like jassid was noticed above ETL where as whiteflies and thrips below ETL. Pink bollworm infestation was also recorded but below ETL. <i>Alternaria</i> leaf spot disease incidence was noticed in few areas.</p> <p>Advisory: Farmers are recommended to take up intercultivation and first split application of fertilizers (N and K).if sucking pests crosses ETL, spray Imidacloprid 17.8 SL @ 80 ml or Acetamaprid 20% SP @ 40g or Flonicmid 50% WG @ 80g or Diafenthiuron 50% WP @ 240g per acre. Regarding PBW, erect pheromone traps and observe the severity of pest and if it crosses ETL, spray Neem oil @ 1 litre or Thiodicarb 75% WP @ 400 g or Profenophos @ 40 ml per acre. Wherever water stagnation is noticed, drain out the excess water from field and spray urea@ 20 g or DAP @ 10 g or 19-19-19 @ 5g per lit of water. Spray Pyraclostrobin 20% WG @ 10 g/10 litre of water for management of fungal leaf spot disease.</p>
Warangal	0	32	7	114	10		19	27	11	32	32	
Khammam	0	1	35.6	1	18.4		17	23	7	23	16	
Karimnagar	0	0	33.6	10	0		27	5	7	17	26	
Mahabubnagar		0		14			33	20	6	9	8	
AP												
Guntur	0	0.4	6.2	0	14.1	22	41	9	9	25	12	
Prakasam	0	0.3	53.1	0.5	5	22	64	19	8	6	7	
KARNATAKA												
Dharwad	1.4	0	0.2	2	4.8	3	9	8	4	4	4	<p>At Raichur, early sown crop is 85 to 90 days old at flowering and boll initiation stages, late sown crop (55 to 60 days old) is at flowering stage and very late sown crop (25 to 30 days old) at vegetative stage. Till date, about 85 to 90 per cent of the area has been sown in the region. Basal application of fertilizers has been recommended along with soil application of MgSO₄ (@ 10 kgs per acre). Second top dressing of Nitrogen and Potassium for the early sown crop and first top dressing of Nitrogen and Potassium given for late sown crop. First foliar spray of 1% 19: 19: 19 (10 grams in 1 litre of water) + 1% MgSO₄ was recommended for 55-60 days old crop. The same spray has been advised to take up for second time during boll initiation stage (75-80 DAS). Weeds were noticed in the early sown crop in the farmers' fields. Intercultural operations were carried out. Post emergent application of Pyrethriobac Sodium @ 12.5 ml in 10 lit of water was sprayed against weeds for 25-30 old crop. Thrips</p>

Haveri						3	6	7	3	4	4	<p>were noticed in the 25-30 days old crop in the area. Jassids were also noticed in some patches and also in 45-50 days old crop. Flonicamid @ 4 g/10 litre of water was sprayed. Profenophos @ 10 ml in 10 litre of water has been advised for 60 days and above old crop against sucking pests and also for PBW as it acts as ovicidal for PBW eggs. No incidence of diseases.</p> <p>At Dharwad and adjoining districts, early sown crop is 60 days old at vegetative growth stage to flowering stage. Inter-cultivation, hand weeding and foliar applications of fertilizer were carried out. Weed population is under control. Incidence of leaf blight diseases was noticed with moderate status.</p> <p>In Chamarajanagara district, the crop is between 15 days to 120 days old, No rainfall during the reporting week. Weed incidence was noticed, managed with appropriate cultural and chemical measures. Population of sucking pests like Aphids (20 to 25/3 leaves), Jassid (3 to 4/3 leaves), mirid bugs (10-12 for 25 squares) were observed. 3-4% of pink bollworm incidence was noticed. Overall the condition of the crop is good.</p>
Mysore	0	4	0	0	2	6	14	10	5	6	7	<p>Advisory: Installing insect traps @ 1 per acre is advised for 45 days old crop for monitoring of pink bollworm moths. Some farmers complained about square dropping and were advised to spray NAA @ 2.5 ml per 10 litre of water along with a spray of 13:0:45 (Potassium Nitrate) @ 100 g/ 10 lit of water. At Chamarajanagara, Thiamethoxam 25WG @ 5 g/10 liters or Diafenthiuron 50 WP @ 10 g/litre of water recommended for sucking pest and Lambda Cyhalothrin @ 10 g/10 litres for PBW recommended (for the crop beyond 120days). Leaf blight diseases to be managed by spraying Metiram 55% + Pyraclostrobin 5% @ 20 g/10 litre of water</p>
TAMIL NADU												
Perambalur	0	12	0		0	0	0	0	4	12	0	At Srivillipithur, the crop is 15 to 20 days old at vegetative stage. The weather during the reporting period was moderately hot with no rains. Irrigation given and first weeding taken up.
Salem	15	0	1	4	0	10	0	0	5	5	4	Weeds like <i>Echinochloa spp</i> , <i>Dactyloctenium aegyptium</i> , <i>Cyperus spp</i> , <i>Cynadon dactylon</i> , <i>Trianthema portulacastrum</i> etc. have infested the fields. Thrips attack noticed but below ETL.
Trichy						4	0	3	11	12	8	
Virudhunagar	0	0	0		0	0	0	0	3	5	0	<p>Advisory: Farmers are advised to do first thinning and provide need based irrigation. Spraying of Neem oil 5ml/ litre of water should be done to control sucking pests at this stage.</p>

Rainfall (mm)

Legend



0.0 mm rainfall (no rainfall)

Blank space express data not available.

Source: <http://imdagrmet.gov.in>

(Note: Data Assessed from <http://imdagrmet.gov.in> on 2nd September, 2019)