

**ICAR-Central Institute for Cotton Research, Nagpur**  
**XIV Weekly Advisory for Cotton Cultivation from 4<sup>th</sup> to 10<sup>th</sup> August 2020**

	ACTUAL RAINFALL in mm IMD					PREDICTED RAINFALL in mm IMD							ADVISORY
	AUGUST					AUGUST							
Date	30	31	01	02	03	04	05	06	07	08	09	10	
<b>PUNJAB</b>													
Firozpur								0	5	0	0	0	At Bhatinda, overall crop stand is good, the crop is 60 to 75 days old at flowering and boll formation stage. Hoeing and weeding are in progress. Draining of excess water from cotton fields was taken up. Weeds like <i>Cyperus</i> sp., <i>Digera arvensis</i> and <i>Trianthema monogyna</i> have infested the fields. Whitefly population varied from 1-6 per three leaves; Leafhoppers from 0- 4 per three leaves and Thrips from 10 – 40 per three leaves. No incidence of diseases.
Faridkot	0	0	3	0	0	0		0	5	0	0	0	
Muktsar								0	5	0	0	0	
Bhatinda	0	0	1	7	0	0		0	3	0	0	0	
Sangrur								0	0	0	0	17	
Ludhiana	5	0	8	41	0	23		0	0	0	3	83	<p>At Faridkot, the crop is 90 days old at flower initiation stage. Chemical weed control has been advocated in present circumstances owing to non-feasibility of manual and mechanical intercultural operations. One spray against sucking pests at few locations was given. Thrips incidence was in range of 10-15/leaf on cotton, Whitefly above ETL (8.0-12.0/leaf) and leafhopper incidence moderately high (3-5/leaf). Cotton leaf curl disease was also observed at few locations up to grade I to II.</p> <p><b>Advisory:</b>            At Bhatinda, farmers are advised to spray the fields with Flonicamid 50WG @ 80g or Dinotefuran 20 SG @ 60g/ acre, where whitefly adult population is around 6 adults per leaf and leafhopper population is more than 2 nymphs or adults per leaf. If thrips incidence is noticed, then spray Spinetoram 11.7% SC @ 170 ml/acre or Profenophos 50 EC @ 500 ml/acre. Farmers are advised to give 4 sprays of 2% Potassium nitrate (13:0:45) at weekly intervals in cotton fields where flowering has started.</p> <p>At Faridkot, farmers are advised to look for full bloom stage and start spray of Potassium nitrate (13:0:45) @ 2% to improve boll setting and reduce flower drop. For managing weed infestation under wet conditions, farmers are advised to spray 500 ml Paraquat 24 SL in 100 lit of water (6-8 weeks after sowing when the crop</p>





															litre of water is suggested. Similarly, spot application with carbendazim 50% WP @ 2 g per litre of water is recommended in <i>Fusarium</i> wilt affected fields. To control fungal leaf spot and blight diseases, depending on severity of diseases spray propiconazole 25 EC@10 ml or propineb 70 WP@25-30 g or metiram 55%+pyraclostrobin 5% WG@20 g or azoxystrobin 18.2%w/w+difenoconazole 11.4% w/w SC@ 10 ml in 10 litres of water is suggested.
<b>RAJASTHAN</b>															
Ajmer	0	1	0	37	0	0		9	27	7	4	0			In Southern Rajasthan (Banswara, Dunarpur, Pratapgarh, Udaipur, Rajsamand, Chittorgarh, Bhilwara etc), the crop is 35 days old at vegetative stage. Intercultural operations carried out. No incidence of weeds, pests or diseases. Leafhoppers have started their infestation but below ETL.
Jodhpur	0	0	0	11	0	0		0	0	0	0	0			
Nagaur								3	22	3	4	0			
Pali	0	16			0	0		20	27	7	0	11			<b>Advisory:</b>
Sri Ganganagar	0	32	0	0	0	0		0	8	0	0	0			In Southern Rajasthan, there are no rains. Dry spell has continued during the past 2 to 3 weeks. Farmers are advised to give irrigation, if facility is available. Weeding, earthing up and first top dressing of fertilizer should be completed. Farmers are advised to watch the crop and spray against sucking pests when noticed above ETL. Farmers are also advised to keep an update on the attack of locust swarm in their area. Spray neem-based formulation (0.15%) @ 45 ml/15 litres water on standing crop as feeding deterrent.
<b>ODISHA</b>															
Koraput	0	0	13	10	0	6		18	0	8	35	44			The crop is 38 to 45 days old at vegetative to square formation stage. The weather was hot and humid. Weeding, first top dressing and earthing up were completed and control of sucking pests like aphids and leafhoppers is going on in all the districts. All the three types of weeds i.e. grasses, sedges and broad leaf weeds have infested the fields. No incidence of diseases.
Kalahandi	7	0	0	0	7	3		19	12	0	53	48			
Balangir	0	0	0	0	0	45		23	13	0	53	44			<b>Advisory:</b> On the event of medium to heavy rainfall is prediction in all the cotton growing districts during the next 3-4 days due to low pressure, farmers are advised to postpone the spraying of pesticides. Weeding and earthing up should be done in the areas where it is not completed. Farmers are advised to use herbicides to control weeds where earthing up and hand weeding is not possible. They are advised to spray post emergence herbicide Pyriithiobac Sodium 10 % EC @12.5 to 15 ml per 10 litres of water to control broad spectrum weed and spray of Quizalofop ethyl 5 % EC @15 ml per 10 litres of water to manage grassy weeds in cotton once rains stop. Planofix @ 3.5 ml/15 litres of water should be sprayed at 45 DAS for

<b>GUJARAT</b>													
Amreli	0	42	14					393	25	10	3	11	
Bhavnagar	17	2	0	3	0	0		393	23	5	7	12	
Jamnagar	1	6	0	1	0	1		291	285	11	9	11	
Rajkot	1	16	0	0	0	0		392	109	6	0	11	
Junagadh	2	2	5	0	15	3		181	309	10	6	16	
Sabarkantha								11	21	12	0	4	
Surendranagar								309	32	11	0	12	
Ahmedabad	1	16	0	0	0	0		393	32	8	8	15	
Baroda	0	3	0	0	0	0		50	10	7	10	13	
Patan								29	11	11	0	3	
Mehesana								18	15	10	0	0	

retention of more number of square and bolls. Micronutrients- ZnSO<sub>4</sub> (25 kg/ha) and Boron (5 kg Borax/ha) should be applied at the time of first top dressing, if not applied as basal dose. Surveillance for incidence of sucking pests like aphids, leafhoppers and thrips is to be followed. Spray neem pesticides @ 5 ml/litre of water against sucking pests. If 25% plants shows infestation grade II/III/IV by leafhoppers spray Flonicamid 50 WG 4g/10 litres of water.

At Surat, the crop is in seedling to vegetative stage. The weather was cloudy. Weeding and intercultural operations have been taken up. Weeds like Satodi (*Trianthema monogyna*), Chido (*Cyprus rotundus*), Kadjaro (*Digera arvensis*), Dharo (*Cynodon dactylon*), *Euphorbia hirta* (Dudheli) and Tandaljo (*Amaranthus viridis*) were found dominant in the fields. Thrips incidence was above ETL. Bacterial leaf blight was recorded in its initial stage.

At Junagadh, the crop is 54 days old at vegetative stage. Intercultural and weeding operations have been taken up. Kharif weeds, *Echinochola crus-galli* (Sambo), *Eclipta alba* (Bhangro), *Euphorbia hirta* (Dudheli), *Phyllanthus fraternus* (Bhoi amali), *Portulaca sativa* (Luni), *Amaranthus viridis* (Dhimano) are in dominance. In some early sown cotton, pink bollworm and stem weevil infestation has been recorded. To control stem weevil attack, Chlorpyrifos 25 EC 20 ml in 10 litres water was sprayed. Wilt of cotton has been recorded for which farmers were advised to drench carbendazim 50% WP@ 2 g per litre of water in the affected plants.

**Advisory:**  
At Surat, farmers are advised to spray Thiamethoxam 25 WG 2g or Flonicamid 50 WG @ 4g/10 litres water as thrips have crossed ETL. Install pheromone traps @ 2/ac to monitor pink bollworm. Initiate control interventions based on ETL of 8 male moths/traps/night or 10% damage in flowers by spraying neem oil @ 50 ml per in 10 litres of water or Profenofos 50 EC @ 20 ml in 10 litres of water. Spray streptomycin 1 g + copper oxychloride 50% WP @ 25 g in 10 litres of water for effective management of Bacterial leaf blight (BLB) disease. In case of heavy rains, farmers are advised to drain out the excess rain water from the cotton fields. For the control of wilt and root rot disease, spot application of carbendazim 50% WP@ 2 g per litre of water or *Trichoderma harzianum* or *T. viridae* @6 g per litre of water is recommended and for *Fusarium* wilt, patches to be done along with one meter radius of healthy plants in desi cotton fields.





Jalgaon	1	0	0	0	0	0	22	21	7	6	9
Ahmednagar	3	11	48	0	0	0	38	11	11	3	18
Aurangabad	6	24	85	3	0	0	29	17	0	11	23
Jalna	2	0	0	0	0	0	20	0	7	4	9
Beed	0	0		0	0	0	40	7	0	0	20
Nanded	0	0	0	0	0	0	36	7	6	7	30
Parbhani	0	1	6	2	0	0	35	8	0	3	13
Hingoli							22	5	3	3	6
Buldhana	15	0	13	0	11	0	41	6	7	10	13
Akola	4	1	2	0	2		58	11	6	12	15
Washim	7	0	0	20	0		23	6	6	4	8
Amravati	2	0	32	0	6		58	15	12	16	33
Yavatmal							36	8	6	12	37
Wardha	0	11	14	0	46	28	69	8	4	20	14
Nagpur	0	0	0	21	12	13	69	11	8	22	30
Chandrapur	0	2	0	0	12	2	28	8	4	24	66

was cloudy and rainy. Intercultural operations like hoeing, and weeding operations, weedicide spray in late sown cotton crop and top dressing of fertilizers are going on. Grassy weeds particularly *Cyperus rotundus* and *Cyperus rotundus* are prominent weeds observed in cotton field with some broadleaf weeds also. Few cotton fields are heavily infested with *Commelina* weed species. Generally, the weed infestation is high in late sown cotton. Infestation of pink bollworm noticed in pre-monsoon cotton. Sucking pests in some fields was recorded but below ETL. No incidence of diseases.

At Rahuri, the crop is 48 to 85 days old at square, flowering and boll formation stage. The weather was clear to cloudy and rainy. Weeding and hoeing have been taken up. Lavala, hariyali, choti dudhi Chandvel etc. were the dominant weeds that have infested the fields. Incidence of leafhoppers, whitefly, thrips, aphids and pink bollworm noticed in the fields and controlled through recommended pesticides. Recorded *Alternaria* leaf spot 1-2 % and Para wilt 2-3 % incidence.

At Nanded, the crop is 42 to 65 days old at square formation to flowering stage. The weather was cloudy during the reporting period. Intercultural operations, weeding, fertilizer application and crop protection were the major operations carried out during the reporting period. Weeds like *Cynodon dactylon*, *Cyperus rotundus*, *Digeria arvensis*, *Merremia emarginata*, *Xanthium strumarium*, *Cassia tora* have infested the crop. Incidence of pests like aphids, whitefly and pink bollworm were noticed below ETL. No incidence of diseases.

#### Advisory:

At Akola, farmers are advised to undertake spray of 2 % urea at flowering stage of cotton at about 45 DAS. It is suggested to open the furrow in cotton field for moisture conservation purpose at 45 to 50 DAS by tying rope to tyne of the hoe. Drain out the excess water from fields in the area where heavy rainfall occurred. Some symptoms of para wilt were observed in cotton. So, farmers are suggested to drench with carbendazim 50% WP @ 20 g or copper oxychloride 50% WP @ 25 g + Urea 100 gm in 10 litres of water. It is advised to carry out intercultural operations like hoeing and weeding in cotton as required depending on the crop stages. Apply first split of 40 Kg N (90 Kg Urea per ha.) for irrigated hybrid cotton and 30 Kg N (65 Kg urea per ha.) for rainfed hybrid/hirsutum cotton as a top dressing dose of chemical fertilizers. For the management of sucking pests of cotton, For sucking pests control spray Acetamiprid 20 SP 40 gram per acre based on ETL. In some parts of Akola, the infestation of pink bollworms was noticed for

<b>TELANGANA</b>												
Adilabad	0	0	0	0	1	0		15	0	0	7	3
Warangal	43	0	0	7	36	0		7	7	12	0	8
Khammam	4	0	0	8	9	1		7	10	13	6	6

which farmers are advised to install 2 pheromone traps per acre for surveillance purpose in the field and undertake spray of Neem based formulations. It is also advised to observe 20 plants/acre as a representative of cotton field for pest incidence.

At Rahuri, farmers are advised to carry out intercultural operations. Install yellow sticky traps 8/acre for whitefly and leafhopper, blue sticky traps 8/acre for thrips, spray NSKE 5% or neem based formulations. Spray *Verticillium lecanii* 50 gm /10 litres water or Flonicamid 50 WG 2 gm/ 10 litres of water once sucking pest crosses ETL. Install pheromone traps to monitor pink bollworm @2 per acre. When 8 male moths are caught in trap per day or 10 per cent rosette flower observed, spray Profenofos 30 ml in 10 litres of water. Farmers are advised to drain out excess water from fields in the area where heavy rainfall occurred. The farmers are suggested to undertake spot drenching of carbendazim 50% WP@ 20g+urea 100 g per 10 litres of water or *Trichoderma harzianum* or *T.viridae* @10 g/ litres of water should be done for management of wilt and root rot affected crop. For the management of fungal leaf spot diseases, propiconazole 25 EC@10 ml or propineb 70 WP@25-30 g or metiram 55%+pyraclostrobin 5% WG@20 g or azoxystrobin 18.2%w/w+difenoconazole 11.4% w/w SC@ 10 ml in 10 litres of water is recommended.

At Nanded, farmers are advised to carry out intercultural operations for weed management. Top dressing of N@ 60 kg/ha to irrigated crop at 60 DAS should be applied by ring or by drilling method. Excess rain water should be drained out. Foliar spray of Acetamiprid 20% DP 2 g or Clothianidin 50 WDG 1 g per 10 Lit should be done considering ETL of sucking pests. Erect 5 Pheromone traps per ha for monitoring of Pink bollworm infestation. Spraying of 5% NSKE or neem based formulations 40-550 ml per 10 litres of water is recommended as prophylactic measures against Pink bollworm management. If Pink bollworm crosses ETL (10% infestation), spray Profenophos 50 EC @ 20 ml or Thiodicarb 75 WP @ 20 g per 10 litres of water. Spraying of Urea 2% (200 g per 10 litres of water) at 30 DAS; MgSO4 @ 50 g and DAP 2% (200 g) per 10 litres of water should be done for crop nourishment.

At Nandyal, the crop is 37 to 42 days old at vegetative to square formation stage. The weather was cloudy with frequent rainfall. Weeding, inter cultivation, split application of fertilizers and draining of excess water from the fields were carried



Karimnagar	0	0	4	4	47	0		7	12	8	3	0
Mahabubnagar	0	0	1			19		15	8	7	10	0
<b>ANDHRA PRADESH</b>												
Guntur	0	3	1	3	0	13		32	16	0	21	19
Prakasam	0	0	4	2	0	1		49	16	0	6	11
<b>KARNATAKA</b>												
Dharwad	3	0	0	11	3	11		22	16	4	0	15
Haveri								12	16	4	7	19
Mysore	0	3	2	0	15	0		56	63	38	110	162

out during the reported period. Grassy and broad leaved weeds were noticed. Thrips and leafhoppers incidence noticed but below ETL. No major disease recorded. Due to heavy rains some of the cotton fields in the district were inundated.

At Guntur, sowings have been completed. The crop is 0 to 35 days old at germination to early vegetative stage. Sowings followed by pre emergence herbicide spraying were taken up. Weedicide applied on field bunds and inter cultivation done in early sown crop. Due to continuous rains, weed infestation was observed. Post emergence application of Quizalofop Ethyl @ 400ml/acre and Pyriithiobac sodium 250ml/acre was recommended. Sucking pests viz., leaf hopper, whitefly, Thrips were below ETL. Mild incidence of root rot was observed in isolated fields. Drenching the affected and surrounding plants with copper oxychloride @ 3g/l was recommended. Traces of leaf spots noticed on primary leaves.

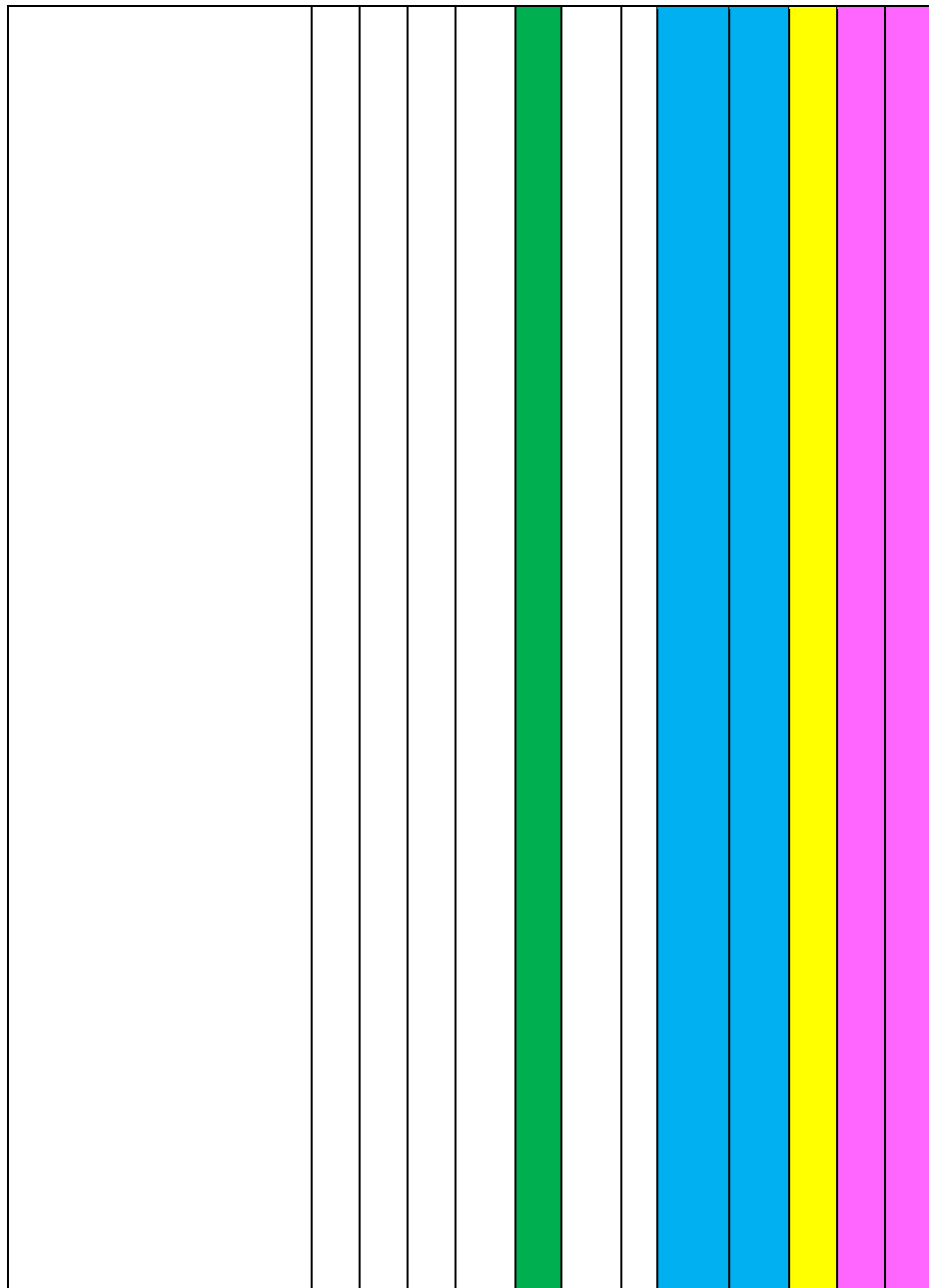
**Advisory:**

At Nandyal, farmers are advised to spray 400 ml of Quizalopop-Ethyl for the management of grass type weed and 250 ml of Pyriithiobac sodium for the management of broad leaved weeds per acre. Farmers are also advised to drain out excess water from the field and suggested to spray urea @ 20 g per litres of water or Potassium nitrate @ 20 g per litres of water. Drench the soil with copper oxychloride 50% WP@ 25 g or carbendazim 50% WP @ 20 g per 10 litres of water for the management of root rot, wilts and soil borne diseases. Install pheromone traps to monitor Pink bollworm incidence. Also advised to spray Flonicmid 50WG@ 60g per acre if sucking pests cross ETL.

At Guntur, farmers are advised to take up inter cultivation wherever possible. Post emergence application of herbicide should be given. First split of fertilizers (50kg urea + 15kg MOP per acre) should be given as spot application. Spray Flonicmid 50WG @ 60g per acre if sucking pests cross ETL.

Drench with copper oxychloride 50% WP @ 25 g or carbendazim 50% WP@ 20 g per 10 litres of water for management of root rot disease.

At Dharwad and surrounding cotton districts, Haveri, Belagavi, Bagalakot, Vijayapur, Gadag and Uttarkannada, the crop is 30 to 50 days old at vegetative stage. Hand weeding and intercultural operations for weed management were done. Grassy weeds, *Cyanodon dactylon* and the sedge, *Cyperus rotundus* were the



dominant weeds that infested the fields. Shoot weevil, thrips and Aphid infestation were in moderate status. Hand collection of Shoot weevil from the Okra as a trap crop was taken up. Sprayed Difenthiuron 50 WP @ 1.0g per litre of water for the management of Thrips, Acetamprid 20 SP @ 0.2g per litre of water for the management of Aphids, Profenophos 50 EC @ 2.0 ml per litre of water for the management of Pink bollworm in 45 days crop. Alternaria blight (*Alternaria macrospora*) was also noticed in moderate status for which Pyroclostrabin 5%+ Matiram 55% WG @3.5 g/L of water was sprayed for its management.

At Raichur, the crop is 50 to 55 days old. Sowing operation has been taken up in some rainfed patches where rainfall was received. Advised to take up intercultural preparations during this week in the areas where sowing is completed. Topdressing @ 18 kg urea and 10 kg MOP per acre has been advised to the farmers. Post-emergent application of Pyriithiobac Sodium 10% EC @ 1.5 ml in 1 litre of water was advised to the farmers at 20 to 25 days after sowing or when the weeds are at 3-4 leaf stage. Inter-cultivation is recommended for the 45 to 50 days old crop. Excess rain water was stagnated in some of the farmer's fields. Advised to make drains to remove excess water. Sucking pests (thrips) were noticed in the farmers' field for which farmers are advised to take up Fipronil spray @ 1 ml in 1 litre of water or Flonicamid per litre of water. No incidence of diseases.

At Chamarajanagar, the crop is 95 to 100 days old at flowering to boll formation stage. Spraying has been taken up. Broad leaved weeds, *Cyperus* and *Parthenium sp.* have infested the fields. Leafhoppers, White fly, Aphids and mired bug incidence noticed at low to moderate level. Spraying of Thiomethaxam @ 0.3 g or Acephate @ 1 gm/litre of water was done. TSV- 0 to 1 grade was noticed at less than 4%.

**Advisory:**

At Dharwad and surrounding districts under its jurisdiction, farmers are advised to take up hand weeding and intercultural operations for management of weeds along with spray of Pyriithiobac Sodium 10 EC @ 1.0 mL + Quizalofop Ethyl 5% EC @ 1.0 mL per litre of water. Install pheromone traps @ 2 numbers/acre for monitoring of Pink bollworm. Spray Pyroclostrabin 5%+ Matiram 55% WG @20 g or propiconazole 25 EC@10 ml or propineb 70 WP@25-30 g or azoxystrobin 18.2%w/w+difenoconazole 11.4% w/w SC@ 10 ml in 10 litres of water is recommended for the management of Alternaria blight and other fungal leaf

													spot/blight.
													At Raichur, farmers are advised to Post-emergent application of Pyrethrin 10% EC @ 1.5 ml in 1 litre of water at 20 to 25 days after sowing or when the weeds are at 3 to 54 leaved stage. Sucking pests (thrips) are noticed in the farmer's field. Farmers are advised to take up Fipronil spray @ 1 ml in 1 litre of water or Flonicamid 50WG 4g per 10 litre of water. There should be sufficient moisture in the field while taking pre-emergent herbicide spray. Topdressing @ 18 kg urea and 10 kg MOP per acre should be done.
													At Chamarajanagar, farmers are advised to spray neem based insecticides for sucking pest management. For leaf reddening, spray DAP @ 2 g perlitre of water.
<b>TAMIL NADU</b>													
Perambalur	3	1	18	0		0		0	0	3	13	23	Harvesting is in process in the summer sown crop. Pink bollworm incidence 19.6% recorded in the open boll damage after harvest (Summer Cotton). <i>Alternaria</i> leaf blight and Bacterial leaf blight were also noticed. Sowing is going on in farmers' fields (Winter crop).
Salem	0	0	5	0	2	3		3	13	7	30	55	
Trichy								4	18	19	36	32	
Virudhunagar								0	7	10	74	16	
													At Srivilliputhur, ploughing is going on in many parts of the area. The weather during the reporting period was moderately hot with little rainfall.
													<b>Advisory:</b> Cotton sowing season has started. Farmers are advised to take up deep ploughing necessary to remove insects and their immature stages. Seed treatment with Imidacloprid 600FS (7-10ml/kg seed) is essential for protecting seed from attack of early stages of insects. Spray Pendimethalin 30 EC as pre-emergence herbicide immediately after sowing.

The detailed information regarding cotton production technology, e.g. selection of soil, varieties, fertilizer application, sowing methods, irrigation systems, management of weeds, insect pests and diseases, etc. can be availed from an android based **CICR Cotton App** developed by ICAR-CICR, Nagpur. The app can be downloaded free of cost from Google play store. Additionally, the crop growth stage specific and weather based weekly advisory are uploaded on the website of ICAR-CICR that may also be consulted for the benefit of farmers

Rainfall (mm)

<5	5-20	21-50	51-80	>80
----	------	-------	-------	-----

0.0 mm rainfall (no rainfall)

Blank space express data not available.

For district past rainfall data:

Source:

Website: [www.imdagrimet.gov.in](http://www.imdagrimet.gov.in)

Link: <http://164.100.114.10/weatherdata/DistrictWindow.php>

For next five day forecast:

Website: [agromet.imd.gov.in](http://agromet.imd.gov.in)

Link: [http://agromet.imd.gov.in/index.php/download/download\\_state\\_wise](http://agromet.imd.gov.in/index.php/download/download_state_wise)