

**ICAR-Central Institute for Cotton Research, Nagpur**  
**XI Weekly Advisory for Cotton Cultivation from 14<sup>th</sup> to 20<sup>th</sup> July '2020**

	ACTUAL RAINFALL in mm IMD							PREDICTED RAINFALL in mm IMD					ADVISORY
	JULY							JULY					
Date	09	10	11	12	13	14	15	16	17	18	19	20	
<b>PUNJAB</b>													
Firozpur								0	3	2	19	14	<p>At Faridkot, the crop is 67 to 70 days old and has reached peak vegetative growth along with flower initiation stage in timely sown crop. Mechanical/manual intercultural operations and fertilizer application has been taken up. One spray for sucking pest control at few locations has been given. There is no serious problem of weed infestation as regular intercultural operations have been carried out. Thrips incidence was above ETL on cotton, so Profenophos 50 EC @ 500ml/acre was sprayed. Whitefly noticed below ETL (2-4/leaf). Leafhopper incidence was moderate (2-4/leaf). Para wilt was observed at few places due to heavy rainfall. Farmers were advised to spray Cobalt chloride @ 1g/100 lit of water on the affected plants only.</p> <p>At Bhatinda, the crop is 40 to 60 days old at vegetative to flowering stage. Second split of nitrogen fertilizer application is being applied. Weeds like <i>Cyperus</i> sp., <i>Digera arvensis</i> and <i>Trianthema monogyna</i> have infested the fields. Hoeing and weeding are in progress Whitefly population varied from 2 to 12 per three leaves. Leafhoppers from 0 to 4 per three leaves and thrips 4 to 25 per three leaves. Problem of Para wilt after rainfall/ irrigation was observed in cotton fields</p> <p><b>Advisory:</b>            At Faridkot, farmers are advised to apply second dose of Nitrogen @ 45 kg Urea/ acre and also to make suitable arrangements for drainage</p>
Faridkot	0	0	0	0	42	48		0	2	3	21	8	
Muksar								0	1	2	9	15	
Bhatinda	0	0	4	16	16	0		0	3	5	11	8	
Sangrur								0	2	6	21	10	
Ludhiana	27	24	9	28	0	0		1	3	6	15	14	

														of water from cotton fields in case of heavy rainfall. For managing weed infestation under wet condition, farmers are advised to spray 500 ml Gramoxone 24 SL (Paraquat) in 100 liters of water (6-8 weeks after sowing when the crop is about 40-45 cm in height) as a directed spray to control weeds between the crop rows. The directed spray can be done by using a protective hood. Paraquat is non-selective herbicide and can cause injury to the crop if it falls on the crop leaves. If the incidence of thrips increases, spray Profenophos 50 EC @ 500ml/acre. In case incidence is severe, spray Diafenthiuron 50 WP @ 200g/acre or Spinetoram 11.7 SC @170 ml per acre. Spray Achook or Nimbecidine @ 1 liter per acre if the whitefly population increases to 4-5/leaf. If whitefly attack increases beyond ETL, then spray Diafenthiuron 50WP @200g/acre or Ethion 50 EC @ 800ml/acre. If both whitefly and leafhopper incidence increases, then spray Flonicamid 50 WG @80 g or Dinotefuran 20%SG 60g/acre. Farmers are advised to be vigilant about the increase in insect pests during next fortnight as the maximum relative humidity level has already increased. After heavy rains or irrigation, some plants might show wilting due to Para wilt which can be checked by spraying Cobalt chloride @ 1g/100 lit of water on the affected plants at the initial stage of wilt.
														At Bhatinda, overall crop stand is good. If whitefly population reaches above ETL, farmers are recommended to spray the fields with Nimbecidine @ 1 litre per acre. Farmers are advised to apply second split of Nitrogen where flowering has started. In case of heavy rainfall, farmers are advised to drain out the excessive water from cotton fields. Problem of para wilt was observed in some cotton fields after rainfall/ irrigation. So, farmers are advised to spray Cobalt chloride solution @ 1g/100 lit of water within 24 to 36 hours of appearance of symptoms on the affected plants
<b>HARYANA</b>														
Hisar	5	0	0	28	6	0		0	2	4	53	32		At Hisar, the crop is 9 to 14 weeks old at vegetative to square/flowering stage. The weather was either clear/cloudy/rainy.
Jind								0	2	4	9	24		

Sirsa							0	0	0	7	42
Rohtak	0.	0	0	0	9	0	0	2	4	5	15

Irrigation, second split dose of fertilizer application and hoeing were the operations carried out during the reporting period. Weeds like, motha, santhi, crowfoot grass, shama and hirankhuri have infested the fields. Farmers were advised to do mechanical hoeing after every flush of rain or applying irrigation. Second split dose of Nitrogenous fertilizer @ half bag urea per acre needs to be given. Several fields were noticed for thrips and leafhoppers above ETL Farmers were advised to spray spray of Thiamethoxam 25WG @ 40 g or Imidacloprid 17.8 SL @ 40 ml for thrips and leafhopper control with 150-175 lit of water per acre. The activity of pink bollworm was noticed in installed traps in the villages namely, Karsindhu (Jind) and Baldhan Khurd (Rewari). Farmers were advised to monitor pink bollworm population through pheromone traps and flower/boll infestation in the villages of Uchana block (Jind). Locust swarm entered in Keshpura and Umedpura villages in Sirsa district and caused damage in cotton. The swarm was controlled by the efforts of district administration and farmers were also advised to be vigilant for further invasion of locust swarm and inform the State Agriculture Department immediately. Root rot and cotton leaf curl virus disease were observed in few farmers' fields. Farmers were advised to do spot application of Carbendazim 50% WP@ 2.0 g per lit of water in root rot affected patches and manage whitefly attack.

At Sirsa, the crop is 9 to 11 weeks old at vegetative and square formation stage. Weeding is in progress. Whitefly population recorded between 7-10, thrips 7-13/ 3 leaves at all the locations and leafhoppers (0-2/3leaves) were in traces. Root rot and para wilt incidence observed at few locations

**Advisory:**  
At Hisar, farmers are advised to irrigate crops which are more than 6 weeks old and sufficient rainfall yet to receive. Excess water should be drained out after the rainfall. Mechanical hoeing needs to be done after every flush of rainfall or irrigation. Split dose of Nitrogenous fertilizer @ half bag of urea per acre is to be given. Farmers are

<b>RAJASTHAN</b>												
Ajmer	0	0	0	0	0	0		2	0	2	56	12
Jodhpur	0	0	0	1	0	0		1	0	0	3	0
Nagaur								0	0	0	23	5
Pali	0	0		0	3	4		6	13	5	11	9

advised to monitor the population of sucking pests on 10 randomly plants (3 leaves/Plants) and pink bollworm through pheromone traps (2 traps/acre) and fruiting bodies (20 flowers or bolls/acre). Farmers were also advised to be vigilant towards the invasion of locust swarm in the cotton growing districts sharing boundaries with Rajasthan and inform the State Agriculture Department immediately. For root rot disease, spot application of Carbendazim 50% WP@ 2.0 g per litre of water or *Trichoderma harzianum* or *T. viridae* @10 g/ litre of water is suggested.

At Sirsa, as the sucking pests are below ETL, farmers are advised not to apply any intervention at this stage. If the population of sucking pests is above ETL (whitefly 6 adults, thrips 10-20 nymphs and adults and Leafhopper 2 nymphs/leaf), spray Nimbicidene @1.0 litre/acre in 200 lit of water. In case of rains, farmers are advised to drain out excess water from cotton fields. Farmers are advised to apply first application of nitrogenous fertilizers.

In southern Rajasthan (Banswara, Dunarpur, Pratapgarh, Udaipur, Rajsamand, Chittorgarh, Bhilwara etc), the crop sown is 14 days. No weed infestation. No incidence of pests and diseases. At Sriganganagar, the crop is 55 to 85 days old at vegetative and

Sri Ganganagar	0	0	0	1	42	0	0	0	1	2	47	<p>square formative stages. Need based irrigation applied, weed hoeing to clean the crop, first recommended dose of fertilizer (Urea) also applied during the reporting period. Weeds like Itsit (<i>Trianthema spp.</i>), Tandla (<i>Digera arvensis</i>), Motha (<i>Cyperus rotundus</i>) have infested the crop. Leafhoppers noticed below ETL ( 1.67-6.33/3 leaves), Whitefly from (13.67-20.33/3leaves) and thrips population observed ranging from 18.67-24.33/ 3 leaves.</p> <p><b>Advisory:</b> In southern Rajasthan, farmers are advised to make proper drainage system in their fields looking to forecast of rains. Still crop is free from insect pests and diseases. Farmers are also advised to be careful from the attack of locust swarm in their areas. Spray neem-based formulation 5ml/ lit of water on standing crop as feeding deterrent. Farmers should make loud sound by beating tin/metal plates, drums, loud speaker, DJ and other electric sound to prevent locust swarm landing in the field.</p> <p>At Sriganganagar, farmers are advised to remove weed infestation manually or by weedicide spray. Neem based insecticides @ 5ml/lit. of water are to be sprayed for sucking pests control. Spray Flonicamid 50 WG @ 0.3g or Thiamethoxam 25 WG @ 0.5g /lit. of water for whitefly and leafhopper attack if cross ETL. Spray of Spinetoram 11.7 SC @0.9 ml or Thiamethoxam 25 WG @ 0.5g /lit. of water for thrips is also recommended.</p>
<b>ODISHA</b>												
Koraput	0	0	0	0	21	7	13	5	2	16	10	<p>The crop is 17 to 24 days old at germination to seedling stage The weather was hot and humid. Sowing of cotton has been completed in all the districts. Weeding, first top dressing and earthing up is going on in the early sown crops. All the three types of weeds i.e. grasses, sedges and broad leaf weeds have infested the fields. No incidence of pests and diseases reported so far.</p>
Kalahandi	1	0	6	5	5	0	11	8	11	7	12	
Balangir	0	0	0	0	21	28	15	2	9	0	1	

<b>GUJARAT</b>												
Amreli	0	0	5	0	0	7		32	26	6	12	8
Bhavnagar	3	0	5	7	3	0		28	30	2	26	20
Jamnagar	2	5	0	28	9	0		34	14	6	7	6
Rajkot	0	1	34	9	9	0		30	24	17	9	7
Junagadh	5	3	13	21	3	74		34	14	6	7	6
Sabarkantha								104	10	8	9	23
Surendranagar	0	12	8	0	4	8		26	25	10	14	11
Ahmedabad	28	9	2	3	17	0		39	21	5	14	30
Baroda	2	4	7	0	39	10		30	8	4	3	10
Patan								30	8	4	3	10
Mehesana								79	14	9	6	18

#### Advisory:

Weeding and earthing up should be done and first top dressing of fertilizer (50% K and 50% N) should be given at 25 to 30 DAS. Use fertilizer dose of 120:60:60 kg/ha for hybrids and 90:40:40 kg/ha for varieties. 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 and thrips to be followed. Spray neem pesticides (1500 ppm) @ 3 ml/litre of water to prevent sucking pests incidence.

At Junagadh, the crop is 33 days old at vegetative stage. Cotton sowing is completed in Saurashtra region of cotton growing areas, Gap filling, intercultural and weeding operations have been carried out. Kharif weeds like *Echinochloa crus-galli* (Sambo), *Eclipta alba*(Bhangro), *Euphorbia hitra* (Dudheli), *Phyllanthus fraternus* (Bhoi amali), *Portulaca sativa* (Luni), *Amaranthus viridis* (Dhimano) are in abundance. Minor attack of grey weevil is observed.

At Surat, the crop is in initial growth stage. The weather was cloudy with medium to heavy rains. Weeds like Chido (*Cyprus rotundus*) Dharo (*Cynodon dactylon*) Tandaljo (*Amaranthus viridis*) and few others have infested the crop. No pests and diseases noticed.

#### Advisory:

At Junagadh, farmers should go for light earthing up 35 days after sowing cotton. Due to continuous rains, phoma blight was observed in some areas. For fungal leaf spot/blight farmers should spray Pyraclostrobin 5% + Metiram 55% 20 gm or Propaconazole 25% EC @10 ml or Propineb 70% WP @ 25g in 10 liter water. Remove excess water from the field. Apply Ammonium Sulphate @ 15 kg per acre after 30 days of sowing cotton. Those farmers with labour scarcity should spray Quazalofop ethyle 20 ml in 10 liters water for weed control. Those areas where water logging is seen, make small



Buldhana	81	0	2	5	0	0		15	8	5	15	5
Akola	29	8	27	0	14	0		12	24	7	10	3
Washim								28	24	11	16	10
Amravati	3	25	4	0	10	1		15	21	5	15	11
Yavatmal								24	20	11	16	19
Wardha	0	2	16	0	43	1		25	15	7	19	30
Nagpur	1	0	0	0	7	4		17	11	8	28	36
Chandrapur	0	0	26	0	6	16		15	14	10	28	35

*rotundous*, *Digeria arvensis*, *Merremia emarginata*, *Xanthium strumarium*, *Cassia tora* have infested the fields. Aphids attack noticed below ETL. Root rot disease noticed in few fields.

At Akola, the sowing of cotton has been completed. The crop is of 20 to 25 days old and at vegetative stage. The weather during the reporting period was cloudy and rainy. Thinning, hoeing and weeding operations have been taken up. Some grassy weeds particularly *Cyperus rotundus* and *Cyperus rotundus* are prominent weeds observed in cotton fields with some broadleaf weeds too. Weedicide spray is going on. No pests and diseases.

**Advisory:**

At Rahuri, collection of neem seed should be done for preparation of NSKE. Install yellow sticky traps against Jassid and whitefly for monitoring. Install pheromone traps @2 per acre at 45 days after sowing and spray NSE or neem based insecticides against pink bollworm. Excess rain water should be drained out from field. If sucking pest reaches above ETL, spray Flonicamid 50 WG 4 gm or Dinotefuran 20%SG 3g/10 lit of water.

At Nanded, basal dose of fertilizers - 48:60:60 NPK kg/ha should be applied as early as possible to rainfed cotton. Intercultural operations are to be carried out on irrigated and rainfed crops. Top dressing of Nitrogen @ 60 kg/ha to irrigated crop and 36 kg/ha to rainfed crop should be applied by ring or by drilling method. Nitrogenous fertilizers should not be applied by broadcast. Post emergence weedicide Pyriithiobac Sodium @ 62.5 g a.i. /ha + Quiazalofop- ethyl 50 g a.i. / ha should be sprayed as tank mix at 20-30 DAS (2-4 weed leaf stage) or hand weeding should be done at 20-30 DAS. Collection of Neem seeds should be done for using as NSKE in future. Excess rain water should be drained out. Foliar spray of 5% NSKE or Acetamiprid 20% DP or pest after 35-40 DAS @ 2 g per 10 lit.

At Akola, the infestation of some grassy weeds and broadleaf weeds



<b>TELANGANA</b>												
Adilabad	0	34	16	0	49	0		22	17	13	22	17
Warangal	0	33	0	0	3	0		8	1	7	18	15
Khammam	5	15	0	13	14	26		13	1	2	18	11
Karimnagar	15	26	0	0	0	0		2	5	8	19	22
Mahabubnagar	0	6	0	12	0			26	3	0	3	10
<b>ANDHRA PRADESH</b>												
Guntur	105	1	10					10	1	1	2	2
Prakasam	94	0	0	0	5	0		9	1	1	2	4

were observed in cotton fields. So farmers are advised to undertake the spray of post-emergence herbicide Pyrithiobac Sodium 10 % EC @12.5 to 15 ml per 10 lit of water for broad spectrum weed control or spray of Quizalofop-ethyl 5 % EC @15ml per 10 lit of water to manage grassy weeds in cotton. It is also advised to carry out the intercultural operations like hoeing and weeding in cotton. It is recommend to apply first split of 40 Kg N (90Kg 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 leafhoppers, spray Acetamiprid 20 SP 2g/10lit. of water on crossing ETL.

At Parbhani root rot incidence has been reported in some fields, spot application of Carbendazim 50% WP@ 2.0 g per litre of water or *Trichoderma harzianum* or *T. viridae* @10 g/ litre of water is recomended. While gap filling in place of infected /rotted plants farmers are advice to give seed treatment with fungicides Thiram 37.5+ Carboxin 37.5% DS @ 3.5 g / kg seed or Tetraconazole 11.6% w/w (12.5% w/v) SL @ 2 ml /kg seed or *Trichoderma harzianum* or *T. viridae* @4 g/ kg of seed .

At Nandyal, the crop is 20 to 25 days old at vegetative stage. The weather was cloudy with frequent rainfall. Grassy weeds were noticed for which weeding and intercultural operations have been taken up. No major pests recorded during the reporting period. No incidence of disease.

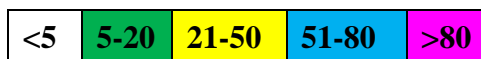
At Guntur, preparatory cultivation and sowings are being done at slow pace due to continuous rains. Till date, the crop sown is 15 days old at initial growth stage. Field cleaning and basal application of Single Super Phosphate is being done Due to continuous rains, weed infestation is observed. No pests incidence. Traces of root rot noticed for which the affected and surrounding plants are drenched with fungicides.



												<p>At Chamarajanagar, the crop is 74 to 79 days old at vegetative stage to square formation stage. Broad leaved weeds, <i>Cyperus</i> and <i>Parthenium sp.</i> have infested the fields. Leafhoppers, Aphids and mirid bug incidence noticed. Imidacloprid @ 0.5 ml or Acephate @ 1 gm/lt of water was sprayed. No incidence of diseases.</p> <p><b>Advisory:</b>  At Raichur, the farmers are advised to purchase Bt cotton seeds from the reputed dealers. Take up sowing on time those who have irrigation facilities. Pre-emergent application of Pendimethalin @ 3.5 ml per litre of water is being advised to the farmers who have taken up sowings. Post-emergent application of Pyrethriobac Sodium 10% EC @ 1.5 ml in 1 lit of water is advised to the farmers at 20 to 25 days after sowing or when the weeds are at 3-5 leaf stage. Spinetorum 11.7SC @ 0.9 ml/1 lit of water should be given to control thrips once it goes above ETL. There should be sufficient moisture in the field while taking pre-emergent herbicide spray. To avoid the root rot/wilt incidence treat the seed with fungicides Thiram 37.5+ Carboxin 37.5% DS @ 3.5 g / kg seed or Tetraconazole 11.6% w/w (12.5% w/v) SL @ 2 ml /kg seed or <i>Trichoderma harzianum</i> or <i>T. viridae</i> @4 g/ kg of seed before sowing.</p> <p>At Dharwad and surrounding regions, farmers are advised to take up hand weeding and intercultural operations for management of weeds. Spray Profenophos 50 EC @ 2.0 ml per lit of water to 15 to 30 days crop against shoot weevil..</p> <p>At Chamarajanagar, farmers are advised to spray neem based insecticides, Acephate @ 1 gm/lt of water for sucking pest management. To control leaf reddening, farmers are advised to spray DAP @ 2gm/lt of water</p>	
<b>TAMIL NADU</b>													
Perambalur	0	8	0	44	0	0		0	0	0	0	0	Pre-sowing package of practices

Salem	11	16	4	0	1	0		12	5	2	5	9	<p>Clean up fields of residual stalks and partially opened bolls from previous crop season</p> <p>Seed treatment with Thiram 37.5+carboxin 37.5% DS @ 3.5 g/kg seed or Tetraconazole 11.6% w/w (12.5% w/v) SL @ 2 ml/kg or <i>Trichoderma harzianum</i> or <i>T. viridae</i> @4 g/ kg of seed to avoid the seed and soil borne diseases and biofertilizers, Azotobacter and PSB @ 6 ml/kg should be done before sowing of cotton.</p> <p>Crop rotation to be followed in the fields that were heavily infested with pink bollworm during last season to break the life cycle of pink bollworm.</p> <p>Grow sucking pest and disease tolerant, short duration and early maturing varieties/hybrids/cultivars of cotton.</p> <p>Increased awareness should be created among the cotton farmers regarding implementation of integrated pest management (IPM) strategy for management of pink bollworm.</p> <p>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 <b>CICR Cotton App</b> 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</p>
Trichy								2	1	2	5	4	
Virudhunagar								2	0	2	6	8	

Rainfall (mm) Legend colour



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)