

ICAR-Central Institute for Cotton Research, Nagpur
Tenth Weekly Advisory for Cotton Cultivation from 7th to 13th July '2020

	ACTUAL RAINFALL in mm IMD							PREDICTED RAINFALL in mm IMD					ADVISORY
	JULY							JULY					
State and district	1	2	3	4	5	6	7	9	10	11	12	13	
PUNJAB													
Firozpur								0	1	4	9	2	<p>At Bathinda, the crop is 35 to 55 days old at vegetative to flowering stage. Application of nitrogenous fertilizer has been initiated. Hoeing and weeding are in progress. <i>Cyperus</i> sp., <i>Digera arvensis</i> and <i>Trianthema monogyna</i> are the major weeds that have infested the fields. Whitefly population varied from 0 - 8 per three leaves, Leafhopper from 0 - 4 per three leaves and Thrips incidence varied from 4 – 21 per three leaves. Problem of Para wilt after rainfall/ irrigation was observed in cotton fields. Overall crop stand is good.</p> <p>At Faridkot, the crop is two months old at peak vegetative growth along with flower initiation stage in timely sown crop. Manual weeding along with mechanical inter-cultural operations were taken up. No serious problem of weed infestation as regular inter cultural operations have been carried out. Farmers were advised to spray Profenophos 50 EC @ 500ml/acre against thrips . Whitefly incidence was noticed below ETL and leafhopper moderate (1-2/leaf). Farmers were asked to spray Nimbecidine @ 1 litre per acre if whitefly population increases to 4-5/leaf. There is no serious issue of any disease at present.</p> <p>Advisory: At Bathinda, farmers are advised to apply first/second split of Nitrogen where the crop is one/two months old. In case of heavy rainfall, farmers are advised to drain out the excess 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 litre of water within 24 to 36 hours of appearance of symptoms on the affected plants.</p>
Faridkot	0	0	0	0	0			0	0	3	4	2	
Muktsar								0	0	1	1	1	
Bhatinda	0	0	0	0	34	0	0	1	0	3	2	1	
Sangrur								1	0	3	2	1	
Ludhiana	0	0	0	0	45	0	0	2	2	5	12	0	

														At Faridkot, farmers are advised to apply second dose of Nitrogen @ 45 kg Urea/ acre and also to make suitable arrangements for drainage of water from cotton crop in event of heavy rainfall. Irrigate the fields as thrips incidence is above ETL. If the incidence of thrips increases, spray Profenophos 50 EC @ 500ml/acre or Diafenthiuron 50 WP @ 200g/acre or Spinetoram 11.7 SC @170 ml. Farmers are advised to be vigilant about increase in insect pests during next fortnight as the maximum relative humidity level has already increased. Farmers are advised to keep the fields free from Kanghi buti (<i>Sida</i> sp.) and Peeli buti (<i>Abutilon</i> sp.) which act as collateral hosts for leaf curl virus. After heavy rains or irrigation, some plants might show wilting due to Parawilt which can be checked by spraying Cobalt chloride @ 1g/ 100 litre of water on the affected plants at the initial stage of wilt.
HARYANA														
Hisar	0	0	0	0	7	0	0	2	0	0	0	0	1	At Sirsa, the crop is 8 to 10 weeks old at vegetative and square stages. Weeding is in progress. Whitefly population recorded between 0-6, thrips 13-24/ 3leaves at all the locations and leafhoppers are in traces. Root rot incidence observed at few locations.
Jind								0	1	1	5	2		
Sirsa								1	0	0	0	0		
Rohtak	0	0	0	17		0	0	3	0	0	0	0	1	At Hissar, the crop is 8 to13 weeks old at vegetative to flowering stage. The weather was clear/ cloudy/ rainy. Hoeing and fertilizer application were taken up. Weeds like, motha (<i>Cyperus rotundus</i>) and horse purslane (<i>Trianthema portulacastrum</i>) were noticed in the fields. Farmers were advised to do mechanical hoeing after every flush of rain or applying irrigation. Split dose of nitrogenous fertilizer @ half bag urea needs to be given. The population of whitefly (18.67 to 20.47 adults/3 leaves) and thrips (29.73 to 36.20 thrips/3 leaves) are reaching ETL, however, the population of leafhopper is below ETL. The population of leafhopper was found to cross ETL in a few farmers' fields. Spray of Thiamethoxam 25WG @ 40 g or Imidacloprid 17.8 SL @ 40 ml with 120-150 litres of water was suggested. The infestation of pink bollworm was noticed in farmers' fields of Karsindhu village (Jind) on <i>Bt</i> hybrids. Rosette flowers and infested bolls were observed. Farmers were advised to install pheromone traps for monitoring the population. Farmers were also advised to be vigilant for the invasion of locust swarm and inform the State Agriculture Department immediately. Root rot disease was observed in few fields. Cotton leaf curl virus disease was also observed in a few fields. Farmers were advised for spot application of Carbendazim 50% WP @ 2.0

													g per litre of water in root rot affected patches.
													<p>Advisory:</p> <p>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 +adults and Leafhopper 2nymphs/leaf) spray Nimbecidene 300ppm@1.0 litre/acre in 200 litres of water. Farmers are advised to apply first application of Nitrogenous fertilizer.</p> <p>At Hissar, irrigation may be done in crops which are more than 6 to 7 weeks old in absence of sufficient rainfall. Drained out excess water after rainfall. Mechanical may 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 advised to monitor the population of sucking pests on 10 randomly plants (3 leaves/plant) and pink bollworm through pheromone traps and fruiting bodies. An initial spray of neem based insecticides like Nimbecidine or Achook 300 PPM @ 1.0 litre with 150-200 litres of water is suggested in case whitefly population crosses ETL (18-24 adults/3 leaves). Generally, population of thrips declines in the areas that received good amount of rainfall but the population of leafhopper may cross ETL (6 leafhoppers or 2nd grade injury), thus spray of Thiamethoxam 25WG @ 40 g or Imidacloprid 17.8SL @ 40 ml with 150 litres water is suggested. Farmers are also advised to be vigilant for the invasion of locust swarm 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 <i>Trichoderma harzianum</i> or <i>T. viridae</i> @10 g/ litre of water is suggested.</p>
RAJASTHAN													
Ajmer	12	0	0	0	0	0	10	1	0	0	1	0	At Sriganaganagar, the crop is 42 to 82 days at vegetative stage. Need based irrigation applied, weed hoeing was done to clean the crop, first recommended dose of fertilizer (Urea) 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
Jodhpur	22	1	0	0	0	5	7	0	0	0	0	0	
Nagaur								3	0	0	0	0	
Pali	2	0	0	0		0	6	2	0	0	1	1	

Sri Ganganagar	0	0	0	0	0	1	0	1	0	0	0	0	ETL (1.33-1.67/3 leaves), Whitefly below ETL (8.33-15.67/3leaves), thrips population observed ranging from (7.67-16.33/ 3 leaves. No incidence of diseases. At Banswara, the crop is 7 days old at germination stage. No weeds, pests and disease incidence. In Southern Rajasthan (Banswara, Dunarpur, Pratapgarh, Udaipur, Rajsamand, Chittorgargh, Bhilwara etc), the crops have been sown after onset of monsoon. Advisory: At Sriganaganagar, farmers are advised to spray neem based insecticides @ 5ml/lit. or Dinotefuran 20.00% SG 60g/acre or Flonicamid 50.00% WG 80g/acre for sucking pests (whitefly, leafhopper, thrips). At Banswara, farmers have been advised to make proper drainage system in their fields in light of forecast of rains. Farmers are also advised to be careful and keep vigil over the attack of locust swarm in the area. Spray neem-based formulation (0.15%) @ 45 ml/15 liter water on standing crop as feeding deterrent. Farmers should make loud noises by beating tin/metal plates, drums, loud speaker, DJ and other electric sound in their fields to prevent locust swarm landing in the fields.
ODISHA													
Koraput	0	1	0	6	1	10	7	14	15	11	12	9	The crop is 10 to 17 days old at germination to seedling stage. The weather was hot and humid during the reporting period. Sowing of cotton has been completed in about 75% area of total target of 1.8 lakh ha in the State. Cleaning of land, final ploughing and spreading of FYM, procurement of seed and fertilizer, basal fertilizer application and sowing of seeds are going on. Weeds are in abundance for which farmers were advised to spray Pendimethalin @ 1.0 kg/ha as pre-emergence 1-2 days after sowing of seeds. No pests and diseases observed. Advisory: As monsoon is in progress, farmers are advised to complete sowing where land preparation has been completed. Deep ploughing using MB plough for controlling weeds and more rain water penetration should be taken up.
Kalahandi	2	0	0	1	5	52	16	9	20	16	10	8	
Balangir	0	32	0	2	9	16	2	4	8	6	3	1	

														Procure cotton hybrids with good fibre quality and yield. Use fertilizer dose of 120:60:60 kg/ha for hybrids and 90:40:40 kg/ha for varieties (Basal dose- Full P, 25% N and 50% K). Micronutrients- ZnSO ₄ (25 kg/ha) and Boron(5 kg Borax/ha) as basal. Use FYM @5t/ha before final land preparation. As root rot incidence has been reported from most of the regions farmers are advised to 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 should be done before sowing to avoid seed and soil borne diseases.
														Adopt closer spacing of 90 cm x 60 cm and sow arhar as intercrop in the ratio (Cotton: arhar = 8:2). Sow castor and maize as border crop around the cotton field (Castor at a spacing of 1 m in the outer row and maize at 60 cm in the inner row).
GUJARAT														
Amreli	22	0	0	0	2	58	4	0	3	1	4	1		At Surat, the crop is at initial growth stage. The weather was cloudy with intermittent rains. Chido (<i>Cyprus rotundus</i>), Tandaljo (<i>Amaranthus viridis</i>) were the major weeds that infested the fields.
Bhavnagar	26	0	0	0	3	2	2	2	3	1	2	5		
Jamnagar	30	0	0	0	23	57	190	2	5	2	10	20		
Rajkot	39	0	0	0	18	70	219	1	5	1	4	8		At Junagadh, the crop is 26 days old at vegetative stage. Cotton sowing has been almost completed in Saurashtra region. Gap filling, inter culturing and weeding operations were carried out. Kharip weeds like <i>Echinochola crus-galli</i> (<i>Sambo</i>), <i>Eclipta alba</i> (<i>Bhangro</i>), <i>Euohorbia hitra</i> (<i>Dudheli</i>), <i>Phyllanthus graternus</i> (<i>Bhoi amali</i>), <i>Portulaca sativa</i> (<i>Luni</i>), <i>Amaranthus viridis</i> (<i>Dhimano</i>) have infested the fields. Minor attack of grey weevil was observed. No incidence of diseases.
Junagadh	5	2	1	1	37	130	41	6	7	3	13	19		
Sabarkantha								1	3	1	7	4		
Surendranagar	0	0	0	33	0	3	11	0	1	0	2	3		
Ahmedabad	1	0	0	48	0	4	14	0	2	1	2	2		
Baroda	7	0	0	0	0	14	20	2	4	6	5	10		
Patan								0	2	1	8	5		Advisory:
Mehesana								0	1	1	3	2		At Surat, farmers are advised to remove excess rain water from the cotton fields in case of heavy rains to avoid water logging conditions.
														At Junagadh, farmers are advised to remove excess water in the fields. After sowing, avoid broadcasting basal fertilizers viz, DAP, SSP and 12-32-16.. Avoid sowing <i>Hirsutum</i> sp. cotton. Weeding, intercultural operations and gap filling should be done. Where the sowing and gap filling are being carried out farmers are advised to 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 to avoid seed and soil borne diseases.
MADHYA PRADESH														
Khargaon								3	1	1	1	3		At Khandwa, the crop is 46 to 73 days old at vegetative stage. The weather is cloudy and humid. Inter cultural operations and fertilizer application were done as per recommendation. Weeds like <i>Cynodon dactylon</i> , <i>Cyperus rotundus</i> , <i>Commelina naudiculus</i> and <i>Parthenium hysterophorus</i> etc. have infested the fields. Leafhoppers population crossed ETL for which spray of Imidachloprid/ Thiomethoxim/ Acetameprid etc. were sprayed. No incidence of diseases. Advisory: Inter cultivation operation as per field condition and fertilizer application 25% N,50% P and 50% K are to be given. Farmers are advised to spray neem based insecticides @ 5ml/lit. or Dinotefuran 20.00% SG 60g/acre or Flonicamid 50.00% WG 80g/acre for sucking pests (whitefly, leafhopper, thrips).
Dhar	0	0	1	72	0	13	1	2	1	2	1	3		
Khandwa														
MAHARASHTRA														
Dhule								4	2	0	0	8		At Akola, sowing of cotton was completed till the last week of June. The crop is of 10-15 days old at vegetative stage. The weather during the reporting period was cloudy and rainy. Gap filling, thinning and hoeing operations are in progress. No incidence of pests and diseases.
Nandurbar								5	3	1	1	7		
Jalgaon	0	0	0	0	0	0		4	2	1	1	4		
Ahmednagar	12	0	0	0	0	0		6	5	1	2	7		At Rahuri, the crop is 10 to 35 days from six to ten leaves to initial growth stages. The weather was cloudy. Gap filling, weeding and hoeing were the operations carried out during the reporting period. Lavalva, Parthenium, Haryali, Dudhi, Kena, Nagarnotha, chandvel etc. were the major weeds that infested the fields. Leafhopper and Aphid incidence noticed below ETL. About, 5-10 % cotton plants damaged due to <i>Myloecerus</i> weevil. At Nanded, the crop is 14 to 37 days old at vegetative growth stage. The weather was clear to cloudy. Intercultural, weeding and fertilizer application were taken up. <i>Cynadon dactylon</i> , <i>Cyperus rotundous</i> , <i>Digeria</i>
Aurangabad	0	21	0	0	3	2		9	2	1	2	7		
Jalna	0	0	0	1	0	0		8	3	2	4	3		
Beed				7				9	9	2	5	11		
Nanded	12	0	0	2	0	0		3	3	2	1	3		
Parbhani	17	0	16	29	0	1		6	3	1	3	7		
Hingoli								3	3	2	3	6		
Buldhana	0	0	0	1	40	31		3	2	2	3	1		
Akola	0	1	0	3	6	16		0	1	0	1	0		

Washim	0	0	18	5	4	5		1	3	0	2	2
Amravati	30	0	12	1	3	5		4	1	2	3	2
Yavatmal								3	2	1	3	1
Wardha	22	0	0	0	60	5		5	1	1	6	1
Nagpur	48	0	0	1	15	8.7		3	1	0	8	1
Chandrapur	0	0	1	50	51	77	3	2	6	4	2	3
TELANGANA												
Adilabad	0	3	16	0	28	1		6	6	3	2	3

arvensis, *Meremia emerginata*, *Xanthium strumarium*, *Casia tora* have infested the fields. No pests and diseases.

Advisory:

At Akola, some grassy and broadleaf weeds are observed in the cotton fields. Farmers are advised to spray post-emergence herbicide Pyriithiobac Sodium 10 % EC @12.5 to 15 ml per 10 liter of water for broad spectrum weed control or spray Quizalofop ethyl 5 % EC @15ml per 10 liter of water. It is also advised to carry out hoeing operations and weeding in cotton wherever labour availability is abundant.

At Rahuri, farmers are advised to install yellow sticky traps, spray NKE 5% or Neem oil 5ml/L of water. Also install pheromone traps for PBW monitoring in cotton at 45DAS.

At Nanded, farmers are advised to apply basal dose of fertilizers - 48:60:60 NPK kg/ha as early as possible to rainfed cotton. Intercultural operations are to be carried out in both the irrigated and rainfed crop conditions. 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 method. Post emergence weedicide, Pyriithioback Sodium @ 62.5 g *a.i.* /ha + Quizolfopethyl 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 may be applied as preventive measure for sucking pest after 35-40 DAS.

At Yavatmal, Chandrapur and Wardha District root rot incidence has been reported in some of the fields hence farmers are advised to spot drench infected plants with fungicide carbendazim 50% WP @2 g/lit of water or 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 seed or *Trichoderma harzianum* or *T. viridae* @4 g/ kg of seed before sowing of seeds for gap filling.

At Guntur, land preparation and working with markers is in progress.

Warangal	0	6	3	37	0	50	0	4	9	11	13	3
Khammam	0	5	0	9	22	44	0	6	4	3	9	3
Karimnagar	20	3	0	3	1	8	1	2	15	10	10	2
Mahabubnagar		0	132	9	10	0		4	10	17	14	12
ANDHRA PRADESH												
Guntur	0	0	0	7	6	7		5	2	1	4	3
Prakasam	3	0	16	0	2	0	0	3	7	4	3	4
KARNATAKA												
Dharwad	1	16	0	2	7	0	2	2	2	4	9	3
Haveri								1	2	3	11	4
Mysore	0	0	5	16	0	0	3	9	15	5	10	3

At Nandyal, the crop is 21 days old at vegetative stage. The weather was cloudy with intermittent showers. Gap filling and weeding has been taken up. No incidence of pests and diseases

Advisory:

For preparatory cultivation, if sufficient moisture is available, farmers are advised to take up sowings. Procure seed from authorized dealers and select the varieties based on their previous years' experience. Basal application of phosphorus fertilizers and 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 before sowing to avoid seed and soil borne diseases.

At Dharwad and neighbouring cotton areas, the crop is 7 to 20 days old at germination to vegetative stage. Land preparation and sowing are being taken up. No infestation of weeds. Incidence of Shoot weevil attack was noticed for which Profenophos 50 EC @ 2.0 ml + Dichlorvos (DDVP) 76 EC @ 0.5ml per litre of water was sprayed. No incidence of diseases.

At Raichur, about 70% of the area has been sown. The weather was in general humid and cloudy. Sowing operation has been taken up in some irrigated patches and also in rainfed areas where rains were received. No incidence of pests and diseases.

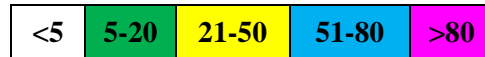
At Chamarajanagar, the crop is 67 to 72 days old at vegetative to square formation stage. Broad leaved weeds like *Cyperus* sp. and *Parthenium* sp. were notice din the fields. Incidence of leafhoppers, aphids, thrips, white fly and mirid bugs were noticed but below ETL

Advisory:

At Dharwad and surrounding cotton regions, farmers are advised to spray pre-emergent herbicide (Pendimethalin 30 EC @ 5.0ml/l) during the day of sowing or the next day. Okra for every 20 rows of cotton should be sown for Shoot weevil pest management at the time of sowing cotton. Spray Profenophos 50 EC @ 2.0 ml per litre of water for the 15 to 30 days crop.

														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
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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

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

For next five day forecast:

Website: agromet.imd.gov.in

Link: http://agromet.imd.gov.in/index.php/download/download_state_wise