ICAR-Central Institute for Cotton Research, Nagpur

Ninth Weekly Advisory for Cotton Cultivation from18th to 25thJuly, 2023

	ACTUAL RAINFALL in mm IMD					PREDICTED RAINFALL in mm IMD					ADVISORY
	JULY					JULY					
Date	**15**	**16**	**17**	**18**	**19**	**21**	**22**	**23**	**24**	**25**	
PUNJAB											
Firozpur	0	0	0	0	0	4	12	13	5	16	At Bathinda, the crop is 65 to 80 days at flowering to boll formation stage. Hoeing and weeding are in progress. Weeds like *Chulai (Amaranthus viridus), Dodhak* (*Euphorbia* spp)*, Tandla* (*Digera arvensis*)Madhana *(Eleusine* spp.)*, Trianthema monogyna,* Makru (Ipomea spp.), Khabbal (*Cynodon dactylon*), Chibber bel (*Cucumis trigonus*) have dominated the fields. Sprayed 2% potassium nitrate (13:0:45) in cotton fields where flowering initiation started. Two to three sprays for pests of cotton were done. Whitefly population ranged between 0-19.2/ 3 leaves, jassid between 0-14.7/3 leaves and thrips population ranged between 0-36/3 leaves. Incidence of pink bollworm ranged between 0- 4%. Problem of parawilt was also noticed in few fields. At Faridkot, the crop is 67 to 77 days old at flower initiation stage. Mechanical/ manual intercultural operations, fertilizer application and one spray against pink bollworm were taken up. At few isolated fields, weeds like *Trianthema* spp. (Itsit), *Digera* spp. (Tandla) have emerged after irrigation. Jassid incidence was above ETL at few spots and pink bollworm incidence near ETL at most of the spots. **Advisory**: At Bathinda, overall crop stand is good. Farmers are advised to drain out the excess water from cotton fields as cotton is very sensitive to standing water. Apply total of 90 kg urea/acre in 2-3 equal splits depending upon the soil type and moisture conditions of the cotton fields. Spray 500 ml Glufosinate ammonium 13.5SL in 100 litres 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. If whitefly adult population is above ETL, spray Afidopyropen @ 400 ml/acre or Flonicamid 50 WG @ 80 g per acre or Clothianidin 50 WG @ 20g/acre or Dinotefuran 20 SG @ 60g/acre. Spray Profenofos 50 EC @ 500600ml/acre or Spinetoram 11.7 SC @ 170 ml/acre where the population of thrips is above ETL. Rosette flowers, if any, should be removed and destroyed. Monitor them in fields where crop is at flowering stage and spray Profenofos 50 EC @ 500-600 ml/acre or Emamectin benzoate @ 100 g/acreor or Indoxacarb 14.5SC @ 200ml/acre if the incidence of pink bollworm goes above 5 per cent. After heavy rains or irrigation, some of the cotton plants may show wilting due to para wilt.
Bhatinda	0	3	0	13.3	0	4	6	7	3	9	
Sangrur	0	0	0	0	0	4	6	7	9	18	
Ludhiana	0	0	0	39	0	6	8	7	9	19	
Muktsar	0	0	0	1	0	2	5	7	4	8	

											In that case, spray Cobalt chloride solution @ 1g/100 litres of water immediately after the appearance of symptoms on the affected plants. At Faridkot, farmers are advised to apply recommended dose of N fertilizers in 2-3 equal splits depending upon soil type and moisture conditions. Avoid N application through broadcast just before irrigation as this leads to leaching of fertilizers and contamination of groundwater. Drain out excessive water in event of heavy rainfall as cotton is very sensitive to stagnating water. In case of high thrips infestation, spray Profenofos 50 EC @ 500-600 ml/acre. If jassid incidence crosses ETL, spray Flonicamid 50 WG @80g/acre or Dinotefuran 20SG @60g/acre. Check for squares and flowers for the infestation of pink bollworm especially in early sown crop. Spray Profenophos 50EC@ 500-600ml/acre or Emamectin benzoate 5SG @ 100g/acre or Indoxacarb 14.5SC@ 200ml/acre, if incidence crosses ETL. Use pheromone traps @5/ha. Replace the lure as per validity indicated.
HARYANA											
Hisar	0	0	0	0	0	3	7	1	3	13	At Hisar, the crop is at 56 to 95 days old at boll formation stage. Fertilizer application, insecticide spray was given. Weeds like *motha*, *santhi, makra, hiranhuri, kelapatta* and *doob* were observed in some of the fields after rainfall. Farmers were advised to do mechanical hoeing followed by manual hoeing by spade. Population of thrips declined after rainfall but it is above ETL in majority of fields. Jassid and whitefly population are building up with jassid having crossed economic threshold in few fields. Infestation of pink bollworm was observed in flowers and green bolls in cotton crop above ETL in few fields. Cotton leaf curl viral disease and *Myrothecium* leaf spot has started infesting few fields in the district. At Sirsa, the crop is 60 to 90 days old at squaring, flowering and boll formation stage. Intercultural operations by tractor and hand hoeing, weeding and irrigation, fertilizer application and Neem/ based sprays were taken up. Weeds like *Cyperus* sp., *Digera arvensis* and *Trianthema monogyna type*have spread in few fields. Whitefly and jassid population noticed below ETL but thrips crossed ETL at all locations. Rosette flower damage decreased and green boll damage increased. Necessary recommendation of pheromone traps installation to monitor PBW has been issued. Root rot incidence were noticed. **Advisory:** At Hisar, rainfall occurred at most of the places and therefore, farmers are advised to apply first split dose of Urea @ 1 bag/acre in 7 to 8 weeks old crop and second split dose of Urea @ 1 bag/acre in 10 to 12 weeks old crop. Take up mechanical hoeing after irrigation/rainfall followed by manual hoeing by spade, if needed. Cover previous season cotton stalks by mosquito net or polythene sheet. In cotton crop where flowering and boll formation has initiated in flowers and bolls, remain vigilant for bollworm attack, if any. Install pheromone
Jind	0	0	0	0	0	11	13	1	4	23	
Sirsa	0	0	0	0	0	1	11	8	5	11	
Rohtak	15	0	31	2	6	7	4	1	2	12	

											traps @ 5 traps/ha to monitor pink bollworm. Adult catch of 8 adults/trap for consecutive 3 days requires insecticide intervention for its management. In case the infestation of pink bollworm crosses ETL of 5-10% rosette flowers or 5-10% infested green bolls, spray Profenofos 50 EC @ 500-600 ml/acre or Quinalphos 20AF @ 400ml/acre which would also manage initial infestation of thrips. In case of foliar disease, spray of Carbendazim 50 WP@0.04% or Kresoxim methyl 44.3 SC@0.1% or Propineb 70 WP@0.25 % or Propiconazole 25 EC@ 0.1% or Metiram 55% +Pyraclostrobin 5% WG @0.2% or Azoxystrobin 18.2% w/w + Difenoconazole 11.4% w/w SC @0.1% or Fluxapyroxad167 g/L + Pyraclostrobin 333 g/L SC @0.6% is recommended to manage fungal leaf spots, Myrothecium leaf spot, blights and fungal boll rot disease. Treat root rot affected patches and surrounding healthy plants in field by drenching with Carbendazim 50 WP@ 2g/litre of water. Make bunds to confine root rot affected patches before flood irrigation so that this disease can be prevented from spreading further. To manage initial population of whitefly, give a spray of neem-based insecticide @ 5 ml/litre of water. Monitor fields regularly at weekly intervals and necessarily after the rainfall. At Sirsa, farmers are requested to continue intercultural operations. Regularly monitor the insect-pest incidence. Henceforth, monitor PBW either through trap catches or 20 green boll/acre destructive sampling as advised. Apply second split of Nitrogen (Urea 40kg/ha) wherever crop age is 70 to 80 days old at fruiting stage and first split has already been given. Start foliar application of N:P:K (13:0:45) @ 2.0 kg /150 litre of water and repeat 2-3 times at 10 days interval. Install pheromone traps @ 5/ha to monitor pink bollworm and yellow sticky traps @ 20/ha to monitor whitefly. To control thrips, give irrigation, if required, or else, apply Spinetoram 11.7 SC @170ml or Emamectin benzoate 5SG@ 100 g/acre. Destroy rosette flowers along with pink bollworm larvae. In case PBW crosses ETL based on rosette flower damage/trap catches/green boll damage, apply Emamectin benzoate 5SG@100 g/acre followed by Profenofos 50WP @ 500-600ml /acre, which is effective against thrips also. Drench the root rot affected plants and surrounding healthy plants with Carbendazim 50 WP@2g/litre of water or *Trichoderma harzianum* or *T. viride* WP@ 5-6 g/litres of water.
RAJASTHAN											
Ajmer	0	0	0	0	63	21	26	8	13	43	In Southern Rajasthan (Banswara, Bhilwara, Chittorgargh, Dungarpur, Pratapgarh, Rajsamand and Udaipur), the crop is 21 to 67 days old at vegetative to flowering stage. Intercultural operations could not be carried out due to continuous rains. Both the weeds, grassy and broad leaves, have spread in the fields. No Incidence of pests and diseases except jassid but below ETL. In Sriganganagarand Hanumangarh, the sown crop is 50 to 105 days old at branching, square formation and flower initiation stages. Weeds like Itsit (*Trianthema* spp.), Tandla
Jodhpur	0	0	0	0	0	6	12	12	6	14	
Nagaur	0	0	0	0	0	7	15	7	5	14	
Pali	0	0	0	0	0	29	14	8	7	12	
Sri Ganganagar	0	8.2	0	23.4	0	0	11	5	9	16	

											(*Digeraarvensis*), Motha (*Cyperusrotundus*) have infested the crop. Post sowing irrigation has been given, intercultural operations have been taken up in early and timely sown cotton. Manual hoeing and weeding have been done to remove the weeds from row spaces. Jassid incidence noticed around 0 to 3/3 leaves, whitefly 0 to 3/3 leaves and thrips 0 to 7/3 leaves. CLCuD symptoms have started appearing in few locations. **Advisory:** In Southern Rajasthan (Banswara, Bhilwara, Chittorgargh, Dungarpur, Pratapgarh, Rajsamand and Udaipur), weather has been forecasted to be cloudy with medium rains for the next few days. Farmers are advised to drain excess rain water from the fields on time. Apply either first or second split of recommended dose of N fertilizers according to crop stage. Monitor infestation of sucking pests in earlier sown cotton. Spray 5% neem seed kernel extract (NSKE) or *Azadirachtin* 1500 ppm (0.15% EC) @ 5ml/ litre of water or Buprofezin 25 EC @ 1.25 litre/ha or Diafenthiuron 50 WP @625g/ha or Flonicamid 50 WG @200g/hato control sucking pests if it goes beyond ETL. Install yellow sticky traps 8/acreto monitorwhitefly and jassid. In case of wet soil condition where manual weeding is not possible, go for application of post-emergence herbicides like Quizalofop ethyl 5% EC @2ml/litre of water, if the field is infested with grassy weeds and Pyrithiobac sodium 10 % EC @ 1.25 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. In Sriganganagar and Hanumangarh, farmers are advised to apply recommended dose of nitrogenous fertilizers after first and second irrigation for maximum fertilizer use efficiency. Avoid N application through broadcast just before irrigation as this leads to leaching of fertilizers and in turn, contamination of groundwater. Apply total of 27.5 kg Urea in three splits i.e. first at basal, second on first irrigation, third on square formation/ second irrigation depending upon soil type and moisture conditions. Give foliar application of KNO_3 @ 2% where the crop is above 65 days. Remove weeds near and around the cotton fields**.** Spray neem-based insecticides @ 5 ml/litre at early stage of crop or in case of mild attack of sucking pests and pink bollworm.Spray Flonicamid 50 WG @ 0.40 g/litre or Afidopyropen 50DC @1.50ml/litre of water to control jassid. In case of thrips infestation, use Spinetoram 11.7 SC @ 0.8 ml/litre or Profenofos 50 EC @ 3ml/ litre of water. Install pheromone traps @5/ha to monitor bollworms. Regularly, monitor bollworm occurrence and destroy the affected flower along with larvae. Wherever pink bollworm population crosses ETL, i.e.,flower or bolls infestation is more than 5%, spray Profenofos 50 EC @ 3ml/ litre or Emamectin benzoate 5 SG@ 0.50 g/litre of water.
ODISHA											
Koraput	0	6	1	78	0	90	30	30	60	25	At Odisha, sowing of cotton is completed in all the cotton growing districts of Western

Kalahandi	0	0	46.2	3	57.4	60	25	25	40	40	Odisha. The crop is 17 to 27 days old at seedling to early vegetative stage. Sowing of cotton and intercrops, application of pre-emergence herbicides, gap filling, intercultural operations, weeding and earthing up, application of second dose of fertilizer were the operations taken up. Weeds of all types i.e., broad leaf, grasses and sedges were noticed in most of the fields but low population due to pre emergence application of Pendimethalin. No incidence of pests and diseases.
Balangir	0	10	24.7	0	1.9	35	20	18	35	40	**Advisory**: Due to continuous rains and expected rains in the forthcoming days due to low pressure, farmers are advised to take utmost care and drain excess water from the fields. Take up weeding, intercultural and earthing up operations on time. Apply second dose of fertilizer @ 120:60:60 kg/ha for hybrids and 90:45:45 kg/ha for varieties (2nd dose- 50% N and 50% K). Micronutrients, if not applied, give as basal dose @ $ZnSO_4$(25 kg/ha) and Boron(5 kg Borax/ha) at the time of earthing up. In case of wetsoil condition where manual weeding is not possible, go for application of post emergence herbicides at 25 -30 days after sowing like Quizalofop ethyl 5% EC @2ml/litre of water, if the field is infested predominantly with grassy weeds and Pyrithiobac sodium 10 % EC @ 1.25 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds.Regularly monitor the crop to know about incidence of any pest and disease. To prevent sucking pests like aphids, spray neem-based pesticide (1500 ppm) @50 ml/10 litres of water.
GUJARAT											
Amreli	1	146	3.6	49.4	0	45	200	129	17	11	At Surat, sowing is in progress and the sown crop is at seedling and initial vegetative stage. Resowing, gap filling and manual weeding is in progress. Weeds like Chido(*Cyprus rotundus*), Satodi (*Trianthema monogyna*), Dhamdo (*Amaranthus viridis*) and others have infested the fields.
Bhavnagar	1.2	15	68	14	0	52	200	129	24	60	
Jamnagar	0	0	0	0	0	0	38	40	16	3	
Rajkot	0	0	0	0.5	0	11	55	71	30	8	
Junagadh	0	7.5	0	0	0	60	100	100	60	8	At Junagadh, the sown crop is 28 days old at initial vegetative stage. Gap-filling, intercultural operations and weeding are under progress. Heavy to extremely heavy rainfall was received in some pockets. Removed excess water and gap-filling done. Wet weather blight was noticed in some isolated places. Weeds like Sambo, sedge, amaranth and horse purslane havespread in the fields.
Sabarkantha						55	44	75	15	30	
Surendranagar	0	0	0	0	0	33	40	29	44	14	
Ahmedabad	0	0	0	0	0	40	45	25	25	33	
Baroda	0.6	2.6	48	14	0.4	65	65	19	28	49	
Patan	0	0	0	1.5	0	17	27	16	21	36	
Mehesana						55	36	25	15	44	**Advisory:** At Surat, farmers are advised to be vigilant to take up timely field sanitation. Install pheromone traps (5 traps/ha) to monitor pink bollworm. In case of wet soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @2ml/litre of water, if the field is infested predominantly with grassy weeds and Pyrithiobac sodium 10 % EC @ 1.25 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6%

											EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds.. In case of heavy rain, drain out the excess rain water from the cotton fields. If sowing yet to be done, then treat the seeds with Carboxin 37.5% + Thiram 37.5% DS @ 3.5g/kg of seeds to manage root rot and bacterial diseases with Fluxapyroxad (333 g/L FS) @1.5 ml/kg seed or Tetraconazole 11.6% w/w (12.5% w/v) SL @1.5 ml/kg of seeds to manage root rot disease or *Trichoderma harzianum* or *T. viride* @10g/ litre of water for *Fusarium* wilt patches along with one meter radius of healthy plants in desi cotton field. Apply Nitrogen dose @ 30, 60, 75, 90 and 105 days after sowing in equal splits. Give complete dose of phosphorus at the time of sowing as a basal dose. At Junagadh, farmers are advised to remove excess water from the fields after heavy rains. Take up gap filling, weeding, intercultural operations to maintain plant population and application of Ammonium sulphate @10kg/acre. In those cotton fields where germination has failed, take up re-sowing of early maturity hybrid/variety with inter-cropping viz., Cotton + Groundnut (1:1) or Cotton + Black gram (1:1) or Cotton + soybean (1:1) or Cotton+ Sesamum. If hand weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @2ml/litre of water, if the field is infested predominantly with grassy weeds and Pyrithiobac sodium 10 % EC @ 1.25 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds.. Spray Fluxapyroxad 167g/litre + Pyraclostrobin 333g/litre SC @ 0.6 g/litre orAzoxystrobin 18.2% w/w + Difenoconazole 11.4% w/w SC @1 ml/litre or Metiram 55%+ Pyraclostrobin 5%WG @2g/litre of water to manage wet weather blight and other fungal foliar diseases.
MP											
Khargaon											At Khandwa, sowing has been completed in almost all areas. The crop is 21 to 70 days at initial vegetative or vegetative or pre flowering stage and flowering stages. Spot weeding, gap filling and thinning, fertigation is being taken up in the sown areas. Temperatures have come down due to short/ intermittent showers in almost all the places, so there is no need for irrigating the fields. Incidence of jassid have been observed in some fields. Summer season weeds like *Cynodon dactylon*, *Cyperus rotundus*, *Argemone mexicana* and *Phylanthus niruri* have infested the fields. No disease incidence so far. **Advisory** Farmers are advised to apply second dose of chemical fertilizer @ 150:75:40 kg/ha, respectively with 25% of N at 30 DAS and 25% N by column method at a depth of 10 to 15 cm and 50% of P & K at 60 DAS. Take up weeding with bullock drawn *Kolpa* in those areas where crop is at 35 DAS if the field condition is probable**.** Spray neem-based insecticides @ 1 litre per acre at 45-60 days of crop age to check the sucking pests and prevent egg laying by pink bollworm. Install Pheromone traps @ 5 /ha to monitor pink bollworm moth activity.
Dhar	0	5.8	5	0.5	0.7	68	65	66	30	25	
Khandwa											

MAHARASHTRA											
Dhule	0	8.4	17.1	0	0	25	38	15	10	14
Nandurbar						38	35	20	15	18
Jalgaon	3.6	7.3	0	8	0	40	38	16	12	18
Ahmednagar	1	0	1	4	0	35	40	20	10	12
Aurangabad	5.8	0	12.1	4.4	4.4	25	36	7	9	11
Jalna						40	38	16	12	18
Beed	0	0.2	0	1.4	0	30	20	9	5	10
Nanded	6.4	0	5	2	17	48	20	12	15	19
Parbhani	2.5	0	25	5	21	30	15	8	8	14
Hingoli	0	0	10	2.5	0	38	18	10	12	19
Buldhana	0	0	2	4	0	13	23	32	22.9	24
Akola	0.2	3.8	1	4	0.8	11	18	23	23.7	19
Washim	0	0	0.6	5.4	0	16	69	30	10.5	17
Amravati	0	28	2.2	10.4	4	26	30	67	38.8	34
Yavatmal	0	11	2	9	0	66	120	20	20	15
Wardha	0	7	0	2.8	1.4	25	68	29	24.6	22
Nagpur	3	17	3	40.9	0.3	34	25	71	73.1	30
Chandrapur	34	13	6.2	6	0	120	121	123	39.6	21

At Akola, the sown crop is of 15-20 days old and is in initial vegetative growth. Sowing, gap filling, hoeing, thinning, weeding, weedicide spray and fertilizer application is going on. Some grassy weeds particularly *Cyperus rotundus* is prominent in the fields with broadleaf weeds in few fields. No incidence of pests and diseases.

At Nanded, the sown crops in irrigated areas are 7 to 28 days at sowing, germination to initial vegetative growth stages. Sowing is in progress both under irrigated and rainfed conditions. Gap filling is in progress. Weeds like *Cynadon dactylon, Cyperus rotundous, Digeria arvensis, Meremia emerginata, Xanthium strumarium, Casia tora, Acalypha indica, Achyranthes aspera, Alternanthera sessilis, Eclipta alba, Parthenium hysterophorus, Phyllanthus niruri, Digitaria sanguinalis, Dinebra retroflexa, Setaria viridis* etc. have dominated the cotton fields. No incidence of pests except jassids and aphids but below ETL. Physiological disorder and reddening in seedlings have been noticed in few fields.

At Rahuri, the crop is at germination to initial growth stage. Sucking pests noticed below ETL. One to two per cent cotton plants damaged to cotton leaves due to *Myllocerus* weevil.

Advisory:

At Akola, the infestation of some grassy weeds and broadleaf weeds was observed in cotton field. So, farmers are advised to undertake spray of post-emergence herbicide Pyrithiobac Sodium 10 % EC @12.5 to 15 ml/10 litres of water for broad leaf weeds and Quizalofop ethyl 5 % EC @20ml/10 litres of water to manage grassy weeds in cotton or Pyrithiobac sodium 6%EC + Quizalofop Ethyl 4%EC@20-25 ml/10 litres of water for broad spectrum weed control. Carry out the intercultural operations like hoeing and weeding in cotton after draining the excess water from the fields. Apply first split of 40 Kg N (90Kg Urea/ha) for irrigated hybrid cotton and 30 Kg N (65 Kg urea/ha) for rainfed hybrid/hirsutum cotton as top-dressing dose of chemical fertilizer. Go for gap filling where gaps are observed and thinning should be undertaken to maintain the plant to plant spacing in cotton.

At Nanded, farmers are advised to carry out intercultural operations in pre-seasonal (irrigated) crop considering the field condition. Apply basal dose of fertilizer @ 30:75:75 NPK kg/ha to pre-seasonal crop and basal dose of fertilizers @ 48:60:60 NPK kg/ha to crop with 20-25 DAS rainfed cotton if not applied at the time of sowing cotton. Gap filling and thinning of cotton in rainfed crop considering rainfall and soil moisture. Take up intercultural operations in rainfed cotton to manage weeds. In case of wet soil conditions, where manual weeding is not possible, go for application of post emergence herbicides at 25-30 days after sowing like Quizalofop ethyl 5% EC @2ml/litre of water, if the field is infested predominantly with grassy weeds and Pyrithiobac sodium 10 % EC @ 1.25 ml/litre of water for broad

											leaved weeds or Pyrithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds.Spray Flonicamid @ 4g/10 litres of water to manage sucking pests considering rainfall condition. Provide drainage to cotton crop to drain out excess rain water by opening trenches in low lying area. Intermittent wet and dry spell may cause infection of *Macrophomina phaseolina*(*R. bataticola*) to roots, stem and leaves and this stress causes reddening of stems, stunted growth and dry root rot in seedlings in some areas. Drenching with carbendazim 50 WP @ 12 g mixed per 10 litres of water is suggested to recovers early symptomatic affected plants. At Rahuri, farmers are advised to install yellow sticky traps, spray NSKE 5% or Neem oil@ 1 litre/acreto check sucking pests and avoid pink bollworm egg laying. Install pheromone traps @ 5 traps per ha to monitor pink bollworm moth activity. In case of wet soil conditions, where manual weeding is not possible, go for application of post emergence herbicides at 25-30 days after sowing like Quizalofop ethyl 5% EC @2ml/litre of water, if the field is infested predominantly with grassy weeds and Pyrithiobac sodium 10 % EC @ 1.25 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds.
TELANGANA											
Adilabad	6	3	13	38	3	48	45	49	37	34	At Warangal, sowing has been completed in 90 per cent of the cotton fields. The sown crop is at seedling stage. Pre emergence herbicide was applied. Root rot problem at seedling stage was recorded due to severe dry conditions. Thrips incidence started due to dry weather. Phosphorus deficiency was also observed in some places due to dry conditions. At Adilabad, the sown crop is 27 to 34 at vegetative stage. Post emergence herbicide and basal application of fertilizers were applied. Weeds have started coming up in the fields. Nutrient deficiencies were noticed in few patches. As of now, overall crop is in good condition. **Advisory** At Warangal, farmers are recommended to spray 19-19-19 @ 10g or 2% DAP (20 g/litre) twice in one-week interval to correct P deficiency. In case of wet soil conditions, where manual weeding is not possible, go for application of post emergence herbicides at 25-30 days after sowing like Quizalofop ethyl 5% EC @2ml/litre of water, if the field is infested predominantly with grassy weeds and Pyrithiobac sodium 10 % EC @ 1.25 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. If thrips incidence noticed, spray Thiamethoxam 25WDG@ 0.2g/litre or Spinetoram 11.7 SC @ 0.8 ml/litre or Profenofos 50 EC @ 3ml/ litre of water . To control root rot, drench the root rot affected plants and nearby healthy plants with Carbendazim 50 WP@2 g/litre of water at the base
Warangal	0	0	39	0	44	100	53	82	60	13	
Khammam	0	7	11	5	10	98	72	28	76	16	
Karimnagar	2.2	13	33.2	10	27.5	71	53	55	65	54	
Mahabubnagar	35	5	4	9.2	0	15	13	5	9	37	

											of affected plants twice in one-week interval and foliar application of 19-19-19 @ 10g/ litre of water.. . At Adilabad, farmers are advised not to apply basal phosphoric fertilizers as top dressing after 20 days of the crop.In case of wet soil conditions, where manual weeding is not possible, go for application of post emergence herbicides at 25-30 days after sowing like Quizalofop ethyl 5% EC @2ml/litre of water, if the field is infested predominantly with grassy weeds and Pyrithiobac sodium 10 % EC @ 1.25 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds.Spray foliar nutrients like 19:19:19/13:0:45/DAP/Urea @ 10g/litre for proper growth of the crop**.** Apply first dose of Urea @25kg + Potash @12kg/acre. Drench the root rot affected plants and nearby surrounding healthy plants with Carbendazim 50 WP@2 g/litre of water is suggested**.**
AP											
Guntur	0	0	0	0.7	0.3	8	10	2	5	8	At Guntur and Nandyal, final ploughing and marking are in progress and sowing of cotton will be taken up within a week with onset of monsoon rains. **Advisory:** Before sowing, treat the seeds with Carboxin 37.5% + Thiram 37.5% DS) @3.5 g per kg of seeds (root rot and bacterial diseases) or Fluxapyroxad (333 g/L FS) @1.5 ml per kg seed or Tetraconazole 11.6% W/W (12.5% w/v) SL @1.5 ml per kg of seeds to manage seed borne diseases (for root rot disease), if not treated.In case of wet soil conditions, where manual weeding is not possible, go for application of post emergence herbicides at 25-30 days after sowing like Quizalofop ethyl 5% EC @2ml/litre of water, if the field is infested predominantly with grassy weeds and Pyrithiobac sodium 10 % EC @ 1.25 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds.
Prakasam	0	0	2	0	0	0	0	0	0	5	
KARNATAKA											
Dharwad	0	0	3	3	5	6	7	4	3	7	At Dharwad, cleaning and land preparation is in progress. Sporadic rainfall was received in surrounding locations. Sowing has started in few areas. At Chamarajanagar, the crop is 74 to 79 days old at flowering stage. Intercultural operations and earthing up are in progress. Incidence of jassid (10-12/3 leaves), thrips (10-15/3leaves) and aphids (15-20/3leaves) were noticed. Flonicamid @ 0.4 g /litre of water was sprayed. **Advisory:** At Dharwad, farmers are advised to sow Okra for every 20 rows of cotton for shoot weevil pest management. Spray pre-emergence herbicide Pendimethalin 38.7 CS at 700 ml/acre in 200 litres of water within 24-48 hours of sowing to keep field weed free for first 30 days.
Haveri	0	0	0	0	0	6	7	5	4	9	
Mysore	2.8	0	0	0	0	5	7	7	6	6	

											Provide protective irrigation through sprinkler. Before sowing if not treated, treat the seeds with Carboxin 37.5% + Thiram 37.5% DS) @3.5 g per kg of seeds (root rot and bacterial diseases) or Fluxapyroxad (333 g/L FS) @1.5 ml per kg seed or Tetraconazole 11.6% W/W (12.5% w/v) SL @1.5 ml per kg of seeds to manage seed borne diseases (for root rot disease). At Chamarajanagar, farmers are advised to install yellow sticky traps @ 8/acre and spray Diafenthiuron 50 WP @625g/ha or Flonicamid 50 WG @200g/ha
TAMIL NADU											
Perambalur	0	0	0	0	0	0	0	0	0	0	At Coimbatore, and Srivilliputhur in and around fields, sowing is yet to commence after onset of monsoon rains. **Advisory:** Clean up fields of residual stalks and partially opened bolls from previous crop season. Do not stack the uprooted cotton stalks on field bunds. Before sowing, treat the seeds with Carboxin 37.5% + Thiram 37.5% DS) @3.5 g per kg of seeds (root rot and bacterial diseases) or Fluxapyroxad (333 g/L FS) @1.5 ml per kg seed or Tetraconazole 11.6% W/W (12.5% w/v) SL @1.5 ml per kg of seeds to manage seed borne diseases (for root rot disease), if not treated.
Salem	8	0	0	1	0	0	0	0	0	0	
Trichy						0	0	0	0	0	
Virudhunagar	0	0	0	5.5	0	0	0	0	0	0	

Post-season and pre-sowing package of practices

1. Clean up fields of residual stalks and partially opened bolls from previous crop season. Do not stack the uprooted cotton stalks on field bunds. At the end of crop season, the pink bollworm larvae of last generation enter the hibernation in crop residues like infested bolls, stalks or in soil. Therefore, such infested residues should be promptly destroyed in order to break the life cycle of pink bollworm. Residue destruction will also helps to reduce the inoculums and infection of new season's cotton crop by diseases like bacterial leaf blight, root rot and fungal leaf spots.
2. Install at least 10 pheromone traps each at 20 m distance in the premises of market yards and ginning mills to trap post season moths or suicidal emergence if any. Change the lures in pheromone traps timely. Also kill the larvae that come out of damaged seeds. This will help to check the spread of infestation of pink bollworm from ginning or market yard premises to nearby fields.
3. Avoid pre-monsoon sowing of cotton crop. Early sown crop bears the reproductive structures like squares and flowers early. The pink bollworm moths emerging from dormant population of previous season lay eggs on these squares and flowers thus early sown crop supports completion of new season's first generation of pink bollworm. If not controlled timely, next generations of this population further spreads onto the timely sown cotton crop with onset of squares, flowers and bolls.
4. Deep summer ploughing helps to expose and kill the dormant larvae and pupae hidden in the soil due to scorching heat of sun in April-May. Also, the birds following ploughed fields predate on these life stages of insect. This helps in minimising the incidence of insects like pink bollworm, leaf eating caterpillars, and soil borne diseases like wilt, root rot and nematodes on coming season's cotton crop.
5. 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. Cotton is the only host of pink bollworm, therefore crop rotation helps to break the life cycle of this pest. Crop rotation is very effective in checking the infection of soil borne diseases and nematodes in disease prone fields.

6. Grow sucking pest and disease tolerant, short duration and early maturing varieties/hybrids/cultivars of cotton. This helps in avoiding unwanted spraying of pesticides to control sucking pests and diseases during early crop growth stage. Pink bollworm infestation starts from mid-season and increases steadily towards the late season. Therefore, short duration and early maturing varieties helps to escape pink bollworm infestation in late season.
7. Sowing of cotton crop should be done in the month of June, only after receipt of 80-100 mm of monsoon rainfall. For ensuring proper germination and crop stand, withstand the prolonged dry periods during early seedling stage, there should be optimum soil moisture. This also helps to avoid re-sowing due to prolonged dry spell of rainfall. Timely sowing in June helps to avoid early infestations of pink bollworm.
8. Increased awareness should be created among the cotton farmers regarding implementation of integrated pest management (IPM) strategy for management of pink bollworm. The shopkeepers may also be advised to inform the famers not to adopt pre-monsoon sowing. This will help to spread the right message to farmers more effectively.

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 also to be consulted for the benefit of farmers

Rainfall (mm)Legend colour

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

0.0 mm rainfall (no rainfall)
Blank space express data not available.
Source:
www.imdagrimet.gov.in
www.agromet.imd.gov.in