ICAR-Central Institute for Cotton Research, Nagpur

Seventh Weekly Advisory for Cotton Cultivation from 4th to 10th July '2023

	ACTUAL RAINFALL in mm IMD					PREDICTED RAINFALL in mm IMD					ADVISORY
	JUNE/ JULY					JULY					
Date	**30**	**01**	**02**	**03**	**04**	**06**	**07**	**08**	**09**	**10**	
PUNJAB											
Firozpur	0	0	0	0	0	6	8	20	8	15	At Bathinda and Faridkot, the crop is 42 to 62 days old at square formation to flowering stage. Hoeing and weeding are in progress. First Irrigation and application of first split of Nitrogen started in some fields. Second post sowing irrigation to timely sown crop has been done followed by urea fertilization *Cyperus* sp., *Digeraarvensis* and *Trianthema monogyna* type of weeds are in dominance in most of the fields at Faridkot. Second post sowing irrigation to timely sown crop has been given followed by urea fertilization. Tractor operated intercultural operations have been taken up in timely sown cotton. Manual hand hoeing has been done to remove left over weeds from intra row spaces. Population of whitefly varied from 0-4/3 leaves, jassids varied from 0-4/3 leaves and thrips varied from 4-25/3 leaves. Pink bollworm incidence varied from 4 to 20 per cent noticed in flower where flowering has started. **Advisory**: At Bathinda, overall crop stand is good. Most of the fields are free from weed species. Farmers are advised to spray the fields with Profenofos 50 EC @600ml/ ac or Spinetoram 11.7 SC @ 170 ml/ac where the population of thrips is above ETL. Spray Afidopyropen @400ml/ac or Ethion @ 800ml/ ac if whitefly population crosses ETL. If nymphal population of whitefly is high, then spray Pyriproxyfen 10EC @ 500 ml/ ac or Spiromesifen 22.9 SC @ 200 ml/ac. In fields where the crop is at flowering stage, destroy rosette flowers, if any. In case, flower or bolls infestation is more than 5%, spray Profenofos 50 EC @ 600ml/ac or Emamectin benzoate 5 SG @ 100 g/ac or Ethion @ 800 ml/ac. At Faridkot, farmers are advised to apply recommended dose of N fertilizers only after application of first irrigation for maximum fertilizer use efficiency. 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. Parawilt may appear in cotton fields where rainfall has been received after first irrigation. So, farmers should keep regular surveillance of the fields and contact University Scientists or Officials of State Agriculture Department for any corrective measures. In case of high thrips infestation, spray Profenofos 50 EC @ 600 ml/ac. Preventive spray of neem based insecticide is suggested @ l lit/ac at 45-60 DAS to check the population of sucking pests and to prevent egg laying by pink bollworm moths. Check for squares and flowers for the infestation of pink bollworm especially in early sown crop. To monitor pink bollworm, use pheromone traps
Faridkot	1	0	0	0	0	5	4	22	6	16	
Muktsar	0	0	0	0	0.5	3	5	30	5	10	
Bhatinda	0	0	0	0	0	2	5	14	5	12	
Sangrur	0	0	0	0	0	10	5	14	15	65	
Ludhiana	9.4	22	0	0	2.6	16	6	50	14	70	

											@5 per hectare. Replace the lure as per validity indicated. Spray Profenofos 50EC@ 600ml/ac or Emamectin benzoate 5SG @ 100g/ac, if incidence crosses ETL. Be vigilant about flare of insect pest incidence during next fortnight as the humidity level has been continuously increasing due to start of paddy season in the State.
HARYANA											
Hisar	0	0	0	0	0	7	6	22	12	35	At Hisar and Sirsa, the crop is at squaring to flowering and boll formation stages. Weeds like *motha*, *santhi* and *doob* have emerged in the fields after rainfall. Mechanical followed by manual hoeing has been taken up. Thrips and pink bollworm incidence were noticed above ETL. Some cases of leaf spot, nematode and root rot diseases were also observed in light soils. At Sirsa, rosette flower initiation and green boll damage was observed in early sown crop. Necessary recommendation of pheromone traps installation to monitor PBW has been issued. **Advisory:** At Hisar, farmers are advised to give first irrigation in cotton crop followed by the application of first split dose of Urea @ 1 bag/ac in cotton crop which is in peak square formation stage. Do mechanical hoeing after rains or irrigation followed by manual hoeing to control the weeds. Remain vigilant in the fields wherever flowering has started for the attack of pink bollworm on flowers. Install pheromone traps @ 5 traps per ha to monitor pink bollworm. If the infestation of pink bollworm starts appearing in flowers, give one spray of neem-based insecticides @ 1/ac and if it crosses 5-10% in flowers, spray Profenofos 50 EC @ 600 ml/ac which would also manage initial infestation of thrips. Treat root rot affected patches in field by drenching with Carbendazim 50 WP@ 2g/lit of water. Make bunds to confine root rot affected patches before flood irrigation so that this disease can be prevented from spreading further. Monitor fields regularly at weekly intervals. At Sirsa, farmers are requested to continue intercultural operations. Install pheromone traps to manage bollworms and low-cost yellow sticky traps to monitor whitefly. Give irrigation if required, in cotton crop or else, apply neem oil @ 1 lit /ac to control thrips. Monitor the insect-pest incidence regularly and destroy the rosette flowers along with PBW larvae. Remove cotton stalks stacked in or around the fields or cover them with nets at the earliest. Install pheromone traps @ 5 traps/ha to monitor pink bollworm. Wherever ETL of PBW (5-10% rosette flower or green boll damage observed), apply first spray with neem based insecticide followed by Emamectin benzoate @100g/ac if required further. Drench the root rot affected plants with Carbendazim 50 WP@2g/lit of water.
Jind	0	0	0	0	0	15	6	12	13	50	
Sirsa	0	0	0	0	0	5	6	25	7	15	
Rohtak	11	0	0	0	0	8	6	11	13	55	
RAJASTHAN											
Ajmer	15.4	0	0	0	0	0	70	65	44	25	In Southern Rajasthan (Banswara, Bhilwara, Chittorgargh, Dungarpur, Pratapgarh, Rajsamand and Udaipur etc.), sowing has been completed after onset of monsoon rains. The sown crop is 0 to 52 days old. The early sown crop is at vegetative stage to flowering stage. First Irrigation
Jodhpur	1	0	0	0	0	0	6	18	21	15	
Nagaur						0	79	39	31	13	
Pali	0	0	0	0	0	0	45	30	35	34	

Sri Ganganagar	0	7	1.6	0	0	0	12	70	12	29	and application of first split of Nitrogen started in some fields. Intercultural operations done to control weeds. Incidence of jassids was noticed below ETL. In Sriganganagar and Hanumangarh, sowing is almost completed under assured irrigation track. The sown crop is at vegetative and branching stages. Sowing is still continuing in some areas. Weeds like Itsit (*Trianthema spp.*), Tandla (*Digera arvensis*) Motha (*Cyperus rotundus*) have infested the crop. Post sowing irrigation has been applied, intercultural operations have been taken up in early and timely sown cotton. Jassids incidence noticed below ETL, whitefly 0 to 8/3 leaves, thrips population and pink bollworm incidence observed below ETL. CLCuD symptoms have started appearing in few locations. **Advisory:** In Southern Rajasthan (Banswara, Bhilwara, Chittorgargh, Dungarpur, Pratapgarh, Rajsamand and Udaipur), farmers are advised to do gap filling in early sown crop for proper plant population and thinning to reduce crop competition wherever needed. Apply recommended dose of N fertilizers. In the fields where sowing is taken up, spray Pendimethalin 30 EC @ 3.25-3.50 lit/ha within 24 to 48 hours after sowing for weed control. Monitor the fields for infestation of sucking pests in earlier sown cotton. If any sucking pest infestation reported near ETL, spray with Neem based insecticide or NSKE 5%. 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. Remove weeds near and around the cotton fields**.** Spray neem-based insecticides @ 1 lit/ac to control sucking pests and PBW**.** Install pheromone traps @5/ha to monitor bollworms. Regularly, monitor bollworm occurrence and destroy the affected plant part along with larvae. Wherever PBW population crosses ETL, apply Neem based insecticide up to 60 days old crop or spray chemical insecticides i.e., Emamectin benzoate 5 WG @ 100g/ac or Profenofos 50 EC @ 600ml/ac.
ODISHA											
Koraput	0	0	0	0	40.5	39	80	70	30	10	At Odisha, sowing of cotton is in full swing in all the cotton growing districts of Western Odisha. Though the rainfall so far in June is almost 80% less than the normal, it is sufficient for sowing and good germination. A total area of 2.20 lakh ha has been planned to be covered under cotton in 2023-24 in 11 districts of the State. The sown crop is at germination to initial stage. **Advisory**:
Kalahandi	0	0	0.6	0	0	15	18	70	50	15	
Balangir	0	2.2	0	0	0	4	7	35	20	13	

											Farmers are advised to go for final land preparation and sowing of cotton. Sowing should be completed by second week of this month. As dry spell is prevailing, give life saving irrigation to save the seedlings wherever water is available Take up deep ploughing using MB plough during summer to control weeds and more rain water penetration. Procure cotton seed of short to medium duration with good fibre quality and yield. Use fertilizer dose of 120:60:60 kg/ha for hybrids and 90:45:45 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 is recommended. Sow seeds of border crops like maize and cowpea and trap crops like castor and seedlings of marigold. Adopt intercropping system viz., Cotton + Black gram (1:2) or Cotton + soybean (1:2) or Cotton + Pigeon pea (8:2) for sustainable production. 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). Use Pendimethalin 30 EC @ 1.33 litre in 200 litres of water/acre as pre - emergence spray within 1-2 days after sowing to control weeds.
GUJARAT											
Amreli	12	126	14.6	3	0.6	42	3	50	167	77	At Surat, sowing is in progress and the sown crop is at seedling stage. At Junagadh, sowing of cotton is almost completed in Saurashtra region of Gujarat. The sown crop is 7 to 14 days old. Weeds like Sambo, sedge, amaranth and horse purslane have germinated in the fields. Heavy to extremely heavy rainfall was received in some pockets. Removed excess water and gap-filling done. **Advisory:** At Surat, farmers are advised to apply FYM @10 ton/ha. Sowing of cotton crop should be done at the earliest possible 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 helps to avoid early infestation of pink bollworm. Clean up the fields of residual stalks and partially or damaged opened bolls from previous crop season. Do not stack the uprooted and unwanted cotton stalks on the field. Follow crop rotation in the fields that were heavily infested with pink bollworm during last season to break its life cycle and also checks the infection of soil borne diseases and nematodes in disease prone fields. At Junagadh, farmers are advised to remove excess water. Take up gap filling, weeding and inter-cultural operations to maintain plant population.
Bhavnagar	0	91	47.6	15	0	56	15	40	97	67	
Jamnagar	0	0.7	0	6.2	0	1	3	1	3	10	
Rajkot	51	3.6	8.8	0	0	42	14	66	16	78	
Junagadh	14.8	0.7	0.7	4.2	7.6						
Sabarkantha						5	8	5	20	154	
Surendranagar	8.6	6	13	0	0	1	2	22	48	32	
Ahmedabad	12	0	15	0	0	1	5	19	79	106	
Baroda	43	71	9.4	0	5.6	51	20	12	53	168	
Patan	0	5.5	0.5	0	0	2	4	64	60	21	
Mehesana						0	2	5	1	106	
MP											
Khargaon											
Dhar	0	0.2	0	13.8	0	36	19	24	65	56	

Khandwa											At Khandwa, sowing has been completed in almost all areas having irrigation facilities. The crop is 0 to 56 days at seedling and initial vegetative or vegetative stage. Farmers who are entirely dependent on monsoon showers have just started their sowing after receipt of rains. Spot weeding, gap filling and thinning, fertigation is being taken up in the sown areas. Incidence of jassids have been observed in some fields. Summer season weeds like *Cynodon dactylon*, *Cyperus rotundus*, *Argemone mexicana* and *Phylanthus niruri* have infested the fields. In the end of previous week, almost entire cotton area received rains and thus temperatures lowered down. So, there is no need of irrigating those fields. Incidence of jassids observed in few fields. **Advisory** Farmers are advised to apply second dose of chemical fertilizer @ 150:75:40 kg/ha, respectively. Among these nutrients, apply split dose of N @ 25% by column method at a depth of 10 to 15 cm. Take up weeding with bullock drawn *Kolpa* in those areas where crop is at 35 DAS. Spray neem based insecticides @ 1 litre per acre at 45-60 days of crop age to check the sucking pests and prevent pink bollworm egg laying. If the jassid population crosses ETL, spray Flonicamid 50 WG @ 4g/10 lit of water.
MAHARASHTRA											
Dhule	10.5	2.5	0	1	0	9	10	15	28	14	At Akola, land preparation for coming *kharif* season like harrowing, levelling, FYM application etc. have been completed. Sowing of cotton is yet to be started due to very less rainfall till date. At Nanded, sowing is in progress under irrigated conditions. Land preparation is completed under rainfed conditions. The sown cotton is at germination stage. No incidence of pests and diseases. At Rahuri, the crop is at two leaf stage. Sucking pests noticed below ETL. One to two per cent cotton plants damaged due to *Myllocerus* weevil. **Advisory:** At Akola, farmers are advised to start sowing of cotton after receipt of sufficient rainfall of 75-100 mm. Avoid cultivation of *Bt* cotton in light type of soil. Use short duration *Bt* /non *Bt* varieties for rainfed sowing and mid-late for irrigated condition. Reduce the spacing than recommended. Before sowing, treat the seeds with Carboxin 37.5% + Thiram 37.5% DS) @3.5g/kg of seeds (root rot and bacterial diseases) or Fluxapyroxad (333 g/L FS) @1.5ml/kg seed or Tetraconazole 11.6% W/W (12.5% w/v) SL @1.5 ml/kg of seeds to manage seed borne diseases (for root rot disease). Also give seed treatment of *Azotobacter* for Nitrogen fixation and PSB @20-25 g /kg seed for phosphate solubilization. Include intercrops like greengram and blackgram in cotton in 1:1 row proportion or take Pigeonpea as an intercrop after every 8-10 rows of cotton. Use Pendimethalin 38.7 % CS @700 ml/ac as pre-emergence weedicide to control weeds in early stage of crop. Follow recommended spacing and fertilizer doses for
Nandurbar						10	12	18	35	20	
Jalgaon	0	0	12.2	5.2	0	10	9	14	17	9	
Ahmednagar	4.2	0	0	0	0	10	18	25	10	9	
Aurangabad	0.5	0	2.4	48.3	0	18	10	12	6	2	
Jalna						15	12	10	8	2	
Beed	0	0	0	15	0	8	13	13	5	3	
Nanded	0	0	0	0	0	18	40	12	5	2	
Parbhani	3.2	0	0	11.3	0	12	20	12	9	2	
Hingoli	0.5	0	0	2	0	16	21	10	6	3	
Buldhana	0	0	6	0	0	4.6	13	14	15.8	4.4	
Akola	0	0	3.5	0	0	4.2	9.2	25	8.6	3.5	
Washim	0	0	0	0	0	1.1	8.8	11	9.7	2.9	
Amravati	9.4	1	2.2	0	0	9.5	26	24	20.8	2.4	
Yavatmal	3	0.3	0	0	0	5.9	11	55	6.6	2.5	
Wardha	1.2	0	0	0	0	3.6	9.8	14	8.9	3.8	
Nagpur	2.9	0	0	0	0	5.8	11	13	5.9	2.9	
Chandrapur	0	0	0	0	0	4.6	42	55	57.3	6.9	

											arboreum 60x15, ,40:20:20KgNPK/ha), Improved *hirsutum* (60x30cm,60:30:30 Kg NPK/ha) and rainfed *Bt* hybrid cotton (90x45,90x60, 60:30:30Kg NPK/ha) and irrigated *Bt* Cotton (120x30,120x60 cm,120:60:60 Kg NPK/ha), respectively. At Nanded, farmers are advised to do gap filling and thinning in pre-seasonal (irrigated) crop. Sowing of rainfed cotton should be done after receipt of 75-100 mm rains. It should be sown with spacing of 120 x 45 cm. Apply basal dose of fertilizers - 48:60:60 NPK kg/ha at the time of sowing of rainfed cotton. Before sowing, treat the seeds with Thiram @3g/kg seed and *Azotobacter* and PSB @10ml/kg. Adopt intercropping system *viz.*, Cotton + Green gram (1:2) or Cotton + Black gram (1:1) or Cotton + soybean (1:1) or Cotton + Pigeon pea (6:1 or 8-10:2) for sustainable production. Sow trap crop / border crops *viz.,* maize, cowpea, castor, marigold, *setaria*, etc around borders of field and after every 8-10 lines of cotton for IPM strategies. At Rahuri, farmers are advised to install yellow sticky traps, spray NKE 5% or Neem oil@ I lit/ac to check sucking pests and avoid pink bollworm egg laying. Install pheromone traps @ 5 traps per ha to monitor PBW.
TELANGANA											
Adilabad	0	0	0	0	0	54	91	51	29	21	At Warangal, sowing has been completed in majority of the fields. The sown crop is at seedling stage. Fields were irrigated due to lack of rains. Pre emergence herbicides were applied. Root rot problem at seedling stage was recorded due to severe dry conditions. Thrips incidence started due to dry weather At Adilabad, the sown crop is at two leaved stage. Dry spell with no soil moisture prevailed during the reporting week. Nutrient deficiencies were noticed in few patches. As of now, overall crop is in good condition **Advisory** At Warangal, farmers are recommended to select variety/hybrid based on soil suitability. Do not sow the seed in dry conditions. Before sowing, treat the seeds with Carboxin 37.5% + Thiram 37.5% DS) @3.5g/kg of seeds (root rot and bacterial diseases) or Fluxapyroxad (333 g/L FS) @1.5ml/kg seed or Tetraconazole 11.6% W/W (12.5% w/v) SL @1.5 ml/kg of seeds to manage seed borne diseases (for root rot disease), if not treated. If thrips incidence noticed, spray Neem oil @ 1 lit/ac. In root rot affected patches observed, drench with Carbendazim 50 WP@ 2 g/lit water in the early stages of root rot affected fields and surrounding healthy plants. At Adilabad, farmers are advised to give basal application of fertilizers in fields with sufficient moisture conditions *i.e* after receipt of rains. Apply post emergence herbicide, Pyrithiobac Sodium 6% + Quizalofop Ethyl 4% MEC) @ 2.5 ml/lit. Spray foliar nutrients like 19:19:19/13:0:45/DAP/Urea @ 10g/lit. for proper growth of the crop through stem application technique in cotton.
Warangal	0	0	0	0	0	98	50	53	28	3	
Khammam	0	0	1	0	0	53	15	55	19	1	
Karimnagar	0	0	0	0	0	89	42	50	23	4	
Mahabubnagar	0	0	0	19	0	53	73	21	30	17	

AP											
Guntur	0	0	7	6	7	8	12	4	0	0	At Guntur, sowings will be taken up only after the receipt of sufficient 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.
Prakasam	0	0	0	0.8	42.7	3	4	2	0	0	
KARNATAKA											
Dharwad	0.2	0	2.2	6.8	0	17	16	7	5	5	At Dharwad, cleaning and land preparation is in progress. Sporadic rainfall was received in surrounding locations. At Chamarajanagar, the crop is 60 to 65 days old at squaring to flowering stage. Intercultural operations and earthing up are in progress. Incidence of jassids (2-3/ 3 leaves), thrips (9-10/3leaves) and aphids (15-20/3leaves) were noticed. **Advisory:** At Dharwad, farmers are advised to sow Okra for every 20 rows of cotton for shoot weevil pest management. 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. At Chamarajanagar, farmers are advised to install yellow sticky traps and spray Acephate @ 1gm /lt of water.
Haveri	0.5	0	1	0	0	17	16	7	5	4	
Mysore	0	9.2	0	0	1	16	8	7	6	5	
TAMIL NADU											
Perambalur	0	0	0	0	0	4	18	2	0	3	At Coimbatore, in and around fields, the summer cotton is at boll formation stage. Weeds like *Parthenium* sp.and *Cyperus*sp. have infested the fields. Root rot and bacterial blight recorded in few patches. **Advisory:** At Coimbatore, farmers are advised to take up hand weeding based on the intensity of weeds in the fields. Regularly monitor the crop for the pest and disease incidence. Spray Flonicamid 50% WG @ 150 g/ha to manage sucking pests. Drench the soil with Carbendazim 50 WP@ 1g /litre of water to manage root rot. Spray Copper oxychloride 50 WP@2 kg/ ha to reduce severity of bacterial blight.
Salem	0.9	5	0	0	14	24	15	8	4	0	
Trichy						6	10	3	0	3	
Virudhunagar	0	0	20.5	0	0	6	18	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