ICAR-Central Institute for Cotton Research, Nagpur

Second Weekly Advisory for Cotton Cultivation from 30th May to 5th June '2023

	ACTUAL RAINFALL in mm IMD					PREDICTED RAINFALL in mm IMD					ADVISORY
	MAY					MAY					
Date	**26**	**27**	**28**	**29**	**30**	**01**	**02**	**03**	**04**	**05**	
PUNJAB											
Firozpur	0	0	0	0	0	3	6	8	0	0	At Bathinda and Faridkot, the crop is 10 to 30 days at vegetative stage. Sowing of cotton is being taken up at few isolated farmer's fields. No major incidence of any insect pest or disease. 1-3 whitefly adults/3 leaves were noticed. *Cyperus* sp. of weed were spread in few fields. **Advisory**: At Bathinda, farmers are advised to remove weeds near and around the fields and do gap filling where burning is noticed. At Faridkot, farmers are advised to apply 1.0 lit/ac of Pendimethalin 30EC as pre-emergence within 24 hours of sowing for control of weeds particularly *itsit*, *madhana/makra* etc. Give first irrigation 4 to 6 weeks after sowing depending upon soil type. Take up thinning and gap filling after irrigation. Apply recommended dose of N fertilizers only after application of first irrigation for maximum fertilizer use efficiency. Avoid application of N through broadcasting just before irrigation as this leads to leaching of fertilizers which in turn leads to contamination of groundwater. Keep the fields and fallow/barren area around the farm/ canals etc. free from Kanghibuti (*Sida sp.*) and Peelibuti (*Abutilon sp*.) which act as collateral hosts of leaf curl virus. Since intermittent rainfall has been occurring across the cotton growing belt of the State, crust formation is likely to take place. Therefore, farmers are advised to break the crust by pegs or other implements.
Faridkot	0	0	0	0	0	3	8	6	0	0	
Muktsar	0.5	0.5	0	0	0	3	8	6	0	0	
Bhatinda	1.2	5	0	0	0	2	8	6	0	0	
Sangrur	0	0	0	0	0	7	2	8	0	0	
Ludhiana	1.5	0	0	0	0	6	3	8	4	0	
HARYANA											
Hisar	3.8	18	0	0	0	2	0	6	0	0	At Hisar and Sirsa, the crop is 0 to 50 days old at germination to initial vegetative stage. Crust breaking, Gap filling, thinning and manual weeding by *khurpa/* spade were taken up. Weeds like *motha*, *santhi* and *doob* have emerged in the fields. Incidence of thrips and whitefly population noticed but below ETL. Root rot were observed in few fields. One adult of pink bollworm was trapped at one location (Begu village) in pheromone trap installed in 40 days old crop. Root rot observed at few locations. **Advisory:** At Hisar, the recommended time of sowing for cotton crop is over. Rainfall was received at most of the places. So, farmers are advised to broadcast Urea @ 1 bag/ac in cotton crop which is 6 to 7 weeks old. Take up manual weeding by *khurpa* or spade in the weed infested fields. Mechanical weeding can be done by tractor mounted cultivator in 6 to 7 weeks old crop. Treat root rot affected patches in field with drenching of Carbendazim @ 2 g/lit of water.
Jind	0	0	0	0	0	2	0	5	0	0	
Sirsa	0	0	0	0	0	0	0	6	0	0	
Rohtak	2	45	0	9	0	2	0	5	0	0	

											At Sirsa, farmers are advised to avoid late sowing of cotton. As per prediction of weather department, visit fields regularly and drain excess water from fields. Do gap filling in poor plant stand fields. Continue intercultural operations wherever required. Regularly, monitor the insect-pest incidence. Install pheromone traps to monitor bollworms especially in early sown crop and adjoining to stack of cotton stalks and in ginneries. Avoid any chemical spray till the crop is 60 days old. If any pest infestation reported near ETL, spray with Neem based insecticide. Remove or destroy the cotton stalks or cover them with nets at the earliest. Treat root rot by drenching root zone with Carbendazim @2g/lit or Trichoderma S.P.P@ 5 to6g/lit of water.
RAJASTHAN											
Ajmer	20	0	33	0	0	11	1	4	2	5	In Southern Rajasthan (Banswara, Bhilwara, Chittorgargh, Dunarpur, Pratapgarh, Rajsamand and Udaipur etc at some locations sowing completed. However, the crop is yet to be sown in considerable areas after onset of monsoon. Summer ploughing and cleaning of fields to be sown with cotton have been completed. In Srigangangar and Hanumangarh, sowing is almost completed under assured irrigation track. However, due to recent rainfall, sowing is still continuing in some areas. **Advisory:** Farmers are advised to go for deep summer ploughing to expose and kill the dormant larvae and pupae hidden in the soil due to scorching heat of sun during May. Arrange fertilizers, FYM and seeds for sowing well in advance. Select sucking pest and disease tolerant, short duration and early maturing varieties/hybrids of cotton. Farmers having irrigation facilities and have already sown their crop are advised to regularly monitor the crop.
Jodhpur	0.4	0	0	47.6	0	39	5	2	4	2	
Nagaur	0	0	0	0	0	19	2	7	7	5	
Pali	0	0	0	0	0	22	2	4	5	5	
Sri Ganganagar						1	6	5	3	5	
ODISHA											
Koraput	0	0	0	0	0	5	7	1	0	0	At Odisha, sowing of cotton not yet started awaiting onset of monsoon probably by second week of June. **Advisory**: Farmers are advised to clean their land and go for summer ploughing when there is rain. Arrange seeds, fertilizers, FYM and seeds for green manuring crop well in advance. Procure cotton hybrids with good fibre quality and yield. Seeds of border crops like maize and cowpea and trap crops like castor and marigold should be arranged in advance.
Kalahandi	1.2	0	2.6	0	0	3	1	1	0	0	
Balangir	0	3.2	11.9	0	0	1	0	0	0	0	
GUJARAT											
Amreli	0	0	0	0	0	7	0	0	0	0	At Surat and Junagadh, sowing is yet to be taken up. Furrows have been formed. **Advisory:**
Bhavnagar	0	0	0	1.2	0	7	0	0	0	0	
Jamnagar	0	0	0	0	0	0	0	0	0	0	
Rajkot	0	0	0	0	0	0	0	0	0	0	
Junagadh	0	0	0	0	0	0	0	0	0	0	

Sabarkantha	0	0	0	0	0	10	8	0	0	0	Farmers are advised to apply FYM @10 ton/ha and basal dose of fertilizers @ 20kg Phosphorus and 75 kg Potassium per ha for irrigated cotton. Purchase seed with original bill. Early sowing must be avoided.
Surendranagar	0	0	0	0	0	0	0	0	0	0	
Ahmedabad	0	0	0	23	0	8	0	0	0	0	
Baroda	0	0	0	2.4	0	0	0	0	0	0	
Patan	0	0	0	12.5	0	8	0	0	0	0	
Mehesana	0	0	0	0	0	10	0	0	0	0	
MP											
Khargaon											At Khandwa, sowing has been completed in some areas having irrigation facilities. Crop is 0 to 21 days old at seedling and initial vegetative stage. Sowing is slowly in progress because of high temperature. Spot weeding, gap filling and thinning are being taken up in these areas. There is no incidence of insect pests and diseases. However summer season weeds like *Cynodon dactylon*, *Cyperus rotundus*, *Argemone maxicana* and *Phylanthus niruri* have infested the fields **Advisory** As per Pest and Disease Management Strategies 2023-24 issued by the Director ICAR-CICR Nagpur, it is advised to discourage the pre season sowing of cotton crop. In spite of these recommendations, sowing of cotton has been initiated in the major cotton growing areas of Madhya Pradesh. Farmers are advised to grow only early to medium maturing Bt. hybrids. Avoid taking up cotton in those fields where the same crop was sown during the previous year.
Dhar	0	0	0	0.1	0	1	0	0	0	2	
Khandwa											
MAHARASHTRA											
Dhule	0	0	0	0	0	2	0	0	0	0	At Akola, land preparation for coming *kharif* season is in progress. All the operations like harrowing, levelling, FYM application etc. are going on. **Advisory:** At Akola, farmers are advised to start sowing of cotton after receipt of sufficient rainfall of 75-100 mm. Use short duration *Bt* /non *Bt* varieties for rainfed sowing and mid-late to late varieties for irrigated condition. Treat the cotton seed with Carboxin (Vitavax) 1gm or Thiram 3 gm/kg seed before sowing them. Also give seed treatment of *Azotobacter* for Nitrogen fixation and PSB @20-25 gm /kg seed for phosphate solubilization. Include intercrops like Greengram and Blackgram in cotton in 1:1 row proportion. Use Pendimethalin 38.7 % CS @1.5 -1.75 ai/ha(20-25 ml/ lit of water) as pre-emergence weedicide to control of weeds in early stage of crop. Follow recommended spacing and fertilizer doses for arboreum (60x15,60x30cm,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/h, respectively
Nandurbar	0	0	0	0	0	4	0	0	0	0	
Jalgaon	0	0	0	0	0	8	0	0	0	0	
Ahmednagar	0	0	0	0	0	9	0	0	0	0	
Aurangabad	0	0	0	0	0	9	0	0	0	0	
Jalna	0	0	0	0	0	4	0	0	0	0	
Beed	0	0	0	0	0	4	0	0	0	0	
Nanded	0	0	0	0	0	10	6	0	0	0	
Parbhani	0	0	0	0	0	8	4	0	0	0	
Hingoli	0	0	0	7.5	0	6	4	0	0	0	
Buldhana	0	0	0	0	0	2.2	0	0	0	0	
Akola	0	0	0	0	0	2.1	0	0	0	0	
Washim	0	0	0	0	0	2.2	2.1	0	0	0	
Amravati	0	0	0	0	0	2.3	0	0	0	0	
Yavatmal	0	0	0	0	0	2.3	2.3	0	0	0	
Wardha	0	0	0	0	0	2.1	0	0	0	0	
Nagpur	0	0	0	0	0	2.3	1.8	0	0	0	
Chandrapur	0	0	0	0	0	1.8	1.8	0	0	0	
TELANGANA											

Adilabad	0	0	0	0	0	2	0	0	0	0	At Warangal, field preparation is going on in the fields. At Adilabad, summer ploughing ahs been completed in all the fields. Farmers will sow cotton crop seed from first week of June. **Advisory** At Warangal, farmers are advised to go for crop rotation for every 2 to 3 seasons. Take up deep summer ploughing to destroy pests and weeds residues in the soil. Soil incorporation of FYM should be done. Select medium duration hybrids. Sow the crop after receipt of at least 60-70mm rain fall to avoid germination related problems.
Warangal	0	0	0	0	0	11	11	1	0	0	
Khammam	0	0	0	0	0	14	15	11	0	0	
Karimnagar	0	0	0	0	0	5	1	0	0	0	
Mahabubnagar	0	0	0	0	0	36	13	0	0	0	
AP											
Guntur	0	0	0	0	0	45	7	1	2	0	Sowings will be taken up only after the receipt of sufficient monsoon rains.
Prakasam	0	0	0	0	0	15	16	3	1	1	
KARNATAKA											
Dharwad	0	0	0	0	0	3	5	4	4	3	At Chamarajanagar, the crop is 25 to 30 days old at vegetative stage. Inter cultivation operation is going on. Incidence of aphids (10-15/3leaves) was noticed. **Advisory** At Chamarajanagar, farmers are advised to install yellow sticky traps and spray Neem oil @ 2-3ml /lit of water
Haveri	0	0	0	0	0	3	5	4	3	3	
Mysore	0	0	0	0	0	9	7	10	11	5	
TAMIL NADU											
Perambalur	2	0	0	0	0	4	2	3	5	2	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
Salem	0	0	0	0	0	4	8	6	8	4	
Trichy	0	0	0	0	0	3	3	3	6	0	
Virudhunagar	0	0	0	0	0	6	2	2	3	0	

											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 born 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