## ICAR-Central Institute for cotton Research, Nagpur

## Second Weekly Advisory for Cotton Cultivation from 12th to 18th May 2020

	ACTUAL RAINFALL in mm IMD			PREDICTED RAINFALL in mm IMD					ADVISORY				
			MAY					MAY					
Date	09	10	11	12	13	14	15	16	17	18			
PUNJAB													
Ferozpur						7	10	6	0	3	At Bhatinda, land preparation and irrigation of fields is in progress. Sowing of cotton has been		
Faridkot	0	0	0	0	1.6	4	10	5	0	0	started in most of the cotton fields.		
Mukatsar						7	6	6	0	0	At Faridkot, the crop is 7 to 10 days old at two leaf stage. Breaking of crust formation by the		
Bhatinda	0	0	0	0	0	4	6	6	0	0	farmers recommended in few spots for enhancing emergence. No weed infestation. No		
Sangrur						0	5	6	0	0	incidence of pests and diseases.		
Ludhiana	0	0	0	0	1.4	0	8	6	0	0	Advisory:		
											Farmers are advised to cultivate recommended and approved hybrids. Apply heavy pre sowing		
											irrigation, prepare fine seed bed for proper germination to facilitate good plant stand. Apply		
											recommended basal dose of fertilizers. For control of weeds particularly itsit (Trianthema),		
											madhana/makra apply 1.0 litre Pendimethalin 30EC as pre- emergence within 24 hours of		
											sowing cotton.		
HARYANA													
Hissar	0	0	0	0	0.6	7	0	6	0	0	At Hissar, the crop is 3 to 5 weeks old at seedling stage. Pre-sowing irrigation, field preparation,		
Jind						5	3	6	0	0	sowing, thinning were the major field operations carried out during the period. Incidence of thrips		
Sirsa						9	0	6	0	0	was observed at seedling stage in few fields but below ETL. Scorching of leaves in cotton has		
Rohtak	0	0	0	0	0	0	4	0	0	0	been noticed in few fields due to high temperature. Such plants normally recover without any		
											intervention.		
											At Sirsa, wheat harvesting is almost over, straw making from wheat and sowing operations are		
											in progress.		
											Advisory:		
											Farmers are advised to use recommended <i>Bt</i> cotton hybrids/varieties and follow recommended		
											rate of fertilizers. Sowing of the cotton should be completed as soon as possible and preferably		
											by mid of May. Apply beavy are sowing irrigation, prepare fine seed bed for proper germination		
											to facilitate good plant stand. Can filling/thinning should be done in order to maintain ontimum		
											nonulation For control of woods particularly itsit (Trianthama), madhana/makra annly 10 litra		
											population. For control of weeds particularly <i>itsi</i> ( <i>Thanthenna</i> ), <i>indunatia/makia</i> apply 1.0 little		
Ajasi HAN	16	0	0	0	0	0	0	0	0	0	At Szigongongon the gran is 7 to 21 days old at 2 to 2 loof stage. At remaining places, equips		
	1.0	0	0	0	0	0	0	1	0	0	A conganganagar, the crop is 7 to 21 days on at 2 to 5 leaf stage. At remaining places, sowing		
Nagaur	U	U	U	U	U	0	0	4	0	0	peration is going on. weeds like itsit ( <i>inantnema spp.</i> ), I andia ( <i>Digera arvensis</i> ), Motha		
Pali	Λ	0	0	0	0	0	0	0	0	0	( <i>Cyperus rotundus</i> ) have intested the crop controlled manually as well as spray of weedicides.		
Sri Ganganagar	02	0	0	0	0	1	3	6	0	13	Jassig incidence noticed below ETL level (0.00-0.17/3 leaves), Whitefly incidence below ETL		
Sir Gariyariayal	0.2	U	U	U	U	4	5	0	U	15	Level (0.0-0.33/3leaves) and thrips population observed ranging from 7.67-12.33/ 3 leaves.		

ORRISA											
Koraput	0	0	0	2	0	8	6	19	32	12	F
Kalahandi	0	2	0	0	0	6	3	8	7	4	
Balangir	0	0	0.2	0	0	4	3	0	0	0	
GUJARAT											
Amreli	0	0	0	0	0	0	0	0	0	0	
Bhavnagar	0	0	0	0	0	0	0	0	0	0	
Jamnagar	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	
Sabarkantha						0	0	0	0	0	
Surendranagar	0	0	0	0	0	0	0	0	0	0	
Ahmedabad	0	0	0	0	0	0	0	0	0	0	
Baroda	0	0	0	0	0	0	0	0	0	0	
Patan						0	0	0	0	0	
Mehesana						0	0	0	0	0	
MP											
Khargaon											
Dhar	0	0	0	0	0	0	0	0	0	0	
Khandwa											
MAHARASHTRA											
Dhule						0	6	11	14	11	
Nandurbar						0	3	3	0	9	
Jalgaon	0	0	0	0	0	0	0	0	0	0	
Ahmednagar	0	0	0			7	13	27	22	22	
Aurangabad	0	0	0	0	4	0	0	0	0	0	
Jalna	0	0	0	0	0	0	0	0	0	0	
Beed						4	5	6	0	0	
Nanded	0	0	0	0	0	0	13	7	0	0	
Parbhani	0	0	0	0	0	4	0	6	0	0	
Hingoli						0	0	0	0	0	
Buldhana	0	0	0	0	4	0	0	0	0	0	
Akola	0	0	0	0	2.4	5	0	0	0	0	
Washim	0	0	0	0	0	0	0	0	0	0	
Amravati	0	0	0	0	9	8	0	0	0	0	
Yavatmal						6	13	0	0	0	
Wardha	0	0	0	0	7	3	0	0	0	0	
Nagpur	0.3	0	0.4	0	0	3	0	0	0	0	
Chandrapur	0	0	3	7	0	6	3	0	0	0	
TELANGANA											]
Adilabad	0	0	0	0	0.4	0	0	0	0	0	1

Post-season and pre-sowing package of practices

- 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 inoculum 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 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

0	0	0	0	0	3	0	12	8	0
0	0	0	0	0	0	0	27	21	10
12	0	0	0	0	0	0	6	0	0
0	0	0	0		3	4	15	21	10
0	0	0	0		0	0	11	22	4
0	0	0	0	0	3	5	15	14	6
0	0	2	0	0	0	8	6	11	15
					5	7	9	16	19
0	0	0	0	0	30	17	17	32	11
0	0	0	0	0	0	0	11	13	9
0	0	0	0	0	8	17	17	11	44
					6	13	11	13	25
					11	5	7	14	9
	0 0 12 0 0 0 0 0 0	0 0   12 0   0 0	0 0   0 0   12 0   0 0	0 0 0 0   0 0 0 0   12 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 2 0   0 0 2 0   0 0 2 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0 0 0 0   0	0 0 0 0   0 0 0 0   12 0 0 0 0   12 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 2 0 0   0 0 2 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0   0 0 0 0 0 </td <td>0 0 0 0 0 3   0 0 0 0 0 0 0   12 0 0 0 0 0 0 0   12 0 0 0 0 0 0 0   0 0 0 0 0 0 3   0 0 0 0 0 3   0 0 0 0 0 3   0 0 0 0 0 3   0 0 0 0 0 3   0 0 0 0 0 3   0 0 2 0 0 0   0 0 0 0 3 3   0 0 0 0 3 3   0 0 0 0 3 3   0 0 0 0 0 3   0 0 0 0 0 3</td> <td>0 0 0 0 3 0   0 0 0 0 0 0 0   12 0 0 0 0 0 0 0   12 0 0 0 0 0 0 0 0   0 0 0 0 0 0 0 0 0   0 0 0 0 0 0 0 0 0   0 0 0 0 0 0 0 0 0   0 0 0 0 0 0 3 5   0 0 0 0 0 3 1   0 0 2 0 0 8 7   0 0 0 0 3 1 1   0 0 0 0 0 0 0 1   0 0 0 0 0 1 5 1   0 0 <t< td=""><td>0 0 0 0 3 0 12   0 0 0 0 0 0 27   12 0 0 0 0 0 0 27   12 0 0 0 0 0 0 6   0 0 0 0 0 0 3 4 15   0 0 0 0 0 1 1 1 1   0 0 0 0 0 0 1 1 1 1   0 0 0 0 0 0 3 5 15   0 0 0 0 0 0 3 5 15   0 0 2 0 0 0 8 6 17   0 0 0 0 0 0 10 11 17   0 0 0 0 0 1 11 11 11   0 0</td></t<><td>0 0 0 0 3 0 12 8   0 0 0 0 0 0 27 21   12 0 0 0 0 0 0 6 0   0 0 0 0 0 0 0 6 0   0 0 0 0 0 0 0 6 0   0 0 0 0 0 0 0 1 22   0 0 0 0 0 1 22 1 1 22   0 0 0 0 0 1 12 2 1 1 1   0 0 0 0 0 0 3 5 15 14   10 0 2 0 0 0 8 6 11   11 1 1 1 1 1 1 1 1   10 0 0 0 0</td></td>	0 0 0 0 0 3   0 0 0 0 0 0 0   12 0 0 0 0 0 0 0   12 0 0 0 0 0 0 0   0 0 0 0 0 0 3   0 0 0 0 0 3   0 0 0 0 0 3   0 0 0 0 0 3   0 0 0 0 0 3   0 0 0 0 0 3   0 0 2 0 0 0   0 0 0 0 3 3   0 0 0 0 3 3   0 0 0 0 3 3   0 0 0 0 0 3   0 0 0 0 0 3	0 0 0 0 3 0   0 0 0 0 0 0 0   12 0 0 0 0 0 0 0   12 0 0 0 0 0 0 0 0   0 0 0 0 0 0 0 0 0   0 0 0 0 0 0 0 0 0   0 0 0 0 0 0 0 0 0   0 0 0 0 0 0 3 5   0 0 0 0 0 3 1   0 0 2 0 0 8 7   0 0 0 0 3 1 1   0 0 0 0 0 0 0 1   0 0 0 0 0 1 5 1   0 0 <t< td=""><td>0 0 0 0 3 0 12   0 0 0 0 0 0 27   12 0 0 0 0 0 0 27   12 0 0 0 0 0 0 6   0 0 0 0 0 0 3 4 15   0 0 0 0 0 1 1 1 1   0 0 0 0 0 0 1 1 1 1   0 0 0 0 0 0 3 5 15   0 0 0 0 0 0 3 5 15   0 0 2 0 0 0 8 6 17   0 0 0 0 0 0 10 11 17   0 0 0 0 0 1 11 11 11   0 0</td></t<> <td>0 0 0 0 3 0 12 8   0 0 0 0 0 0 27 21   12 0 0 0 0 0 0 6 0   0 0 0 0 0 0 0 6 0   0 0 0 0 0 0 0 6 0   0 0 0 0 0 0 0 1 22   0 0 0 0 0 1 22 1 1 22   0 0 0 0 0 1 12 2 1 1 1   0 0 0 0 0 0 3 5 15 14   10 0 2 0 0 0 8 6 11   11 1 1 1 1 1 1 1 1   10 0 0 0 0</td>	0 0 0 0 3 0 12   0 0 0 0 0 0 27   12 0 0 0 0 0 0 27   12 0 0 0 0 0 0 6   0 0 0 0 0 0 3 4 15   0 0 0 0 0 1 1 1 1   0 0 0 0 0 0 1 1 1 1   0 0 0 0 0 0 3 5 15   0 0 0 0 0 0 3 5 15   0 0 2 0 0 0 8 6 17   0 0 0 0 0 0 10 11 17   0 0 0 0 0 1 11 11 11   0 0	0 0 0 0 3 0 12 8   0 0 0 0 0 0 27 21   12 0 0 0 0 0 0 6 0   0 0 0 0 0 0 0 6 0   0 0 0 0 0 0 0 6 0   0 0 0 0 0 0 0 1 22   0 0 0 0 0 1 22 1 1 22   0 0 0 0 0 1 12 2 1 1 1   0 0 0 0 0 0 3 5 15 14   10 0 2 0 0 0 8 6 11   11 1 1 1 1 1 1 1 1   10 0 0 0 0

Rainfall (mm)Legend colour

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

0.0 mm rainfall (no rainfall)

Blank space express data not available.

Source: http://agromet.imd.gov.in/index.php/download/download\_state\_wise

<5

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. In view of lockdown due to corona virus epidemic, proper social and physical distancing should be followed to avoid unnecessary crowd during purchasing of seed and other inputs at agro-input shops.
- 9. Increased awareness should be created among the cotton farmers regarding implementation of integrated pest management (IPM) strategy for management of pink bollworm. In view of lockdown due to corona epidemic, it is practically difficult to reach the farmers personally through field visits for creating awareness. Therefore, as apart of awareness, the literature on pink bollworm management may be distributed to the farmers along with cotton seed at the seed sale counters. The shopkeepers may also be advised to inform the farmers not to adopt pre-monsoon sowing. This will help to spread the right message to farmers more effectively.
- 10. 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 that may also be consulted for the benefit of farmers.