

ICAR-Central Institute for Cotton Research

Second Weekly Advisory for Cotton Cultivation from 8th to 18th August 2018

WEATHER ADVISORY

Date	ACTUAL RAINFALL In mm IMD					PREDICTED IMD						ADVISORY
	08	09	10	11	12	13	14	15	16	17	18	
AUGUST 2018												
PUNJAB												
Ferozpur	0.0	0.0	1.0	1.0			9.0	5.0	49.0	8.0	13.0	<p>At Bathinda, the crop is 90-100 days old at flowering and boll formation stage. Weeding and fertilizer application (13:0:45 sprays) initiated. <i>Digera arvensis</i>, <i>Trianthema monogyna</i> and <i>Amaranthus viridis</i> were the major weeds noticed in the fields. Whitefly population varied from 2 -12 per three leaves. Jassid population varied from 1- 14 per three leaves. Grade II injury equivalents were observed in few locations. Thrips incidence varied from 8 – 46 per 3 leaves. No incidence of diseases. Sprays for jassids and thrips were recommended to farmers.</p> <p>Advisory: Insecticide sprays for managing Jassids and thrips are required. Sprays of flonicamid @ 80 g or thiamethoxam @ 40 g per acre for jassids and thrips is recommended. Spray of KNO₃ 10g/l , Irrigation of cotton crop recommended.</p>
Faridkot	2.0	1.0	0.0	8.0	0.0		9.0	5.0	24.0	5.0	9.0	
Mukatsar	0.0	0.0	0.0	0.0	0.0		8.0	5.0	49.0	8.0	11.0	
Bhatinda	0.0	0.0	13.0	0.0	0.0		11.0	5.0	29.0	5.0	5.0	
Sangrur							23.0	7.0	14.0	6.0	4.0	
Ludhiana	0.0	0.0	1.0	0.0	0.0		19.0	10.0	14.0	0.0	11.0	
HARYANA												
Hissar		25.6					20.0	16.0	7.0	18.0	23.0	<p>At Sirsa, the crop is 80-95 days at vegetative and reproductive stage. Whitefly incidence ranged between 1-15/3leaves but upsurge in leafhopper population above ETL was recorded at few locations. The incidence of whitefly is below ETL. Thrips population with declining trend was observed. Leafhopper counts have increased and IInd grade injury symptoms have been observed at many locations.</p> <p>Advisory: Wherever the population leafhopper crossed ETL, application of Thiamethoxam@ 40g/acre or Imidacloprid @ 40ml/acre was recommended.</p> <p>At Hisar, the crop is at square and reproductive stage. Population of leafhopper crossed the ETL in few fields and except few fields, the whitefly population was below ETL. No incidence of wilt, bacterial blight, para wilt was observed at farmer's field and also root rot was observed in traces. Incidence of cotton leaf curl virus disease was observed in few fields.</p> <p>Advisory: In case of mixed infestation of whitefly and leafhopper the farmers were advised to apply Flonicamid @ 80g/acre or Dinotefuran @ 60g/acre. Application of N: P: K (13:0:45) @ 2/kg acre is also advised as the crop is in full bloom stage. At Hisar, the</p>
Jind							24.0	16.0	9.0	18.0	33.0	
Sirsa							8.0	6.0	76.0	10.0	8.0	
Rohtak							18.0	13.0	3.0	18.0	46.0	

												population of leafhopper is expected to increase in areas where humidity is more than 70 per cent. If population is more than 2 nymph & adult per leaf (ETL), spray 40 ml Imidacloprid 200 SL or 40g Thiamethoxam 25WG using 120-150 litres of water per acre. Increase the spray solution as per the crop requirement. In areas where dry spell of 15 days occurs, the whitefly population may increase. In case, the whitefly population is more than 6-8 adult/leaf (ETL), first spray should be done with Nimbecidine/Achook @ 1 litres/acre. If required, the second spray 250-350 ml of Dimethoate (Rogor) 30 EC in 120-150 litres of water per acre. For spotted bollworm in desi cotton (if > 5% infested fruiting bodies), spray 600 ml Quinalphos 25 EC or 600 ml Profenophos 50 EC or 75 ml Spinosad (Tracer) 45 SC using 150-175 litres of water per acre. Farmers are advised to drench Carbendazim @ 2g/litre in root rot affected patches. In CLCuD affected fields, the farmers are suggested to apply recommended dose of nitrogen and control the whitefly population.
RAJASTHAN												
Ajmer			5.1				0.0	0.0	11.0	35.0	13.0	At Udaipur, the crop is 54 days old at vegetative and flowering stage. Intercultural operations carried out and one spray also given to cotton against jassids. During this week, only jassids infestation is observed (in early sown cotton it is near to ETL and in late sown it is less). Still whitefly and Bollworm infestation not recorded. At present fields are weed free. At Sriganganagar, the crop is 77 to 105 days old at boll formative stage. Need based irrigation applied, second recommended dose of fertilizer (Urea) also applied and first foliar application of potassium nitrate 2% has been applied. Itsit (<i>Trianthema spp.</i>), tandra (<i>Digera arvensis</i>) Motha (<i>Cyperus rotundus</i>) infested the crop. Jassid noticed below ETL level (0.67-1.67/3 leaves), Whitefly incidence below ETL Level (5.67-9.33/3leaves), thrips population observed ranging from 13.67-25.33/ 3 leaves. Incidence of <i>Earias spp.</i> on desi and non- Bt American cotton have recorded 1.67-3.33 larvae/20 plants. 2.67-3.67 adult moth of pink boll worm caches per pheromone trap/ week. Occurrences of cotton leaf curl virus disease (CLCuD PDI 10-15 %) at farmers fields. Weed infestation was removed manually or by weedicide spray. Advisory: Neem based insecticides @ 5ml or or Diafenthiuron 50WP @ 1.00g/lit. of water for whitefly may be sprayed. Farmers are advised to spray Flonicamid 50 WG @ 4g or Thiamethoxam 25 WG @ 0.2g per liter of water, whenever the whitefly, jassid and thrips crossed ETL level. Spray of Emamectin benzoate 5 SG @ 0.5g or Spinosad 45 SC @ 0.3ml per liter of water has been recommended for spotted bollworm
Jodhpur			68.1				0.0	0.0	9.0	13.0	7.0	
Nagaur							0.0	10.0	14.0	24.0	16.0	
Pali							0.0	0.0	9.0	24.0	47.0	
Sri Ganganagar	0.0	0.0	2.0	0.0	0.0		0.0	0.0	60.0	32.0	6.0	
ORRISA												
Koraput		3.0	3.0	8.0	1.0	48.4	7.0	14.0	41.0	23.0	39.0	The crop is 44- 51 days old at vegetative stage. First top dressing of fertilizer and weeding, spraying of neem pesticides to prevent pest attack, spraying of NAA (Planofix) hormone for retention of squares and bolls in later stage were taken up. Crop has been affected by aphids almost in all the districts like Rayagada, Kalahandi and Bolangir and is below ETL (10-40/3leaves), Jassids incidence is below ETL (0-2.0/3leaves) and Thrips population is
Kalahandi		3.0	0.0	15.0	6.0	3	13.0	62.0	55.0	46.0	39.0	
Balangir	0.9	1.6					20.0	56.0	55.0	62.0	49.0	

Hingoli	0.0			1.0			16.0	3.0	12.0	14.0	9.0
Buldhana	0.0	3.0	0.0	0.0	1.0	2	10.0	6.0	14.0	10.0	7.0
Akola	1.0	0.0	1.0	3.0	0.0		13.0	6.0	5.0	3.0	3.0
Washim	0.0	0.0	0.0	0.0	0.0		13.0	3.0	7.0	4.0	5.0
Amravati	0.0	1.0	0.4	0.0	1.0	1.2	15.0	10.0	9.0	9.0	8.0
Yavatmal	2.0	1.0	9.0	4.0	8.0		29.0	10.0	17.0	14.0	16.0
Wardha	0.0	4.0	4.0	26.0	1.0		29.0	6.0	7.0	8.0	8.0
Nagpur	3.0	0.0	2.0	0.0	13.0		23.0	6.0	7.0	13.0	14.0
Chandrapur						0.8					
	0.0	0.0	1.0	8.0	25.0		34.0	9.0	12.0	8.0	12.0

of *Alternaria* was recorded with 2.25 PDI.

Advisory:

Farmers are advised to carry out weeding operations, Hoeing to be done. Control of sucking pest as per the recommendations. Drenching if wilting observed. Apply first dose of fertilizer. Intercultural operations are to be carried out for weed management as well as aeration. At Nanded, third split of Nitrogen @ 48 kg ha⁻¹ for rainfed and 60 kg ha⁻¹ for irrigated should be applied at 2 months stage. Foliar spray of Potassium Nitrate 1% should be done for stress management.

Bollworms management

In Maharashtra, cotton crop is about 40-60 days old and is in squaring and flowering stage. Monitor the crop for presence of PBW larvae within flowers (presence of Rosette flowers) and destroy them. Wherever plants bearing bolls, it is advised to pluck 20 bolls from randomly selected plants from one acre area (one boll per plant from 20 plants). If at least 2 flowers or bolls shows live larvae (10% infestation), on availability release egg parasitoid *Trichogramma bactrae* 60,000 eggs /acre. Avoid insecticide spray for at least 10 days from the date of release. Or Spray with neem seed kernel extract 500ml+neem oil 50 ml or Quinolphos 25% AF 20 ml or Thiodicarb 75% WP 20 g per 10 liter water. For mass trapping of pink bollworm (if ETL crossed in Pheromone traps) Pheromone traps (8 / ac) may be installed
If Bt cotton seed is with refuge- in-bag (contains 5% Non Bt cotton seeds), there is possibility that non Bt plants may have infestation of American bollworm (symptoms ‘flare up square’) or Spotted bollworm (Symptoms dry shoot). On sampling if 20% infestation (nearly 4 plants out of 20 plants having at least one flare up square or dry shoots) observed , farmers are advised to spray Chlorantriniprole 18.5SC 3ml per 10 liter of water.

TELANGANA											
Adilabad	4.0	0.0	1.0	9.0	132.0		19.0	14.0	20.0	25.0	15.0
Warangal							8.0	8.0	7.0	7.0	6.0
Khammam	9.0	5.0	2.0	47.0	27.0		10.0	13.0	17.0	16.0	15.0
Karimnagar	4.0	0.0	2.0	2.0	128.0		4.0	3.0	0.0	0.0	0.0
Mahabubnagar	0.0	0.0	1.0	9.0	13.0		15.0	13.0	3.0	3.0	6.0
AP											
Guntur	5.0	1.0	5.0	11.0	6.0		15.0	8.0	5.0	0.0	3.0
Prakasam		0.0		0.0	293.0		14.0	17.0	4.0	0.0	3.0

The crop is 1–30 days old from sowing to seedling stage, Gap filling and thinning were taken up. Pre emergence application of weedicide / intercultivation also done. Thrips and Jassids observed below ETL.

Advisory:

Inter-cultivation and first split application of fertilizers to be given wherever sufficient soil moisture is there.

KARNATAKA												
Dharwad	3.0	3.0	1.0	0.0	5.0		13.0	4.0	3.0	0.0	0.0	<p>Early sown crop is 60-70 days old. At some locations the crop is 45-50 days old. Top dressing with Urea and Potassium was taken up. Intercultivation and hand weeding were done. Plant protection measures for sucking pests and precautionary measures for the management of PBW were carried out. Last intercultivation undertaken with manual weeding. Spray Flonicamid 4g or Imidacloprid 17.8SL 3ml or Acetamapird 20SP 2g or Thiomethaxam 25WG 2 g per 10 litre water for the control of sucking pest.. Advisory Top dressing the crop with 25 kg urea and 25 kg MOP (Last split), Manual weeding and earthing up, Sucking pest management by spraying Fipronil 5 SC @ 1 ml/lit of water, Foliar sprays of 19:19:19 water soluble fertilizer (10g/lit of water) in 60-70 days old crop,. Sowing of Desi cotton varieties (Sole crop or as an intercrop in chilli/Onion) to be continued till August end. Bollworms management Monitor the crop for presence of PBW larvae within flowers (presence of Rosette flowers) and destroy them. Wherever plants bearing bolls, it is advised to pluck 20 bolls from randomly selected plants from one acre area (one boll per plant from 20 plants). If at least 2 flowers or bolls shows live larvae (10% infestation), on availability release egg parasitoid <i>Trichogramma bactrae</i> 60,000 eggs /acre. Avoid insecticide spray for at least 10 days from the date of release. Or Spray with neem seed kernel extract 500ml+neem oil 50 ml or Quinolphos 25% AF 20 ml or Thiodicarb 75% WP 20 g per 10 liter water. For mass trapping of pink bollworm (if ETL crossed in Pheromome traps) Pheromone traps (8 / ac) may be installed If Bt cotton seed was with refuge- in-bag (contain 5% Non Bt cotton seeds), there is possibility that non Bt plants may have infestation with American bollworm (symptoms ‘flare up square’) or Spotted bollworm (Symptoms dry shoot). On sampling if 20% infestation (nearly 4 plants out of 20 plants having at least one flare up square or dry shoots) observed , farmers are advised to spray Chlorantriniprole 18.5SC 3ml per 10 liter of water.</p>
Haveri							11.0	3.0	0.0	3.0	0.0	
Mysore							23.0	17.0	10.0	5.0	4.0	
TAMIL NADU												
Perambur	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	Land preparation for sowing is being taken up.
Salem	0.0	0.0	0.0	0.0	4.0		9.0	7.0	14.0	18.0	16.0	
Trichy	0.0	1.0	0.0	0.0	0.0		11.0	14.0	15.0	19.0	20.0	
Viridhunagar	0.0	0.0	0.0	0.0	0.0		3.0	3.0	7.0	17.0	0.0	

Rainfall (mm)

Legend

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

0.0 mm rainfall (no rainfall) .Blank space express data Not available. Source : <http://imdagrmet.gov.in>

