ICAR-Central Institute for Cotton Research, Nagpur

Weekly Advisory for Cotton Cultivation from 12th to 21st September ' 2018

WEATHER ADVISORY

	ACTUAL RAINFALL In mm IMD					PREDICTED IMD					
	SEPTEMBER										
Date	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	
PUNJAB											
Ferozpur						0.0	0.0	0.0	0.0	0.0	At Faridkot, the crop is 136 days old at fruiting and boll development stage. No serious problem of weed infestation. As such, the incidence of sucking pests was below ETL. At Bathinda, the crop is 125-135 days old at Boll formation and boll maturation stage. Weeding and picking of matured bolls were taken up. Whitefly population varied from 1-10 per three leaves; Jassids from 0–3 per three leaves and thrips incidence varied from 0-6 per 3 leaves. Bacterial leaf blight is increasing in the field **Advisory:** Spray of 13:0:45 (Potassium nitrate) is recommended to farmers. The farmers are advised to monitor their crop regularly for whitefly and jassids particularly in the late sown fields. For bacterial blight spray Copper oxychloride 50 WP @ 25 g+ Streptocycline @ 1g in 10 litre of water.
Faridkot	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Mukatsar						0.0	0.0	0.0	0.0	0.0	
Bhatinda	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Sangrur						0.0	0.0	0.0	0.0	0.0	
Ludhiana	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	
HARYANA											
Hissar						0.0	0.0	0.0	0.0	0.0	At Hisar, the crop is more than 122 days old at reproductive stage. Crop condition is good. Irrigation was given during the reporting week. Picking has been initiated in few areas. The population of whitefly is decreasing and found to cross the ETL only in few fields. The population of jassid was below ETL. The incidence of spotted bollworm is observed in *Desi* cotton. At flowering and boll formation stage of cotton, boll rot disease was observed in traces. No economic loss to the farmers till now in this season. Incidence of cotton leaf curl virus disease (CLCuD) was observed.. At Sirsa, the crop is 115 to125 days old at reproductive and boll opening stage. Whitefly attack ranged between 3 to 9/3 leaves in farmers' fields. Parawilt symptoms were reported. **Advisory:** In areas where dry spell of 15 days occurred, whitefly population may increase. In case, the whitefly population is more than 6-8 adult/leaf (ETL), first spray should be done with Neem based insecticides (Neem seed extract 5% + Neem oil 5 ml/litre of water). The population of jassid 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 40 g Thiamethoxam 25WG using 200 litres of water per acre. Proper coverage of underside of leaves during the insecticidal sprays effectively reduces the population of sucking insects. Farmers are advised to monitor their crop for insect pests & diseases regularly. Mixing of pesticides should be avoided. Farmers are advised to spray Copper oxychloride 2g/L of water or Carbendazim 2g/L of water for the control of boll rot disease. At Sirsa, as
Jind						0.0	0.0	0.0	0.0	0.0	
Sirsa						0.0	0.0	0.0	0.0	0.0	
Rohtak						0.0	0.0	0.0	0.0	0.0	

											population of all sucking pests is below ETL, farmers are advised not to spray any insecticide at this stage but need to remain vigilant. Wherever parawilt symptoms appear, apply Cobalt chloride @1.0 g/100 litres of water immediately
RAJASTHAN											
Ajmer						0.0	0.0	0.0	0.0	0.0	At Banswara, the crop is 88 days old at flowering and boll formation stage. During the reporting week, jassid infestation was above ETL. Whitefly infestation recorded below ETL. Bollworm infestation not recorded. At present fields are weed free. **Advisory:** Spray of any one of the insecticides against sucking pests- Buprofezin 25 SC @ 1.25 liter or Diafenthiuron 50 WP @ 625g or Flonicamid 50WG @ 200g /ha. Do not mix two or more insecticides. If, plants show sudden drooping of leaves which ultimately get wilted, the affected plants can be saved by spraying Cobalt chloride @ 10mg/liter of water (10 ppm) immediately after the appearance of these symptoms.
Jodhpur						0.0	0.0	0.0	0.0	0.0	
Nagaur						0.0	0.0	0.0	0.0	0.0	
Pali	8.0					9.0	9.0	11.0	10.0	0.0	
Sri Ganganagar						0.0	0.0	0.0	0.0	0.0	
ORRISA											
Koraput						78.0	52.0	37.0	37.0	20.0	The crop is 79 to 86 days old at boll formation and boll development stage. Weeding and application of pesticides done in Kalahandi, Bolangir and Rayagada and Nuapada districts to control jassid. Crop has been infested with several weeds. The most common weeds are Barnyard grass (*Echinochloa* sp.), Doob grass (*Cynodon dactylon),* Cock's Comb (*Celosia argentea*) and Purple nut sedge (*Cyperus rotundus*).Crop which has been affected by water logging and wilting in Kalahandi, Bolangir and Rayagada and Nuapada districts recouped after the rain stopped. Root rot and wilting has also been controlled. Aphids and jassid population has been reduced due to heavy rainfall. Thrips population is also below ETL (1.0-5.0/3leaves). Angular leaf spot has been reported in Nuapada and Rayagada districts. **Advisory:** If sucking pest infestation crossed ETL, spray Flonicamid 50 WG @ 0.4g/litre of water or Thiomethoxam @ 0.2 g/lit of water. Sucking pests population can be reduced by installation of yellow sticky traps @ 20/ha. Spraying of Carbendazim 50 % WP @ 1g/litre of water can save the crop from early stage wilting. Root rot can be controlled by spot drenching of Carbendazim 50 % WP @ 2g/litre. To control angular leaf spot, spray 25g Copper Oxychloride and 1 g Streptocycline mixing with 10 litres of water. Install pheromone traps @ 5/ha to monitor the incidence of pink bollworm. Farmers were advised to drain off excess rain water from the field. To recoup the plant from water logging effects, spray 1% DAP or 1% water soluble fertilizer 19:19:19 at weekly intervals.
Kalahandi	2.4			0.0	0.0	71.0	42.0	21.0	21.0	43.0	
Balangir						51.0	13.0	3.0	5.0	36.0	
GUJARAT											
Amreli						8.0	6.0	10.0	15.0	22.0	
Bhavnagar						10.0	6.0	8.0	15.0	4.0	

Jamnagar			0.1	1.0	0.0	0.0	0.0	0.0	0.0	13.0	At Junagadh, the crop is at vegetative and flowering stage. Weeding, Inter culturing, Fertilizer application, Insecticide applications were carried out. At Surat, the crop is in flowering stage. Chido (*Cyperus rotundus*), Satodi (*Trianthema monogyna*) and Dhamdo (*Amaranthus viridis*) were the major weeds that were controlled using appropriate measures. Jassid incidence was below ETL and Thrips *(Thrips tabaci)* crossed ETL. BLB was seen in some of the lower leaves of plant. **Advisory:** Initiate pink bollworm monitoring starting from flowering stage. Install pheromone trap 5/ha. . Spray crop with Neem oil 5 ml/L + NSKE 5% + 1 g detergent power at 50-60 DAS. Initiate control interventions based on ETL of 8 moths/trap/night or 10% damage in flowers. Collection and destruction of rosette flowers along with larva of pink bollworm Collection and destruction of scattered infested mealybug plants. For the control of sucking pests, spray Diafenthiuron 50% WP 10 g or Thiamethoxam 25% WG 2-3 g or *Beauveria bassiana* 60-80 g or Thiacloprid 48 sc 5 ml or Flonicamid 50 WG 4 g in 10 litres of water. For the management of Bacterial leaf blight, spray Copper oxychloride 25 gm + Streptocycline 1 g in 10 liter of water @ two sprays at 15 days interval. For Root rot and wilt, drench with Carbendazim 20 g or Copper oxychloride 25 g in 10 litre of water at weekly intervals.
Rajkot	0.7	0.0	0.0	0.0		15.0	5.0	7.0	13.0	13.0	
Broach	0.0	0.0	0.0	0.0	0.0	3.0	6.0	17.0	14.0	4.0	
Sabarkantha						4.0	6.0	5.0	3.0	0.0	
Surendranagar						15.0	5.0	0.0	7.0	0.0	
Ahmedabad	0.0	0.0	0.0	0.0	0.0	14.0	5.0	4.0	5.0	3.0	
Baroda		1.3				27.0	23.0	27.0	19.0	4.0	
Patan						0.0	3.0	0.0	0.0	0.0	
Mehesana						5.0	5.0	0.0	0.0	0.0	
MP											
Khargaon											At Khandwa, the crop is 90 to 115 days old at flowering to boll formation stage. *Cyprus rotundus, Euphorbia, sp., Cynodon dactylon, Physalis minima, Solanum nigrum, Echinocloa, colona Commelina benghalensis, Commelina nuadiculus, Digera arvensis, Parthenium histerophorus, Achyranthes aspera, Phyllanthus niruri etc.* were the weeds that infested the crop. Incidence of jassids, whitefly and pink bollworm were controlled using recommended measures. No incidence of diseases were observed. **Advisory:** Apply N 40kg/ha at 90 days and apply remaining 15 k.g. per hectare N at 120 days. Spray Imidacloprid or Acetamapird or Thiamethaxam for the control of jassids and whiteflies. Install pheromone traps for pink boll worm @2 per acre wherever flowering has started. If 8 male moths are collected consecutively for three nights then it is assumed that ETL of the pests has been crossed. Collect 20 bolls randomly from the fields and open them for the presence of pink bollworm, if 2 or more bolls found damaged by the pest, then spray Quinolphos 20 ml or Profenophos 15 ml or Thiodicarb 20 g / 10 litres of water.
Dhar			0.9			9.0	8.0	7.0	4.0	0.0	
Khandwa											
MAHARASHTRA											
Dhule						6.0	6.0	9.0	9.0	7.0	The crop is approx 90 days old at boll formation stage. Infestation of Thrips *(Thrips tabaci)* and jassid crossed ETL, Whitefly were below ETL. Infestation of Pink bollworm was below ETL in most of the areas. Low incidence of *Alternaria* was recorded. Intercultural operations carried out wherever necessary. Farmers were
Nandurbar						10.0	20.0	28.0	24.0	8.0	
Jalgaon	0.0	0.0	0.0	0.0	0.0	3.0	4.0	6.0	5.0	0.0	
Ahmednagar						6.0	12.0	10.0	24.0	28.0	
Aurangabad						0.0	0.0	0.0	19.0	83.0	

Jalna						7.0	7.0	5.0	6.0	0.0	recommended to spray Buprofazin 25 SC @ 2 ml / lit for management of sucking pests. Use of Integrated Pest Management Practices (NSKE 5%, installation of Pheromone traps, destruction of rosette flowers and spray insecticides) undertaken for PBW control. **Advisory:** Foliar spray of 2% KNO_3 should be done for drought tolerance during boll development stage of the crop. For Pink Bollworm management, rosette flowers should be plucked, destroyed. Spraying of insecticides should be done only if boll infestation crossed ETL (10% bolls having live pink bollworm larvae) **For Sucking pests** **Jassid, Aphid, thrips, whitefly:** Spray Neem oil based formulations or Flonicamid 50 WG 4g **Or** Thiamethoxam 25%WG 2g **Or** Imidacloprid 17.8% SL 3 ml per 10 L water. **Whitefly:** Install yellow sticky traps for monitoring and management of whitefly. Spray Neem oil based formulations or Diafenthiuron 50%SC 12g, Buprofezin 25 % SC 10ml **Or** Diafenthiuron 50 % WP 12g **Or** Spiromesifen 22.9% EC 12ml **Or** Pyroproxifen 10%EC 20 ml per 10 L water. **Thrips:** Thiamethoxam 25%WG 2g **Or** Imidacloprid 17.8% SL 3 ml per **Or** Buprofezin 25 % SC 10ml 10 L water. For the control of leaf redennning (Lalya) foliar spray 2% urea, 1% magnesium sulphate, 1%DAP
Beed						10.0	13.0	10.0	24.0	16.0	
Nanded			0.0	0.0	1.0	12.0	7.0	7.0	9.0	0.0	
Parbhani	0.0	0.0	0.0	0.0		10.0	13.0	4.0	4.0	0.0	
Hingoli						7.0	7.0	3.0	3.0	0.0	
Buldhana						5.0	13.0	17.0	6.0	0.0	
Akola	0.0	0.0	0.0	0.0	0.0	5.0	10.0	3.0	4.0	0.0	
Washim						0.0	4.0	3.0	0.0	0.0	
Amravati						10.0	11.0	3.0	4.0	0.0	
Yavatmal						0.0	4.0	3.0	0.0	0.0	
Wardha						0.0	0.0	0.0	0.0	0.0	
Nagpur						0.0	0.0	0.0	0.0	0.0	
Chandrapur	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	
TELANGANA											
Adilabad		12.8				0.0	5.0	5.0	0.0	0.0	The crop is at vegetative to squaring / flowering stage. Thrips, Jassid and Mealybug infestation were controlled through recommended measures. Fungal leaf spots were noticed. **Advisory:** Recommended installation of pheromone traps @ 2/acre for pink bollworm monitoring l. For leaf spots spray Pyraclostrobin 20%WG 2g **Or** Metiram 55%+ Pyraclostrobin 5% WG 20g /10 L water.
Warangal						13.0	10.0	6.0	0.0	0.0	
Khammam		1.4				27.0	23.0	6.0	7.0	0.0	
Karimnagar	0.0	4.8	0.0	0.0		4.0	3.0	0.0	0.0	0.0	
Mahabubnagar						35.0	9.0	17.0	37.0	11.0	
AP											
Guntur											
Prakasam	0.0	0.0				82.0	38.0	27.0	11.0	3.0	
KARNATAKA											
Dharwad											Early sown crop is 85-95 days old. Peak square and Boll formation in most of the areas No rainfall in major cotton growing areas of Dharwad, Belgaum, Haveri districts. Dry weather with rising temperature. Manual weeding was suggested. Plant protection measures for sucking pests and precautionary measures for the management of PBW taken up. Foliar sprays of water soluble fertilizers were also given. At Raichur, the early sown crop is 85 to 90 days that has entered boll initiation and boll development stage whereas late sown crop is 50 to 55 days old at flowering stage. Sowing was done in an area of about 80 per cent. Third top dressing of fertilizers with Nitrogen and Potassium (Early sown crop) and second top dressing
Haveri			0.0	0.0	0.0	4.0	0.0	0.0	0.0	37.0	
Mysore						4.0	0.0	0.0	0.0	17.0	

											with Nitrogen and Potassium (late sown crop) was done. First spray of 1% 19:19:19 and 1% MgSO4 foliar spray is recommended to the early sown crop, second spray with 1% 19:19:19 and 1% MgSO4 foliar spray is recommended for 75 to 80 days old crop and third spray with the same combination is recommended wherever leaf reddening is noticed. Totally 80% of the lands in the area covered with cotton. Weeds were noticed in the early sown crop in the farmers' fields. Thrips were noticed in the 40-45 days old crop in the area. Jassid and aphids were noticed in both early and late sown crop. Mealybugs were noticed in some areas. No incidence of diseases. **Advisory:** Spray Neem based insecticides at earlier stages, then with Profenophos 50 EC @ 2 ml/lit of water to manage PBW. Spray Flonicamid 50 WP @0.4g/lit of water to manage specifically jassid. Spray Dinotefuran 12g/10L or Acetamiprid 20 SP @ 0.2g/L for managing sucking pests. Foliar sprays of all 19 water soluble fertilizer (10g/lit of water) with $MgSO_4$ @ 10g/lit of water in 90 days old crop to manage leaf reddening. Post emergent application of Pyrithiobac Sodium @ 1.25 ml in 1 lit of water was recommended against weeds for 20-25 days old crop. Buprofezin 10ml/10L is recommended to control mealybugs.
TAMIL NADU											
Perambur			0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	Sowing of cotton in many parts of area going on. The sown crop is around 25 days in vegetative stage. Thinning and early post emergence herbicide application was recommended. First top dressing with 25 % N as neem coated urea was given. *Echinochloa spp, Dactyloctenium aegyptium, Cyperus spp, Cynodon dactylon, Trianthema portulacastrum* etc were the major weeds that infested the crop for which appropriate measures have been taken up. Incidence of thrips noticed in many areas. No incidence of diseases. **Advisory:** As the sowing of cotton is under way, acid delinting (con. H_2SO_4 at 100 ml/kg of seeds) and seed treatment with insecticides (Chlorpyriphos at 10 ml/kg of seeds) / fungicides (*Pseudomonas fluresence* 10 g/kg or *Trichoderma viride* 4 g/kg or Carbandazim or thiram at 2 g / kg of seeds) followed by biofertilizer (*Azophos* 6 pockets /ha seeds) may be recommended as a prophylactic measure.. As a prophylactic measure for the management of stem weevil, application of neem cake at 150 kg/ ha recommended during last ploughing or drenching of Chloropyriphos at 2.5 ml / litre of water may be followed from 20 DAS onwards thrice at 15 days interval. To get healthy seedlings, spraying of 0.5% urea is recommended if sufficient moisture is available
Salem						10.0	3.0	10.0	0.0	0.0	
Trichy						14.0	5.0	8.0	0.0	0.0	
Virudhunagar						0.0	3.0	4.0	6.0	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://imdagrimet.gov.in