ICAR-Central Institute for Cotton Research, Nagpur

Weekly Advisory for Cotton Cultivation from 20th to 29th September 2018

WEATHER ADVISORY

	ACTUAL RAINFALL In mm IMD					PREDICTED IMD					Advisory
	SEPTEMBER										
Date	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	
PUNJAB											
Ferozpur						14.0	0.0	0.0	0.0	0.0	At Faridkot, the crop is 136 days old at fruiting and boll development stage. Foliar sprays of KNO_3 for better fruit retention and high yield at weekly intervals were given. No serious problem of weed infestation. As such, the incidence of sucking pests was below ETL. Whitefly, leafhopper and thrips incidence is negligible across Punjab, however crops should be regularly monitored in the late sown fields. At Bathinda, the crop is 125-135days 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; Jassid from 0–3 per three leaves and thrips incidence varied from 0-6 per 3 leaves. No incidence of diseases. Spray of 13:0:45 (Potassium nitrate) were recommended to farmers. **Advisory:** At Faridkot, the incidence of Cotton leaf curl disease is increasing and is between grades (II-III). Bacterial leaf blight is increasing in the field, so spray of Copper oxychloride 50 WP @ 25g + Streptocycline @ 1g in 10 ltrs of water should be given in cotton fields. At Bathinda, the farmers are advised to monitor their crop regularly for whitefly, jassid particularly in the late sown fields. For management of jassid, the fields showing yellowing and curling of the leaves along the margins in the upper canopy of the 50 per cent of the plants (ETL) should be sprayed with 60 g of Dinotefuran 20 SG or 80 g of Flonicamid50 WG per acre. In the fields having high incidence whitefly and thrips, spray the crop with 200 g of Diafenthiuron 50 WP or 800 ml of Ethion 50 EC per acre basis. For the management of nymphs of whitefly, spray 500 ml of Pyriproxfen 10 EC or 200 ml of Spiromesifen 22.9 SC.
Faridkot	0.0					14.0	0.0	0.0	0.0	0.0	
Mukatsar	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	
Bhatinda	0.0	0.0	0.0			25.0	0.0	0.0	0.0	0.0	
Sangrur						121.0	0.0	0.0	0.0	0.0	
Ludhiana	0.0	0.0	0.0	0.0	13.0	85.0	0.0	0.0	0.0	0.0	
HARYANA											
Hissar						61.0	0.0	0.0	0.0	0.0	At Sirsa, the crop is 120 to135 days old at reproductive and boll opening stage. Whitefly attack ranged between 2-22/3leaves in farmers' fields. Symptoms of sudden wilting reported at farmer's field locations. At Hisar, the crop is more than 130 days old at reproductive stage. Crop condition is good. In general, the population of whitefly and leafhopper is decreasing and found to cross the ETL only in few fields of Jind district. The
Jind						113.0	5.0	0.0	0.0	0.0	
Sirsa						7.0	0.0	0.0	0.0	0.0	
Rohtak						20.0	0.0	0.0	0.0	0.0	

											incidence of spotted bollworm was observed in *Desi* cotton. The incidence of sooty mould (*Capnodium* spp.) was observed in one field of village Dhani Sobha of Hansi Tehsil wherein the field severity of sooty mould was recorded with III grade (75% leaf area covered) in Katha hybrid. CLCuD incidence was recorded in all fields and ranged from 8.33 to 33.32 % in village Nidani of Jind District. Parawilt incidence was in traces. **Advisory:** At Sirsa, though population of all sucking pests is below ETL, farmers are advised not to spray any insecticide at this stage but need to remain vigilant At Hisar, In areas where dry spell of 15 days occur, 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. 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. For spotted bollworm in *desi* cotton (if > 5% infested fruiting bodies), spray 800-1000 ml Quinalphos 25 EC or 800 ml Profenophos 50 EC or 75 ml Spinosad 45 SC using 175-200 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. In CLCuD affected fields, farmers are suggested to avoid excess use of nitrogen, and control whitefly. In case of parawilt, farmers are advised to apply foliar spray of Cobalt Chloride @ 10mg/ litre water within 24-48 hrs of occurrence. Avoid picking of rotten cotton bolls. Avoid picking in morning hours. Dry the kapas before storage to avoid micro-organism damage.
RAJASTHAN											
Ajmer					11.6	0.0	0.0	0.0	3.0	3.0	At Banswara, the crop is 95 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: Watch for insect infestation on crop and also parawilt. 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. Farmers are advised
Jodhpur						0.0	0.0	0.0	0.0	0.0	
Nagaur						0.0	0.0	0.0	0.0	0.0	
Pali						4.0	0.0	0.0	11.0	9.0	
Sri Ganganagar						0.0	0.0	0.0	0.0	0.0	

											to spray for infested crop as per suggestion of University Scientists/Agriculture Officers against sucking pests when infestation seen above ETL. Spray of any one 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.
ORRISA											
Koraput	19.8	2.4	100.4			89.0	84.0	86.0	68.0	39.0	The crop is 86 to 93 days old at boll formation and boll development stage. The weather was hot and humid. Plant protection measures by application of pesticides and fungicides in Kalahandi, Bolangir and Rayagada and Nuapada districts. Monitoring of bollworm and spodoptera by installation of pheromone traps was done. Aphid and jassid populations have been reduced due to heavy rainfall. Aphid: Below ETL (3-10/3leaves); Jassid below ETL (0-4.0/3 leaves); Thrips below ETL (1.0-5.0/3leaves); Mealy Bug incidence has been reported from Gunupur area of Rayagada but below ETL (< 20 plants/acre showing damage grade II/ III/ IV). Angular leaf spot has been reported in Kalahandi, Nuapada, Bolangir and Rayagada districts. Farmers were advised to drainage of excess rain water from the field, to control sucking pest and foliage feeder infestation spraying of Buprofezin 25 SC @ 2ml/litre of water. To recoup the plant from water logging effects spray 1% DAP or 1% water soluble fertilizer 19:19:19 at weekly interval. To control angular leaf spot, spray 25g Copper Oxychloride and 1 g Streptocycline mixing with 10 litres of water. Advisory: If sucking pest infestation goes above 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 number/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 numbers/ha to monitor the incidence of bollworms and Spodoptera.
Kalahandi		1.0	25.0	3.0	0.0	20.0	37.0	49.0	41.0	37.0	
Balangir			23.0			19.0	14.0	19.0	0.0	0.0	
GUJARAT											
Amreli						0.0	0.0	0.0	0.0	0.0	At Surat, the crop is in flowering stage. Chido (Cyprus rotundus), Satodi (Trianthema monogyna) and Dhamdo (Amaranthus viridis) were the major weeds that were controlled using appropriate measures. jassid and Thrips attack above ETL. BLB was seen in lower leaves of plant. At Junagadh, the crop is 75 to 80 days old at vegetative and flowering stage. Weeding, Inter culturing, Fertilizer application, Insecticide application: Profenofos 40%+Cypermethrin 4%EC, DDVP 76 EC were taken up.
Bhavnagar						0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	
Broach	0.0					4.0	0.0	0.0	16.0	24.0	
Sabarkantha						3.0	0.0	0.0	6.0	8.0	
Surendranagar						0.0	0.0	0.0	0.0	5.0	
Ahmedabad	0.0	0.0	0.0			0.0	0.0	0.0	0.0	3.0	
Baroda						15.0	4.0	0.0	13.0	65.0	

Patan						0.0	0.0	0.0	0.0	5.0	Advisory: Field sanitation to be maintained. Spray Thiamethoxam 25 WG 2gor Flonicamid 50 WG @ 4 g/10 lit. water at ETL for sucking pests control. Install pheromone traps (5 traps/ha) for monitoring of pink bollworm. 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, if found. Spray Streptomycin sulphate 1g + Copper oxychloride 25g/ 10 lit of water for effective management of Bacterial leaf blight (BLB) disease, if seen. For Leaf spot of cotton, spray Metiram + Pyroclostrobin 20 g in 10 lit of water @ two sprays at 15 days interval. Root rot & wilt can be controlled by drenching with Carbendazim 20 g or Copper oxychloride 40 g in 10 litre of water at weekly interval.
Mehesana						0.0	0.0	0.0	0.0	5.0	
MP											
Khargaon											At Khandwa, the crop is 100 to 120 days old at flowering to boll formation stage. Incidence of jassids, white fly and pink boll worm were controlled using recommended measures. No incidence of diseases. **Advisory:** Spray Imidacloprid 0.3 ml or Acetamapird 20%SP 2g or Thiomethaxam 0.22 g per liter water for the control of jassid and whiteflies Install pheromone traps for pink boll worm wherever flowering has started. If 8 male moths are collected continuously 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 boll worm, if 2 or more bolls found damaged by the pest, then spray Quinolphos 20 ml or Profenophos 30 ml or Thiodicarb 20 g / 10 litre of water.
Dhar	1.5	7.7				0.0	4.0	0.0	8.0	26.0	
Khandwa											
MAHARASHTRA											
Dhule						0.0	9.0	14.0	36.0	42.0	The crop is 95 to 105 days old at boll formation stage. Weather was cloudy and expected rain. Plant protection for sucking pests and Pink bollworm were taken up. Infestation of Thrips *(Thrips tabaci)* and Whiteflies crossed ETL. Infestation of Pink Bollworm was recorded on farmers field but was below ETL. Incidence of *Alternaria* was recorded on Grade I and Bacterial Blight on Grade 0 to I. Farmers were recommended to carry out intercultural operations to rainfed crop and opening of furrows. At few places in Parbhani district whitefly infestation was above ETL.
Nandurbar						20.0	11.0	5.0	47.0	82.0	
Jalgaon	3.0	1.5		11.0	7.0	4.0	0.0	3.0	19.0	0.0	
Ahmednagar						23.0	18.0	53.0	42.0	33.0	
Aurangabad						0.0	0.0	0.0	0.0	0.0	
Jalna						10.0	4.0	9.0	19.0	12.0	
Beed						5.0	23.0	31.0	18.0	22.0	
Nanded						11.0	22.0	23.0	22.0	25.0	
Parbhani	0.0	1.8	0.0	0.0		5.0	23.0	22.0	13.0	11.0	
Hingoli						8.0	16.0	7.0	6.0	0.0	

Buldhana						10.0	10.0	6.0	12.0	0.0	At Akola the crop is 80 to 85 days old at Square formation to flowering and boll development stage. Due to dry weather and high temperature, cracks were formed in soil. As such, field condition is good. Weeds infestation negligible. Sucking pest infestation moderate. *Myrothecium* leaf spot. *Alternaria* leaf spot were in traces, Infestation of Cercospea leaf spot and Colletricum were also observed. Infestation of bacterial leaf spot was not seen during the period. Necessary plant protection scheduled followed for sucking pest and bollworm complex. **Advisory:** **F**urrow should be opened in each or alternate row for conservation of moisture *in situ*. Foliar spray of 2% KNO_3 should be done for drought tolerance and boll development. Spray of Flonicamid 50 WG @ 0.4 g or Imidacloprid @ 3ml in 10 / lit should be undertaken for management of sucking pests. For whitefly management spay neem oil 5ml/l water. Nipping of cotton should be done to manage plant height.
Akola	14.0	1.0	0.0	53.0	0.0	0.0	0.0	6.0	5.0	0.0	
Washim						8.0	0.0	5.0	5.0	0.0	
Amravati					21.6	17.0	7.0	17.0	8.0	0.0	
Yavatmal			0.6		0.4	4.0	13.0	4.0	4.0	4.0	
Wardha			0.4		1.6	10.0	6.0	0.0	0.0	0.0	
Nagpur						10.0	6.0	6.0	0.0	0.0	
Chandrapur	0.0	0.0	23.2	14.4	0.0	14.0	7.0	3.0	7.0	0.0	
TELANGANA											
Adilabad			3.4		7.6	4.0	13.0	6.0	6.0	16.0	The crop is 30 to 70 days old 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. Spray Mancozeb@3g/l.
Warangal						3.0	0.0	7.0	12.0	28.0	
Khammam	0.0					8.0	14.0	17.0	21.0	8.0	
Karimnagar	4.2	2.6	5.0	56.5		4.0	6.0	6.0	11.0	24.0	
Mahabubnagar		10.2				31.0	16.0	30.0	28.0	30.0	
Guntur	24.4	0.0	1.9			7.0	14.0	22.0	14.0	13.0	
Prakasam	34.8					51.0	54.0	76.0	62.0	58.0	
KARNATAKA											
Dharwad	0.0	0.0	22.0	0.0	0.0	29.0	30.0	18.0	11.0	9.0	Early sown crop is 90 to 100 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. Plant protection measures for mirid and other sucking pests and precautionary measures for the management of PBW; Foliar sprays of water soluble fertilizers; Light irrigation and Manual weeding operations were taken up during the reporting week. Mirid bug noticed in Haveri district, and spraying of Acephate 75 SP @ 2 ml/lit of water was suggested. In many places sucking pests incidence was reported. Suggested to spray Dinotefuron 20 SG@ 0.3g/lit of water. Sporadic incidence of *Alternaria* leaf blight noticed. **Advisory:** Foliar sprays of 19:19:19 water soluble fertilizer (10g/lit of water) with $MgSO_4$ @ 10g/lit of water and Planofix @ 0.5 ml/lit in 90 days old crop to manage leaf reddening and square dropping. Spraying of Neem based insecticides at earlier stages, then with Thiodicarb 75 WP @ 2.0 g/lit of water to manage PBW. Light irrigation at critical stages. Nipping in HxB hybrids in more than
Haveri						14.0	10.0	11.0	12.0	9.0	
Mysore						48.0	13.0	30.0	13.0	20.0	

											100 days crop for canopy and sucking pest management. Last top dressing with 25 kg each Urea and Potash to 70-80 days crop.
TAMIL NADU											
Perambur	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Sown crop is in 36 days old at vegetative and square formation stage. Thinning and early post emergence herbicide application was recommended to control late emerged weeds. First top dressing with 25 % N as neem coated urea was recommended. *Trianthema, Cyprus, Parthenium* were the major weeds observed. No incidence of pests and diseases. At Srivilliputhur, the crop is 35 days old at vegetative stage. Weeding of cotton in many parts of area and sowing in some parts of area taken up. *Echinochloa spp, Dactyloctenium aegyptium, Cyperus spp, Cynadon dactylon, Trianthema portulacastrum* etc were the major weeds noticed. Thrips was observed in some areas. No incidence of diseases. **Advisory:** Intercultural operation with junior hoe or tractor drawn implements are recommended. At Srivilliputhur, during sowing, basal application of fertilizers (full P, fifty per cent N and K) should be given. To manage the thrips population, application of neem oil 5ml/l + 5% NSKE is recommended. As a prophylactic measure for the management of stem weevil, drenching of Chloropyriphos at 2.5 ml / litre or Carbendazim at 1 g/ litre of water may be followed from 20 DAS onwards thrice at 15 days interval .
Salem						0.0	20.0	30.0	18.0	13.0	
Trichy						7.0	45.0	26.0	34.0	34.0	
Virudhunagar						19.0	26.0	8.0	8.0	7.0	

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