




XVI Weekly Advisory for Cotton Cultivation from 5th to 11th September '2023

PUNJAB		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Firozpur						0	0	0	0	0
	Faridkot	0	0	0	0	0	0	0	0	0	0
	Muktsar	0	0	0	0	0	0	0	0	0	0
	Bhatinda	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
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:

At Bathinda, the crop is 107 to 120 days old at boll formation stage. Foliar sprays of Potassium nitrate and insecticide spray for the control of pink bollworm was done. Weeds have infested the fields. Whitefly population varied from 1-4/3 leaves and jassid between 0-3/3 leaves. Incidence of green boll damage due to pink bollworm noticed in few fields (0-15%). Boll rot was observed in maximum fields.


At Faridkot, the crop is 119 to 130 days old at flowering/ boll development phase. Around 5-6 sprays against sucking pests and pink bollworm were done. Foliar applications of KNO₃ and MgSO₄ were given to boost the yield and quality. Whitefly incidence was near ETL at few locations and jassid below ETL at most of the spots. Pink bollworm incidence was above ETL ranging between 5-22%. Cotton leaf curl disease up to grade I and II, internal boll rot and leaf spots were observed at a few spots.

Advisory:

At Bathinda, farmers are advised to apply four sprays of 2% Potassium nitrate (13:0:45) at weekly intervals in cotton fields where flowering has started which would reduce flower drop and improve boll setting in cotton. For high yield and management of leaf reddening in *Bt* cotton, apply 2 sprays of 1% Magnesium sulphate at 15 days interval during full bloom and boll development stage. If whitefly adult population is above ETL, spray Afidopyropen50 DC @ 400 ml/acre or Flonicamid 50WG @ 80g/acre or Clothianidin 50 WDG @20g/acre or Dinotefuran 20SG @60g/acre. If nymphs of whitefly population are high, then spray Pyriproxyfen 10EC @500 ml/acre. For jassid above ETL, spray Dinotefuran 20SG @ 60g/acre or Thiamethoxam 25WG @40g/acre. Rosette flowers, if any, should be removed and destroyed. Monitor pink bollworm in fields where crop is at flowering stage and spray Profenofos 50EC @ 600 ml/acre or Emamectin benzoate 5 SG @ 100 g/acre or Indoxacarb 14.5 SC/15.8 EC @ 200 ml/acre if the incidence of pink bollworm goes above ETL (5-10% infestation in flowers or green bolls). In areas where crop is more than 120 days old, spray Fenpropathrin 10 EC @ 300 ml/ acre or Cypermethrin 25% EC @ 100ml/acre or Deltamethrin 2.8 EC @200 ml/acre or Fenvalerate 20 EC @200 ml/acre or Lambda cyhalothrin 5%EC @ 200 ml/acre. Apply foliar spray of Carbendazim 50 WP@ 0.04% or Kresoxim methyl 44.3 SC @ 0.1% or Propineb 70 WP @ 0.25 % or Propiconazole 25 EC @ 0.1% or Metiram 55% +Pyraclostrobin 5% WG @ 0.2% or Azoxystrobin 18.2% w/w + Difenconazole 11.4% w/w SC @ 0.1% or Fluxapyroxad167 g/L + Pyraclostrobin 333 g/L SC @ 0.6% to manage boll rot disease complex and fungal foliar leaf spots.

At Faridkot, farmers are advised to apply fourth spray of Potassiumnitrate (13:0:45) @ 2% to improve boll setting and reduce flower drop at 7 to 10 days interval. Avoidbrackish/tube well water for anytype of foliar sprays on cotton as excessive salts sometimes burn margins of cotton leaves. Cotton growers who experienced leaf reddening during last season in cotton crop, they can apply two sprays of Magnesiumsulphate @ 1% through foliar application at 15 days interval during full bloom and boll development. Both chemicals (KNO₃ and MgSO₄) should be sprayed at alternate weeks depending upon weather and rainfall.As there has been no rainfall during the month of August in the entire South West cotton zone, provide irrigation to the crop to avoid shedding of flowers and bolls. If whitefly adult population is above ETL, spray Afidopyropen50 DC @ 400 ml/acre or Flonicamid 50WG @ 80g/acre or Clothianidin 50 WDG @20g/acre or Dinotefuran 20SG @60g/acre. If nymphs of whitefly population are high, then spray Pyriproxyfen 10 EC @ 500 ml/acre. Check for squares and flowers for the infestation of pink bollworm. Spray Profenofos 50 EC @ 600ml/acre or Emamectinbenzoate 5 SG @ 100 g/acre or Indoxacarb 14.5 SC/15.8 EC @ 200 ml/acre, if incidence crosses ETL.To manage fungal foliar diseases, spray Carbendazim 50 WP@ 0.04% or Kresoxim methyl 44.3 SC @ 0.1% or Propineb 70 WP @ 0.25 % or Propiconazole 25 EC @ 0.1% or Metiram 55% +Pyraclostrobin 5% WG @ 0.2% or Azoxystrobin 18.2% w/w + Difenconazole 11.4% w/w SC @ 0.1% or Fluxapyroxad167 g/lit + Pyraclostrobin 333 g/lit SC @ 0.6%.as recommended. Apply a

@10 ml or Carbendazim 50 WP@ 4g or Fluxapyroxad 167g/lit + Pyraclostrobin 333g/lit SC @6g or Azoxystrobin 18.2% w/w + Difenconazole 11.4% w/w SC@10ml or Metiram 55%+Pyraclostrobin 5% WG @20g/10 lit of water. Treat early symptomatic root rot-affected patches and wilt affected cotton fields by drenching with Carbendazim 50 WP @ 4g/lit of water. Manage boll rot disease complex by applying Propiconazole 25EC @10ml or Carbendazim 50WP@4g or Fluxapyroxad 167g/lit + Pyraclostrobin 333g/lit SC @6g or Azoxystrobin 18.2% w/w +Difenoconazole 11.4% w/w SC @10 ml or Metiram 55%+Pyraclostrobin 5%WG @20g/10 lit of water. Monitor the fields regularly at least at weekly intervals. In case of parawilt symptoms, spray Cobalt chloride @ 2g/200 lit of water/acre within 24-48 hours.

RAJASTHAN		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Ajmer	0	0	0	0	0	0	0	0	3	3
	Jodhpur	0	0	0	0	0	0	0	0	0	0
	Nagaur	0	0	0	0	0	0	0	0	1	0
	Pali	0	0	0	0	0	0	0	0	1	1
	Sri Ganganagar	0	0	0	0	0	0	0	0	0	0
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:


In Southern Rajasthan (Banswara, Bhilwara, Chittorgarh, Dungarpur, Pratapgarh, Rajsamand and Udaipur), the crop is 70 to 115 days old at flowering and boll formation stage. Most of the fields are free from weeds as timely intercultural operations have been taken up. No incidence of pests and diseases except jassid but below ETL.

In Sriganganagar and Hanumangarh, the crop is 100 to 147 days old at flower initiation/ boll formation/ boll bursting stages. Post sowing irrigation has been given. Intercultural operations have been taken up in early and timely sown cotton. Manual hoeing and weeding have been done to remove the weeds from row spaces. Incidence of sucking pests like jassid noticed 0.00 to 1.67/leaves, whitefly 0.00 to 4.67/leaves and thrips ranging from 0 to 3.33/leaves observed in most of the fields. CLCuD symptoms recorded in the range of PDI 5% in the cotton fields.

Advisory:

In Southern Rajasthan (Banswara, Bhilwara, Chittorgarh, Dungarpur, Pratapgarh, Rajsamand and Udaipur), farmers are advised to apply recommended dose of N fertilizers according to crop stage. Monitor infestation of sucking pests and spray 5% neem seed kernel extract (NSKE) or Azadirachtin 1500ppm (0.15% EC) @ 2.5L/ha or Buprofezin 25 SC @ 1.25 lit/ha or Diafenthiuron 50WP @600g/ha or Flonicamid 50WG @200g/ha to control them if it goes beyond ETL. Install yellow sticky traps @ 8/acre to monitor whitefly and jassid and pheromone traps @ 2/acre to monitor pink bollworm and replace the lure as per validity indicated. Regularly monitor pink bollworm occurrence and destroy the affected flowers (rosette flowers) along with larvae. For PBW, dissect 10-20 days old 20 greens bolls/acre to see the level of incidence. In case PBW crosses ETL based on trap catches or green boll damage, apply Emamectin benzoate 5SG@100 g/acre or Profenophos 50 EC @ 600ml or Chlorpyrifos 20 % EC @ 500 ml or Indoxacarb 14.5 SC @200ml/acre. Do not repeat the same insecticide and rotate insecticide whenever repetition is required. If plants show sudden drooping of leaves (Parawilt) which ultimately get wilted, save the affected plants by spraying Cobalt chloride @ 10mg/lit of water (10 ppm) or drench with Copper oxychloride 50 WP@2.5 g/lit of water or Carbendazim 50 WP @12g + Urea 100g/10 lit of water immediately after the appearance of these symptoms. In case of foliar diseases like *Myrothecium Corynespora*, *Alternaria* leaf spot, boll rot disease and wet weather blight, apply foliar spray of Propiconazole 25EC @10 ml or Carbendazim 50 WP @ 4g or Fluxapyroxad 167g/lit + Pyraclostrobin 333g/lit SC @ 6g or Azoxystrobin 18.2% w/w + Difenconazole 11.4% w/w SC @10ml or Metiram 55%+ Pyraclostrobin 5%WG@ 20g/10 lit of water. Drench the root rot affected plants and surrounding healthy plants with Carbendazim 50WP@ 1.2g/lit of water or *Trichoderma harzianum* or *T. viride* WP formulation@5-6g/lit of water. Do not repeat same insecticides/fungicides as well as same group of insecticides/fungicides. Avoid tank mixture of two or more insecticides.

In Sriganganagar and Hanumangarh, farmers are advised to apply third spray of KNO₃ @ 2% to improve boll setting and reduce flower drop. Monitor the crop for insect pests and diseases regularly. To control jassid and whitefly, spray Afidopyropen 50 DC @ 400 ml/acre or Flonicamid 50 WG @ 80 g/acre or Clothianidin 50 WDG @20 g/acre or Dinotefuran 20 SG @ 60g/acre. If nymphs of whitefly population are high, then spray Pyriproxyfen 10EC @ 500ml/acre. Install pheromone traps @ 5/ha to monitor pink bollworm. Regularly, monitor bollworm occurrence and destroy the affected flower along with larvae. Wherever pink bollworm population crosses ETL, i.e. flower or bolls infestations is more than 5%, spray Profenofos 50EC @ 600 ml/acre or Emamectin benzoate 5 SG @ 100 g/acre or Indoxacarb 14.5 SC @ 200 ml/acre.


ODISHA		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Koraput	0	0	0	0	0	60	35	10	5	5
	Kalahandi	0	0	12	0	6	25	30	15	10	5
	Balangir	0	0	14.6	9	40.7	18	25	30	10	5
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:

At Odisha, the crop is 66 to 76 days old at reproductive stage i.e., flowering and boll formation stage. Intercultural operations, weeding, fertilizer, herbicidal and insecticidal sprays were the operations taken up. Manual weeding in few places is in progress. Minor incidences of aphids, jassid, *Spodoptera*, semi-loopers and shoot weevils were noticed. Wilting, root rot and Bacterial Leaf Blight were reported from some regions of the State.

Advisory:

Farmers are advised to complete weeding and intercultural operations at the earliest. Apply third dose of fertilizer 25% of N as delayed application of N fertilizer will enhance more vegetative growth. Regularly monitor the crop to know about incidence of any pest and disease. Spray Flonicamid 50 WG @ 4g/10 lit of water or Dinotefuran 20 SG @ 3g/10 lit or Thiamethoxam 25 WG @ 2g/10 lit of water once the sucking pests like jassid and whitefly crosses ETL. Install yellow sticky trap @ 8/acre to monitor them. Spray Chlorpyrifos 20 EC @ 25ml or Quinalphos 20 AF @ 20ml or Profenophos 50 EC @ 30ml/10 lit of water to control pink bollworm on crossing ETL as well as shoot weevil. If parawilt or sudden wilt occur due to heavy rains and water logging after dry spell, apply Cobalt chloride @ 10 mg/lit (10 ppm) on affected plants within 24 hours of onset of symptoms and/or drench plants with a mixture of Copper-oxchloride 50 WP @ 25 g or Carbendazim 50 WP @ 12g and 200g Urea mixed in 10 lit of water. To reduce leaf reddening if any, spray 100g Magnesium sulphate mixed with 100g Urea in 10 lit of water in water logged areas. To manage root rot and wilt, drench with Carbendazim 50 WP @ 12g mixed/10 lit of water or *Trichoderma harzianum* or *T. viride* WP formulation @ 100g/10 lit of water to recover early symptomatic affected plants. Apply foliar spray of Copper oxchloride 50 WP/WG @ 30g/10 lit of water to manage bacterial blight in cotton.

GUJARAT		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Amreli	0	0	0	0	0	1	2	8	3	5
	Bhavnagar	0	0	0	0	0	0	2	10	15	2
	Jamnagar	0	0	0	0.2	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	8	10	7
	Surendranagar	0	0	0	0	0	0	0	0	0	0
	Ahmedabad	0	0	0	0	0	0	3	8	10	4
	Baroda	0	0	0	0	0	0	20	29	21	20
	Patan	0	0	0	0	0	0	0	0	0	0
	Mehesana						0	0	0	0	0
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:

At Surat, the sown crop is 70 to 76 days duration crop at squaring and flowering stage. Weeding, intercultural operations and Nitrogen application were done. Thrips and jassid have crossed ETL and pink bollworm population below ETL. Bacterial leaf blight disease was noticed in moderate status.


At Junagadh, the sown crop is 77 days old at square formation and flowering stage. Intercultural operations, weeding, fertilizer application, earthing up and pesticides spray have been carried out. Thrips infestation has crossed ETL at few places. *Fusarium* wilt has been observed in few places. Pink bollworm incidence has also started in few fields.

Advisory:

At Surat, farmers are advised to take up field sanitation. Spray the crop grown in light soils with urea @ 2%, Zinc sulphate 21% @ 0.5% to overcome zinc deficiency and Magnesium sulphate @ 1% to overcome magnesium deficiency in crop. On receiving sufficient rain, apply third installment of split dose of nitrogenous fertilizer application (> 75 DAS). If there is problem of square

dropping, spray Naphthalic Acetic acid 4.5 SL @ 4.5 ml/10 litres of water. Spray Flonicamid 50 WG @ 4g or Dinotefuran 20 SG @ 3 g or Thiamethoxam 25 WG @ 2g per 10 litres of water once the sucking pests crosses ETL. Monitor the cotton crop at squaring and flowering stages for presence of pink bollworm larvae within rosette flowers in fields and destroy them. Install pheromone traps @ 5 traps/ha to monitor pink bollworm. Spray Chlorpyrifos 20 EC @ 25ml or Quinalphos 20 AF @ 20ml or Profenophos 50 EC @ 30ml or Indoxacarb 14.5 SC @ 5 ml per 10 litres of water where ever pink bollworm crosses ETL (10% damage to fruiting bodies). Give spot application of Carbendazim 50% WP @ 1.2g/litre of water or *Trichoderma harzianum* or *T. viride* WP formulation @ 10g/litre of water to manage wilt and root rot and for *Fusarium* wilt disease (in desi cotton) in patches along with one meter radius of healthy plants in desi cotton field. Apply prophylactic spray of Copper oxychloride 50 WP/WG @ 25-30 g/10 litres of water to manage bacterial leaf blight disease. Apply 2% Urea at the base of plant (root system) by making 3-4 holes with stick or rod for proper aeration which will reduce para wilting, if persists. Further, give foliar spray of Carbendazim 12%+ Mancozeb 63% WP @ 0.3% or Propiconazole 25 EC @ 10ml or Carbendazim 50 WP @ 4g or Fluxapyroxad 167g/lit + Pyraclostrobin 333g/lit SC @ 6g or Azoxystrobin 18.2% w/w + Difenconazole 11.4% 4/13 w/w SC @ 10ml or Metiram 55%+Pyraclostrobin 5% WG @ 20g/10 litres of water to manage fungal leaf spots, fungal boll rots and other blight diseases.

At Junagadh, farmers are advised to take up top dressing application of Nitrogen fertilizers (25 kg Urea/acre). If there is problem of square dropping, foliar spray Naphthalene acetic acid 4.5 SL @ 4.5 ml/10 litres of water. Spray Thiamethoxam 25 WG @ 2g/10 litres or Spinetoram 11.7 SC @ 8.4 ml or *Beauveria bassiana* @ 60g/ 10 litres of water to control thrips infestation. Install pheromone trap @ 2/ acre to monitor pink bollworm moth in more than 45 days old crop and record the population of moths. Collect and destroy the initial flush of infested squares and rosette flowers from the field to avoid carryover of pink bollworm population. If the infestation of pink bollworm crosses ETL, spray Emamectin benzoate 5 SG @ 5g or Profenophos 50 EC @ 30ml or Indoxacarb 14.5 SC @ 10 ml per 10 litres of water. To manage fungal foliar disease, give a spray of Fluxapyroxad 167g/lit + Pyraclostrobin 333g/lit SC @ 0.6 g/litre or Metiram 55%+ Pyraclostrobin 5% WG @ 2g/litre of water. For wilt and root rot management, apply *Trichoderma harzianum* or *T. viride* WP formulation in soil @ 2.5kg/ha or Carbendazim 50 WP @ 1.2g/litre of water with drenching around plant root zone.


MADHYA PRADESH		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Khargaon										
	Dhar	0	0	0	0	0	5	22	51	33	33
	Khandwa										
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:

At Khandwa, the crop is 70 to 119 days at squaring, pre-flowering, flowering and boll formation stages. Weeding, intercultural operations, irrigation, fertilizer and pesticide application has been carried out as per stages of the crop. The incidence of jassid and aphids were noticed in many fields while whiteflies in few fields. Potassium deficiency was recorded in some areas. Bacterial leaf blight and *Cercospora* leaf spot was observed in some fields.

Advisory:

Farmers are advised to apply chemical fertilizer with 50% of P and K at 60 DAS and 25% N at 90 DAS. Split doses of these nutrients should be applied by column method at the depth of 10 to 15 cm. Spray Potassium Sulphate 0.5% in Potassium deficit areas. Take up weeding with bullock drawn *Kolpaas* per existing field conditions. If incidence is above ETL (jassid 2 nymph/leaf, aphids 10% infested plants and whitefly 6/leaf) spray Flonicamid 50 WG @ 200g/ha or Dinotefuran 20 SG @ 150g/ha or Thiamethoxam 25 WG @ 100 g/ha. If there is growth of black sooty mould, then spray Propiconazole 25 EC @ 500ml/ha or Copper Oxychloride 50 WP @ 1250 g/ha. Spray Copper Oxychloride 50 WP/WG @ 25-30g/10 litres of water to manage bacterial blight disease. If sudden drying or parawilt symptoms appear in fields, drench immediately with carbendazim 50 WP @ 12g+Urea 1.5% around affected plants. Install Pheromone traps @ 5 /ha to monitor pink bollworm moth activity. Observe for the presence of rosette flowers and collect them and destroy immediately. Spray Profenofos 50 EC @ 600 ml/acre or Emamectin benzoate 5 SG @ 100 g/acre or Indoxacarb 14.5 SC @ 200 ml/acre, if incidence crosses ETL. Spray Copper Oxychloride 50 WP/WG @ 25-30g/10 litres of water to manage bacterial blight disease and foliar spray of Carbendazim 12%+ Mancozeb 63% WP @ 30 g or Carbendazim 50 WP @ 4 g or Kresoxim methyl 44.3 SC @ 10 ml or Propineb 70 WP @ 25 g or Propiconazole 25 EC @ 10 ml or Metiram 55% +Pyraclostrobin 5% WG @ 20 g or Azoxystrobin 18.2% w/w + Difenconazole 11.4% w/w SC @ 10 ml or Fluxapyroxad 167g/l + Pyraclostrobin 333 g/l SC @ 6 g mixed in 10 litres of water against *Cercospora* leaf spot, *Corynepsoa* leaf spot, other fungal leaf spots and fungal boll rots field.

MAHARASHTRA		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Dhule	0	0	0	0	0	8	28	67	30	18
	Nandurbar	0	0	0	0	0	6	25	86	56	30
	Jalgaon	0	0	0	0	0	8	66	76	38	66
	Ahmednagar	0	0	0	0	0	21	38	37	11	8
	Aurangabad	0	0	3.7	0	0	10	65	56	15	8
	Jalna						3	65	37	10	11
	Beed	0	0	0	0	0	21	30	29	11	7
	Nanded	0	0	3.2	19	1	30	40	22	5	14
	Parbhani	0	0	0	2.8	0	22	66	45	8	9
	Hingoli	0	0	0	0	10.5	1	66	12	7	9
	Buldhana	0	0	0	8	0	10	37	71	68.6	12
	Akola	15.2	0	0	0	0	11	27	68	65.6	65
	Washim	0	0	0	0	0	4.7	12	65	9.8	9
	Amravati	0	0	0	0	0	29	66	69	70.6	69
	Yavatmal	0	0	0	4	13.1	3.3	66	71	14.3	10
	Wardha	0	0.6	0	61	8.2	7.9	121	22	13.3	18
	Nagpur	0	0	0	45.3	1.1	68	116	29	35.3	24
Chandrapur	5	0	0	3	29	66	66	65	14.4	16	
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:

At Akola, the sown crop is of 62 to 112 days duration at square formation/ flowering/ boll formation/ boll development stages. The weather during the reporting period was clear with more sunshine hours and no rainfall. Hoeing, weeding and insecticide spray were carried out. Infestation of sucking pests like aphids, jassid, thrips, spotted bollworm and pink bollworm were observed in cotton fields. No incidence of diseases.

At Nanded, the crop is 54 to 75 days old at vegetative to square formation stage. Intercultural operations, plant protection and fertilizer application sprays were given. No incidence of pests except jassid and thrips attack but below ETL. No incidence of diseases.

At Rahuri, the crop is 69 to 80 days old at square formation/flowering/boll formation stage. Weeding and hoeing were taken up. Sucking pests were noticed above ETL except whitefly incidence below ETL. Weeds have infested the fields. Cotton plants damaged due to *Myllocerus* weevil at few fields. TSV recorded at 1% in few fields.


Advisory:

At Akola, farmers are advised to open dead furrows in June and July sown crop, if not done earlier. Take up weeding to avoid competition of weeds with crop. Spray 2% urea at flowering stage and 2% spray of DAP at boll development stage of cotton. Spray Potassium nitrate @ 100g/10 lit of water in dry spell condition. Spray NAA 4.5 SL @ 4.5 ml /10litres of water to avoid shedding of squares and flowers of cotton and Mepiquat Chloride @ 10 ml/10 litres of water to restrict the excess vegetative growth of cotton. Spray NSKE 5% or Neem oil or neem based pesticide @ 1 lit/acre to check sucking pests and avoid pink bollworm egg laying in cotton. If sucking pest infestation crosses ETL, spray Thiamethoxam 25 WG @ 2g or Dinotefuron 20% SG @ 3g or Flonicamid 50 WG @ 4g or Diafenthiuron 50 WP @ 12g or Buprofezin 25 SC @ 20ml per 10lit of water to manage sucking pests considering rainfall condition. Install pheromone traps @ 5/ha to monitor pink bollworm moth activity. Spray Profenofos 50 EC @ 30ml or Emamectin benzoate 5 SG @ 5g or Indoxacarb 14.5 SC @ 10ml/ 10 lit of water, if pink bollworm incidence crosses ETL.

At Nanded, farmers are advised to give top dressing of 36 kg N per ha for rainfed cotton at 60 days after sowing. Take up intercultural operations in cotton fields to manage weeds. Install yellow sticky traps @ 8/acre and blue sticky traps @ 8/acre to control sucking pests. Spray NSKE 5% or Neem based pesticide @ 1 litre/acre to check sucking pests and avoid pink bollworm egg laying in cotton. On crossing ETL by sucking pests, spray Thiamethoxam 25 WG @ 2 g or Dinotefuron 20% SG @ 3g or Flonicamid 50 WG @ 4g or Diafenthiuron 50 WP @ 12g or Buprofezin 25 SC @ 20ml/10 lit of water. Install pheromone traps @ 5/ha to monitor pink bollworm moth activity. Collect and destroy the rosette flowers. If incidence crosses ETL, spray Profenofos 50 EC @ 30 ml or Emamectin benzoate 5 SG @ 5g or Indoxacarb 14.5 SC @ 10ml/10 lit of water.

At Rahuri, farmers are advised to carry out intercultural operations on time and change the lure of pheromone traps. Install yellow sticky traps @ 8/acre and blue sticky traps @ 8/acre to monitor jassid and thrips population, respectively. Spray NSKE 5% or Neem

based pesticide @ 1 lit/acre to check sucking pests and deter pink bollworm egg laying in cotton. On crossing ETL by sucking pests, spray Thiamethoxam 25 WG @2g or Dinotefuron 20% SG @ 3g or Flonicamid 50 WG @ 4g or Diafenthiuron 50 WP @ 12g or Buprofezin 25 SC @ 20ml/10lit of water. Install pheromone traps @ 5/ha to monitor pink bollworm moth activity. Collect and destroy the rosette flowers. If incidence crosses ETL, spray Profenofos 50 EC @ 30 ml or Emamectin benzoate 5 SG @ 5 g or Indoxacarb 14.5 SC @10ml/10 lit of water.

TELANGANA		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Adilabad	0	0	14	27	12	3	61	31	5	10
	Warangal	0	0	7	14	23	57	16	11	8	14
	Khammam	0	0	2	0	10	79	59	16	21	27
	Karimnagar	0	0	2.4	63.2	42.6	51	47	12	3	5
	Mahabubnagar	0	0	0	0.2	57	53	30	12	14	9
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:

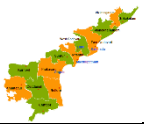
At Warangal, the sown crop is 73 to 80 days old at vegetative to flowering stage. Foliar application of nutrients and insecticide sprays were given. Thrips incidence was noticed above ETL with low to moderate jassid incidence. TSV incidence has affected the fields. Incidence of pink boll worm in the form of rosette flowers recorded in fields. Sporadic incidence of wilt was also observed.

At Adilabad, the sown crop is 76 to 83 days old at flowering to boll initiation stage. Sprayed foliar nutrients like 19:19:19/13:0:45/28:28:0 @ 10g/lit for crop growth. Third dose of top dressing of Urea + Potash and second spray of insecticide were completed. Intercultural operations were carried out. Aphid and jassid noticed in the fields above ETL.

Advisory:

At Warangal, farmers are recommended to spray 19-19-19 @ 10 g or DAP @20 g/lit of water twice in one-week interval to avoid stunted growth. Take up inter cultivation for effective weed control and plant growth. After weed control, give basal application of Urea @25 kg and MoP @10 kg/acre. If sucking pests crosses ETL, spray Thiamethoxam 25 WG @2g or Dinotefuron 20% SG @3g or Flonicamid 50 WG @4g or Diafenthiuron 50WP @12g or Buprofezin 25 SC @20ml/10 lit of water. If thrips incidence is more prevalent, spray Thiamethoxam 25 WG @2g/10 litor Spinetoram 11.7 SC @ 8.4ml/10 lit of water. If Tobacco streak virus is noticed, spray above chemicals to control thrips and remove weeds like *Parthenium* and *Abutilon* in and around the cotton fields. Install pheromone traps @2/acre to monitor pink bollworm. Collect and destroy rosette flowers to control the spread of pink bollworm in cotton fields. Based on trap catches and fruiting bodies infestation, spray Profenofos 50EC @ 30 ml/10 lit or Emamectin benzoate 5SG @ 5g/10 litor Indoxacarb 14.5 SC @10ml/10litor Chlorpyrifos 20% EC @ 25ml/10 lit of water. If parawilt noticed, drench with Carbendazim 50 WP@1.2g or Copper oxychloride 50WP @ 3g/lit of water+Urea @1.5 % at the base of the plants twice in one week interval and foliar application of 19-19-19 @ 10g/lit of water. Apply *Trichoderma harzianum/T. viride* WP formulation in soil @2.5 kg/ha with well decomposed FYM/ composts or Carbendazim 50WP@ 1.2g/lit of water by drenching around root zone of early symptomatic plants to manage wilt/root rot disease. Give a foliar spray of Carbendazim 12%+ Mancozeb 63% WP@30 g or Carbendazim 50 WP @12 g or Kresoxim methyl 44.3 SC@10 ml or Propineb 70 WP@ 25 g or Propiconazole 25 EC@ 10 ml or Metiram 55% +Pyraclostrobin5% WG @20 g or Azoxystrobin 18.2% w/w + Difenconazole 11.4% w/w SC @10 ml or Fluxapyroxad 167g/l + Pyraclostrobin 333 g/l SC @ 6 g mixed in 10 litres of water to manage fungal leaf spots, fungal boll rots and other blight diseases.

At Adilabad, farmers are advised to spray foliar nutrients like 19:19:19/13:0:45/28:28:0 @ 10g/lit + Formula 4 or Formula 6 @ 5g/lit for proper growth of the crop. Apply third dose of Urea @25kg + Potash @12kg/acre. If sucking pests crosses ETL, spray Thiamethoxam 25 WG @ 2g or Dinotefuron 20% SG @3g or Flonicamid 50 WG @4g or Diafenthiuron 50 WP @12 g or Buprofezin 25SC @ 20ml/10 lit of water. Install pheromone traps @2/acre to monitor pink bollworm. Collect and destroy rosette flowers to control the spread of pink bollworm in cotton fields. Based on trap catches and fruiting bodies infestation, spray Profenofos 50EC @ 30ml/10 litor Emamectin benzoate 5SG @ 5g/10 litor Indoxacarb 14.5 SC @10ml/10 lit or Chlorpyrifos 20% EC @ 25ml/10 lit of water. Give foliar spray of Carbendazim 12%+ Mancozeb 63% WP@30 g or Carbendazim 50 WP@12 g or Kresoxim methyl 44.3 SC@10 ml or Propineb 70 WP@ 25 g or Propiconazole 25 EC@ 10 ml or Metiram 55% +Pyraclostrobin5%WG @20 g or Azoxystrobin 18.2% w/w + Difenconazole 11.4% w/w SC @10 ml or Fluxapyroxad 167g/l +Pyraclostrobin 333 g/l SC @ 6 g mixed in 10 litres of water to manage fungal leaf spots, fungal boll rots and other blight diseases.

ANDHRA PRADESH		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Guntur	0	0	77	0	0	12	7	0	1	1
	Prakasam	0	0	62.2	4.4	7.2	5	0	0	0	0
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:


At Guntur, the sown crop is 36 to 43 days old at vegetative stage. Inter cultivation and line weeding are in progress. Weeds were controlled through recommended weedicide sprays. Sucking pest complex including jassid and thrips were observed.

At Nandyal, the sown cotton is 37 to 62 days old at vegetative/ square formation/ flowering stages. The weather was cloudy with heavy rainfall since two days. Draining out excess water, intercultural operations and fertilizer application were done. Broad and narrow leaved weeds have spread in many fields. Incidence of pink bollworm was noticed in few cotton fields.

Advisory:

At Guntur, farmers are advised to give first dose of fertilizer (Urea and Potash) to the crop based on rainfall received or 1% 19:19:19 or 1% KNO₃ or 1% Urea spray where drought conditions prevailed. Install blue sticky traps against thrips and yellow sticky traps against whitefly @ 8 per acre each. Spray Flonicamid 50% WG @ 80 g/ acre or Diafenthiuron 50 WP@ 250g/acre against sucking pests once it crosses ETL. Remove and destroy *Parthenium* weed to prevent transmission of Tobacco streak virus disease. Install pheromone traps @ 2 per acre to monitor pink bollworm activity. Apply NSKE 5% or neem based pesticides @ 1 liter per acre at the crop age of 50-60 days. Collect and destroy rosette flowers. Avoid spraying of chemical pesticides up to 60 days.

At Nandyal, farmers are advised to drain out the excess water due to heavy rains and drench the soil with Copper oxy chloride @ 3gm/lit of water and spray Urea @ 20 g/lit of water or Potassium nitrate @ 20 g /lit of water. Install pheromone traps @ 2/acre to monitor pink bollworm. Collect and destroy rosette flowers and spray Neem based insecticides @ 1 lit per acre. After 60 days of sowing, on crossing ETL by sucking pests, spray Thiamethoxam 25 WG @ 2 g or Dinotefuron 20% SG @ 3g or Flonicamid 50 WG @ 4g or Diafenthiuron 50 WP@ 12g or Buprofezin 25 SC @ 20ml/10 lit of water considering rainfall condition.

KARNATAKA		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Dharwad	0	25	0	0	0	5	5	5	7	7
	Haveri	0	0	0	0	0	6	5	4	6	6
	Mysore	2	7.2	10.4	0	0	5	6	7	0	5
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:

At Dharwad, the sown cotton is 55 to 60 days old at vegetative to squaring stage. Sporadic rainfall received in surrounding locations. Manual weeding and intercultural operations were taken up for weed management. Grassy weeds and sedges have dominated the fields. Shoot weevil was in moderate status and thrips infestation in severe status. No incidence of diseases.

At Raichur, the early sown crop is 44-89 days old at vegetative to initial flowering/ boll initiation and boll development stages based on the sown time of the crop. Due to heavy infestation of weeds, growth of cotton crop was not satisfactory. Top dressing of fertilizers with Urea and Murate of potash, intercultural operations and weeding were taken up in weed infested fields. Thrips and jassid were noticed in some farmers' fields around ETL and sprayed with recommended dose. Leaf reddening was noticed in few fields.

At Chamarajanagar, the crop is 123 to 128 days old at boll development to boll opening stage. Fertilizer application and intercultural operations were taken up and are in progress. Incidences of aphids (10-15/3 leaves), jassid (2-4/3 leaves) and mirid bug (1-3/25 squares) were recorded.


Advisory:

At Dharwad, farmers are advised to apply Phosphorus and Potash by ring method. Collect shoot weevil from Okragrown as trap crop. Collect and destroy rosette flowers and spray Neem based insecticides @ 1 lit/acre. After 60 days of sowing, on

crossing ETL by sucking pests, spray Thiamethoxam 25 WG @2g or Dinotefuron 20% SG @3g or Flonicamid 50WG @ 4g or Diafenthiuron 50 WP @12g or Buprofezin 25 SC @20ml/10 lit of water considering rainfall condition.

At Raichur, farmers are advised to take up weeding and intercultural operations on priority basis. Take up post emergent herbicide spray with Pyriithiobac Sodium @ 1.5 ml/litre of water on need basis. Give top dressing with Urea and MoP to both early sown and late sown cotton as per the recommended dose. Spray Thiomethaxam 25% WG @ 2 g/10 litres or Flonicamid 50 WG @ 4 g/10 lit or Dinotefuran 20SG @ 3g/10 lit of water recommended against thrips and jassid. Install pheromone traps @ 2/acre to monitor the pink bollworm. Spray Profenofos 50 EC @ 600 ml/acre or Emamectin benzoate 5 SG @ 100 g/acre or Indoxacarb 14.5SC @ 200 ml/acre, if incidence crosses ETL. Drench early parawilt symptomatic affected plants with Carbendazim 50 WP @12g + urea 150 g/10 lit of water. Take up spraying of 1% 19:19:19 (10 grams in 1 litre of water) + 1% MgSO₄ (10 grams in 1 litre of water) to minimize leaf reddening problem in early and late sown crop.

At Chamarajanagar, farmers are advised to spray Thiomethaxam 25% WG @ 2 g/10 lit or Flonicamid 50 WG @ 4 g/10 lit or Midachloprid 17.8 SL @ 3ml or Dinotefuran 20SG @ 3g/10 lit of water against sucking pests on crossing ETL. Collect and destroy rosette flowers. If it crosses 10% infestation in fruiting bodies, spray Profenofos 50 EC @ 30 ml or Emamectin benzoate 5SG @ 5g or Indoxacarb 14.5 SC/15.8 EC @10ml/10 lit of water..

TAMIL NADU		Actual Rainfall in last week(mm)					Predicted Rainfall in next week (mm)				
		September					September				
		01	02	03	04	05	07	08	09	10	11
	Perambalur	5.2	0	1	0	0	3	3	3	3	3
	Salem	86	9	0.5	2	0.5	3	3	5	6	8
	Trichy	0	1	72.5	11	0	2	0	3	3	3
	Virudhunagar	22	0.5	0	23	10	0	0	2	3	3
Amount of rainfall & colour Code		0.1 to 2.4 mm		2.5 to 15.5 mm		15.6 to 64.4 mm		64.5 to 115.5 mm		115.6 to 204.4	
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall	

Crop Condition:

At Coimbatore and surrounding areas, the sown cotton is 40 to 50 days old at vegetative stage. Manual weeding and spraying of post emergence herbicide were done during the reporting period. Weeds have infested the fields. Incidence of jassid, aphids and thrips were noticed in few fields. *Alternaria* leaf blight has been recorded in few fields.

At Srivilliputhur in and around fields, sowing is in progress. The crop is 17 to 27 days old at germination stage. Weeds like *Trianthemum portulacastrum*, *Cyperus* spp. and *Cynodon dactylon* etc. have started appearing in the fields. No incidence of pests and diseases except jassid but below ETL.

Advisory:

At Coimbatore, farmers are advised to take up hand weeding on priority basis to maintain field sanitation. Spray post emergence herbicide Pyriithiobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 20-25 ml/10 litres of water for broad spectrum weed control. Continuously monitor the crop for infestation of sucking pests. Spray neem-based insecticides @ 1 lit/acre at 45-60 days of crop age to check the sucking pests and prevent egg laying by pink bollworm. Give a foliar spray with Azadirachtin 0.15 EC @ 1L/acre to reduce sucking pest populations. Manage *Alternaria* leaf blight disease by spraying Carbendazim 50 WP @ 0.04% or Carbendazim 12% + Mancozeb 63% WP @ 0.3% or Kresoxim methyl 44.3 SC @ 0.1% or Propineb 70 WP @ 0.25 % or Propiconazole 25 EC @ 0.1% or Metiram 55% + Pyraclostrobin 5% WG @ 0.2% or Azoxystrobin 18.2% w/w + Difenoconazole 11.4% w/w SC @ 0.1% or Fluxapyroxad 167 g/lit + Pyraclostrobin 333 g/lit SC @ 0.6%.

At Srivilliputhur in and around fields, as soil is having excess moisture due to rainfall during last week and also expected moderate rainfall in coming days, farmers are advised to create proper drainage. Do gap filling to maintain optimum plant population. Drench collar region with Chlorpyrifos 50EC @ 1200 ml/ha on 15 and 30 DAS and earthing up to prevent stem weevil damage.

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