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An ISO 9001:2015 Certified Organisation

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A. General advisory on soil health, nutrition, pest and disease management

Higher cotton yields rely on balanced soil nutrition, water management, and proactive, monitoring-based pest and disease management. Implementing a holistic and integrated crop management plan ensures proper growth and vigour, reduces input costs, and protects the crop from devastating pest and disease damage.

Soil health & nutrition management (INM)

- **Optimize macronutrients:** Improve soil health by prioritizing crop rotation, organic amendments, and cover crops, and by using rational chemical fertilization based on pre-sowing soil testing.
- **Apply micronutrients:** Address secondary and micronutrient deficiencies (such as Zinc, Boron, Manganese, and Magnesium) proactively via targeted foliar sprays as needed.

Disease management (IDM)

- **Deploy preventative practices:** Management of both soil-borne and foliar pathogens should be achieved through integrated cultural practices, including proper field sanitation and the application of biopesticides and biofertilizers as seed and soil treatments to enhance plant health and suppress disease incidence.
- **Control foliar outbreaks:** Regular field monitoring should be undertaken during periods of high humidity, and recommended fungicides should be applied judiciously only when prevailing environmental conditions are conducive to rapid disease development and spread.

Integrated pest management (IPM)

- **Conduct field scouting:** Perform weekly field scouting to monitor sucking pests (such as thrips, aphids, jassids and spider mites) alongside bollworms.
- **Utilize traps & biopesticides:** Deploy pheromone traps early in the season to track adult moth flights, predict egg-laying cycles and apply organic, natural or plant-based pesticides as a primary response.
- **Conserve natural enemies:** Safeguard beneficial insects like lady beetles, lacewings and big-eyed bugs by choosing highly selective insecticides over broad-spectrum formulas.
- **Restrict chemical interventions:** Use label-recommended chemical pesticides strictly as a last resort, deploying them only when pest populations reach established economic thresholds.

B. Location-specific advisory

PUNJAB		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Firozpur								0	0	0	0.3	0.7
	Faridkot	0	0	0	0	7.8	0	0	0	0	0	0	0.2
	Muktsar								0	0	0	0	0.3
	Bhatinda	0	0	0	0	0	0	0	0	0	0	0	3.3
	Sangrur								0	0	0	0	15.9
	Ludhiana	0	3.4	0.4	0	0	0	0	0	0	0	0.1	13.4
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 120 to 140 days old and is at boll development and boll opening stage. Hoeing and weeding are in progress. Insecticide spray to control pink bollworm and foliar spray of Potassium nitrate and Magnesium Sulphate were taken up. Weeds have infested the fields. Incidence of green boll damage due to pink bollworm varied from 0 to 25 per cent and open boll damage 0 to 6.25%. Incidence of CLCV was spotted in some of the cotton fields.

At Faridkot, the crop is 128 to 138 days at boll development to boll maturity/ opening stage in timely sown crop. Sprays for management of sucking pests and bollworms have been done. Sucking pests like whitefly, thrips and jassid population were below ETL at most of the locations. Pink bollworm incidence has started and low to high incidence is being noticed in the green bolls. The opened bolls in the lower canopy did not show any damage symptom indicating that the first picking will be free from PBW damage. Dusky cotton bug incidence was noticed in some of the fields where boll opening has started. Square and boll damage was noticed in *Desi* cotton fields, so farmers were issued advisory for sprays in *desi* cotton for management of spotted bollworm.

Advisory:

At Bathinda, farmers are advised to apply four sprays of 2% Potassium nitrate (13:0:45) at weekly intervals in cotton fields during the boll maturity stage. *Desi* cotton grown in medium to high fertility soils, generally attain unmanageable height and top portion of plants with excessive height usually remain unsprayed. Fruiting bodies of top portions contribute very little towards yield but favour bollworm build **up may be removed as detopping is recommended around 90-110 DAS**. If the whitefly adult population is above ETL, spray Afidopyropen 50 DC @ 400 ml per acre or Flonicamid 50 WG @ 80 g per acre or Clothianidin 50 WG @ 20 g per acre or Dinotefuran 20 SG @ 60 g per acre or Pyriproxyfen @ 200 g per acre. To control jassid population above ETL, spray Dinotefuran 20 SG @ 60 g/acre or Tolfenpyrad 15 EC @ 300 ml/acre or Fenpyroximate 5 EC @ 300 ml/acre. In case of thrips population above ETL, spray the crop with Profenophos 50 EC @ 500 ml/acre or Spinetoram 11.7 SC @ 170 ml per acre. If thrips and PBW population recorded above ETL then, spray Profenophos 50% EC @ 500 ml per acre. Flonicamid 50% WG @ 80 g per acre using 200 litres of water may be sprayed to control whitefly population below ETL. Install pheromone traps @ 2 per acre to monitor the population of PBW. Remove and destroy 'rosette flowers', if any. Spray Emamectin benzoate 5 SG @ 100 g/acre or Spinetoram 11.7 SC @ 170 ml/acre using 200 litres of water, if green boll infestation is above 5% (ETL). If incidence of parawilt is observed in the fields, apply drenching with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 100 g plus Urea 2 kg/100 litres of water at one-week intervals starting immediately after symptom development or spray Cobalt chloride solution 10 mg/ litre of water immediately after the appearance of symptoms on the affected plants and repeat twice at 5–7 day intervals. Manage the whiteflies with recommended dose of insecticides to check spread of CLCuV. **Spray Azoxystrobin 18.2% + Difenconazole 11.4% SC @ 200 ml in 200 litres of water to control fungal foliar leaf spots of cotton.** In case sooty mould develops, apply 1-2 prophylactic/therapeutic sprays of Propiconazole 25% EC @ 10 ml/10 litres (500 ml/ha) or Copper oxychloride (COC) 50% WP @ 25 g/10 litres (1250 g/ha) at 10-15 days interval.

At Faridkot, farmers are advised to apply Potassium nitrate (13:0:45) spray @ 2% to improve boll size and cotton quality 7-10 days interval. If whitefly infestation exceeds ETL, spray Flonicamid 50 WG @ 80 g/acre or Dinotefuran 20 SG @ 60 g/acre. In case of higher infestation of whitefly adults and nymphal population, prefer Ethion 50 EC @ 800 ml/acre or Afidopyropen @ 400 ml/acre alternately with Pyriproxyfen @ 500 ml/acre. kindly remove If the infestation increases, spray Profenofos 50 EC @ 500 ml/acre (in 200 litres of water for one acre). Monitor pink bollworm using funnel or delta traps baited with Gossyplure, @ 2 traps per acre, and installed at about 15 cm above the crop canopy. Replace the lure after every 30 days or as per the label specifications. Spray Profenophos 50% EC @ 500 ml per acre or Emamectin benzoate 5 SG @ 100 g/acre or Spinetoram

11.7 SC @ 170 ml/acre using 200 litres of water, if green boll infestation is above 5% (ETL). Keep the fields and fallow/barren areas around the farm/canals, etc., free from weeds, which act as collateral hosts of leaf curl virus. After irrigation, some plants might show wilting due to Para wilt which can be checked by spraying Cobalt chloride @ 10 mg/ litre of water on the affected plants at the initial stage of wilt symptoms. For management of thrips-transmitted Tobacco Streak Virus (TSV), strictly follow field sanitation, particularly removal of *Parthenium* weed in and around the cotton fields and recommended management practices for thrips. Keep the fields and fallow/barren area around the farm/ canals etc. free from Kanghi buti (*Sida* sp.) and Peeli buti (*Abutilon* sp.) which act as collateral hosts of CLCuD. In case sooty mould develops, go for 1-2 prophylactic/therapeutic sprays of Propiconazole 25% EC @10 ml/10 litres (500 ml/ha) Or Copper oxychloride (COC) 50% WP @25 g/10 litres (1250 g/ha) at 10-15 days interval.

HARYANA		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Hisar	0	0	64.2	0	0	0	0	0	0	0	0	6.1
	Jind								0	0	0	0.2	16.5
	Sirsa								0	0	0	0	0.2
	Rohtak	0	0	0	0	0	0	0	0	0	0	0.8	14.2
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 Hisar, the crop is 119 to 154 days from at boll opening stage. Picking is in progress in some fields. Manual hoeing, insecticide spray, foliar spray and irrigation (where there were no rains) were taken up during the reporting period. Majority of the fields are infested with weeds. Whitefly was found to cross economic threshold in several fields along with honey dew and sooty mould symptoms where control measures were not adopted well in time. Incidence of pink bollworm was noticed in green bolls in several fields near to economic threshold level. Less severity of cotton leaf curl virus disease was noticed in addition to boll rot in some fields. Root rot and wilt were also observed in patches of some fields.

At Sirsa, the crop is 128 to 148 days old at boll formation and boll opening stages. Cloudy, hot, humid and dry weather prevailed during the reporting period. Sprays for insect pests and diseases as well as micronutrient foliar spray were done. Weed infestation was noticed at a few locations in the cotton field with poor plant stand. The population of jassids ranged between 01-12/ three leaves, whitefly increasing above ETL between 10-38/ three leaves and thrips above ETL between 01-08 nymphs and adults / three leaves. Pink bollworm infestation was also reported above ETL with 05-30 % green boll damage. CLCuD incidence was very low in surveyed locations.

Advisory:

At Hisar, farmers are advised to apply irrigation to cotton crop. Give foliar spray of 13:00:45 @ 2 kg per acre during the peak fruiting stage at 7 to 10 days interval. Need based foliar spray of Urea @ 2.0% and Zinc sulphate 21% @ 0.5% can also be applied to obtain proper growth. Take up hand hoeing with kasola at appropriate stages. The population of sucking pests is crossing economic thresholds. There is a need to monitor sucking pests (thrips, whitefly and jassids) on 20 plants/acre. To control jassids and whitefly, spray Flonicamid 50 WG @ 80 g per acre and Afidopyropen 50 G/L DC @400ml. In case of moderate to high infestation of whitefly with nymphal population, spray Pyriproxyfen 10 EC @ 400 ml or Spiromesifen 240 SC @240 ml per acre. Do not follow tank mixing of insecticides. Since the infestation of pink bollworm started appearing, install pheromone traps @ 2 / acre. Examine at least 100 flowers or 20 green bolls per acre for pink bollworm infestation. Collect and destroy infested and rosette flowers in an early flush of flowering stage. In case of pink bollworm infestation in flower/bolls crosses the economic threshold (>5 %), spray Enamectin benzoate 5 SG @100 g or Profenofos 50 EC @ 500 ml/acre or Quinalphos 20 AF @ 400 ml per acre. Follow-up spray of an alternate insecticide may be done after 10-12 days of the previous spray. In root rot and wilt affected patches, drench the affected plant roots and surrounding plants with Carbendazim 50 WP@ 1.2 g/litre water. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250 g or Carbendazim 50% WP @120 g plus Urea 2 kg per 100 litres of water at one week interval starting immediately after symptom development. Take up picking of stress mediated good opened bolls after proper drying of moisture. For the management of boll rot and leaf spots, foliar spray of Carbendazim 12%+Mancozeb 63% WP @30 g followed by Propineb 70% WP @25-30 g or Propiconazole 25% EC @10 ml or Azoxystrobin 18.2 % w/w+Difenoconazole 11.4% w/w SC @ 10 ml or Fluxapyroxad 167 g/l + Pyraclostrobin 333 g/l SC @ 6 ml in 10 litres of water is recommended especially during flowering 60-120 days and as per weather conditions. In case sooty mould develops, apply 1-2 prophylactic/therapeutic sprays of Propiconazole 25% EC@10 ml/10L (500 ml/ha) Or Copper oxychloride (COC) 50% WP @ 25 g/10L (1250 g/ha) at 10-15 days interval.

At Sirsa, farmers are advised to irrigate the field wherever required and apply a pending split dose of Nitrogenous fertilizer, if any. In case of sudden wilting, yellowing and reddening of leaves occur, apply light irrigation and broadcast 15-20 kg urea per acre. 2-3 foliar spray of NPK (13:00:45) @ 2 kg and MgSO₄ @ 1 kg in 200 litres water per acre and repeated 2-3 times must be applied at weekly intervals. In case of appearance of parawilt symptoms, apply 2-3 drenches with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one week interval starting immediately after symptom development or spray Cobalt chloride @ 10 mg (one gram in 100 ltrs water) or Sodium benzoate @ 50 mg per litre (5 g in 100 litres water) of water immediately after the appearance of symptoms (within 24 hours) on affected plants only. Keep monitoring whitefly population manually and/or using yellow sticky traps @ 8-10/acre and keep the field bunds and surroundings free from other alternate host plants of whitefly. Continue monitoring for other sucking pests like jassids and thrips by observing 20 plants per acre and from underneath three leaves from each plant. To manage whitefly adults, apply Dinotefuran 20 SG @ 60 g or Flonicamid 50 WG @ 80 g or Afidopyropen 50 G/L @ 400 ml or Diafenthiuron 50 WP (wherever appropriate humidity exists either due to irrigation or rainfall) @ 200 g or Profenophos 50 EC @ 500 ml/acre in 200 litres of water. In case sticky, shiny and oily leaves observed with higher whitefly's nymphs, apply Pyriproxyfen 10 EC @ 500 ml or Buprofezin 25 SC @ 400 ml or Spiromesifen 22.9 SC 240 ml per acre in 200 litres of water 3-5 days after spray to control adults. In the case of sooty mold, spray Propiconazole 25 EC @ 1 ml/litre or Copper oxychloride (COC) 50 WP @ 2.5 g/litre once or twice at 10-15 days interval. Manage jassid incidence by applying Tolfenpyrad 15 EC @ 300-400 ml or Fenpyroximate 5 EC @ 300 ml or Dinotefuran 20 SG @ 60 g/acre in 200 litres of water wherever the population crosses ETL (2 nymphs/leaf). Install yellow sticky traps @ 8-10 per acre to monitor whitefly population. Manage initial growing population of thrips and PBW by spraying 5% neem seed kernel extract (NSKE) or Azadirachtin 1500 ppm (0.15% EC) @ 5 ml/litre of water. Manage pink bollworm population by spraying Emamectin benzoate 5 SG @ 100 g or Spinetoram 11.7 SC @ 170 ml or Profenophos 50 EC @ 500 ml per acre and use 200 litres water per acre. Control spotted bollworm at 5% fruiting body damage (flared square or in shed fruiting bodies) in Desi (arboreum) cotton by spraying Spinosad @ 75 ml/acre in 200 litres of water. Under heavy rainfall and waterlogging conditions, maintain proper drainage in the field to remove excess water from the fields to prevent crop damage. Monitor root rot and wilt disease incidence regularly. Drench early symptomatic and surrounding plants with *Trichoderma* spp. 1% WP @ 50 g or Carbendazim 50% WP @ 12 g/ 10 litres of water to manage root-rot and wilt disease.

RAJASTHAN		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Ajmer	18.7	17.7	0	29.7	0	0	0	0.1	0	0	0	0
	Jodhpur	0	0	0	0	5.7	0	0	0	0	0	0	0
	Nagaur								0	0	0	0	0
	Pali	7	0	0	0	13	0	0	0	0	0	0	0
	Sri Ganganagar	0	0	0.6	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 Sriganganagar and Hanumangarh districts, the crop is 124 to 140 days old at boll development to boll bursting stage. Picking is in progress in timely sown crop. Jassid ranged from 0.0 to 3.00/three leaves, whitefly incidence noticed 0.00 to 14.00/three leaves and thrips population observed ranging from 0.00 to 6.00/three leaves.

At Banswara, the crop is 78 to 85 days old at flowering and boll formation stages. The fields are clean. Timely spray for sucking pests was given. No infestation of weeds. Among sucking pests, the incidence of whitefly was below ETL and jassids above ETL. No PBW infestation or incidence of diseases.

Advisory:

In Sriganganagar and Hanumangarh districts, farmers are advised to monitor the crop for insect pests and disease regularly. The locations found infested with pink bollworm last year need to be monitored closely for PBW infestations this year. Install pheromone traps @ 5/ha to monitor pink bollworm activity. In case of recording rosette flowers of more than 5 out of 100 flowers or bolls infestation more than 5%, spray Profenophos 50% EC @ 2.5 ml/litre or Emamectin benzoate 5 SG @ 0.50 g/litre or Indoxacarb 14.5 SC @ 1.0 ml/litre of water. Apply a spray of Flonicamid 50 WG @ 0.40 g/ litre or Afidopyropen 50 DC @ 1.50 ml/litre of water or Thiamethoxam 24 WG @ 0.5 g/litre of water to control jassids and whitefly while in case of nymph of whitefly, apply Pyriproxyfen 10% EC @ 2.5 ml/litre or Spiromesifen 22.9 SC @ 1.25 ml/litre of water. While in case of thrips infestation above ETL, spray Spinetoram 11.7 SC @ 0.84 ml/litre or Profenophos 50 EC @ 2.5 ml/ litre of water. In case sooty

mould develops, give 1-2 prophylactic/therapeutic sprays of Propiconazole 25%EC @10 ml/10L (500 ml/ha) Or Copper oxychloride (COC) 50% WP @25 g/10 litres of water (1250g/ha) at 10-15 days interval. In case of sudden wilting, yellowing and reddening of leaves occur, apply light irrigation and broadcast 15-20 kg urea per acre. 2-3 foliar spray of NPK (13:00:45) @ 2 kg and MgSO₄ @ 1 kg in 200 litres water per acre, and repeat 2-3 times must be applied at weekly intervals. In case of appearance of parawilt symptoms, apply 2-3 drenches with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 120 g plus Urea 2 kg per 100 litres of water at one week interval starting immediately after symptom development or spray Cobalt chloride @ 10 mg (one gram in 100 lits water) or Sodium benzoate @ 50 mg per lit (5 g in 100 litres water) of water immediately after the appearance of symptoms (within 24 hours) on affected plants only.

In southern Rajasthan (Banswara, Bhilwara, Chittorgarh, Dungarpur, Pratapgarh, Rajsamand, Salumber and Udaipur), where manual weeding is not possible in moist soil condition, farmers are advised to go for application of herbicides like Quizalofop ethyl 5 % EC @ 2 ml /litre water if the field is infested with grassy weeds or Pyriothobac sodium 10 % EC @ 1.25 ml/litre water for broad leaved weeds or Pyriothobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Continue monitoring cotton fields for any signs of sucking pest infestation. Spray 5% neem seed kernel extract (NSKE) or Azadirachtin 1500 ppm (0.15% EC) @ 5 ml/ litre of water to control sucking pests if it goes beyond ETL. Install yellow sticky traps 8-10/acre to manage whitefly and jassids. In case of sucking pests exceeding ETL, spray any one of these insecticides: Buprofezin 25 EC @ 1.25 litre/ha or Diafenthiuron 50 WP @625 g/ha or Flonicamid 50 WG @ 200 g/ha. Install pheromone traps for pink bollworm monitoring (5/ha). Regularly monitor pink bollworm occurrence and destroy the affected flowers (rosette flowers) along with larvae.

ODISHA		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Koraput	0	0	0	0	0	0	0	35	46	21	16.6	6.2
	Kalahandi	0	0	0	0	0	0	9	28	23	25	16.1	11.8
	Balangir	0	0	1.8	0.3	0.4	20	18	22	16	22	24	13.6
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 Odisha, the crop is 78 to 82 days old at boll formation to boll development stage. Drained excess rain water from fields to protect the crop from problems caused by water logging like root rot wilting and reddening of leaves. Applied need based herbicides to control weeds, insecticides to control sucking pests like aphids and other foliage feeders like *Spodoptera* and semi-loopers during the reporting period. Sprayed 100 g MgSO₄ with 100 g Urea per 10 litres of water to manage leaf reddening of cotton in places where it occurred due to water logging conditions. All types of weeds, i.e., broad leaf, grasses and sedges, were noticed in most of the cotton fields. Infestation of aphids, jassids, *Spodoptera*, semi-loopers, leaf miners and leaf folders were reported from some areas but below ETL. Wilting and leaf reddening were reported from some places due to continuous rains and waterlogging conditions.

Advisory:

As rainfall is continuing in almost all the cotton growing districts due to successive low-pressure situations, farmers are advised to take extra care to drain excess water from the cotton fields. Complete intercultural operations, weeding and earthing up operations as and when weather conditions improve. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5 % EC @ 2 ml /litre water if the field is infested with grassy weeds or Pyriothobac sodium 10 % EC @ 1.25 ml/litre water for broad leaved weeds or Pyriothobac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Regularly monitor the crop to know about the incidence of any pests and diseases. To prevent sucking pests like aphids, jassids and thrips, spray neem-based pesticide @ one lit per acre in 200 litres of water. After 60 DAS of crop stage, spray Buprofezin @ 20 ml/10 litres of water when aphid population is above ETL (≥ 2 affected plants counted randomly showing symptoms cupping / crumpling of few leaves on the upper portion of plant (10% plants infested). To monitor pink bollworm and *Spodoptera* infestations, install pheromone traps baited with Gossyplure and Spodlure, respectively @ 5 traps /ha. If parawilt or sudden wilt occurs due to heavy rain and waterlogging after a dry spell, spray Cobalt chloride @10 mg/litre (10ppm) or 2-3 drenching with solutions of Copper oxychloride 50% WP @250 g or Carbendazim 50% WP @100 g plus Urea 2 kg per 100 litres of water at one week interval starting immediately after symptom development on affected plants. Spray the crop with 100 g MgSO₄ mixed with 100 g Urea in 10 litres of water in waterlogged areas to reduce leaf reddening conditions. Drench early symptomatic and surrounding

plants with *Trichoderma* spp. 1% WP @50 g or Carbendazim 50% WP @ 12 g/ 10 litres of water to manage root rot and wilt diseases.

GUJARAT		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Amreli	2	0	0	0	0	0	26.8	1.5	0	0	0	0.1
	Bhavnagar	89.4	0	0	0	26	6	56	0.6	0	0	0	0
	Jamnagar	74	0	2	3.2	0	0	13	0.6	0	0	0.1	0
	Rajkot	48.8	2.4	0	7.2	2.6	0	16.8	0.8	0	0	0.1	0.1
	Junagadh	47.2	7	12	1.3	0	0	0.8	2.2	0.1	0.1	0.1	0.1
	Sabarkantha								0	0	0	0	0.1
	Surendranagar	7	0	0	10.8	5	0.2	0	0.1	0	0	0	0
	Ahmedabad	58	0	0	47	10	0	0	0	0	0	0	0
	Baroda	20.4	4	0	0.5	13	0.4	0	0.2	0	0	0	0.1
	Patan								0	0	0	0	0
	Mehesana								0.1	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 66 to 71 days old at flowering stage. Weeding, fertilizer application and intercultural operations were taken up during the reporting period. Weeds have infested the fields. Thrips incidence was noticed above ETL and leaf hopper below ETL. Infestation of BLB in low status has been reported.

At Junagadh, the sown crop is 77 days old at flowering stage. Moisture stress was observed due to which parawilt was observed in isolated locations. Intercultural operations, weeding and insecticide spray were done during the reporting period. Kharif weeds have infested the cotton fields. Heavy incidence of thrips was noticed above ETL at most of locations. TSV in cotton was observed in isolated spots.

Advisory:

At Surat, farmers are advised to carry out field sanitation. In case of heavy rain, drain out the excess rainwater from cotton fields. Cotton crop requires 240-40-00 NPK/ ha. Dose of Nitrogen is applied after sowing @ 30, 60, 75, 90 and 105 days in equal splits. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5 % EC @ 2 ml /litre water if the field is infested with grassy weeds or Pyriothiac sodium 10 % EC @ 1.25 ml/litre water for broad leaved weeds or Pyriothiac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. While in case of thrips infestation above ETL, spray Spinetoram 11.7 SC @0.84 ml/lit or Profenophos 50 EC @ 2.5 ml/ litre of water. Check *Fusarium* wilt patches along with one-meter radius of healthy plants in desi cotton fields with suitable fungicide application. For the control of wilt and root rot disease, give spot application of Carbendazim 50% WP@ 1.2 g per litre of water or *Trichoderma harzianum* or *T. viride* 1% WP@10 g/ litre of water. If parawilt is observed, apply 2-3 drenchings with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP@ 100 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development. On receiving sufficient rain, apply a second instalment of split dose of nitrogenous fertilizer application. Foliar application of *Pseudomonas fluorescens* WP @0.2% is recommended to manage bacterial blights.

At Junagadh, farmers are advised to remove excess water from the cotton fields. Give top dressing of Ammonium sulphate 10 kg per acre or Urea @15 kg/acre and Potash @25 kg/acre along with irrigation. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5 % EC @ 2 ml /litre water if the field is infested with grassy weeds or Pyriothiac sodium 10 % EC @ 1.25 ml/litre water for broad leaved weeds or Pyriothiac sodium 6% EC + Quizalofop Ethyl 4% EC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. While in case of thrips infestation above ETL, spray Spinetoram 11.7 SC @0.84 ml/litre or Profenophos 50 EC @ 2.5 ml/ litre of water. In case of jassid exceeding ETL, spray any one of these insecticides: Buperfezin 25 EC @ 1.25 litre/ha or Diafenthuron 50 WP @ 625 g/ha or Flonicamid 50 WG @200 g/ha. Manage parawilt damage by spraying water soluble fertilizer (13-0-45, NP-K) @ 100 g in 10 litres water and drench the affected plants 2-3 times at weekly interval with Copper oxychloride 50 WP@ 25 g or drench with solution of Carbendazim 50 WP@100 g plus Urea 2 kg/100 litres of water immediately after symptom appearance. For the management of wet weather blight and boll rot, foliar sprays of (Carbendazim 12%+Mancozeb 63% WP)

@ 25 g or Propiconazole 25% EC @10 ml or (Azoxystrobin 18.2% w/w+Difenoconazole 11.4% w/w SC) @ 10 ml or (Pydiflumetofen 13.6% w/w + Propiconazole 11.4% w/w SE) @12 ml or (Fluxapyroxad 167 g/l + Pyraclostrobin 333 g/l SC) @ 6 ml in 10 litres of water is recommended. For the management of TSV, removal of Parthenium weeds from fields and surrounding area with foliar sprays of Spinetoram 11.7 SC @0.84 ml/litre or Profenophos 50 EC @ 2.5 ml/ litre of water for thrips infestation.

MADHYA PRADESH		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Khargaon	12	0	0	0	0	12.8	38	0.6	0.2	0.1	1.7	0.4
	Dhar	0.4	0	0	0.3	0.4	0	0	0.3	0.1	0	0	0.1
	Khandwa	11	0	5.6	0	0	0	0	3.1	1.4	1.2	6.8	0.4
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 sown crop is 70 to 118 days old in its flowering and boll development stage. Spot weeding and fertigation given wherever required. Seasonal weeds have infested the fields. Incidence of jassids, aphids and whiteflies have been observed in some fields. No incidence of diseases reported so far.

Advisory

At Khandwa, farmers are advised to take up weeding on time. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litres of water if the field is infested with grassy weeds or Pyriothobac sodium 10% EC @1.5 ml/litres of water for broad leaved weeds or Pyriothobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litres of water to control both grassy and broadleaved weeds. Install pheromone traps @2 / acre to monitor pink bollworm. Give a split dose of Nitrogen @ 25% applied by column method at the depth of 10 to 15 cm. Apply NSKE 5%+ Neem oil 5 ml/litre or neem oil-based formulations (300 or 1500 ppm) 5 ml/litre + 1.0 g laundry detergent emulsion to control sucking pests. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development. In case of a long dry spell, give foliar spray of 13:00:45 @ 2 kg per acre in 200 litres of water during the peak fruiting stage at 7 to 10 days interval. If square drop is observed, go for foliar spray of NAA 4.5 SL@ 4 ml /10 litres of water to avoid natural shedding of squares and flowers of cotton. Line application of symptomatic and healthy plants with *Trichoderma harzianum* or *T. viride* formulation @ 100 g mixed in 20 litres of water or carbendazim 50 WP @24 g in 20 litres of water by opening nozzle of knapsack sprayer is suggested for root rot and wilt affected areas.

MAHARASHTRA		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Dhule								1.3	0.4	0	0	0.1
	Nandurbar								1	0.3	0	0.1	0.3
	Jalgaon	0	0	0	0	0	0	0	1.8	0.4	0.1	0.9	0.2
	Ahilyanagar	0	0	0	0.1	0	0	22.6	8.4	0.7	0.2	0.2	0.3
	Ch. Sambhaji Nagar	0	0	0	0	0	0	0	5.1	0.6	0	0.2	0.1
	Jalna	0	0	13	0	0	0		6.6	1.6	0.3	0.6	0
	Beed								10	3.7	1.3	0.4	0.4
	Nanded								15	24	30	13.7	4
	Parbhani	0	0	0	80	0	0	0	11	9.8	6.8	1.9	0.2
	Hingoli								9.2	5.6	15	5.8	0.5
	Buldhana	0	2	0	2	0	0	0	4.7	3	2	2.9	0.1
	Akola	1.1	0	0	0	18.3	0	0	6	4.2	13	8.6	0.2
	Washim	0	0	0	0	8	0	0	8.6	4.7	20	8.6	0.2
	Amravati	0	0	0	0	1	0	0	5.8	4.4	11	15.2	1.7
	Yavatmal	1	0	0	18.4	0	0	0	9	17	35	23.8	3.4
	Wardha	0	0	0	0	1.8	0	1	8.4	12	28	31.6	3.5
	Nagpur	0.3	0	0	0	56.8	0	0	8.3	12	27	22.4	5.7

	Chandrapur	0	0	0	0	0	0	8	12	31	46	40.2	14.6
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 85 to 90 days old at flowering and boll development stages. Intercultural operations, insecticides/ fungicides/ PGR sprays were done. The crop growth has been stunted due to moisture stress since the last 40 days. Almost all the fields are weed free as hoeing and weeding operations were completed during the dry spell and low rainfall. Heavy infestations of sucking pests like whitefly and thrips were noticed in most of the fields. The infestation of spotted bollworm on non *Bt* cotton and pink bollworm was also observed in some cotton fields

At Rahuri, the sown irrigated cotton crop is 78 to 113 days at flowering, boll formation, boll development and bursting stages based on the time sown. Irrigation, hoeing, weeding, spraying and fertilizer application were done. Weeds have infested the fields. Thrips and aphids incidence were below ETL but jassid incidence has crossed ETL in many fields. *Myloccerus* weevil 0-1 % cotton plants damaged. Pink bollworm was recorded in rosette flowers. TSV has been recorded in many fields.

At Nanded, the sown crop is 74 to 99 days at square formation to boll formation stage. Intercultural operations, weeding, fertilizer application and plant protection sprays were done during the reporting period. Grassy, broad-leaved weeds and sedges have infested the fields. Jassids and aphids incidence were noticed but below ETL. No incidence of diseases.

Advisory:

At Akola, farmers are advised to open the furrows in the cotton field for moisture conservation purposes at 45-50 DAS. Carry out intercultural operations like hoeing and weeding in cotton. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriothobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriothobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Apply first split of 40 Kg Nitrogen (90 Kg Urea per ha) for irrigated hybrid cotton and 45 Kg N (97 Kg urea per ha) for rainfed hybrid/hirsutum cotton as top-dressing dose of chemical fertilizer. Apply NSKE 5% + Neem oil 5 ml/litre or neem oil-based formulations (300 or 1500 ppm) 5 ml/litre + 1.0 gm laundry detergent emulsion to control sucking pests like aphids, jassids and thrips, and also to repel pink bollworm females from ovipositing on cotton squares. To monitor pink bollworm, install 2 pheromone traps per acre for surveillance purposes in the field. Observe 20 plants per acre as a representative of the cotton field for pest infestation. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250 g or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development. In *Fusarium* wilt and *Macrophomina* root rot affected areas, farmers are advised to uproot the infected plants and destroy them immediately to prevent the spread of disease. Drench the surrounding plants with Carbendazim 50% WP @ 1.2 g/L of water to prevent further spread. This should be followed by two drenches of *Trichoderma harzianum* or *T. viride* @ 5 g/litre of water at 15-day intervals. Farmers who adopted High-Density Planting System (90 x 15 cm) or closer spacing (90 x 30 cm) cotton have to go for spray of plant growth regulator (PGR) Mepiquat chloride 5% AS @1 ml/litres of water at 40-45 day crop or at square initiation and second spray after 15-20 days @1.0 ml/litre of water. If the crop is suffering from moisture stress due to prolonged dry spell, avoid spray of Mepiquat chloride. Alternatively, give foliar spray of 13:00:45 @ 2 kg per acre in 200 litres of water. If square drop is observed, go for foliar spray of NAA 4.5 SL@ 4 ml /10 litres of water to avoid natural shedding of squares and flowers of cotton.

At Rahuri, farmers are advised to apply a second split dose at 60 DAS. Keep the crop weed-free by hand hoeing or intercultural operations with a tractor or bullock operated implements. Remove *Parthenium* weed from the field and field bunds so as to avoid or to minimize TSV and thrips incidence. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriothobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriothobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Monitor the fields to keep a check on the infestation of sucking pests. Install yellow sticky traps, spray homemade neem seed kernel extract (NSKE) 5% or Azadirachtin 10000 ppm 10 ml/10 litres of water. In cotton crops above 60 DAS, if sucking pests cross ETL, spray Flonicamid 50 WG 2 g/10 litre water or Buprofezin 25 SC @ 20 ml /10 litres of water. Install pheromone traps @ 5 /ha to monitor pink bollworm and collect and destroy the rosette flowers along with PBW larvae at regular intervals to avoid further generation of pink bollworm. Farmers who adopted High-Density Planting System (90 x 15 cm) or closer spacing (90 x 30 cm) cotton have to go for spray of plant growth regulator (PGR) Mepiquat chloride 5% AS @1 ml/litres of water at 40-45 day old crop or at square initiation and second spray after 15-20 days @1.0 ml/litre of water. If the crop is suffering from moisture stress due to prolonged dry spell, avoid spray of Mepiquat chloride. Alternatively, give foliar spray of 13:00:45 @ 2 kg per acre in 200 litres of water. If

square drop is observed, go for foliar spray of NAA 4.5 SL@ 4 ml /10 litres of water to avoid natural shedding of squares and flowers of cotton. Farmers having closer spacing (90 x 30 cm) cotton but not willing to spray PGR can go for removal of monopodia at 45 days after sowing and detopping at 75 to 80 days. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250 g Or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one week interval starting immediately after symptom development. Monitor the crop to avoid transmission of Tobacco Streak Virus (TSV) disease. Install blue sticky traps @20/ha to monitor and 100/ha for management of thrips. Uproot and destroy TSV infected plants to avoid spread of the disease and strictly follow field sanitation, particularly removal of *Parthenium* weed in and around the cotton fields and recommended management practices for thrips. Manage thrips (>ETL) incidence with recommended use of insecticides.

At Nanded, farmers are advised to take up intercultural operations and weeding to manage weeds. Give protective irrigation as per availability under moisture stress situations. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyriothobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyriothobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Give top dressing of Nitrogen @ 60 kg per ha to irrigated crops at 60 DAS whereas Nitrogen @ 48 kg/ha at 30 DAS to rainfed crop by drilling or ring method. Avoid broadcasting urea. Spray growth retardant, Mepiquat Chloride 5 % @ 500 ml/ha, at square formation stage in *Bt* cotton planted under HDPS and closer spacing cotton fields. Give foliar spray of NSKE 5% to manage sucking pests at 30 DAS. In crops of > 60 DAS, go for foliar application of Buprofenzin 20 SC @ 1000 ml /ha or Dinotefuron 20 SG @ 150 g per ha to manage sucking pests once it crosses ETL. Field and field bunds should be kept weed free and *Parthenium* weed should be removed in and around the fields to minimize the thrips population build-up and TSV incidence. If parawilt is observed, apply 2-3 drenching with solution of Copper oxychloride 50 % WP @ 250 g or Carbendazim 50% WP @ 100 g plus Urea 2 kg per 100 litres of water at one-week interval starting immediately after symptom development. For the management of leaf spots and boll rot, foliar sprays of (Carbendazim 12%+Mancozeb 63% WP) @ 30 g or Propiconazole 25% EC @10 ml or (Azoxystrobin 18.2% w/w+Difenoconazole 11.4% w/w SC) @ 10 ml or (Fluxapyroxad 167g/l + Pyraclostrobin 333 g/l SC) @ 6 ml in 10 litres of water is recommended. Farmers who adopted High-Density Planting System (90 x 15 cm) or closer spacing (90 x 30 cm) cotton have to go for spray of plant growth regulator (PGR) Mepiquat chloride 5% AS @1 ml/litres of water at 40–45 day old crop or at square initiation and second spray after 15-20 days @1.0 ml/litres of water. If the crop is suffering from moisture stress due to prolonged dry spell, avoid spray of Mepiquat chloride. Alternatively, give foliar spray of 13:00:45 @ 2 kg per acre in 200 litres of water. If square drop is observed, go for foliar spray of NAA 4.5 SL@ 4 ml /10 litres of water to avoid natural shedding of squares and flowers of cotton.

TELANGANA		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Adilabad	3	39	0	0	0	0	0	10	28	54	38.5	4.8
	Warangal	46	0	0	0	0	0	0	23	40	87	66	13
	Khammam	5.6	0	0	0	0	0	0	38	55	89	47.4	7.4
	Karimnagar	3.5	0	0	0	0	0	0	15	52	60	45.9	11.9
	Mahabubnagar	0	0	0	0	16	0	0	19	54	56	2	0.9
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 Adilabad, the sown crop is at 81 to 86 days at flowering to boll development stage. Inter cultural operations, weeding, insecticide and foliar sprays were given during the reporting period. Due to moisture stress, flower and square drop was observed. Thrips and jassid incidence were observed in most of the fields above ETL. Observed mealy bug incidence, which is below ETL. No incidence of diseases.

At Warangal, the crop is 91 to 102 days old at flowering to boll development stage. Application of Nitrogen (25 kg of Urea/acre) and Potassic (10 kg MOP/acre) fertilizer was taken up. Weeds have infested the fields. Thrips, aphids and jassids were noticed above ETL. No incidence of disease.

Advisory:

At Adilabad, farmers are advised to take up periodical hoeing for moisture conservation and weed control. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5% EC @ 2 ml/litre

of water if the field is infested with grassy weeds or Pyrethrin sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyrethrin sodium 6% + Quinalphos Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broadleaved weeds. Give prophylactic spray of neem based insecticide @ 5 ml per litre of water at 45 DAS to control sucking pests and deterring pink bollworm females from egg laying on newly formed squares. If the population of sucking pests exceeds ETL, give a spray of Flonicamid 50 WG @ 0.4 g per litre of water. Farmers who adopted High-Density Planting System (90 x 15 cm) or closer spacing (90 x 30 cm) cotton have to go for spray of plant growth regulator (PGR) Mepiquat chloride 5% AS @1 ml/litres of water at 40-45 day crop or at square initiation and second spray after 15-20 days @1.0 ml/litre of water. If the crop is suffering from moisture stress due to prolonged dry spell, avoid spray of Mepiquat chloride. Alternatively, give foliar spray of 13:00:45 @ 2 kg per acre in 200 litres of water. If square drop is observed, go for foliar spray of NAA 4.5 SL@ 4 ml /10 litres of water to avoid natural shedding of squares and flowers of cotton. Monitor the crop to avoid transmission of Tobacco Streak Virus (TSV) disease. Install blue sticky traps @20/ha to monitor and 100/ha for management of thrips. Uproot and destroy TSV infected plants to avoid spread of the disease and strictly follow field sanitation, particularly removal of *Parthenium* weed in and around the cotton fields and recommended management practices for thrips. Manage thrips (>ETL) incidence with recommended use of insecticides.

At Warangal, farmers are advised to give top dressing of Nitrogen (25 kgs of Urea/acre) and Potassic (10 kgs MOP/acre) fertilizers at 40,60 and 80 DAS after receipt of rains in rainfed crops with sufficient moisture. With respect to weed control, in case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quinalphos ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyrethrin sodium 10% EC @1.5 ml/litres of water for broad leaved weeds or Pyrethrin sodium 6% + Quinalphos Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Prophylactic spray of neem based insecticide @ 5 ml per litre of water at 45 DAS may be given for controlling sucking pests and deterring pink bollworm females from egg laying on newly formed squares. If the population of sucking pests exceeds ETL, spray Flonicamid 50 WG @ 0.4 or Diafenthiuron 50 WP @ 1.25 g or Dinotefuron 20 SG @ 0.4 g per litre of water from 60 DAS onwards. Install yellow- and blue-coloured sticky traps (10 each per acre) as a preventive measure to monitor and control the sucking pest complex. Dry conditions are favourable for the infestation of pink bollworm. So, monitor the infestation of the pest by installing pheromone traps (2 No./Acre) in the cotton fields. Farmers who adopted High Density Planting System (90 x 15 cm) or closer spacing (90 x 30 cm) cotton have to go for spray of plant growth regulator (PGR) Mepiquat chloride 5% AS @1 ml/litres of water at 40-45 day crop or at square initiation and second spray after 15-20 days @1.0 ml/litre of water. The crop is suffering from moisture stress due to prolonged dry spell. So, avoid spray of Mepiquat chloride. Alternatively, give foliar spray of 13:00:45 @ 2 kg per acre in 200 litres of water. Go for foliar spray of NAA 4.5 SL@ 4 ml /10 litres of water to avoid natural shedding of flowers of cotton. Monitor the crop to avoid transmission of Tobacco Streak Virus (TSV) disease. Install blue sticky traps @20/ha to monitor and 100/ha for management of thrips. Uproot and destroy TSV infected plants to avoid spread of the disease and strictly follow field sanitation, particularly removal of *Parthenium* weed in and around the cotton fields and recommended management practices for thrips. Manage thrips (>ETL) incidence with recommended use of insecticides.

ANDHRA PRADESH		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Guntur	32	0	0	3	0	0.6	0	21	64	23	5.5	0.2
	Prakasam	0.4	0	0	0	11	0.4	0	13	19	14	0.2	0.2
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, sowings have been completed and also suggested not to take up further sowings. The crop is at vegetative and square formation stage. Intercultivation and weeding operations were completed in the cotton fields to ensure proper crop growth. Excess rainfall was received during the reporting week. Incidence of leafhoppers was above ETL. No incidence of disease reported so far.

At Nandyal, the sown crop is 73 to 106 days old at flowering and boll development stages. The majority of the early sown area under less moisture conditions is exhibiting wilting and moisture stress symptoms. First to third picking is in progress Top dressing of fertilizer application and intercultural operations were taken up during the reporting period. Infestation of sucking pests were recorded around ETL in most of the locations. Pink bollworm infestation was also noticed in a few fields.

Advisory

At Guntur, farmers are advised not to take up further sowings. In an already sown crop which is about 20-30 days old and if sufficient moisture is available, apply post emergence application of Pyrethrin Sodium 6% + Quinalphos Ethyl 4% @ 400 ml/acre. Give basal application of P_2O_5 @ 60 kg/acre and 50 kg N and 20 Kg K_2O per acre within 30 DAS Use Pendimethalin 38.7 CS @ 700 ml/acre in 200 litres of water as pre-emergence weedicide to control weeds in the early stage of the crop. Give foliar spray with 19:19:19 or 13:0:45 @ 1% per litre of water. Spray Thiamethoxam 25% WG @ 0.2 g/litre or Fipronil 5% SC @ 2.0 ml/litre of water to control sucking pests. Monitor the crop to avoid transmission of Tobacco Streak Virus (TSV) disease. Install blue sticky traps @20/ha to monitor and 100/ha for management of thrips. Uproot and destroy TSV infected plants to avoid spread of the disease and strictly follow field sanitation, particularly removal of *Parthenium* weed in and around the cotton fields and recommended management practices for thrips. As a prophylactic measure against sucking pests and to check the initial pink bollworm infestation, spray neem-based insecticides at 1 lit per acre using 200 litres of water.

At Nandyal, farmers are advised to manage sucking pests by spraying neem oil @ 1 litre per acre (in 200 litres of water. Once it goes beyond ETL, give a spray of Imidacloprid @ 0.4 ml or Acetamiprid @ 0.2 g per litre of water. Remove weeds on the bunds to avoid transmission of TSV virus. If pink bollworm crosses ETL, spray Profenophos @500 ml/acre using 200 litres of water. Farmers who adopted High-Density Planting System (90 x 15 cm) or closer spacing (90 x 30 cm) cotton have to go for spray of plant growth regulator (PGR) Mepiquat chloride 5% AS @1 ml/litre of water at 40–45 day crop or at square initiation and second spray after 15-20 days @1.0 ml/litre of water. If the crop is suffering from moisture stress due to prolonged dry spell, avoid spray of Mepiquat chloride. Alternatively, give foliar spray of 13:00:45 @ 2 kg per acre in 200 litres of water. Monitor the crop to avoid transmission of Tobacco Streak Virus (TSV) disease. Install blue sticky traps @20/ha to monitor and 100/ha for management of thrips. Uproot and destroy TSV infected plants to avoid spread of the disease and strictly follow field sanitation, particularly removal of *Parthenium* weed in and around the cotton fields and recommended management practices for thrips. Manage thrips (>ETL) incidence with recommended use of insecticides. Do not extend the crop beyond 150 DAS. Due to continuous rains, cotton crop coinciding with third and fourth pickings may be affected with boll rot. Spray Copper oxy chloride @ 2.5 g per litre of water or Carbendazim @ 1 g/litre of water and drain standing water from the field to control boll rot in cotton.

KARNATAKA		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Dharwad	0	0	0	0	0	0	0	2.7	10	2.9	2.2	1
	Haveri	0	0	0	0	0	0	0	1.1	7.1	4.6	2.8	0.5
	Mysore	0	0	0	0	0	0	0	0.1	0	3.2	3.4	0.2
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 crop is 85 to 90 days from flowering to boll formation stage. Sporadic rainfall received in surrounding locations. Hand weeding, inter cultivation for weed management, insecticides and foliar spray were taken up. Weeds infestation was noticed in certain fields. Thrips have infested the fields in low status, leaf hopper and mirid bug in low to moderate status. *Alternaria* blight disease was also low to moderate status but wilt incidence in low status reported in certain fields.

At Raichur, the sown crop is 87 days old at squaring to flowering stage. Non receipt of rainfall is resulting in withering of cotton plants with various magnitudes, though the early sown crop is relatively tolerant to the prevailing moisture stress. Inter cultivation operation has been taken up along with sprays for sucking pest control. Field observations revealed the incidence of weeds, insect pests and diseases at varying levels. Farmers were advised to undertake timely and need-based management measures based on the incidence observed, following recommended crop protection practices.

At Chamarajanagar, the crop is 114 to 129 days from boll opening to harvesting stage. Spraying work operation and picking is in progress. Incidence of leaf hopper – (02-04/3 leaves), aphids – (20-30/3 leaves) and PBW incidence below 5-10% were recorded. No incidence of diseases noticed so far.

Advisory:

At Dharwad, farmers are advised to take up hand weeding and intercultural operations to manage weeds. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quinalphos ethyl 5% EC @ 2 ml /litre of

water if the field is infested with grassy weeds or Pyrethiobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyrethiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Do hand collection of shoot weevils from the okra as a trap crop. Apply Phosphorous and Potash by ring method. Apply Salicylic Acid @100 ppm spray for a 75 days old crop. Spray neem based insecticide @ 5.0 ml per litre of water to manage sucking pests. After 60 DAS of crop age, spray Flonicamid 50 WG @0.4 g per litre or Diafenthiuron 50 WP @ 1.2 g per litre of water to manage sucking pests if crosses ETL. Install pheromone traps @ 2 /acre to monitor pink bollworm moth activity. Destroy rosette flowers with PBW larvae. Farmers who adopted High-Density Planting System (90 x 15 cm) or closer spacing (90 x 30 cm) cotton have to go for spray of plant growth regulator (PGR) Mepiquat chloride 5% AS @1 ml/lits of water at 40–45 day crop or at square initiation and second spray after 15-20 days @1.0 ml/litre of water. If the crop is suffering from moisture stress due to prolonged dry spell, avoid spray of Mepiquat chloride. Alternatively, give foliar spray of 13:00:45 @ 2 kg per acre in 200 litres of water. If square drop is observed, go for foliar spray of NAA 4.5 SL@ 4 ml /10 litres of water to avoid natural shedding of squares and flowers of cotton. Foliar sprays of (Azoxystrobin 18.2% w/w+Difenoconazole 11.4% w/w SC) @10 ml or (Fluxapyroxad 167 g/l + Pyraclostrobin 333 g/l SC)@6 ml or Thiophanate methyl 70% WP@15-20 g or propiconazole 25 EC@ 10 ml mixed in 10 litres of water is recommended for the management of Alternaria blights, leaf spots and fungal boll rots. Line application of symptomatic and healthy plants with *Trichoderma harzianum* or *T. viride* formulation @ 100 g mixed in 20 litres of water or carbendazim 50 WP @24 g in 20 litres of water by opening nozzle of knapsack sprayer is suggested for root rot and wilt affected areas.

At Raichur, farmers are advised to take up weeding and intercultivation on priority basis to avoid the land getting dried up. In case of moist soil condition where manual weeding is not possible, go for application of herbicides like Quizalofop ethyl 5%EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyrethiobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyrethiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds when the crop is at 25-30 days duration. Spray the recommended dose of Flonicamid 50% WG (4 g/ 10 litres of water) against sucking pest populations that exceed ETL. Spray Profenophos 50 EC @ 2.5 ml or Imidacloprid 17.8 SL @ 0.3 ml per litre of water to control mealy bug infestation. Farmers who adopted High-Density Planting System (90x 15 cm) or closer spacing (90 x 30 cm) cotton have to go for spray of plant growth regulator (PGR) Mepiquat chloride 5% AS @1 ml/lits of water at 40–45-day crop or at square initiation and second spray after 15-20 days @1.0 ml/litre of water. If the crop is suffering from moisture stress due to prolonged dry spell, avoid spray of Mepiquat chloride. Alternatively, give foliar spray of 13:00:45 @ 2 kg per acre in 200 litres of water. If square drop is observed, go for foliar spray of NAA 4.5 SL@ 4 ml /10 litres of water to avoid natural shedding of squares and flowers of cotton. Spray Profenophos 2 ml + Imidacloprid 0.5 ml + 2 shampoo per tank to control mealy bug infestation.

At Chamarajanagar, farmers are advised to install yellow sticky traps @ 8-12 per acre and pheromone traps, change of lures @ 15 days interval to monitor sucking pests. Spray Flonicamid 50% WG 0.4 ml /lt of water or Dinotefuran 20 SG @ 0.3 g /litre of water and Imidacloprid 17.8 SL @ 0.5 ml /litre of water to control sucking pests above ETL. Spray Profenophos 50 EC @ 500 ml per acre or Emamectin benzoate 5 SG @100 g per acre or Indoxacarb 15 EC @ 200 ml per acre, if the incidence of pink bollworm is above 5 per cent (ETL) in flowers or green bolls. If the crop is above 120 days and incidence of pink bollworm is above ETL, spray Cypermethrin 10% EC @ 10-15 ml/10 litre of water or Deltamethrin 2.8 EC @ 10 ml/10 litres of water or Fenpropathrin 10% EC @ 10 ml/10 litres of water.

TAMIL NADU		Actual Rainfall in last week (mm)							Predicted Rainfall in next week (mm)				
		September							September				
		15	16	17	18	19	20	21	23	24	25	26	27
	Perambalur	0	0	0	21	6		0	0.6	0	0	0.1	0
	Salem	0.6	11	36	0	0	5	75	0.8	0	0.8	2.4	0
	Trichy								0.2	0	0	0	0
	Virudhunagar	0	0	0	0	25.6	2	0	0.7	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 mm		
Rainfall category		Very light rainfall		Light rainfall		Moderate rainfall			Heavy rainfall		Very heavy rainfall		

Crop Condition:

At Coimbatore and surrounding areas, the sown crop is at vegetative stage. Weeding has been carried out. Further, spot drenching with carbendazim 50 WP@ 1.2 g/litre of water or line application of symptomatic and healthy plants with *Trichoderma harzianum* or *T. viride* formulation @ 100 g mixed in 20 litres of water at the base of affected plants as well as surrounding healthy plants has been done to manage the soil borne (root rot and wilt) diseases. Earthing up has been done. Sucking pest infestation has been noticed in a few fields.

At Srivilliputhur and surrounding areas, the sown crop is 24 to 34 days old at initial vegetative growth stage. Sowing of cotton crop has been completed in the district. Applied pre-emergence herbicide and still in progress in some places wherever sufficient moisture is available in the soil at the time of herbicide application. Thinning has been done. Weeds have infested the cotton fields but controlled through recommended measures. Thrips and leaf hopper incidence are noticed in the fields. No incidence of diseases.

Advisory

At Coimbatore and surrounding areas, farmers are advised to regulate irrigation based on soil type and receipt of rainfall. Clean the bunds and irrigation channels and maintain them properly to ensure drainage during excess rains. Take up manual weeding and earthing up. Regularly monitor the crop for incidence of pests and diseases to adopt timely management. After a long dry spell, rainfall has been received. Go for soil application of *Trichoderma viride* and *Bacillus subtilis* @ 2.5 kg/ha along with 500 kg well decomposed FYM or spot drenching with Carbendazim 50 WP@ 1.2 g/l at the base of affected plants as well as surrounding healthy plants for root rot management.

At Srivilliputhur, farmers are advised to utilize the available moisture for herbicide application if possible. Remove cotton stalks after harvest to prevent the carry over life stages of stem weevil. Take up thinning in the sown crop fields. The blanket recommendation for cotton crop (variety) is 60:30:30 kg/ha (N:P:K). If basal application could not be done, apply 50 per cent of N and K full dose of P₂O₅ on 25 DAS. Hoeing and hand weeding should be completed between 18th to 20th DAS, if herbicide is not applied at the time of sowing the crop. For light soils, irrigate on the 20th or 21st DAS (three days after hoeing and weeding). Irrigate again on the 35th or 36th DAS. For heavy soils, irrigate on the 20th or 21st DAS (three days after hoeing and weeding). Irrigate again on the 40th or 36th DAS. To manage thrips and leafhopper, spray Flonicamid 50% WG @ 150 g/ha or Thiamethoxam 25% WG 100 g/ha. Drench the collar region with Chlorpyrifos 50 EC @ 1200 ml/ha on 15 and 30 days after sowing along with earthing up operation.

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 advisories are uploaded on the website of ICAR-CICR (<https://cicr.org.in/resource-weekly-advisory>) also to be consulted for the benefit of farmers.

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