

# भा. कृ. अनु. प.- केंद्रीय कपास अनुसंधान संस्थान, नागपुर

# ICAR-Central Institute for Cotton Research, Nagpur



An ISO 9001:2015 Certified Organisation

## XIII Weekly Advisory for Cotton Cultivation from 3rd to 9th September, 2024

			Actual Rainf	all in las	st week(mn	1)	Predicted Rainfall in next week (mm)						
PUNJA	В		Augus	st / Sept	ember				September				
		30	31	01	02	03	05	06	07	08	09		
	Firozpur						3	1	0	1	0		
	Faridkot	0	1.6	0	0	0	5	4	1	0	1		
	Muktsar						5	4	1	0	1		
	Bhatinda	4.4	0	0	0	0	12	3	0	1	1		
	Sangrur	10	0	0	0	0	18	4	2	1	1		
Ludhiana		4.5	0	0	0	0	9	1	1	1	1		
Amount of rainfall & c	olour Code	0.1 t	o 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	Rainfall category		ight rainfall	Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall			

# **Crop condition**

At Bathinda, the crop is 102 to 122 days old at boll development stage. Intercultural operations, one to two sprays of potassium nitrate (13:0:45) @ 2% in cotton fields where flowering started were taken up during the reporting period. Incidence of whitefly 3-15/three leaves, jassid 0-6/three leaves and around 0-5% flower infestation by pink bollworm was observed. Incidence of leaf curl virus was also recorded in few fields.

At Faridkot, the crop is 108 to 113 days old at peak flowering/ boll formation/ boll development stage. Manual intercultural operations and fertiliser application, herbicide and insecticide sprays have been taken up. Leaf hopper and thrips incidence were below ETL and whitefly incidence was moderate to very high and pink bollworm incidence below ETL in most of the fields.CLCuD was observed at a few locations inII-III grade.

#### Advisory:

At Bathinda, farmers are advised to give four sprays of potassium nitrate (13:0:45) @ 2% at weekly interval in cotton fields to reduce flower drop and to improve boll setting in cotton. Spray the crop with Afidopyropen 50 DC @ 400 ml/acre or Flonicamid 50 WG @ 80 g/acre or Clothianidin 50 WG @ 20 g/acre or Dinotefuran 20% SG @ 60 g/acre to control whitefly once infestation crosses ETL. Spray Dinotefuran 20% SG @ 60 g/acre or Tolfenpyrad15 EC @ 400 ml/acre or Fenpyroximate 5 EC @ 300 ml/acre against jassid. If thrips population is above ETL, spray Profenofos 50 EC @ 600 ml/acre or Spinetoram @ 170 ml/acre. Remove and destroy rosette flowers, if any. Spray Profenofos 50 EC @ 600 ml/acre or Emamectin benzoate 5 SG @ 100 g/acre if the incidence of pink bollworm is above 5 per cent (ETL) in flowers or green bolls. Spray Azoxystrobin 18.2%+ Difenoconazole 11.4% SC) @ 200 ml per 200 litres of water to manage fungal foliar leaf spots of cotton.

At Faridkot, farmers are advised to spray potassium nitrate (13:0:45) @ 2% to improve boll setting and reduce flower drop in timely sown crop. Avoid brackish/tubewell water for any type 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 must apply two sprays of Magnesium sulphate @ 1% (through foliar application) at 15 days interval during full bloom and boll development to minimize the issue in Bt cotton. Both chemicals should be sprayed at alternate weeks depending upon weather and rainfall. Drain out excessive water in event of heavy rainfall. To control weeds, spray Glufosinate ammonium 13.5% SL @ 2.5-3.0 L/ha as a directed spray between the crop rows. The directed spray can be done by using a protective hood as Glufosinate is non-selective herbicide and can cause injury to the crop if it falls on the crop leaves Alternatively, do manual or tractor operated intercultural operation to control emerging weeds. In case of high thrips infestation, spray Profenofos 50% EC@ 600 ml/acre or Spinetoram @ 170 ml/acre. If whitefly incidence exceeds ETL, spray Flonicamid 50 WG @ 80 g/acre or Dinotefuran 20 SG @ 60 g/acre; in case of higher infestation of whitefly adults, nymphal population and appearance of sooty mould on leaves, spray Afidopyropen50 DC @ 400ml/acre alternately with Pyriproxyfen @ 500 ml/acre. Check squares and flowers for the infestation of pink bollworm especially in the early sown crop. 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. To monitor pink bollworm, use pheromone trap @ 2 per acre and place it at 30 cm above crop canopy. Replace the lure as per validity. After heavy rains or irrigation, some plants might show wilting due to parawilt which can be checked by spraying Cobalt chloride @ 10 mg/ litre of water on the affected plants at the initial stage of wilting symptom. To manage fungal foliar leaf spot, spray(Azoxystrobin 18.2%+ Difenoconazole 11.4% SC) @ 200 ml per 200 litres of water. To check further spread of cotton leaf curl virus, protect the crop against whitefly vector by using recommended insecticides as

			Actual Rain	nfall in la	st week(m	m)	Predicted Rainfall in next week (mm)						
HAR	YANA		Augı	ust / Sep	tember		September						
		30	31	01	02	03	05	06	07	08	09		
PACCHIA PRODUCTION TO THE PACCHIA	Hisar	0	0	0	0	0	12	5	4	4	1		
Sea control Sales (Sales)	Jind	1.7	0	0	0	0	18	6	6	4	3		
British Carlos Parabased	Sirsa	1	10	0	0	0	10	5	1	2	1		
Mahendragan Pagarin Francis	Rohtak	15	19	0	0	0	3	2	5	4	2		
Amount of rainfall & colour Code		0.1 to	2.4 mm	2.5 to 15.5 mm		15.6 to 6	64.4 mm 64.5 to 115.5 r		15.5 mm	115.6 to	o 204.4		
Rainfall category		Very li	ght rainfall	Light rainfall		Moderate rainfall		Heavy rainfall		Very heavy rainfall			

# **Crop Condition:**

At Hisar, the crop is 84 to 133 days at flowering to boll development stage. Flowering is appropriate in areas where rainfall was minimal. Most of the fields are free from weeds but weeds like *motha*, *makra*, *santhi*, *hirankhuri* and *doob* were observed in some of the fields after rainfall. Manual hoeing by *khurpa*/ spade or mechanical hoeing done as per the growth of crop. Population of whitefly is above economic threshold at few locations only where less rainfall was received. Jassid population crossing ETL in few fields and thrips is below ETL in majority of fields. Trap catches of pink bollworm has increased during last week but the infestation of pink bollworm started appearing on flowers and bolls in several fields. Some cases of root rot and wilt were observed. Cotton leaf curl virus disease was observed in several locations. Boll rot was also observed in some fields where high rainfall was received

At Sirsa, the crop isat flowering and boll formation stage. Cloudy, rainy and hot humid weather prevailed during the reporting period. Intercultural operations by tractor / bullock, hand hoeing, weeding and application of second split dose of Urea broadcasting and insecticide spray for sucking pests and PBW were taken up. At some locations, tank mixture of insecticides and fungicides spray was observed. Some farmers sprayedmicronutrient i.e. NPK, Boron, Zn etc. mixed with insecticide in tankWeeds have appeared at all locations. Squaring, flowering and boll formation in full swings at all locations. Whitefly infestation ranged between 18-51/3leaves, leaf hopper 4-16/3 leaves, thrips below ETL and infestation of pink bollworm reported above ETL (5-10 %) based on green boll damage. Sooty mould (very less) and CLCuD incidences were observed a few locations.

#### Advisory:

At Hisar, farmers are advised to drain excess water after rainfall and apply third split dose of Urea @1 bag per acre. Take up manual or mechanical hoeing after irrigation or rainfall. In case of cotton crop more than 100 days old, apply foliar spray of 2.0% Urea+0.5 % ZnSO<sub>4</sub> (21%) especially in light soils. Examine at least 150 to 200 flowers and 20 bolls per acre in cotton crop where flowering has started for the infestation of pink bollworm larvae. Install pheromone traps @ 2/acre to monitor pink bollworm. Collect and destroy early season rosette flowers in cotton crop. Remove and destroy rosette flowers, if any. Spray Profenofos 50 EC @ 600 ml/acre or Emamectin benzoate 5 SG @ 100 g/acre if the incidence of pink bollworm is above 5 per cent (ETL) in flowers or green bolls. Spray Flonicamid 50 WG @ 80 g or Afidopyropen 50 DC @ 400 ml/acre for management of sucking pests like whitefly and jassid. Do not use synthetic pyrethroids in cotton fields where whitefly is crossing threshold level till 15<sup>th</sup> September. Treat root rot affected patches in field by drenching the affected plants with Carbendazim 50 WP @2 g/litre of water for early symptomatic plants and nearby healthy plants. Confine root rot affected patches by making bunds before flood irrigation so that this disease can be prevented from spreading further. Uproot and bury early season cotton leaf curl virus infected plants. In case of parawilt, spray Cobalt chloride @10 mg/ litre of water immediately after the appearance of symptoms on the affected plants. To manage sooty mould, beside spray for whitefly, give a spray of copper oxychloride 50 WP @ 2-3 g/litre of water. Monitor fields regularly at weekly intervals and necessarily after rainfall.

At Sirsa, farmers are advised to continue intercultural operations. After irrigation or rain, apply third split dose of nitrogenous fertilizer. For better retention of square, flower and bolls, apply NPK 13:00:45 @ 2 kg/100 litres of waterand repeat 2-3 times at 10 days interval. If crop is in full swing with square, flowers and bolls and if leaf reddening appears, spray magnesium sulphate @ 1.0 kg in 100 liters of water per acre and repeat after a fortnight. spray 2,250 ml per hectare Glufosinate ammonium as a directed spray (using a protective hood) to control weeds in between the crop rows. Use 200- 250 litres of water per acre for spray. Regularly monitor the insect pest infestation. Install pheromone traps @ 2/acre to monitor pink bollworm and 40 low-cost yellow sticky traps for whitefly management. Whitefly adults can be managed by spray of Diafenthiuron 50% WP@ 240 g/acre (field should either be wet due to irrigation or rainfall) or Afidopyropen 50 DC @ 400 ml/acre or Dinotefuran 20 SG @ 60 g/acre or Flonicamid 50 WG @ 80 g or Profenophos 50 EC @ 600 ml/acre. Spray Spinetoram 11.7% SC @170 ml/acre to control thrips. If sooty mould appear, leaves will become sticky or if nymphal population of whitefly is higher, then spray Pyriproxyfen 10 EC @ 400

ml or Spiromesifen 22.9 SC @ 240 ml/acre 3-5 days after first adult's emergence. Repeat spray of Propiconazole 25 EC @1 ml /litre or Mancozeb 30% WDG @ 2.0 g/litre or Copper Oxychloride (COC) 50 WP @ 2.5 g/litre water as curative measure. Manage jassid infestation by spraying Dinotefuran 20 SG @ 60 g or Flonicamid 50 WG @ 80 g or Tolfenpyrad 15 EC @ 400 ml or Fenpyroximate 5% EC @ 300 ml/acre. Destroy rosette flower and if PBW infestation crosses ETL based on flower i.e.10 or more flowers out of 100 observed per acre are infested or 2 out of 20 bolls infested with PBW, or 5-8 male trap catches per night for 3 consecutive nights, then sprayProfenofos 50 EC @ 600 ml/acre or Emamectin benzoate 5 SG @ 100 g/acre or Indoxacarb 14.5 SC @ 200 ml/acre or thiodicarb 75 WP @ 250 gin 150 liters of water. In case of appearance of parawilt symptoms, spray cobalt chloride @10 mg/litre of water immediately after the appearance of symptoms (within 24 hours) on affected plants only. For boll rot and sooty mould, give prophylactic spray with Carbendazim 50% WP@ 0.4 g or Propineb 70% WP @2.5-3 g/litre or (Azoxystrobin 18.2%+ Difenoconazole 11.4% SC) @ 1 ml/litre or Propiconazole 25 EC @1 ml/litre or Pyraclostrobin 20% SC @ 1 g/litre or (Fluxapyroxad 167 g/L + Pyraclostrobin 333 g/L SC) @ 0.6 ml/litre or (Metiram 55% + Pyraclostrobin 5% WG) @2 g per litre of water. Avoid spray of tank mixture of insecticides and fungicides. Spray only recommended insecticides or fungicides.

			<b>Actual Rai</b>	nfall in las	t week(mn	1)	Predicted Rainfall in next week (mm)						
RAJA	ASTHAN		Aug	ust / Septe	mber				Septembe	r			
		30	31	01	02	03	05	06	07	08	09		
	Ajmer	10.2	0	0.2	0	0	30	30	22	42	22		
	Jodhpur	0.5	0	23.4	0	0	22	10	24	12	10		
44	Nagaur						20	16	18	16	6		
-	Pali	0	0	0	0	0	18	36	30	20	30		
	Sri Ganganagar	0	12	0	0	0	2	2	1	2	0		
Amount of rainfa	all & colour Code	0.1 to	2.4 mm	2.5 to 1	5.5 mm	15.6 to 6	64.4 mm	64.5 to 1	15.5 mm	115.6	to 204.4		
Rainfall category	/	Very lig	ht rainfall	Light r	rainfall	Moderat	e rainfall	Heavy	rainfall	Very hea	vy rainfall		

# **Crop Condition:**

In Southern Rajasthan (Banswara, Bhilwara, Chittorgarh, Dungarpur, Pratapgarh, Rajsamand and Udaipur), the crop is 56 to 84 days old at squaring and flowering stage. Intercultural operations for weed management and fertilizer application was done. Fields are free from weeds. Infestation of jassid noticed above ETL and whitefly infestation below ETL. No incidence of diseases reported so far.

At Sriganganagar and Hanumangarh, the crop is 88 to 123 days at square formation, flower initiation and boll development stage. Post sowing irrigation has been applied. Manual hoeing/ hand weeding and intercultural operations are in progress. Jassid population was 0.11 to 2.69/ 3 leaves, Whitefly 2.41 to 19.34/3 leaves and thrips population 0 to 4.72/3 leaves were recorded. Occurrence of CLCuDupto grade III has been noticed

# Advisory:

In southern Rajasthan (Banswara, Bhilwara, Chittorgarh, Dunarpur, Pratapgarh, Rajsamand and Udaipur), farmers are advised to drain excess rain water from the fields on time. Apply recommended dose of N fertilizers according to crop stage, if required. Keep watch on infestation of sucking pests in early sown cotton. If any sucking pest infestation reported near ETL, spray with Neem based insecticide or NSKE 5%+ Neem oil 5 ml /litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) +0.05% surfactant. Install yellow sticky traps 8-10/acre to monitor whitefly and jassid incidence. Spray Flonicamid 50% WG @ 80 g/acre or Dinotefuran 20% SG @ 60 g/acre or Imidacloprid 17.8% SL @ 60 ml/acre or Tolfenpyrod 15% EC @ 400 ml/acre or Fenpyroximate 5% EC @ 300 ml/acre against sucking pests when infestation seen above ETL. Install pheromone traps for PBW @ 2 /acre. Change lures of pheromone traps as per validity. Remove and destroy rosette flowers, if any. Spray Profenofos 50 EC @ 600 ml/acre or Emamectin benzoate 5 SG @ 100 g/acre if the incidence of pink bollworm is above 5 per cent (ETL) in flowers or green bolls.

At Sriganganagar and Hanumangarh, farmers are advised to give foliar application of potassium nitrate @2% wherever the crop is above 80 days old. Monitor the crop for insect pests and disease regularly. Spray NSKE 5% + Neem formulation @ 5 ml /litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) + 0.05% surfactant to control sucking pests and PBW infestation at initial level of incidence. Spray Flonicamid 50% WG @ 80 g/acre Or Dinotefuran 20% SG @ 60 g/acre Or Imidacloprid 17.8% SL @ 60 ml/acre Or Tolfenpyrod 15% EC @ 400 ml/acre Or Fenpyroximate 5% EC @ 300 ml/acre against sucking pests when infestation seen above ETL. In case of higher thrips infestation, spray Spinetoram 11.7 SC @170 ml/acre or Profenofos 50 EC @ 600 ml/acre. Whenever PBW population cross ETL, spray any of the insecticides like., Emamectin benzoate 5% SG @ 100 g/acre or Profenofos 50% EC @ 600 ml/acre. The locations found infested with pink bollworm last year are to be monitored closely. Install pheromone traps @ 2 per acre to monitor pink bollworm activity. Foliar spray of Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease and fungal leaf spots in cotton.

			Actual Ra	infall in last	t week(	mm)	Predicted Rainfall in next week (mm)						
ODISH	Α		Aug	gust / Septe	mber			September					
		30	31	01	02	03	05 06 07 08 09						
	Koraput	4.5	9	8	0	0	30	40	45	20	20		
	Kalahandi	20	14	23	0.2	1	15	20	20	15	15		
*1	Balangir	0	7.7	5.3	3.5	0	2	5	10	5	5		
Amount of rainfall &	2.4 mm 2.5 to 15.5 mm 15.6 to 64.4			15.6 to 64.4	mm	64.5 to 115.5	115.6 to 2	204.4					
Rainfall category		Very ligh	t rainfall	Light rai	nfall	Moderate ra	Moderate rainfall Heavy rainfall Very heavy rainfa				rainfall		

#### **Crop Condition:**

At Odisha, crop is 56 to 66 days old at square formation and flower initiation stage. Partially cloudy and intermittent rainfall was prevalent during reporting period. Weeding, earthing up, second dose of fertilizers, intercultural operations and spray of neembased pesticides have been taken up. Weeds of all types i.e., broad leaf, grasses and sedges have emerged in the cotton fields. Incidence of aphids, jassid, Spodoptera, semi loopers and leaf miners reported from some areas. Wilting reported from Balangir and Nuapada districts due to continuous rains and water logging conditions. Root rot, leaf spot and Bacterial leaf blight reported from Kalahandi and Rayagada districts.

#### Advisory:

Farmers are advised to take care to drain excess water from the field. Apply third dose of fertilizer in the early sown crop (after 50-55 DAS) 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 Pyrithiobacsodium 10%EC @ 1.5 ml/lit water for broad leavedweeds or Pyrithiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broadleavedweeds. In case of water logging conditions, ensure proper drainage in the fields to drain out excessrainwater by providing adequate slope and drainingexcessive stagnating water around the root system atthe earliest possible. Due to waterlogged situation cotton crop suffers frominadequacy of nutrients causes reddening and chlorosisin leaves due to poor uptake by roots under anerobicconditions in soil. Foliar application of 1.0 % Urea or DAP or 19:19:19 at 15 days interval isrecommended. Regularly monitor for any incidence of pests and diseases. If any sucking pest infestation reported near ETL, spray with Neem based insecticide or NSKE 5%+Neem oil 5 ml /litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) + 0.05% surfactant. If parawilt or sudden wilt occur due to heavy rain and water logging after dry spell, drenching to be done for affected plants/rows with a mixture of Copper oxychloride 25 g + 200 g Urea in 10 liters of water immediately after occurrence of Parawilt within 48 h can revive the plants. Spray 100 g magnesium sulphate mixed with 100 g urea in 10 litres of water in waterlogged areas to reduce leaf reddening in cotton. Apply alfa NAA @3.5 ml/15 litres of water at 60 DAS to prevent square and flower drop. Drench the soil of early symptomatic and nearby plants wilt and root rot diseases with Carbendazim 50 WP@ 2 g/litre of water to manage any soil borne disease including root rot and wilt disease. Foliar spray of (Carbendazim 12%+Mancozeb 63% WP) @30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease and leaf spots in cotton.

		- 1	Actual Rain	fall in last	week(mr	n)	Pre	dicted R	ainfall in ne	xt weel	(mm)
GUJA	RAT		Augu	st / Septe	mber				Septembe	r	
		30	31	01	02	03	05	06	07	08	09
	Amreli	4.8	0	0	0	2.4	126	65	65	65	12
	Bhavnagar	9.8	0	0	0	0	131	71	65	64	15
	Jamnagar	80.1	4	2.3	0	0	81	10	3	6	7
	Rajkot	7.4	0	0	0	4	124	68	6	12	11
	Junagadh	1.6	0	0	0	0	64	12	10	10	19
The state of the s	Sabarkantha						114	69	66	65	75
•	Surendranagar	1	0	0	0	15	65	97	12	13	10
	Ahmedabad	11	0	0	0	71	64	67	13	14	15
	Baroda	2.6	0	0	1.6	32.9	118	80	14	16	16
	Patan						118	64	65	63	15
Mehesana							144 67 66		66	64	14
Amount of rainfall & colour Code		0.1 to	2.4 mm	2.5 to 1	5.5 mm	15.6 to	64.4 mm	64.5 to	115.5 mm	115.6 to 204.4	
Rainfall category		Very liq	ght rainfall	Light r	ainfall	Modera	ate rainfall	Heav	y rainfall	Very	heavy rainfall

# **Crop Condition:**

At Surat, sown crop is 63 to 69 days old at vegetative stage. Heavy rains received during the reporting week. Hand weeding and intercultural operations were taken up wherever possible. Weeds have infested the fields. No incidence of diseases. Thrips infestation seen above ETL.

At Junagadh, the sown crop is 42 to 62 days old at vegetative and square formation stage. Heavy rains received during the week. Intercultural, operations, fertilizers and pesticide spray could not be done. Fields are infested with weeds. Minor infestations of thrips, jassid and whitefly were noticed in few locations.

# Advisory:

At Surat, farmers are advised to drain out the excess rain water from the cotton fields. Keep fields free from debris. To manage sucking pest infestation, spray Neem based insecticide or NSKE 5%+ Neem oil 5 ml/litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) +0.05% surfactant. Install pheromone traps @ 2/acre to monitor pink bollworm. Check *Fusarium* wilt patches along with one-meter radius of healthy plants in desi cotton fields. If parawilt symptoms found in fields, drenchingto be done for affected plants/rows with a mixture ofCopper oxychloride 25 g + 200 g Urea in 10 liters ofwater immediately after occurrence of Parawilt within48 h can revive the plants. Further, to prevent the entry of pathogens, apply Kresoxim methyl 44.3 SC @10 ml or Propineb 70 WP @ 25 g or Propiconazole 25 EC @10ml or (Metiram 55% + Pyraclostrobin 5% WG) @20 g 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 mixed in 10 litres of water to manage fungal leaf spots and blight diseases. Foliar spray of Carbendazim 12%+Mancozeb 63% WP@30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease complex.

At Junagadh, farmers are advised to drain excess water from the cotton fields. Apply Ammonium sulphate @ 10 kg/acre or Urea 15 kg/acre. Take up intercultural operations and weeding, earthing up along with application of fertilizers (25 kg MOP+25 kg Urea/acre in irrigated condition) to the soil. 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 Pyrithiobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. If thrips infestation crosses threshold level, spray Thiamethoxam 25% WG @ 2 g/10 litres (100 g/ha) or Spinetoram 11.7% SC @ 8.4 ml/10 litres (420 ml/ha). Manage fungal foliar diseases, if any, by giving a spray of (Fluxapyroxad 167 g/litre + Pyraclostrobin 333 g/litre SC) @ 0.6 ml/litre or (Metiram 55% + Pyraclostrobin 5% WG) @ 2 g/litre of water. Foliar spray of Carbendazim 12% + Mancozeb 63% WP@30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease complex.

In case of water logging conditions, ensure proper drainage in the fields to drain out excessrainwater by providing adequate slope and drainingexcessive stagnating water around the root system at the earliest possible. Due to waterlogged situation cotton crop suffers frominadequacy of nutrients causes reddening and chlorosisin leaves due to poor uptake by roots under anerobic conditions in soil. Foliar application of 1.0 % Urea or DAP or 19:19:19 at 15 days interval isrecommended

		A	Actual Rain	nfall in last	t week(mm	1)	Predicted Rainfall in next week (mm)					
MADHYA F	PRADESH		Aug	ust / Septe	mber		September					
		30	31	01	02	03	05	06	07	08	09	
	Khargaon											
MAN YOU	Dhar		0	0	0.2	30.8	118	24	43	35	80	
	Khandwa											
Amount of rainfall	Amount of rainfall & colour Code 0.1 to 2.4 mm			2.5 to 15.5 mm 15.6 to 6			64.4 mm 64.5 to 115.5 mm			115.6 t	o 204.4	
Rainfall category		Very light	rainfall	Light rain	fall	Moderate	rainfall	Heavy ra	infall	Very h	eavy rainfall	

#### **Crop Condition:**

At Khandwa, the sown crop is 63 to 111 days old at vegetative / square / flower / boll formation stage. Spot weeding, fertigation and plant protection measures were done based on the feasibility of field conditions. Irrigation was not given as enough rains have been received. Weeds have dominated the fields. Infestation of jassid and whitefly have been observed in traces in some fields. Occurrence of Bacterial blight, *Corynespora* and *Cercospora* leaf spots have been noticed in few locations.

#### Advisory:

At Khandwa, farmers are advised to give thirdand fourth dose of chemical fertilizer. Start weeding with bullock drawn *Kolpa*in those area where crop is more than 35 days old. 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 Pyrithiobac sodium

10%EC @ 1.5 ml/lit water for broad leaved weeds or Pyrithiobac sodium 6% + Quizalofop Ethyl 4% MEC @ 2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Install pheromone traps @ 2/acre to monitor pink bollworm infestation and yellow sticky traps @ 8/acre to monitor whitefly. In those crops that has crossed 90 days with sucking pest infestation above ETL, spray Diafenthiuron 50% WP @ 240 g/acre or Dinotefuran 20 SG @ 60 g/acre or Flonicamid 50 WG @ 80 g/acre. Foliar spray of (Carbendazim 12%+Mancozeb 63% WP) @30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease complex and leaf spots in cotton.

		Actu	ual Rainfa	III in last v	week(mm	)	Pre	dicted Ra	infall in ne	kt week (mm	)
MAHARA	ASHTRA		August	/ Septem	ber				September		
		30	31	01	02	03	05	06	07	08	09
	Dhule						45	12	20	22	28
	Nandurbar						34	16	28	29	42
	Jalgaon	0	0	0	23	12.2	61	13	26	21	20
	Ahmednagar	1.5	0	0	0	0	8	8	13	11	7
	Aurangabad	1.1	0	0.5	0	71.7	19	6	10	10	13
	Jalna	0	0	0.5	0	0.5	23	10	12	14	22
	Beed	0	2.4	0	0	0	8	1	10	15	6
	Nanded	2.5	0	0	144	19	24	17	15	20	29
	Parbhani	0	0.2	29.7	128	12.3	9	5	15	16	28
w w	Hingoli						12	12	15	18	28
	Buldhana	0	2	2	20	79.3	29	21	41	21	29
	Akola	0	0.1	4	22.2	49.8	23	12	20	16	27
	Washim	0	0	33	15	7	24	15	16	32	31
	Amravati	0.2	17	2.8	11.6	23.4	46	32	44	23	27
	Yavatmal	5	0	91	11	37.4	29	21	16	38	23
	Wardha	1	15	71.8	0	21.6	45	28	15	23	28
	Nagpur	11.6	58	32.6	33.5	11.4	45	34	16	27	36
Chandrapur		4	0	44.8	1	0	46	34	16	28	36
Amount of rainfall	& colour Code	0.1 to 2	.4 mm	2.5 to 1	5.5 mm	15.6	to 64.4 mm	64.5 to	115.5 mm	115.6 to	204.4
Rainfall category		Very light	rainfall	Light r	rainfall	Mode	erate rainfall	Heav	/ rainfall	Very heavy	y rainfall

#### **Crop Condition:**

At Akola, sown crop is at various stages depending upon the time sown. The crop is at vegetative to boll development stage. The weather during the reporting period was mostly cloudy with less sunshine hours, and heavy rainfall was received during this week. Different intercultural operations like hoeingand insecticide spray were carried out during reporting week. Some fields are infested with monocots and dicot weeds. Incidence of sucking pests like thrips and jassids noticed in some fields. Infestation of spotted and pink bollworm in flower were observed. No incidence of diseases so far.

At Nanded, the crop is 70 to 90 days at squaring / flowering/ boll formation stage. Weed grasses, broad-leaved weeds and sedges have infested the fields. Intercultural operations, weeding, fertilizer application and plant protection spray were taken up. Incidence of jassid, aphids, thrips and pink bollworm were noticed but below ETL. *Fusarium* wilt was noticed in few patches.

At Rahuri, the crop is at 70 to 93 days at vegetative growth to flowering stage. Intercultural operations, weeding and hoeing were taken up. Weeds have infested the fields. Sucking pest incidence noticed below ETL. Incidence of TSV at 7-14% was recorded

#### Advisory:

At Akola, farmers are advised to drain out the excess water from fields in the area where heavy rainfall occurred. Dead furrowshould be opened in June and July sown crop if not opened. Take up weeding to avoid competition of weeds with crop. Give a spray of 2% Urea at flowering stage and 2% spray of DAP at boll development stage of cotton. Spray NAA @ 4ml /10 lit of water to avoid natural shedding of squares and flowers of cotton and mepiquat chloride@ 10 ml/10 lit of water to restrict the excess vegetative growth of cotton. To manage sucking pests of cotton above ETL, spray Diafenthiuron 50% WP @ 240 g/acre or Dinotefuran 20 SG @ 60 g/acre or Flonicamid 50 WG @ 80 g/acre.In some parts of Akola district, infestation of pink bollworms is noticed. Install 2 pheromone traps/acrefor PBW monitoring.Whenever PBW population cross ETL, spray any of the insecticides like., Emamectin benzoate 5% SG @ 100 g/acre or Profenofos 50% EC @ 600 ml/acre.

At Nanded, farmers are advised to drain excess water by opening trenches. Give second top dressing of Nitrogen @ 36 kg/haunder rainfed condition if delayed. Take up intercultural operations to manage weeds in field condition. Spray post emergenceweedicide, Pyrithiobac sodium 6% + Quizalofop ethyl 4% MEC @ 2 – 2.5 litre when weeds are at 2-4 leaf stage tokeep crop weed free under labour shortage condition. To prevent sucking pests like aphids, spray NSKE 5% + Neem formulation 5 ml /litre or neem oil-basedformulation 5 ml /litre (300 or 1500 ppm) + 0.05% surfactant at 50 DAS. When crop crosses60 days, spray Flonicamid 50% WG @ 80 g/acre or Tolfenpyrod 15% EC @ 400 ml/acre to manage jassid whencrosses ETL. Install pheromone traps @ 5/ha to monitor pink bollworm. Collect and destroy rosette flowers. Spray Profenophos 50% EC @ 30 ml/10 litre once it crosses ETL i.e. 10% rosette flowers. Drench with *Trichoderma viridae*1% WP @ 50 g/10 litres water or Carbendazim 50% WP @ 12 g/10 litres water to manage *Fusarium* wilt. Spray Mepiquat chloride @ 500 ml / ha (10 ml / 10 L) as growth retardant under high density planting as well as where excess growth of crop is observed in normal spaced cotton fields. Open furrows at 60 DAS under rainfed condition to conserve rainwater. Do detopping (nipping) at 80-90 DASunder irrigated condition and at 75 DAS in rainfed HDPS cotton fields

At Rahuri, farmers are advised to carryout intercultural operations. Install yellow sticky traps @ 8/acre. Spray NSKE 5% + Neem oil 5 ml /litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) + 0.05% surfactant to check sucking pests and avoid laying eggs of pink bollworm. Spray Flonicamid 50 WG @ 4 g or Buprofezin 25 SC @ 20 ml or Difenthuron 50 WP 12 g per 10 liter of water once sucking pests crosses ETL. Install pheromone traps @ 2 per acre to monitor pink bollworm moth activity. Change lure as per validity. Foliar spray of Carbendazim 12%+Mancozeb 63% WP@30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease complex and leaf spots in cotton.

In case of water logging conditions, ensure proper drainage in the fields to drain out excessrainwater by providing adequate slope and drainingexcessive stagnating water around the root system at the earliest possible. Due to waterlogged situation cotton crop suffers frominadequacy of nutrients causes reddening and chlorosisin leaves due to poor uptake by roots under anerobic conditions in soil. Foliar application of 1.0 % Urea or DAP or 19:19:19 at 15 days interval isrecommended

If parawilt or sudden wilt occur due to heavy rain and water logging after dry spell, drenching to be done for affected plants/rows with a mixture ofCopper oxychloride 25 g + 200 g Urea in 10 liters ofwater immediately after occurrence of Parawilt within48 h can revive the plants.

			Actual Rain	fall in las	t week(m	m)	Predicted Rainfall in next week (mm)						
TELAN	NGANA		Augu	st / Septe	mber				Septemb	er			
		30	30 31 01 02 03 05 06 07						07	08	09		
Latina	Adilabad	45	7	63	0	31	13	25	17	36	25		
Statement Fort gall Statement Statem	Warangal	0	25	60	30	8	46	15	16	41	23		
Make States of Kongoline Kongoline Should be States of S	Khammam	12	58	25	10	2	36	47	28	58	26		
Samuel Common March	Karimnagar	11	3.1	45.5	40.7	0.6	16	6	8	26	7		
Control	Mahabubnagar	0	13	49	19	16	14	2	11	3	4		
Amount of rainfall & colour Code		0.1	to 2.4 mm	2.5 to 15.5 mm		15.6 to 6	4.4 mm	64.5 to 115.5 mm		115.6 to	204.4		
Rainfall category	Rainfall category		light rainfall	Light rainfall Modera			e rainfall Heavy rainfall			Very heavy rainfall			

#### **Crop Condition:**

At Warangal, the sown crop is 64 to 74 days at square formation / flowering and boll development stage. Foliar application of NPK nutrients, pesticide sprays against pests and diseases were done. Infestation of thrips and jassids were noticed above ETL and TSV (<5%).

At Adilabad, the sown crop is 68 to 73 days old at vegetative stage. Foliar application of nutrients, pest management, manual weeding and intercultural operations have been completed. Infestation of aphids was noticed below ETL but thrips and jassid were above ETL. PBW Infestation has just started in the form of rosette flowers

#### Advisory:

At Warangal, farmers are advised to give foliar application of 19-19-19 or13-0-45 @10 g/litre of water. If any sucking pest infestation reported near ETL, spray with Neem based insecticide or NSKE 5%+ Neem oil 5 ml /litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) + 0.05% surfactant. Install yellow sticky traps @ 8/acre to monitor whitefly and jassidInfestation. 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 Pyrithiobac sodium 10 % EC @ 1.5 ml/litre of water for broad leaved

weeds or Pyrithiobac sodium 6% + Quizalofop Ethyl 4% MEC @ 2-2.5 ml/litre of water to control both grassy and broad-leaved weeds. Spray Flonicamid 50% WG @ 80 g/acre or Dinotefuran 20% SG @ 60 g/acre or Imidacloprid 17.8% SL @ 60 ml/acre or Tolfenpyrod 15% EC @ 400 ml/acre or Fenpyroximate 5% EC @ 300 ml/acre against sucking pests when infestation seen above ETL.Foliar spray of Carbendazim 12%+Mancozeb 63% WP@30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease complex and leaf spots in cotton.

At Adilabad, farmers are advised to give foliar application of nutrients 19-19-19 or 13-0-45 @10g/lit of water. Install yellow and blue sticky traps @ 8/ acre to monitor thrips. Do not spray any insecticides to control early stage sucking pests which might kill entire natural enemy population and delay the crop maturity. Instead, spray NSKE 5% + Neem formulation 5 ml /litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) + 0.05% surfactant at 50 DAS. Spray Flonicamid 50% WG @ 80 g/acre or Dinotefuran 20% SG @ 60 g/acre or Imidacloprid 17.8% SL @ 60 ml/acre or Tolfenpyrod 15% EC @ 400 ml/acre or Fenpyroximate 5%EC @ 300 ml/acre if infestation ofsucking pests seen above ETL. Install pheromone traps @ 2 per acre to monitor pink bollworm moth activity, change lure as per validity. Collect and destroy rosette flowers. Spray Profenofos 50% EC @ 30 ml/10 L (1500 ml/ha) Or Emamectin benzoate 5% SG @ 5 g/10 L (250 g/ha) to manage pink bollworm. Foliar spray of Carbendazim 12%+Mancozeb 63% WP@30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease complex and leaf spots in cotton.

In case of water logging conditions, ensure proper drainage in the fields to drain out excessrainwater by providing adequate slope and drainingexcessive stagnating water around the root system at the earliest possible. Due to waterlogged situation cotton crop suffers frominadequacy of nutrients causes reddening and chlorosisin leaves due to poor uptake by roots under anerobic conditions in soil. Foliar application of 1.0 % Urea or DAP or 19:19:19 at 15 days interval isrecommended

If parawilt or sudden wilt occur due to heavy rain and water logging after dry spell, drenching to be done for affected plants/rows with a mixture of Copper oxychloride 25 g + 200 g Urea in 10 liters of water immediately after occurrence of Parawilt within 48 h can revive the plants.

		1	Actual Raiı			)	Predicted Rainfall in next week (mm)						
ANDHRA P	RADESH	August / September					September						
		30 31 01 02 03 05 06 07 0							08	09			
	Guntur	33	28	134	0	3	5	3	1	2	5		
	Prakasam	18	36	66.9	0.8	0	3	1	1	1	1		
Amount of rainfall 8	& colour Code	0.1 to	2.4 mm	2.5 to 1	5.5 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 Moderat			derate rainfall Heavy rainfall		rainfall	Very heavy rainfall			

#### **Crop Condition:**

At Guntur, sown crop is 42 to 60 days old at vegetative to square formation stage. Due to heavy rains field were completely inundated with water. Water was drained out from the fields immediately after receding the rains.

At Nandyal, the crop is flowering and boll formation stage. Excess rain water was drained out from the fields and managed flooding related disorders. Incidence of boll rot was noticed in few fields.

#### Advisory:

At Guntur, farmers who are yet to take up sowing are advised to treat seeds with imidacloprid 600 FS@9 ml/kg seed and *Pseudomonas fluorescens* @10 g/kg or *Trichoderma viride* @8 g/Kg seed or Carboxin 37.5% + Thiram 37.5% DS @3.5 g per kg of seeds (root rot and bacteria diseases) or Fluxapyroxad (333 g/L FS) @1.5 ml per kg seedor Tetraconazole 11.6% W/W (12.5% w/v) SL @1.5 ml per kg of seeds to manage seed and soil borne diseases. Give pre-emergence application of Pendimethalin 30 EC @ 1.5 litre/acre within 48 hours of sowing cotton and basal application of  $P_2O_5$  @ 60 kg/acre and 50 kg N and 20 Kg K<sub>2</sub>O per acre within 30 DAS. In the field where crop is already sown which is in in vegetative stage, drain out excess water from the standing crop.Apply N and K as a booster dose @ 25-30 kg urea with 10 kg MoP/acre. Give foliar application of 1- 2% Potassium Nitrate or 1- 2% urea + 1% MoP or 1-2% DAP. In case of any micronutrient deficiencies, spray1%MgSO<sub>4</sub>(10 g/l) and Borax or Boric acid @1-1.5 g/lit to avoid flower and young boll drop.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 Pyrithiobacsodium 10%EC @ 1.5 ml/lit water for broad leavedweeds or Pyrithiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leavedweeds. Spray Mepiquat chloride @1 ml/litre of water at 75-100 days crop

or follow nipping. to prevent excess vegetative growth. If reddening is noticed, spray 1- 2% Potassium Nitrate + spray1%MgSO<sub>4</sub> (10 g/l) twice at 15 days interval. Spray NAA @ 2.5 ml in 10 lit of water to prevent excess flower drop. Spray 600g/acre of Copper oxychloride as prophylactic measure to prevent boll rot diseases in cotton and (Carbendazim + Mancozeb) @ 2.5g/lit to prevent foliar diseases. Give spot drenching of COC twice at 10-15 days interval @ 3g/lit or Carbendazim @1g/lit if wilting of plants are noticed. Manage initial population of sucking pests by spraying NSKE 5%+ Neem oil 5 ml /litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) + 0.05% surfactant. Spray Flonicamid 50% WG @ 80 g/acre or Dinotefuran 20% SG @ 60 g/acre or Imidacloprid 17.8% SL @ 60 ml/acre or Tolfenpyrod 15% EC @ 400 ml/acre or Fenpyroximate 5%EC @ 300 ml/acre if infestation of sucking pests seen above ETL.

At Nandyal, farmers are advised todrain out the water from the fields and spray potassium nitrate @ 20g/litre of water and 19-19-19 @ 5g/litre of water to manage flooding related disorders. In case of moist soil condition where manual weeding is not possible, apply herbicides like Quizalofop ethyl 5% EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyrithiobac sodium 10% EC @1.5 ml/litre of water for broad leaved weeds or Pyrithiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leaved weeds. Spray neem-based pesticide 1 L /acre. Install yellow and blue sticky traps@ 8/acre against sucking pests and pheromone traps @2/acre to monitor pink bollworm incidence. Change lure as per validity. To prevent infestation by sucking pests like aphids, spray NSKE 5% + Neem formulation 5 ml /litre or neem oil-based formulation 5 ml /litre (300 or 1500 ppm) + 0.05% surfactant. In case of high sucking pests' infestation, spray Flonicamid 50% WG @ 80 g/acre or Dinotefuran 20% SG @ 60 g/acre or Imidacloprid 17.8% SL @ 60 ml/acreor Buprofezin 25 SC @ 400 ml/acre. Spray Profenofos 50% EC @ 30 ml/10 L (1500 ml/ha) Or Emamectin benzoate 5% SG @ 5 g/10 L (250 g/ha) to manage pink bollworm.As a prophylactic measure, give a spray of Carbendazim 12%+Mancozeb 63% WP@30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water to manage boll rot disease complex, leaf spots due to humidity and congenial weather factors.

If parawilt or sudden wilt occur due to heavy rain and water logging after dry spell, drenching to be done for affected plants/rows with a mixture of Copper oxychloride 25 g + 200 g Urea in 10 liters of water immediately after occurrence of Parawilt within 48 h can revive the plants.

			Actual Ra	infall in las	st week(mr	n)	Pro	edicted Ra	infall in ne	xt week (m	m)		
KAI	RNATAKA		Aug	just / Sept	ember		September						
		31	01	02	03	05	06	07	08	09			
	Dharwad	1	0	0	0.6	0	5	4	4	5	5		
	Haveri	0	0	0	0	0	4	3	4	5	5		
	Mysore	2.3	5	0	0	0	4	3	3	6	5		
Amount of rair	nfall & colour Code	0.1 to	2.4 mm	2.5 to 1	5.5 mm	15.6 to 6	64.4 mm	64.5 to 1	15.5 mm	115.6 to	204.4		
Rainfall catego	Rainfall category		ht rainfall	Light i	rainfall	Moderate rainfall Heavy rainfall \			Very hear	vy rainfall			

#### **Crop Condition:**

At Dharwad, the sown crop is 81 to 86 days old at flowering to square formation stage. Weeds have dominated the fields. Hand weeding, intercultural operations and spraying of nutrients and insecticides were taken up. Sucking pests like thrips, aphids and leaf hoppers, shoot weevil infestations were noticed in few pockets. Incidence of Alternaria blight (*Alternaria macrospora*) was reported in moderate status.

At Raichur, the early sown crop is 77to 83 days old at flowering stage, late sown 55 to 60 days old at squaring stage and very late sown 40 to 45 days old at vegetative stage. Due to continuous rains, the cotton fields are infested with more weeds. Manual weeding and intercultural operations were taken up. Incidence of boll rot was noticed in some fields.

At Chamarajanagar, the crop is 100 to 115 days old at boll formation to boll development stage. Top-dressing of Potash fertilizer, weeding, inter cultivation and earthing-up operations were done. *Cyprus* spp. weeds have dominated the fields.Infestations of leafhopper (5-6/3leaves), Aphids (30-40/3 leaves), Mirid bug (5-6/25 squares) and PBW 5-6% were noticed.

# Advisory:

At Dharwad, farmers are advised to take up hand weeding and intercultivation to manage weeds in the fields wherever cotton crop is sown. Spray Flonicamid 50 WG @ 80 g/acre or Buprofezin 25 SC @ 400 ml/acre or Diafenthiuron 50 WP @ 240 g/acre once sucking pests' crosses ETL. Install pheromone traps @ 2 per acre to monitor pink bollworm moth activity, change lure as per

validity. Spray Profenofos 50% EC @ 30 ml/10 lit (1500 ml/ha) or Emamectin benzoate 5% SG @ 5g/10 lit (250 g/ha) of water to manage pink bollworm if infestation crosses ETL. Give foliar spray of Carbendazim 12%+Mancozeb 63% WP@30 g or Propineb 70%WP @2.5-3 g/lit or Propiconazole 25 EC @1 ml/lit or Carbendazim 50 WP @0.4g/ lit of water to manage boll rot disease complex and leaf spots.if noticed in the cotton fields. Spray (Pyroclostrabin 5%+ Metiram 55% WG) @3.5 g/lit of water to manage Alternaria blight.

At Raichur, farmers are advised to take up weeding on time. Give recommended dose of fertilizers (DAP, MOP and MgSO<sub>4</sub>) for the very late sown and early sown crop as per the stipulated crop duration period. In case of moist soil condition where manual weeding is not possible, go for applicationof herbicides like Quizalofop ethyl 5 %EC @ 2 ml /litre of water if the field is infested with grassy weeds or Pyrithiobacsodium 10%EC @ 1.5 ml/lit water for broad leavedweeds orPyrithiobac sodium 6% + Quizalofop Ethyl 4% MEC @2-2.5 ml /litre of water to control both grassy and broad-leavedweeds.Manage leafhoppers by spraying Flonicamid @ 0.4g or Thiamethoxam @ 0.2g in 1 lit of water. In case of sucking pests above ETL, spray Flonicamid 50 % WG @ 80 g/acre or Dinotefuran 20% SG @ 60 g/acre or Imidacloprid 17.8% SL @ 60 ml/acre or Buprofezin 25 SC @ 400 ml/acre. Spray Profenofos @ 400 ml and Chlorpyrifos @ 500 ml/acre to manage pink bollworm in cotton. For early sown crop, install pheromone traps @ 4/acre to monitor pink boll worm population. To early sown crop, give first foliar spray of 19:19:19 (10 grams in 1 litre of water) + MgSO<sub>4</sub> (10 grams in 1 litre of water) for better growth, boll retention and to manage leaf reddening problem. In case of high sucking pestspests' infestation, spray Flonicamid 50% WG @ 80 g/acre or Dinotefuran 20% SG @ 60 g/acre or Imidacloprid 17.8% SL @ 60 ml/acre or Buprofezin 25 SC @ 400 ml/acre. .Spray Profenofos 50% EC @ 30 ml/10 L (1500 ml/ha) Or Emamectin benzoate 5% SG @ 5 g/10 L (250 g/ha) to manage pink bollworm. Foliar spray of Carbendazim 12%+Mancozeb 63% WP@30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease complex and leaf spots in cotton.

At Chamarajanagar, farmers are advised to take up hand weeding and intercultivation operations to control weeds. In case of sucking pests above ETL, spray Flonicamid 50% WG @ 80 g/acre or Dinotefuran 20% SG @ 60 g/acre or Imidacloprid 17.8%SL @ 60 ml/acre or Buprofezin 25 SC @ 400 ml/acre. Install pheromone traps @ 8/ acre to monitor pink bollworm attack. Spray Profenofos 50% EC @ 30 ml/10 L (1500 ml/ha) Or Emamectin benzoate 5% SG @ 5 g/10 L (250 g/ha) to manage pink bollworm. Foliar spray of Carbendazim 12%+Mancozeb 63% WP@30 g or Propineb 70% WP @2.5-3 g/litre or Propiconazole 25 EC @1 ml/litre or Carbendazim 50 WP @0.4 g per litre of water is recommended to manage boll rot disease complex and leaf spots in cotton.

TAI	MIL NADU	Δ.	ctual Rainf	all in last	week(mn	1)	Predicted Rainfall in next week (mm)						
			Augus	t / Septer	mber		September						
		30	30 31 01 02 03 05 06							08	09		
A 45 F	Perambalur	0	0	0	0	0	3	2	0	0	2		
3	Salem	8	7	0	9	0	4	2	0	2	2		
	Trichy						1	1	0	0	1		
	Virudhunagar						0	1	0	0	0		
Amount of rainfall & colour Code 0.1 to 2.4 m				0.1 to 2.4 mm 2.5 to 15.5 mm 15.6 to				to 64.4 mm 64.5 to 115.5 mm 115.6 to					
Rainfall catego	ory	Very light rainfall Light rainfall I				Moderate rainfall Heavy rainfall Very heav				/ rainfall			

#### **Crop Condition:**

At Coimbatore and surrounding areas, the crop is around 14 to 42 days old at initial to vegetative growth stage. Sowing is still in progress. Intercultural operations and foliar spray of insecticides and spot drenching were done. Weeds like *Cyperusrotundus, Tridaxprocumbens* and *Parthenium* have spread in the fields. Incidence of thrips and leaf hopper were recorded below ETL. Collar rot was noticed in few fields.

At Srivilliputhur in and around fields, sowing has commenced. The sown cotton is 0 to 10 days old at germination stage. Land preparation and sowing in some parts are in progress. Weeds have started to appear in the fields. No incidence of pests and diseases.

### Advisory:

At Coimbatore and surrounding areas, farmers are advised to do earthing up. Take up gap filling 10 DAS and thinning of seedlings on 15 days old crop. Do hand weeding on more than 25 days old crop depending on the weed intensity. Give top dressing with Urea and Potash @50:25 kg/ha for hybrids and for variety @35:20kg/ha. Monitor the crop scrupulously for pest and disease incidence. To manage sucking pests, take up foliar spray with Fipronil5% SC 1500-2000ml/ha orFlonicamid 50% WG @150g/ha. Do spot drenching with Carbendazim 50 WP@12 g/10 lit of water or (Trifloxystrobin + Tebuconazole) @ 0.75g/lit at the base of affected

plants and surrounding healthy plants to manage collar rot incidence. Drench the soil with *Bacillus subtilis* @10ml/lit of water to manage soil borne diseases.

At Srivilliputhur in and around fields, farmers are advised to follow optimum seed rate viz.,15,20 and 2.5 kg/ha for varieties, rainfed and hybrid cotton respectively. Treat the seeds with 600g of Azospirillum and 600g of Phospobacteria or 600g of Azophos for one hectare. To maintain optimum plant population, go for recommended spacing of 75x30 cm, 45x15 cm and 120 or 90x60 cm for varieties, rainfed and hybrid cotton, respectively. Follow soil test based fertilizer recommendation or blanket recommendation of 80:40:40, 40:20:20 and 120:60:60 kg/NPK/ha for varieties, rainfed and hybrid cotton, respectively. At the time of sowing, apply basal full dose of P and half dose of N and K. Follow crop rotation where heavy infestation of stem weevil and bollworm complex are prominent. During final plough, apply neem cake @ 250 kg/ha to prevent stem weevil infestation. Clean the farm bunds and other premises to destroy the alternate host of insect pests such as *Abutilon* and other grassy weeds. Treat the seeds with *Trichoderma asperellum* @4g/kg of seeds and soil application at 2.5 kg /ha to prevent the plants from root rot disease.