

PEST SITUATION ON COTTON CROP IN PUNJAB DURING 3RD WEEK OF OCTOBER, 2020

Pest Situation of Cotton Pests								
Sr. No.	Pest Name	%age of spots						Remarks
		Current Week		Previous week		Corresponding week of Last Year		
		AETL	BETL	AETL	BETL	AETL	BETL	
1	Whitefly	29.98	67.84	39.44	59.41	12.25	77.21	Decreasing
2	Jassid	4.97	72.31	6.01	79.12	3.35	70.47	Decreasing
3	Thrips	0.04	58.63	0.14	68.23	0.00	44.85	Low
4	Mealy Bug	14.09	-	17.00	-	13.68	-	Decreasing
5	Mites	0.00	0.15	0.00	0.14	0.00	0.00	Low
6	Dusky Cotton Bug	5.84	41.67	3.73	37.55	4.90	40.48	Increasing
7	Pink Bollworm	14.44	35.71	14.73	35.56	12.09	35.09	Sustaining
8	American Bollworm	0.00	0.11	0.00	0.14	0.00	0.12	Low
9	Spotted Bollworm	0.00	0.27	0.00	0.80	0.00	0.65	Low
10	Armyworm	4.70	-	5.54	-	3.15	-	Decreasing
11	CLCuV	16.58	-	19.28	-	9.72	-	Decreasing

Tehsil wise percentage of hot spots of Whitefly

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	KOT CHUTTA	78.2	32	MAILSI	21.7
2	D.G.KHAN	69.1	33	CHICHA WATNI	20.8
3	JALAL PUR P.W	63.9	34	BURE WALA	20.0
4	MINCHAN ABAD	62.8	35	SHORKOT	20.0
5	MULTAN	60.0	36	CHOBARA	19.6
6	CHISHTIAN	53.6	37	LAYYAH	18.5
7	A.P.EAST	51.7	38	MUZUFAR GARH	18.4
8	MIAN CHANNU	50.0	39	JATOI	18.4
9	SADIQ ABAD	48.9	40	DEPALPUR	17.6
10	LIAQUAT PUR	48.0	41	DARYA KHAN	15.4
11	HAROON ABAD	45.5	42	OKARA	15.2
12	TAUNSA	45.5	43	JAM PUR	15.0
13	FORT ABBAS	44.4	44	A.P SIAL	13.6
14	SHUJABAD	44.0	45	18-HAZARI	13.3
15	BAHAWAL NAGAR	44.0	46	ISA KHEL	13.3
16	HASILPUR	43.5	47	ARIF WALA	12.5
17	R.Y.KHAN	43.3	48	KOT ADDU	12.5
18	KHANEWAL	42.9	49	KALLOR KOT	11.8
19	KHAN PUR	42.6	50	GOJRA	10.3
20	BAHAWAL PUR	39.0	51	MIANWALI	10.0
21	ALI PUR	34.0	52	MANKERA	10.0
22	KAROR L.E.	31.6	53	SAHIWAL	9.7
23	KABIR WALA	27.5	54	RENALA KHURD	9.3
24	DUYAPUR	27.5	55	BHAKKAR	7.7
25	LODHRAN	27.3	56	PAK PATTAN	7.1
26	YAZMAN	26.0	57	PIPLAN	6.7
27	KEHROR PACCA	25.5	58	SUMUNDRI	5.9
28	RAJAN PUR	24.0	59	T.T.SINGH	2.4
29	VEHARI	23.3	60	TANDLIANWALA	2.3
30	JAHANIAN	23.3	61	JHANG	2.2
31	ROJHAN	22.5			

Tehsil wise percentage of hot spots of Jassid

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	CHICHA WATNI	45.3	20	LAYYAH	5.6
2	SAHIWAL	30.6	21	MINCHAN ABAD	4.7
3	GOJRA	20.7	22	JHANG	4.4
4	DEPALPUR	17.6	23	JATOI	4.1
5	T.T.SINGH	14.3	24	TAUNSA	3.6
6	KAROR L.E.	14.0	25	VEHARI	3.3
7	RENALA KHURD	11.6	26	MIANWALI	3.3
8	FAISALABAD	11.1	27	PIPLAN	3.3
9	CHOBARA	10.7	28	ARIF WALA	2.5
10	OKARA	9.1	29	PAK PATTAN	2.4
11	A.P SIAL	9.1	30	LODHRAN	2.3
12	CHISHTIAN	8.9	31	HAROON ABAD	2.3
13	TANDLIANWALA	7.0	32	HASILPUR	2.2
14	FORT ABBAS	6.7	33	LIAQUAT PUR	2.0
15	18-HAZARI	6.7	34	KEHROR PACCA	2.0
16	PIR MAHAL	6.7	35	MAILSI	1.7
17	BAHAWAL NAGAR	6.0	36	BURE WALA	1.7
18	ALI PUR	6.0	37	R.Y.KHAN	1.7
19	SUMUNDRI	5.9			

Tehsil wise percentage of hot spots of Thrips

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	TAUNSA	1.8			

Tehsil wise percentage of hot spots of Mealy bug

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	KOT CHUTTA	49.1	26	BAHAWAL NAGAR	12.0
2	D.G.KHAN	38.2	27	KHANEWAL	11.9
3	BAHAWAL PUR	35.6	28	VEHARI	11.7
4	KHAN PUR	33.3	29	LODHRAN	11.4
5	YAZMAN	32.0	30	JALAL PUR P.W	11.1
6	TAUNSA	29.1	31	OKARA	9.1
7	FORT ABBAS	28.9	32	MUZUFAR GARH	7.9
8	CHISHTIAN	28.6	33	DARYA KHAN	7.7
9	LIAQUAT PUR	28.0	34	KABIR WALA	7.5
10	SADIQ ABAD	26.7	35	LAYYAH	7.4
11	BURE WALA	25.0	36	RENALA KHURD	7.0
12	MIAN CHANNU	21.1	37	A.P.EAST	6.7
13	R.Y.KHAN	20.0	38	18-HAZARI	6.7
14	RAJAN PUR	20.0	39	MIANWALI	6.7
15	ROJHAN	17.5	40	PIPLAN	6.7
16	MAILSI	16.7	41	ISA KHEL	6.7
17	MINCHAN ABAD	16.3	42	KEHROR PACCA	5.9
18	MULTAN	16.0	43	DEPALPUR	5.9
19	SHUJABAD	16.0	44	CHICHA WATNI	5.7
20	HASILPUR	15.2	45	PAK PATTAN	4.8
21	DUYAPUR	15.0	46	JAHANIAN	4.7
22	JAM PUR	15.0	47	A.P SIAL	4.5
23	ALI PUR	14.0	48	JHANG	4.4
24	HAROON ABAD	13.6	49	CHOBARA	3.6
25	KAROR L.E.	12.3	50	T.T.SINGH	2.4

No Hot Spots of Mites In Any Tehsil

Tehsil wise percentage of hot spots of Dusky Cotton Bug

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	HASILPUR	47.8	15	DUYAPUR	7.5
2	JALAL PUR P.W	41.7	16	KOT ADDU	7.5
3	BAHAWAL PUR	33.9	17	CHISHTIAN	7.1
4	SHUJABAD	24.0	18	JAHANIAN	7.0
5	ALI PUR	22.0	19	LODHRAN	6.8
6	MULTAN	14.0	20	KABIR WALA	5.0
7	VEHARI	13.3	21	BURE WALA	5.0
8	YAZMAN	12.0	22	MINCHAN ABAD	4.7
9	KHANEWAL	11.9	23	HAROON ABAD	4.5
10	MAILSI	8.3	24	FORT ABBAS	4.4
11	MIAN CHANNU	7.9	25	BAHAWAL NAGAR	4.0
12	MUZUFAR GARH	7.9	26	GOJRA	3.4
13	KEHROR PACCA	7.8	27	PIR MAHAL	3.3
14	BHAKKAR	7.7			

Tehsil wise percentage of hot spots of Army Worm

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	KEHROR PACCA	25.5	17	KHAN PUR	5.6
2	MULTAN	20.0	18	CHISHTIAN	5.4
3	A.P.EAST	20.0	19	KABIR WALA	5.0
4	JALAL PUR P.W	19.4	20	KHANEWAL	4.8
5	LODHRAN	13.6	21	MINCHAN ABAD	4.7
6	DUYAPUR	12.5	22	FORT ABBAS	4.4
7	KOT CHUTTA	10.9	23	YAZMAN	4.0
8	MIAN CHANNU	10.5	24	BAHAWAL NAGAR	4.0
9	CHICHA WATNI	9.4	25	TAUNSA	3.6
10	D.G.KHAN	9.1	26	R.Y.KHAN	3.3
11	SHUJABAD	8.0	27	MIANWALI	3.3
12	LIAQUAT PUR	8.0	28	PIPLAN	3.3
13	KAROR L.E.	7.0	29	JAHANIAN	2.3
14	BAHAWAL PUR	6.8	30	HAROON ABAD	2.3
15	SADIQ ABAD	6.7	31	JHANG	2.2
16	SAHIWAL	6.5			

Tehsil wise percentage of hot spots of Pink Bollworm

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	JALAL PUR P.W	36.1	28	LAYYAH	13.0
2	MULTAN	32.0	29	ARIF WALA	12.5
3	SAHIWAL	30.6	30	BAHAWAL NAGAR	12.0
4	DUYAPUR	30.0	31	BAHAWAL PUR	11.9
5	LODHRAN	29.5	32	A.P.EAST	11.7
6	KEHROR PACCA	29.4	33	FORT ABBAS	11.1
7	SADIQ ABAD	26.7	34	KAROR L.E.	10.5
8	SHUJABAD	26.0	35	GOJRA	10.3
9	ALI PUR	26.0	36	JATOI	10.2
10	KHAN PUR	25.9	37	YAZMAN	10.0
11	KABIR WALA	25.0	38	KOT ADDU	10.0
12	VEHARI	25.0	39	KOT CHUTTA	9.1
13	CHICHA WATNI	24.5	40	DARYA KHAN	7.7
14	BURE WALA	23.3	41	D.G.KHAN	7.3
15	MIAN CHANNU	21.1	42	PAK PATTAN	7.1
16	MAILSI	20.0	43	MINCHAN ABAD	7.0
17	PIR MAHAL	20.0	44	MIANWALI	6.7

18	CHOBARA	19.6	45	SUMUNDRI	5.9
19	T.T.SINGH	19.0	46	KALLOR KOT	5.9
20	LIAQUAT PUR	18.0	47	FAISALABAD	5.6
21	KHANEWAL	16.7	48	SHORKOT	5.0
22	JAHANIAN	16.3	49	TANDLIANWALA	4.7
23	BHAKKAR	15.4	50	A.P SIAL	4.5
24	R.Y.KHAN	15.0	51	PIPLAN	3.3
25	CHISHTIAN	14.3	52	HAROON ABAD	2.3
26	MUZUFAR GARH	13.2	53	TAUNSA	1.8
27	HASILPUR	13.0			

No Hot Spots of American Bollworm In Any Tehsil

No Hot Spots of Spotted Bollworm In Any Tehsil

Tehsil wise percentage of hot spots of CLCuV

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	ALI PUR	66.0	25	BHAKKAR	15.4
2	JALAL PUR P.W	55.6	26	KHAN PUR	14.8
3	MULTAN	50.0	27	MIAN CHANNU	13.2
4	MUZUFAR GARH	44.7	28	KAROR L.E.	12.3
5	VEHARI	43.3	29	JATOI	10.2
6	BURE WALA	43.3	30	MANKERA	10.0
7	SHUJABAD	38.0	31	DARYA KHAN	7.7
8	SADIQ ABAD	35.6	32	CHICHA WATNI	7.5
9	HASILPUR	34.8	33	MINCHAN ABAD	7.0
10	TAUNSA	32.7	34	18-HAZARI	6.7
11	D.G.KHAN	30.9	35	MIANWALI	6.7
12	KOT CHUTTA	30.9	36	KALLOR KOT	5.9
13	LIAQUAT PUR	30.0	37	CHISHTIAN	5.4
14	KOT ADDU	27.5	38	SHORKOT	5.0
15	DUYAPUR	25.0	39	PAK PATTAN	4.8
16	KEHROR PACCA	21.6	40	JAHANIAN	4.7
17	BAHAWAL PUR	20.3	41	HAROON ABAD	4.5
18	A.P.EAST	20.0	42	FORT ABBAS	4.4
19	KHANEWAL	19.0	43	JHANG	4.4
20	LODHRAN	18.2	44	BAHAWAL NAGAR	4.0
21	CHOBARA	17.9	45	PIPLAN	3.3
22	KABIR WALA	17.5	46	SAHIWAL	3.2
23	MAILSI	16.7	47	ARIF WALA	2.5
24	R.Y.KHAN	16.7			

FORECAST FOR THE NEXT WEEK

Meteorological data of the current week 2019-2020

Districts	2020				2019			
	Temperature °C		R.H%	Rainfall (mm)	Temperature °C		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
MULTAN	34.57	18.43	70.43	0.00	34.43	21.43	81.50	0.00
KHANEWAL	35.26	19.57	64.29	0.00	35.00	20.75	70.25	0.00
VEHARI	34.00	19.17	68.75	0.00	34.00	21.71	67.64	0.00
LODHRAN	34.57	19.86	66.79	0.00	36.00	22.29	68.71	0.00
Sahiwal	35.14	17.21	58.00	0.00	33.20	19.94	65.07	0.00
Pakpattan	34.88	18.00	53.75	0.00	36.38	20.00	54.00	0.00
Okara	34.68	22.00	61.00	0.00	35.41	21.00	65.00	0.00
Bahawalpur	36.20	18.64	52.64	0.00	33.66	20.50	75.57	0.00
Bahawalnagar	35.50	19.13	50.69	0.00	34.88	20.38	56.75	0.00
R.Y.Khan	36.75	23.00	34.88	0.00	36.63	22.50	79.13	0.00
D.G. Khan	34.00	20.71	65.71	0.00	34.14	21.86	49.71	0.00
Muzaffar Garh	35.25	21.83	49.33	0.00	34.25	20.80	46.25	0.00
Rajanpur	38.6	19.4	63.10	0.00	36.30	20.2	60.20	0.00
Layyah	33.43	16.57	62.29	0.00	33.14	19.57	61.00	3.00
AVERAGE	35.20	19.54	58.69	0.00	34.82	20.92	64.34	3.00

Weather forecast for next 7 day in cotton zone

Division	Dated	21/10	22/10	23/10	24/10	25/10	26/10	27/10
Multan	Max.Temp.	35	34	33	33	32	32	32
	Min.Temp.	19	18	17	18	16	17	18
	Humidity %	15	16	14	16	18	20	9
Sahiwal	Max.Temp.	34	34	34	34	33	32	31
	Min.Temp.	18	17	18	16	18	16	18
	Humidity %	18	20	15	17	25	20	9
Bahawalpur	Max.Temp.	35	35	34	34	32	34	33
	Min.Temp.	21	18	20	17	18	17	16
	Humidity %	17	17	13	20	23	20	10
D.G. Khan	Max.Temp.	36	35	34	34	33	33	32
	Min.Temp.	16	15	15	17	15	17	18
	Humidity %	13	13	11	13	18	20	7
Average Cotton Region	Max.Temp.	33.46						
	Min.Temp.	17.29						
	Humidity %	15.96						

Source: timeanddate.com

Summary of weather forecast

Overall weather for seven days in cotton zone during next week will remain mild hot.

Pest Forecast for Next 15 days

Avg. Temperature for next 15 days = **31.26°C**

Avg. Relative Humidity for next 15 days = **23.14%**

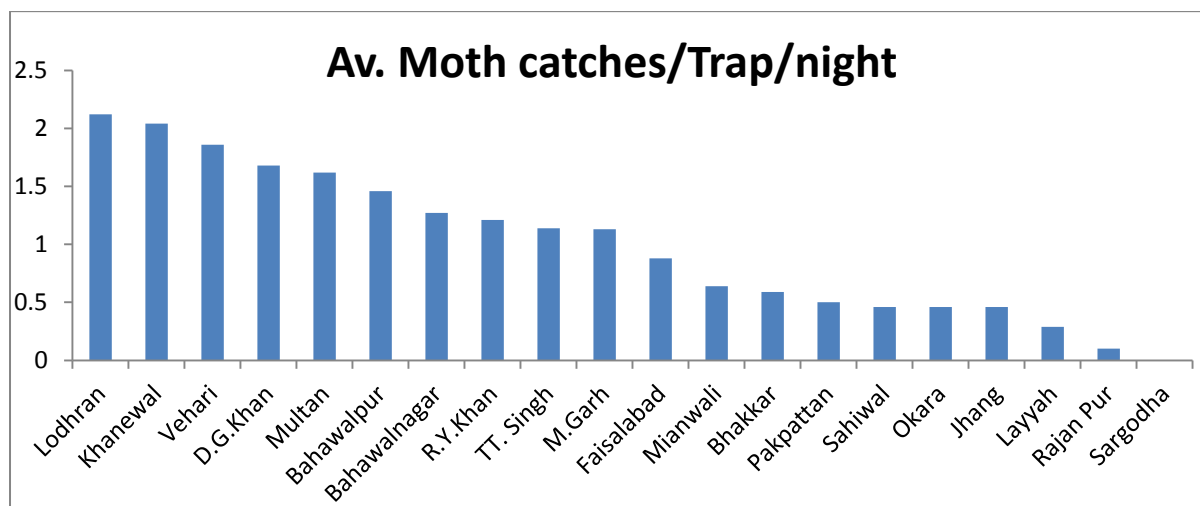
Sr. No.	Pest Name	Opt. Temperature	Relative Humidity	Pest Prediction
1	Whitefly	35-42 °C	<50%	May Decrease
2	Jassid	35-40 °C	>70%	May Decrease
3	Thrips	35-40 °C	<60%	May be Low
4	Mealy Bug	35-40 °C	<60-80%	May Decrease
5	Mites	28-40 °C	<40-50%	May be Low
6	Dusky Cotton Bug	28-40 °C	<50-80%	May Increase
7	Pink Bollworm	32-40 °C	<60-80%	May Sustain
8	American Bollworm	32-40 °C	<50-70%	May be Low
9	Spotted Bollworm	30-40 °C	<60-100%	May be Low
10	Armyworm	30-40 °C	>70-100%	May Decrease
11	CLCuV	-	-	May Decrease

Forecast of Sucking Pests:

Moth Catches in Pheromone Traps during 3rd Week of October, 2020

Moth Catches in Pheromone Traps During 3 rd Week of October, 2020			
District	Traps Installed	Moth catches/Trap/week	Av. Moth catches/Trap/night
Multan	6	68	1.62
Khanewal	8	114	2.04
Vehari	6	78	1.86
Lodhran	6	89	2.12
Sahiwal	4	13	0.46
Pakpattan	4	14	0.50
Okara	4	13	0.46
Bahawalpur	8	82	1.46
Bahawalnagar	10	89	1.27
R.Y.Khan	8	68	1.21
D.G.Khan	6	47	1.68
M.Garh	8	63	1.13
Rajan Pur	6	4	0.10
Layyah	6	12	0.29
Sargodha	2	0	0.00
Mianwali	4	18	0.64
Bhakkar	8	33	0.59
Faisalabad	6	37	0.88
TT. Singh	6	48	1.14
Jhang	8	13	0.46

Note. 3 moth catches on 3 consecutive nights in a trap is considered as ETL



Moth catches on light traps during 3rd Week of October, 2020

Moth Catches on Light Traps/Trap/week During 3 rd Week of October, 2020				
District	Traps Installed	A.B.W	S.B.W	Armyworm
Multan	3	0	0	11
Khanewal	4	0	0	33
Vehari	3	0	0	10
Lodhran	3	0	0	37
Sahiwal	2	6	0	8
Pakpattan	2	3	0	6
Okara	3	4	0	5
Bahawalpur	4	2	1	12
Bahawalnagar	5	8	3	12
R.Y.Khan	4	4	2	9
D.G.Khan	3	6	4	7
M.Garh	4	8	8	5
Rajan Pur	3	0	0	0
Layyah	3	4	0	3

Note. 3 moth catches of a pest on 3 consecutive nights in a trap is considered as ETL

RECOMMENDATIONS

WHITEFLY MANAGEMENT

1. Conduct regular pest scouting of Whitefly.
2. Control the pest without delay when population reaches ETL i.e. nymphs or adults or both 5 per leaf.
3. Control weeds in and outside the field especially near water channels and fallow lands.
4. Apply among the following recommended insecticide at ETL and repeat the spray with alternate insecticides if required;

Sr#	CHEMICAL NAME	DOSE (Per Acre)
1	Spirotetramate	125 ml
2	Pyriproxifen 10.8 EC	500 ml
3	Buprofezin	600 gm
4	Flunicamid 50 WG	60-80 gm
5	Diafenturon	200 ml

Alternate host plants of whitefly

Crops	Vegetables	Orchards	Weeds/ Ornamentals	Trees
Sunflower	Okra	Citrus	Gardenia	Shisham
Tobacco	Brinjal	Litchi	Mako	Shareen
	Cucurbits	Pomegranate	Maina	
	Tomato	Ber (<i>Zizyphus</i>)	Karund	
	Cabbage	Guava	Lehli	
	Cauliflower	Mulberry		
	Peas	Papaya		
	Potato			
	Onion			
	Spinach			

JASSID MANAGEMENT

1. Eradicate weeds.
2. Conduct Pest Scouting at least twice a week.
3. Use *Chrysoperla* Cards @ 80-90 cards per acre having 20-25 eggs/card
4. Apply among the following recommended insecticide at ETL and repeat the spray with alternate insecticides if required;

Sr#	CHEMICAL NAME	DOSE (Per Acre)
1	Flunicamid 50 WG	60 gm
2	Fipronil+Imidacloprid	60 gm
3	Nitenpiram 10 AS	200 ml
4	Dinotefuron 20 SG	100 gm
5	Dimethoate 40 EC	330-400 ml
6	Thiacloprid 480 SC	200 ml

THRIPS MANAGEMENT

1. Conduct Pest Scouting regularly at least twice a week.
2. Avoid intercropping of cotton crop with vegetables.
3. Control weeds in and outside the field.
4. Apply among the following recommended insecticide at ETL and repeat the spray with alternate insecticides if required;

Sr#	CHEMICAL NAME	DOSE (Per Acre)
1	Fipronil+Imidacloprid	60 gm

2	Chlorfenpyr	125 ml
3	Acephate 97% DF	250-300 gm

MEALY BUG MANAGEMENT

1. Visit the fields daily to detect the infestation for effective management of mealy bug well in time.
2. Keep field and water courses etc. free from weeds especially Itsit & Hazaardani.
3. To avoid its shifting from one place to another, keep the horticultural nurseries free from its infestation. Spray such infested nurseries before shifting the plants.
4. Uproot and keep the infested plants gently in plastic bags and bury in the soil outside the field.
5. Avoid water stress to the plants.
6. Avoid repeated visits of workers from infested fields to healthy fields.

Alternate host plants of cotton mealy bug

Crops	Vegetables	Ornamentals	Weeds	Orchards
Sunflower	Okra	China Rose	Hazar Dani	Citrus
Tobacco	Brinjal	Huddle	Amarantus	Mulbery
Jantar	Tomato	Cotton Rose	Bhakra	Ficus
Sesame	Chillies	Gulchain	Mako	Ber
	Pumpkin	Lantana	Sueda	
		Din Ka Raja	Itsit	
		Rat Ki Rani	Karund	
		Anthorium	Aksen	
		Gul-e-Daudi	Bathu	
		Gainda	Puth Kanda	
			Kanghi	

Management Of Pink Bollworm:

1. Use Sex Pheromone Traps for monitoring of PBW
2. Eradicate rosette flowers.
3. Apply among the following recommended insecticide at ETL and repeat the spray with alternate insecticides if required;

Sr#	CHEMICAL NAME	DOSE (Per Acre)
1	Spintoram 120 SC	80 ml
2	Chlorantraniliprole	50ml
3	Triazophos	1000ml
4	Bifenthrin	250ml
5	Gammacyhalothrin	100ml
6	Lambdacyhalothrin	333ml

MANAGEMENT OF DUSKY COTTON BUG

1. Eradicate weeds.
2. Conduct Pest Scouting at least twice a week.
3. Remove alternate host plants
4. Apply among the following recommended insecticide at ETL and repeat the spray with alternate insecticides if required;

Sr#	CHEMICAL NAME	DOSE (Per Acre)
1	Fipronil 5% SC	480 ml
2	Acetamaprid	125 gm
3	Chlorpyrifos	800-1000ml

MANAGEMENT OF ARMY WORM

1. Keep the fields clean from weeds especially Its it which is a preferred host of armyworm.
2. Avoid sowing of Jantar near cotton fields.
3. Regular pest scouting at least twice a week.
4. Hand picking and destruction of egg masses at initial stage as initially its attack starts in patches and is clearly visible.
5. Apply among the following recommended insecticide at ETL and repeat the spray with alternate insecticides if required;

Sr#	CHEMICAL NAME	DOSE (Per Acre)
1	Leufenuron	200ml
2	Flubendamide	50ml

CLCuV MANAGEMENT

1. Keep Cotton fields free from all kinds of weeds.
2. Eradicate other alternate host plants of CLCuV and dispose them off carefully.
3. Thinning out and destruction of Virus affected plants.
4. Remove CLCuV effected plants in less than 60 DAS (Days after sowing) crop.
5. Hoeing after each irrigation or rain at wattar condition till canopies permit.
6. Apply post emergence Glyphosate for both broad and narrow leaved weeds and Glyphosate for grassy weeds with shield and use Flat Fan Nozzle, if needed.
7. Irrigate the fields when needed keeping in view weather conditions e.g. temperature, rainfall, soil water holding capacity and plant need.
8. Balanced use of Fertilizer i.e. N.P.K.

9. Keep transmission vector (whitefly) at the low ebb

Alternate host plants of CLCuV

Crops	Vegetables	Ornamentals	Weeds
Sunflower	Okra	Gurhal	Leh
Melon	Brinjal	Chambeli	Lehli
Tobacco	Chillies		Mako
	Tomato		Maina
	Potato		Karund/Bathu
	Cucumber		Gardenia
			Hazardani
			Rattanjot
			Sun Kukra

Economic threshold levels of cotton pests

Insect pests	Economic threshold levels
Jassid	1 Adult or Nymph per leaf
Whitefly	5 Adults or Nymphs or both per Leaf
Thrips	8-10 Adults or Nymphs per Leaf
Mealy bug	on appearance
Mites	On damage appearance
Spotted Boll worm	3 Larvae/ 25 plants.
Pink Boll worm	5 Larvae /100 bolls.
American boll worm	5 brown eggs or 3 small larvae or both 5 per 25 plants on non Bt varieties. 2 larvae of 2 nd instar per 25 plants on Bt varieties.
Army worm	On appearance
Aphid	Spray on visible damage on top terminals.
Dusky Cotton bug	10 per leaf/bud