

PEST SITUATION ON COTTON CROP IN PUNJAB DURING 2ND 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	39.44	59.41	41.26	55.72	16.12	76.03	High & Decreasing
2	Jassid	6.01	79.12	5.99	83.46	3.77	75.99	High & Increasing
3	Thrips	0.14	68.23	0.22	73.91	0.00	54.72	Low
4	Mealy Bug	17.00	-	19.38	-	15.81	-	High & Decreasing
5	Mites	0.00	0.14	0.00	0.25	0.00	0.00	Low
6	Dusky Cotton Bug	3.73	37.55	2.15	32.47	2.45	36.91	Increasing
7	Pink Bollworm	14.73	35.56	12.52	32.76	13.13	36.95	High & Increasing
8	American Bollworm	0.00	0.14	0.00	0.36	0.00	0.08	Low
9	Spotted Bollworm	0.00	0.80	0.00	0.75	0.00	0.00	Low
10	Armyworm	5.54	-	5.35	-	5.36	-	Sustaining
11	CLCuV	19.28	-	20.31	-	12.59	-	Sustaining

Tehsil wise percentage of hot spots of Whitefly

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	JAM PUR	94.0	30	MIAN CHANNU	37.2
2	RAJAN PUR	82.7	31	KEHROR PACCA	32.1
3	ROJHAN	80.0	32	MAILSI	32.0
4	KOT CHUTTA	76.4	33	KAROR L.E.	29.8
5	JALAL PUR P.W	71.4	34	BURE WALA	28.0
6	D.G.KHAN	71.4	35	KHANEWAL	27.9
7	KHAN PUR	70.4	36	LAYYAH	23.6
8	SADIQ ABAD	70.0	37	DARYA KHAN	23.1
9	LIAQUAT PUR	69.2	38	CHOBARA	21.4
10	MULTAN	69.1	39	KABIR WALA	20.0
11	R.Y.KHAN	67.3	40	MANKERA	20.0
12	A.P.EAST	66.0	41	CHICHA WATNI	16.9
13	BAHAWAL PUR	65.5	42	KALLOR KOT	16.7
14	CHISHTIAN	62.0	43	JAHANIAN	16.3
15	HAROON ABAD	59.1	44	A.P SIAL	13.6
16	MINCHAN ABAD	57.1	45	SHORKOT	13.6
17	FORT ABBAS	55.6	46	SAHIWAL	12.9
18	SHUJABAD	51.0	47	GOJRA	12.5
19	DUYAPUR	46.3	48	PAK PATTAN	11.1
20	ALI PUR	46.0	49	ARIF WALA	11.1
21	MUZUFAR GARH	45.7	50	MIANWALI	10.0
22	TAUNSA	45.5	51	PIPLAN	10.0
23	HASILPUR	44.7	52	ISA KHEL	10.0
24	BAHAWAL NAGAR	44.0	53	DEPALPUR	9.1
25	JATOI	42.9	54	18-HAZARI	9.1
26	LODHRAN	41.4	55	JHANG	8.7
27	YAZMAN	40.7	56	OKARA	7.3
28	VEHARI	38.0	57	RENALA KHURD	3.4
29	KOT ADDU	37.5	58	PIR MAHAL	3.3

Tehsil wise percentage of hot spots of Jassid

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	CHICHA WATNI	42.4	23	BAHAWAL NAGAR	8.0
2	SAHIWAL	32.3	24	FAISALABAD	7.7
3	GOJRA	18.8	25	MULTAN	7.4
4	PAK PATTAN	15.6	26	TANDLIANWALA	7.0
5	T.T.SINGH	15.5	27	RENALA KHURD	5.2
6	DEPALPUR	13.6	28	KABIR WALA	5.0
7	JHANG	13.0	29	ISA KHEL	5.0
8	CHISHTIAN	12.0	30	MINCHAN ABAD	4.8
9	ARIF WALA	11.1	31	FORT ABBAS	4.4
10	CHOBARA	10.7	32	HASILPUR	4.3
11	KAROR L.E.	10.5	33	BURE WALA	4.0
12	PIR MAHAL	10.0	34	ALI PUR	4.0
13	JARANWALA	10.0	35	KHAN PUR	3.7
14	MANKERA	10.0	36	R.Y.KHAN	3.6
15	OKARA	9.8	37	TAUNSA	3.6
16	HAROON ABAD	9.1	38	LAYYAH	3.6
17	18-HAZARI	9.1	39	MIANWALI	3.3
18	A.P SIAL	9.1	40	PIPLAN	3.3
19	SHORKOT	9.1	41	SADIQ ABAD	2.0
20	SUMUNDRI	8.3	42	LIAQUAT PUR	1.9
21	VEHARI	8.0	43	KOT CHUTTA	1.8
22	MAILSI	8.0			

Tehsil wise percentage of hot spots of Thrips

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	18-HAZARI	9.1	3	TAUNSA	1.8
2	KAROR L.E.	3.5			

Tehsil wise percentage of hot spots of Mealy Bug

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	KOT CHUTTA	49.1	27	KHANEWAL	14.0
2	ROJHAN	47.5	28	LAYYAH	12.7
3	D.G.KHAN	44.6	29	MINCHAN ABAD	11.9
4	YAZMAN	42.4	30	MIAN CHANNU	11.6
5	RAJAN PUR	40.4	31	KAROR L.E.	10.5
6	KHAN PUR	37.0	32	CHICHA WATNI	10.2
7	BAHAWAL PUR	34.5	33	VEHARI	10.0
8	SADIQ ABAD	34.0	34	MIANWALI	10.0
9	JAM PUR	32.0	35	PIPLAN	10.0
10	TAUNSA	30.9	36	JATOI	9.5
11	CHISHTIAN	30.0	37	DEPALPUR	9.1
12	MULTAN	27.9	38	A.P SIAL	9.1
13	R.Y.KHAN	27.3	39	KEHROR PACCA	9.0
14	DUYAPUR	25.4	40	JALAL PUR P.W	8.9
15	LIAQUAT PUR	23.1	41	MUZUFAR GARH	8.7
16	MAILSI	22.0	42	JHANG	8.7
17	LODHRAN	20.7	43	KABIR WALA	7.5
18	SHUJABAD	20.4	44	ISA KHEL	5.0
19	FORT ABBAS	20.0	45	SHORKOT	4.5
20	KOT ADDU	18.8	46	CHOBARA	3.6
21	HAROON ABAD	18.2	47	RENALA KHURD	3.4
22	A.P.EAST	18.0	48	PIR MAHAL	3.3
23	ALI PUR	18.0	49	OKARA	2.4
24	HASILPUR	17.0	50	JAHANIAN	2.3

25	BURE WALA	14.0	51	PAK PATTAN	2.2
26	BAHAWAL NAGAR	14.0	52	T.T.SINGH	1.7

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	31.9	14	JAHANIAN	4.7
2	BAHAWAL PUR	25.9	15	SHORKOT	4.5
3	SHUJABAD	16.3	16	MULTAN	4.4
4	JALAL PUR P.W	14.3	17	BURE WALA	4.0
5	YAZMAN	13.6	18	BAHAWAL NAGAR	4.0
6	ALI PUR	12.0	19	PIR MAHAL	3.3
7	VEHARI	10.0	20	DUYAPUR	3.0
8	BHAKKAR	10.0	21	KEHROR PACCA	2.6
9	KHANEWAL	9.3	22	HARROON ABAD	2.3
10	MAILSI	8.0	23	PAK PATTAN	2.2
11	CHISHTIAN	8.0	24	MUZUFAR GARH	2.2
12	KABIR WALA	7.5	25	T.T.SINGH	1.7
13	LODHRAN	5.2			

Tehsil wise percentage of hot spots of Army Worm

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	MULTAN	25.0	19	KHANEWAL	4.7
2	KEHROR PACCA	23.1	20	JAHANIAN	4.7
3	LODHRAN	19.0	21	FORT ABBAS	4.4
4	A.P.EAST	16.0	22	JHANG	4.3
5	JALAL PUR P.W	14.3	23	SHUJABAD	4.1
6	BAHAWAL PUR	13.8	24	BAHAWAL NAGAR	4.0
7	KOT CHUTTA	12.7	25	TAUNSA	3.6
8	D.G.KHAN	12.5	26	YAZMAN	3.4
9	DUYAPUR	11.9	27	PIR MAHAL	3.3
10	R.Y.KHAN	10.9	28	SAHIWAL	3.2
11	CHICHA WATNI	10.2	29	OKARA	2.4
12	SADIQ ABAD	10.0	30	HARROON ABAD	2.3
13	KHAN PUR	7.4	31	HASILPUR	2.1
14	JATOI	7.1	32	KOT ADDU	2.1
15	KAROR L.E.	7.0	33	VEHARI	2.0
16	MIAN CHANNU	7.0	34	MAILSI	2.0
17	LIAQUAT PUR	5.8	35	CHISHTIAN	2.0
18	KABIR WALA	5.0			

Tehsil wise percentage of hot spots of PBW

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	CHICHA WATNI	35.6	28	KABIR WALA	15.0
2	SAHIWAL	32.3	29	LAYYAH	14.5
3	ALI PUR	30.0	30	CHOBARA	14.3
4	DUYAPUR	29.9	31	KHANEWAL	14.0
5	KEHROR PACCA	29.5	32	T.T.SINGH	13.8
6	LODHRAN	27.6	33	FORT ABBAS	13.3
7	SHUJABAD	26.5	34	GOJRA	12.5
8	SADIQ ABAD	26.0	35	YAZMAN	11.9
9	R.Y.KHAN	23.6	36	JAHANIAN	11.6
10	PIR MAHAL	23.3	37	MUZUFAR GARH	10.9
11	DARYA KHAN	23.1	38	JARANWALA	10.0
12	MAILSI	22.0	39	KOT CHUTTA	9.1

13	CHISHTIAN	22.0	40	KAROR L.E.	8.8
14	KHAN PUR	20.4	41	KOT ADDU	8.3
15	VEHARI	20.0	42	HAROON ABAD	6.8
16	BURE WALA	20.0	43	ARIF WALA	6.7
17	BHAKKAR	20.0	44	MIANWALI	6.7
18	LIAQUAT PUR	19.2	45	A.P.EAST	6.0
19	MULTAN	19.1	46	D.G.KHAN	5.4
20	BAHAWAL PUR	19.0	47	MINCHAN ABAD	4.8
21	MIAN CHANNU	18.6	48	TANDLIANWALA	4.7
22	JALAL PUR P.W	17.9	49	SUMUNDRI	4.2
23	PAK PATTAN	17.8	50	RAJAN PUR	3.8
24	HASILPUR	17.0	51	PIPLAN	3.3
25	JATOI	16.7	52	OKARA	2.4
26	KALLOR KOT	16.7	53	TAUNSA	1.8
27	BAHAWAL NAGAR	16.0			

No Hot Spots of American boll worm in Any Tehsil.

No Hot Spots of Spotted boll worm in Any Tehsil.

Tehsil wise percentage of hot spots of CLCuV

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	JALAL PUR P.W	78.6	23	KABIR WALA	20.0
2	ALI PUR	66.0	24	MANKERA	20.0
3	KOT ADDU	64.6	25	JATOI	19.0
4	VEHARI	58.0	26	KHAN PUR	18.5
5	MAILSI	56.0	27	KALLOR KOT	16.7
6	BURE WALA	46.0	28	CHOBARA	14.3
7	MUZUFAR GARH	45.7	29	JAHANIAN	11.6
8	SHUJABAD	42.9	30	MIAN CHANNU	11.6
9	MULTAN	41.2	31	KAROR L.E.	10.5
10	HASILPUR	36.2	32	DUYAPUR	10.4
11	LIAQUAT PUR	34.6	33	BHAKKAR	10.0
12	KOT CHUTTA	34.5	34	JHANG	8.7
13	D.G.KHAN	33.9	35	MINCHAN ABAD	7.1
14	TAUNSA	32.7	36	CHICHA WATNI	6.8
15	R.Y.KHAN	30.9	37	MIANWALI	6.7
16	DARYA KHAN	30.8	38	PAK PATTAN	4.4
17	A.P.EAST	26.0	39	BAHAWAL NAGAR	4.0
18	KHANEWAL	25.6	40	CHISHTIAN	4.0
19	LODHRAN	24.1	41	PIR MAHAL	3.3
20	BAHAWAL PUR	22.4	42	PIPLAN	3.3
21	SADIQ ABAD	22.0	43	ARIF WALA	2.2
22	KEHROR PACCA	21.8	44	T.T.SINGH	1.7

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	34.38	19.88	65.94	0.00	29.17	20.33	79.50	0.00
Khanewal	35.14	20.54	62.71	0.00	29.90	20.14	76.86	5.00
Vehari	34.14	21.14	67.07	0.00	30.67	22.67	79.75	0.00
Lodhran	35.86	21.86	60.57	0.00	30.86	21.29	78.79	0.00
Sahiwal	35.00	20.00	64.00	0.00	36.00	22.00	62.00	0.00
Pakpattan	35.00	22.00	53.86	0.00	36.43	23.00	54.00	0.00
Okara	36.21	23.70	76.25	0.00	35.34	24.78	75.45	0.00
Bahawalpur	37.10	21.63	44.14	0.00	33.69	20.01	66.21	5.74
Bahawalnagar	37.93	20.79	52.57	0.00	33.14	20.64	55.79	0.00
R.Y.Khan	36.67	23.50	47.33	0.00	35.83	22.00	80.33	0.00
D.G. Khan	36.43	22.43	55.14	0.00	37.00	22.57	49.79	0.00
Muzaffar Garh	36.10	22.28	50.58	0.00	34.14	24.56	35.79	16.30
Rajapur	39.4	23.7	60.50	0.00	36.80	20.1	60.20	0.00
Layyah	34.29	20.71	56.86	0.00	34.00	19.85	60.42	0.00
TOT/AVG	35.97	21.73	58.40	0.00	33.78	21.71	65.35	27.04

Weather forecast for next 7 day in cotton zone

Division	Dated	15/10	16/10	17/10	18/10	19/10	20/10	21/10
Multan	Max.Temp.	36	36	36	35	35	36	33
	Min.Temp.	20	19	20	18	18	17	20
	Humidity %	21	16	15	14	14	10	5
Sahiwal	Max.Temp.	35	35	35	35	35	36	32
	Min.Temp.	17	17	18	17	17	17	21
	Humidity %	21	21	17	17	16	13	6
Bahawalpur	Max.Temp.	36	36	36	36	36	35	37
	Min.Temp.	20	19	19	18	17	16	18
	Humidity %	22	17	16	16	16	13	6
D.G. Khan	Max.Temp.	37	37	37	37	36	36	33
	Min.Temp.	19	19	19	18	16	15	20
	Humidity %	17	16	14	12	12	8	6
Average Cotton Region	Max.Temp.	35.54						
	Min.Temp.	18.18						
	Humidity %	14.18						

Source: timeanddate.com

Summary of weather forecast

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

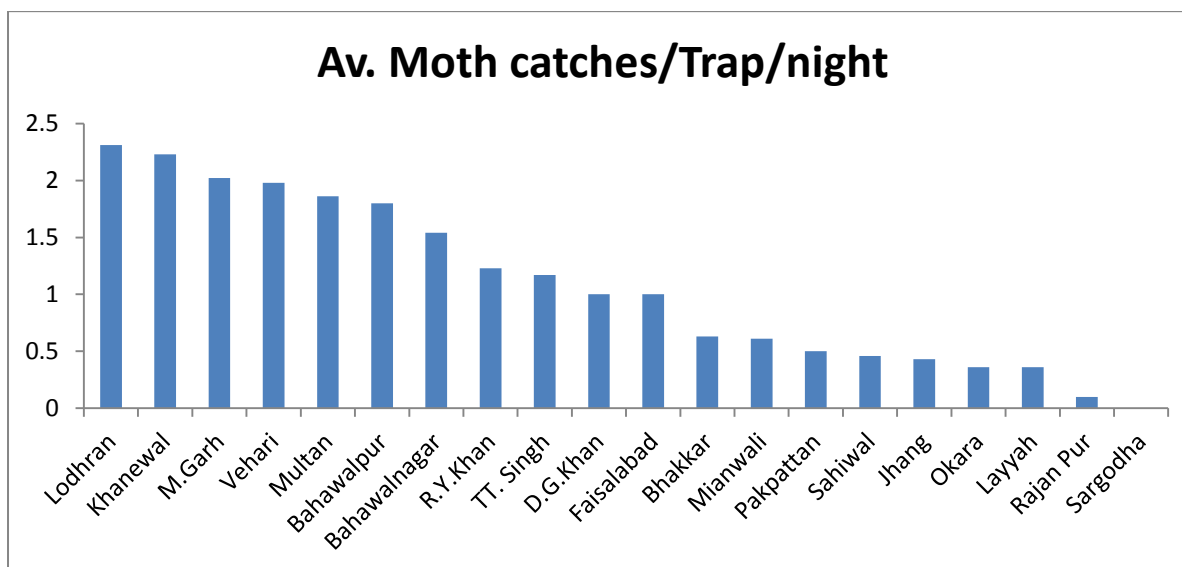
Pest Forecast for Next 15 days				
Avg. Temperature for next 15 days = 25.3 °C				
Avg. Relative Humidity for next 15 days= 14.94 %				
Sr. No.	Pest Name	Opt. Temperature	Relative Humidity	Pest Prediction
1	Whitefly	35-42 °C	<50%	May Decrease
2	Jassid	35-40 °C	>70%	May increase
3	Thrips	35-40 °C	<60%	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 Increase
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 Sustain
11	CLCuV	-	-	May Sustain

Forecast of Sucking Pests:

Moth Catches in Pheromone Traps during 2nd Week of October, 2020

Moth Catches in Pheromone Traps During 2nd Week of October, 2020			
District	Traps Installed	Moth catches/Trap/week	Av. Moth catches/Trap/night
Multan	6	78	1.86
Khanewal	8	125	2.23
Vehari	6	83	1.98
Lodhran	6	97	2.31
Sahiwal	4	13	0.46
Pakpattan	4	14	0.50
Okara	4	10	0.36
Bahawalpur	8	101	1.80
Bahawalnagar	10	108	1.54
R.Y.Khan	8	69	1.23
D.G.Khan	6	42	1.00
M.Garh	8	113	2.02
Rajan Pur	6	4	0.10
Layyah	6	15	0.36
Sargodha	2	0	0.00
Mianwali	4	17	0.61
Bhakkar	8	35	0.63
Faisalabad	6	42	1.00
TT. Singh	6	49	1.17
Jhang	8	24	0.43

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



Moth catches on light traps during 2nd Week of October, 2020

Moth Catches on Light Traps/Trap/week During 2 nd Week of October, 2020				
District	Traps Installed	A.B.W	S.B.W	Armyworm
Multan	3	1	0	12
Khanewal	4	2	0	38
Vehari	3	0	0	9
Lodhran	3	2	0	43
Sahiwal	2	3	0	6
Pakpattan	2	2	0	7
Okara	3	3	0	5
Bahawalpur	4	3	1	9
Bahawalnagar	5	8	3	9
R.Y.Khan	4	3	1	7
D.G.Khan	3	4	4	4
M.Garh	4	7	6	5
Rajan Pur	3	0	0	0
Layyah	3	4	0	4

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.

- 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	Flonicamid 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

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

Sr#	CHEMICAL NAME	DOSE (Per Acre)
1	Flonicamid 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

- Conduct Pest Scouting regularly at least twice a week.
- Avoid intercropping of cotton crop with vegetables.
- 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