

PEST SITUATION ON COTTON CROP IN PUNJAB DURING 4TH WEEK OF SEPTEMBER, 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	39.87	59.04	39.78	59.35	28.22	68.53	Very High & Sustaining
2	Jassid	7.57	84.55	8.49	85.97	4.86	82.06	High & Decreasing
3	Thrips	0.32	84.38	0.80	84.34	0.39	72.11	Low
4	Mealy Bug	22.55	-	23.81	-	19.05	-	High & Sustaining
5	Mites	0.00	1.09	0.00	1.43	0.00	0.03	Low
6	Dusky Cotton Bug	1.83	31.84	1.15	31.78	0.49	27.96	Increasing
7	Pink Bollworm	10.77	31.49	9.15	28.58	9.26	29.93	High & Increasing
8	American Bollworm	0.04	0.60	0.03	0.52	0.07	0.49	Low
9	Spotted Bollworm	0.00	0.46	0.07	0.84	0.00	0.36	Low
10	Armyworm	5.52	-	5.60	-	4.11	-	Sustaining
11	CLCuV	20.76	-	21.72	-	15.90	-	High & Sustaining

Tehsil wise percentage of hot spots of Whitefly

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	JAM PUR	90.0	32	MAILSI	32.0
2	ROJHAN	87.5	33	CHICHA WATNI	30.9
3	RAJAN PUR	80.0	34	BURE WALA	30.0
4	SHUJABAD	76.5	35	OKARA	26.8
5	JALAL PUR P.W	70.0	36	FORT ABBAS	26.7
6	LODHRAN	69.0	37	SAHIWAL	26.2
7	KHANEWAL	66.7	38	18-HAZARI	24.1
8	JAHANIAN	65.9	39	CHOBARA	23.2
9	A.P.EAST	63.6	40	BHAKKAR	22.2
10	MULTAN	62.9	41	CHISHTIAN	22.0
11	KABIR WALA	62.5	42	KALLOR KOT	21.1
12	R.Y.KHAN	60.8	43	DEPALPUR	20.7
13	JATOI	60.4	44	HARON ABAD	20.5
14	DUYAPUR	59.6	45	PAK PATTAN	20.0
15	SADIQ ABAD	58.5	46	BAHAWAL NAGAR	20.0
16	KHAN PUR	58.3	47	LAYYAH	20.0
17	D.G.KHAN	57.9	48	MINCHAN ABAD	18.2
18	KOT CHUTTA	55.4	49	PIR MAHAL	18.2
19	MIAN CHANNU	54.5	50	DARYA KHAN	17.6
20	BAHAWAL PUR	54.4	51	ARIF WALA	14.9
21	YAZMAN	54.0	52	T.T.SINGH	13.4
22	MUZUFAR GARH	52.0	53	MIANWALI	13.3
23	ALI PUR	52.0	54	PIPLAN	13.3
24	KEHROR PACCA	51.7	55	A.P SIAL	13.0
25	LIAQUAT PUR	50.0	56	ISA KHEL	12.5
26	KOT ADDU	41.7	57	RENALA KHURD	12.0
27	HASILPUR	40.8	58	SHORKOT	10.0
28	VEHARI	40.0	59	GOJRA	9.8
29	MANKERA	40.0	60	JHANG	4.0
30	TAUNSA	36.4	61	TANDLIANWALA	3.8
31	KAROR L.E.	32.8	62	SUMUNDRI	3.7

Tehsil wise percentage of hot spots of Jassid

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	OKARA	24.4	28	KHAN PUR	8.3
2	CHICHA WATNI	23.6	29	JARANWALA	8.3
3	KAROR L.E.	20.7	30	GOJRA	8.2
4	PIR MAHAL	20.0	31	TANDLIANWALA	7.7
5	VEHARI	16.0	32	KABIR WALA	7.5
6	CHISHTIAN	16.0	33	KHANEWAL	7.1
7	SUMUNDRI	14.8	34	LODHRAN	6.9
8	MINCHAN ABAD	13.6	35	HASILPUR	6.1
9	PAK PATTAN	13.3	36	BAHAWAL NAGAR	6.0
10	SAHIWAL	12.3	37	TAUNSA	5.5
11	BURE WALA	12.0	38	BAHAWAL PUR	5.3
12	RENALA KHURD	12.0	39	KALLOR KOT	5.3
13	JHANG	12.0	40	JAHANIAN	4.9
14	FAISALABAD	11.8	41	MULTAN	4.8
15	HAROOON ABAD	11.4	42	MIAN CHANNU	4.5
16	BHAKKAR	11.1	43	FORT ABBAS	4.4
17	CHOBARA	10.7	44	MAILSI	4.0
18	DEPALPUR	10.3	45	LIAQUAT PUR	4.0
19	18-HAZARI	10.3	46	KOT CHUTTA	3.6
20	KEHROR PACCA	10.0	47	D.G.KHAN	3.5
21	MIANWALI	10.0	48	SHORKOT	3.3
22	PIPLAN	10.0	49	DUYAPUR	2.1
23	MANKERA	10.0	50	YAZMAN	2.0
24	LAYYAH	9.1	51	ALI PUR	2.0
25	A.P.SIAL	8.7	52	SHUJABAD	2.0
26	T.T.SINGH	8.5	53	R.Y.KHAN	2.0
27	ARIF WALA	8.5	54	SADIQ ABAD	1.9

Tehsil wise percentage of hot spots of Thrips

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	KAROR L.E.	8.6	3	LAYYAH	1.8
2	TAUNSA	3.6	4	KOT CHUTTA	1.8

Tehsil wise percentage of hot spots of Mealy bug

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	R.Y.KHAN	54.9	29	MINCHAN ABAD	20.5
2	ALI PUR	50.0	30	FORT ABBAS	20.0
3	SHUJABAD	47.1	31	KEHROR PACCA	18.3
4	BAHAWAL PUR	45.6	32	HAROOON ABAD	18.2
5	A.P.EAST	45.5	33	BAHAWAL NAGAR	18.0
6	DUYAPUR	44.7	34	MUZUFAR GARH	18.0
7	SADIQ ABAD	43.4	35	JAHANIAN	17.1
8	KABIR WALA	42.5	36	ISA KHEL	12.5
9	YAZMAN	42.0	37	VEHARI	10.0
10	CHISHTIAN	42.0	38	MIANWALI	10.0
11	JAM PUR	40.0	39	PIPLAN	10.0
12	ROJHAN	40.0	40	CHOBARA	8.9
13	KHAN PUR	38.3	41	KAROR L.E.	8.6
14	MAILSI	38.0	42	T.T.SINGH	8.5
15	KOT CHUTTA	37.5	43	GOJRA	8.2
16	MULTAN	37.1	44	JHANG	8.0
17	LIAQUAT PUR	36.0	45	OKARA	7.3
18	D.G.KHAN	33.3	46	LAYYAH	7.3
19	PIR MAHAL	30.9	47	DEPALPUR	6.9

20	HASILPUR	30.6	48	18-HAZARI	6.9
21	BURE WALA	30.0	49	JALAL PUR P.W	5.0
22	LODHRAN	27.6	50	PAK PATTAN	4.4
23	RAJAN PUR	26.0	51	RENALA KHURD	4.0
24	KHANEWAL	23.8	52	CHICHA WATNI	3.6
25	TAUNSA	23.6	53	SHORKOT	3.3
26	KOT ADDU	22.9	54	ARIF WALA	2.1
27	MIAN CHANNU	22.7	55	SAHIWAL	1.5
28	JATOI	20.8			

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	VEHARI	16.0	9	BAHAWAL PUR	7.0
2	HASILPUR	12.2	10	MIAN CHANNU	6.8
3	JALAL PUR P.W	10.0	11	CHISHTIAN	6.0
4	KABIR WALA	10.0	12	FAISALABAD	5.9
5	MAILSI	8.0	13	SHUJABAD	3.9
6	BURE WALA	8.0	14	MINCHAN ABAD	2.3
7	JAHANIAN	7.3	15	BAHAWAL NAGAR	2.0
8	KHANEWAL	7.1	16	MULTAN	1.6

Tehsil wise percentage of hot spots of Army worm

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	PIR MAHAL	20.0	21	D.G.KHAN	5.3
2	R.Y.KHAN	19.6	22	JAHANIAN	4.9
3	LODHRAN	19.0	23	KHANEWAL	4.8
4	KEHROR PACCA	18.3	24	HARON ABAD	4.5
5	SADIQ ABAD	17.0	25	FORT ABBAS	4.4
6	JATOI	12.5	26	VEHARI	4.0
7	YAZMAN	12.0	27	CHISHTIAN	4.0
8	BAHAWAL NAGAR	12.0	28	LIAQUAT PUR	4.0
9	MIAN CHANNU	11.4	29	JAM PUR	4.0
10	DUYAPUR	10.6	30	JHANG	4.0
11	ALI PUR	10.0	31	SHUJABAD	3.9
12	MULTAN	9.7	32	T.T.SINGH	3.7
13	A.P.EAST	9.1	33	DEPALPUR	3.4
14	KOT CHUTTA	8.9	34	GOJRA	3.3
15	BAHAWAL PUR	8.8	35	JALAL PUR P.W	2.5
16	KAROR L.E.	6.9	36	KABIR WALA	2.5
17	MINCHAN ABAD	6.8	37	OKARA	2.4
18	KHAN PUR	6.7	38	RENALA KHURD	2.0
19	HASILPUR	6.1	39	CHICHA WATNI	1.8
20	TAUNSA	5.5	40	SAHIWAL	1.5

Tehsil wise percentage of hot spots of Pink Bollworm

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	BURE WALA	28.0	29	MIAN CHANNU	9.1
2	ALI PUR	28.0	30	MINCHAN ABAD	9.1
3	KEHROR PACCA	26.7	31	JARANWALA	8.3
4	SAHIWAL	26.2	32	BAHAWAL NAGAR	8.0
5	LODHRAN	25.9	33	KABIR WALA	7.5
6	DUYAPUR	23.4	34	SUMUNDRI	7.4
7	VEHARI	22.0	35	DEPALPUR	6.9
8	PIR MAHAL	21.8	36	PAK PATTAN	6.7

9	JALAL PUR P.W	20.0	37	FORT ABBAS	6.7
10	CHICHA WATNI	18.2	38	MIANWALI	6.7
11	OKARA	17.1	39	ARIF WALA	6.4
12	MAILSI	16.0	40	RENALA KHURD	6.0
13	CHISHTIAN	16.0	41	LIAQUAT PUR	6.0
14	T.T.SINGH	15.9	42	R.Y.KHAN	5.9
15	SHUJABAD	15.7	43	FAISALABAD	5.9
16	GOJRA	14.8	44	TANDLIANWALA	5.8
17	JATOI	12.5	45	A.P.EAST	5.5
18	CHOBARA	12.5	46	LAYYAH	5.5
19	HASILPUR	12.2	47	KHAN PUR	5.0
20	KHANEWAL	11.9	48	JAHANIAN	4.9
21	SADIQ ABAD	11.3	49	HAROON ABAD	4.5
22	MULTAN	11.3	50	YAZMAN	4.0
23	BHAKKAR	11.1	51	MUZUFAR GARH	4.0
24	BAHAWAL PUR	10.5	52	JHANG	4.0
25	KALLOR KOT	10.5	53	KOT CHUTTA	3.6
26	KOT ADDU	10.4	54	PIPLAN	3.3
27	KAROR L.E.	10.3	55	TAUNSA	1.8
28	MANKERA	10.0	56	D.G.KHAN	1.8

Tehsil wise percentage of hot spots of American Bollworm

Sr#	TEHSIL	%AGE
1	JAMPUR	2.0

No Hot Spots of Spotted Bollworm in any Tehsil

Tehsil wise percentage of hot spots of CLCuV

Sr#	TEHSIL	%AGE	Sr#	TEHSIL	%AGE
1	SHUJABAD	86.3	23	KHAN PUR	25.0
2	MULTAN	79.0	24	D.G.KHAN	24.6
3	JALAL PUR P.W	72.5	25	MIAN CHANNU	22.7
4	ALI PUR	66.0	26	MANKERA	20.0
5	VEHARI	56.0	27	KOT CHUTTA	19.6
6	BURE WALA	52.0	28	CHOBARA	16.1
7	KOT ADDU	47.9	29	BAHAWAL PUR	15.8
8	KABIR WALA	47.5	30	KAROR L.E.	12.1
9	MUZUFAR GARH	44.0	31	DARYA KHAN	11.8
10	LIAQUAT PUR	42.0	32	KALLOR KOT	10.5
11	SADIQ ABAD	41.5	33	CHICHA WATNI	7.3
12	R.Y.KHAN	41.2	34	HAROON ABAD	6.8
13	JATOI	37.5	35	PAK PATTAN	6.7
14	JAHANIAN	36.6	36	PIPLAN	6.7
15	KHANEWAL	31.0	37	BAHAWAL NAGAR	6.0
16	KEHROR PACCA	30.0	38	LAYYAH	5.5
17	LODHRAN	29.3	39	YAZMAN	4.0
18	MAILSI	28.0	40	MIANWALI	3.3
19	HASILPUR	26.5	41	ARIF WALA	2.1
20	DUYAPUR	25.5	42	PIR MAHAL	1.8
21	A.P.EAST	25.5	43	SAHIWAL	1.5
22	TAUNSA	25.5			

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	37.29	25.43	67.57	0.00	34.86	27.14	77.20	0.00
Khanewal	38.37	26.29	64.71	0.00	35.57	27.29	66.43	0.00
Vehari	37.29	25.86	68.29	0.00	34.84	27.43	70.50	0.00
Lodhran	38.00	26.14	61.36	0.00	35.43	28.14	68.93	0.00
Sahiwal	34.00	25.00	68.00	0.00	33.60	26.00	67.00	0.00
Pakpattan	36.00	28.33	54.33	0.00	36.50	28.83	54.00	0.00
Okara	34.96	24.46	77.58	0.00	32.90	24.06	74.98	0.00
Bahawalpur	39.13	25.93	54.14	0.00	36.70	26.09	65.00	0.00
Bahawalnagar	40.17	25.83	54.88	0.00	38.58	27.17	60.46	0.00
R.Y.Khan	39.67	27.28	76.17	0.00	40.33	24.41	79.63	0.00
D.G. Khan	39.29	25.86	60.21	0.00	38.86	27.43	50.57	0.00
Muzaffargarh	38.52	27.50	40.36	0.00	38.23	28.05	32.21	0.00
Rajanpur	41.3	30.3	61.80	0.00	41.70	28.3	65.80	0.00
Layyah	37.57	23.29	60.71	0.00	35.28	24.28	48.57	0.00
TOT/AVG	37.97	26.25	62.15	0.00	36.67	26.76	62.95	0.00

Weather forecast for next 7 day in cotton zone

Division	Dated	28/9	29/9	30/9	1/10	2/10	3/10	4/10
Multan	Max.Temp.	38	38	38	37	37	37	38
	Min.Temp.	26	26	26	24	22	21	26
	Humidity %	23	24	21	12	13	11	5
Sahiwal	Max.Temp.	38	37	38	37	37	37	37
	Min.Temp.	20	22	22	21	21	18	28
	Humidity %	27	26	22	21	19	17	7
Bahawalpur	Max.Temp.	37	37	38	38	37	37	37
	Min.Temp.	25	26	25	23	18	19	22
	Humidity %	29	28	26	16	13	14	8
D.G. Khan	Max.Temp.	39	39	39	38	38	38	38
	Min.Temp.	26	26	25	23	18	19	28
	Humidity %	21	20	17	8	12	11	4
Average Cotton Region	Max.Temp.	37.64						
	Min.Temp.	23.07						
	Humidity %	16.96						

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 = **31.48 °C**

Avg. Relative Humidity for next 15 days= **21.42%**

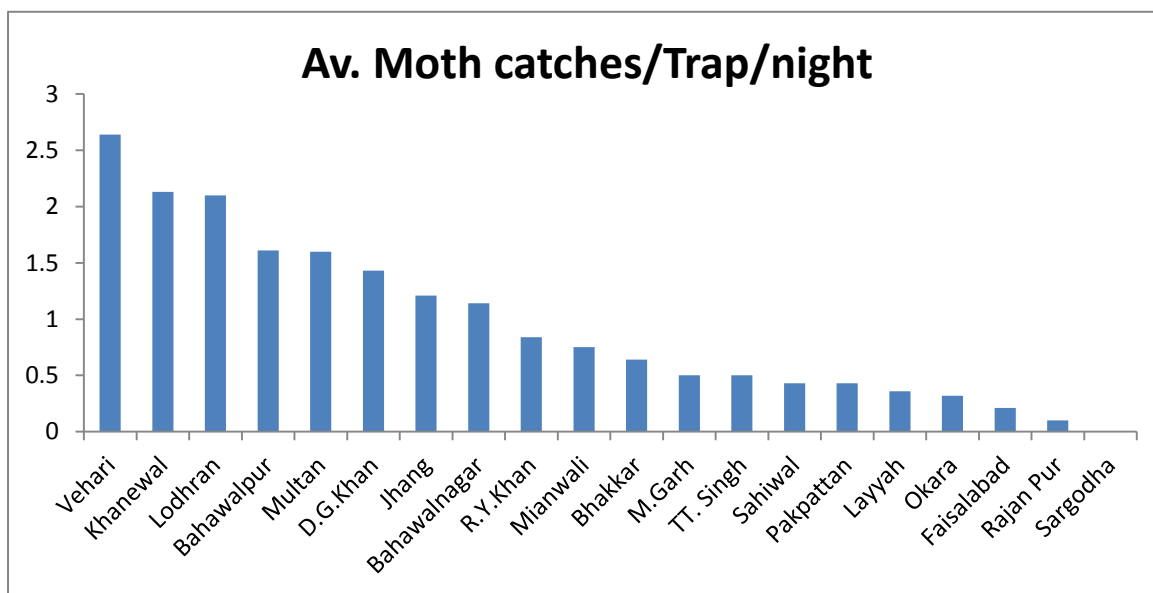
Sr. No.	Pest Name	Opt. Temperature	Relative Humidity	Pest Prediction
1	Whitefly	35-42 °C	<50%	May Sustain
2	Jassid	35-40 °C	>70%	May Decrease
3	Thrips	35-40 °C	<60%	May be Low
4	Mealy Bug	35-40 °C	<60-80%	May Sustain
5	Mites	28-40 °C	<40-50%	May be Low
6	Dusky Cotton Bug	28-40 °C	<50-80%	May Increase
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 4TH Week of September, 2020

Moth Catches in Pheromone Traps During 4 TH eek of September, 2020			
District	Traps Installed	Moth catches/Trap/week	Av. Moth catches/Trap/night
Multan	6	67	1.60
Khanewal	8	119	2.13
Vehari	6	111	2.64
Lodhran	6	88	2.10
Sahiwal	4	12	0.43
Pakpattan	4	12	0.43
Okara	4	9	0.32
Bahawalpur	8	90	1.61
Bahawalnagar	10	80	1.14
R.Y.Khan	8	47	0.84
D.G.Khan	4	40	1.43
M.Garh	8	28	0.50
Rajan Pur	6	4	0.10
Layyah	6	15	0.36
Sargodha	2	0	0.00
Mianwali	4	21	0.75
Bhakkar	8	36	0.64
Faisalabad	6	9	0.21
TT. Singh	6	21	0.50
Jhang	4	34	1.21

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



Moth catches on light traps during 4th Week of September, 2020

Moth Catches on Light Traps/Trap/week During 4 th Week of September, 2020				
District	Traps Installed	A.B.W	S.B.W	Armyworm
Multan	3	1	0	4
Khanewal	4	1	0	59
Vehari	3	0	0	12
Lodhran	3	3	0	42
Sahiwal	2	2	0	4
Pakpattan	2	2	0	7
Okara	3	4	0	4
Bahawalpur	4	3	2	9
Bahawalnagar	5	6	5	13
R.Y.Khan	4	3	2	9
D.G.Khan	3	7	7	4
M.Garh	4	7	5	5
Rajan Pur	3	2	0	0
Layyah	3	7	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.

- 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	Diafenthuron	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.

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