

## PEST SITUATION ON COTTON CROP IN PUNJAB DURING 2nd WEEK OF OCTOBER, 2021

**Whitefly:** On overall Punjab basis 28.73% above ETL spots have been observed during current week as compared to 37.96% in last week and 39.44% during the same corresponding period of last year. And 69.27% below ETL spots have been observed during current week as compared to 61.47% in last week and 59.41% during the same corresponding period of last year.

### Tehsil wise percentage of hot spots of whitefly

S. NO.	TEHSIL	%AGE	S.NO.	TEHSIL	%AGE
1	MULTAN	75.6	31	RENALA KHURD	20.0
2	LIAQUAT PUR	57.4	31	BAHAWAL NAGAR	20.0
3	R.Y.KHAN	56.6	33	HAROON ABAD	20.0
4	JALAL PUR P.W	56.4	34	18-HAZARI	20.0
5	ALI PUR	56.0	35	KABIR WALA	19.0
6	A.P.EAST	55.0	36	CHISHTIAN	18.0
7	TAUNSA	50.0	37	FORT ABBAS	16.9
8	KHAN PUR	48.0	38	SAHIWAL	16.0
9	BAHAWAL PUR	45.6	39	KHANEWAL	15.9
10	SADIQ ABAD	44.0	40	ROJHAN	15.6
11	KOT CHUTTA	41.7	41	JHANG	14.3
12	MUZUFAR GARH	40.8	42	DARYA KHAN	14.3
13	JATOI	40.8	43	CHOBARA	13.7
14	SHUJABAD	40.0	44	PAK PATTAN	13.3
15	BURE WALA	37.5	45	KALLOR KOT	13.3
16	HASILPUR	37.5	46	JAHANIAN	13.2
17	D.G.KHAN	37.5	47	MANKERA	12.5
18	KOT ADDU	36.0	48	RAJAN PUR	12.0
19	VEHARI	35.0	49	A.P SIAL	11.5
20	YAZMAN	30.4	50	ISA KHEL	11.1
21	MAILSI	30.0	51	DEPALPUR	10.0
22	JAM PUR	30.0	52	LAYYAH	10.0
23	BHAKKAR	28.6	53	SHORKOT	10.0
24	KEHROR PACCA	27.3	54	PIPLAN	9.5
25	OKARA	25.0	55	MIANWALI	7.7
26	LODHRAN	24.2	56	CHICHA WATNI	7.5
27	MIAN CHANNU	23.9	57	PIR MAHAL	7.4
28	ARIF WALA	22.2	58	KAROR L.E.	5.0
29	DUYAPUR	21.9	59	T.T.SINGH	3.6
30	MINCHAN ABAD	21.4			

**Jassid:** On overall Punjab basis 3.21% above ETL spots has been observed as compared to 5.01% in last week and same week of last year 6.01%. And 76.01% below ETL spots have been observed during current week as compared to 82.70% in last week and 79.12% during the same corresponding period of last year.

### Tehsil wise percentage of hot spots of Jassid

S. NO.	TEHSIL	%AGE	S.NO.	TEHSIL	%AGE
1	CHICHA WATNI	42.5	13	DEPALPUR	10.0
2	OKARA	25.0	14	18-HAZARI	10.0
3	SAHIWAL	20.0	15	SUMUNDRI	10.0
4	A.P SIAL	19.2	16	KABIR WALA	9.5
5	ARIF WALA	16.7	17	SHUJABAD	7.5
6	SHORKOT	15.0	18	JHANG	7.1
7	BHAKKAR	14.3	19	KALLOR KOT	6.7

8	DARYA KHAN	14.3	20	KEHROR PACCA	6.1
9	TANDLIANWALA	13.6	21	CHOBARA	5.9
10	PAK PATTAN	13.3	22	LAYYAH	2.5
11	RENALA KHURD	13.3	23	ALI PUR	2.0
12	T.T.SINGH	10.7			

**Thrips:** On overall Punjab basis 0.05% above ETL spots has been observed as compared to 0.10% in last week same and week of last year i.e.0.14%. And 57.69% below ETL spots have been observed during current week as compared to 69.21% in last week and 68.23% during the same corresponding period of last year.

#### **Tehsil wise percentage of hot spots of Thrips**

S. NO.	TEHSIL	%AGE
1	18-HAZARI	5.0

**Mealy Bug:** On overall Punjab basis 30.78% spots (all considered above ETL) of Mealy Bug have been observed as compared to 39.05% in last week and 17.00% spots during the same corresponding period of the last year.

#### **Tehsil wise percentage of hot spots of Mealy bug**

S. NO.	TEHSIL	%AGE	S.NO.	TEHSIL	%AGE
1	JALAL PUR P.W	71.8	31	SADIQ ABAD	24.0
2	VEHARI	67.5	32	A.P.EAST	22.5
3	BURE WALA	58.3	33	ARIF WALA	22.2
4	ALI PUR	54.0	34	MINCHAN ABAD	21.4
5	TAUNSA	51.8	35	JHANG	21.4
6	KABIR WALA	50.0	36	T.T.SINGH	21.4
7	KHAN PUR	50.0	37	MUZUFAR GARH	20.4
8	MULTAN	46.3	38	JATOI	20.4
9	MIAN CHANNU	45.7	39	PAK PATTAN	20.0
10	SHUJABAD	45.0	40	DEPALPUR	20.0
11	CHISHTIAN	44.0	41	KAROR L.E.	17.5
12	LIAQUAT PUR	42.6	42	KOT CHUTTA	16.7
13	MAILSI	40.0	43	BHAKKAR	14.3
14	HASILPUR	40.0	44	DARYA KHAN	14.3
15	DUYAPUR	37.5	45	RENALA KHURD	13.3
16	CHICHA WATNI	37.5	46	JAM PUR	12.5
17	HAROON ABAD	37.5	47	GOJRA	12.5
18	FORT ABBAS	37.3	48	SAHIWAL	12.0
19	BAHAWAL PUR	36.8	49	RAJAN PUR	12.0
20	KHANEWAL	36.4	50	MIANWALI	11.5
21	R.Y.KHAN	35.8	51	PIR MAHAL	11.1
22	D.G.KHAN	35.4	52	ISA KHEL	11.1
23	BAHAWAL NAGAR	35.0	53	KOT ADDU	10.0
24	YAZMAN	34.8	54	SHORKOT	10.0
25	JAHANIAN	34.2	55	PIPLAN	9.5
26	OKARA	33.3	56	ROJHAN	8.9
27	LAYYAH	32.5	57	A.P SIAL	7.7
28	KEHROR PACCA	30.3	58	18-HAZARI	5.0
29	CHOBARA	29.4	59	SUMUNDRI	5.0
30	LODHRAN	27.3	60	TANDLIANWALA	4.5

**Mites:** No prevalence of above ETL has been observed. However 1.39% below ETL spots have been observed during current week as compared to 2.38% in last week and 0.14% during the same corresponding period of last year.

**Dusky Cotton Bug:** On overall Punjab basis 7.58% above ETL spots have been observed during current week as compared to 7.18% in last week and 3.73% during the same corresponding period of last year. And 62.90% below ETL spots have been observed during current week as compared to 58.32% in last week and 37.55% during the same corresponding period of last year.

#### **Tehsil wise percentage of hot spots of Dusky cotton Bug**

S. NO.	TEHSIL	%AGE	S.NO.	TEHSIL	%AGE
1	BAHAWAL PUR	54.4	17	TANDLIANWALA	9.1
2	HASILPUR	50.0	18	SHUJABAD	7.5
3	BURE WALA	33.3	19	LODHRAN	6.1
4	VEHARI	25.0	20	KEHROR PACCA	6.1
5	T.T.SINGH	25.0	21	JALAL PUR P.W	5.1
6	FORT ABBAS	23.7	22	SHORKOT	5.0
7	HAROON ABAD	22.5	23	SUMUNDRI	5.0
8	ALI PUR	20.0	24	PIPLAN	4.8
9	MULTAN	17.1	25	MUZUFAR GARH	4.1
10	MAILSI	15.0	26	MIANWALI	3.8
11	JHANG	14.3	27	PIR MAHAL	3.7
12	FAISALABAD	12.5	28	DUYAPUR	3.1
13	KOT ADDU	12.0	29	JAHANIAN	2.6
14	ISA KHEL	11.1	30	KABIR WALA	2.4
15	BAHAWAL NAGAR	10.0	31	KHANEWAL	2.3
16	CHISHTIAN	10.0			

**Armyworm:** On overall Punjab basis 1.58% spots (all considered above ETL) of Armyworm have been observed as compared to 1.96% in last week and 5.54% spots during the same corresponding period of the last year.

#### **Tehsil wise percentage of hot spots of army worm**

S. NO.	TEHSIL	%AGE	S.NO.	TEHSIL	%AGE
1	JHANG	14.3	9	KHANEWAL	4.5
2	BHAKKAR	14.3	10	SAHIWAL	4.0
3	BAHAWAL PUR	12.3	11	KOT ADDU	4.0
4	T.T.SINGH	10.7	12	MIANWALI	3.8
5	KABIR WALA	9.5	13	KEHROR PACCA	3.0
6	CHICHA WATNI	7.5	14	JAHANIAN	2.6
7	MIAN CHANNU	6.5	15	JALAL PUR P.W	2.6
8	18-HAZARI	5.0	16	HASILPUR	2.5

**Pink Boll Worm:** On overall Punjab basis 31.47% above ETL spots have been observed as compared to 32.28% in last week and 14.73% same corresponding period of the last year. And 43.61% below ETL spots have been observed as compared to 43.70% in last week and 35.56% during same corresponding period of last year.

**Tehsil wise percentage of hot spots of PBW**

S. NO.	TEHSIL	%AGE	S.NO.	TEHSIL	%AGE
1	BAHAWAL PUR	63.2	31	JHANG	21.4
2	KABIR WALA	59.5	32	CHICHA WATNI	20.0
3	DUYAPUR	59.4	33	MUZUFAR GARH	18.4
4	BAHAWAL NAGAR	57.5	34	T.T.SINGH	17.9
5	HAROON ABAD	57.5	35	OKARA	16.7
6	CHISHTIAN	54.0	36	D.G.KHAN	16.7
7	VEHARI	52.5	37	MIANWALI	15.4
8	HASILPUR	52.5	38	SHORKOT	15.0
9	MINCHAN ABAD	52.4	39	SUMUNDRI	15.0
10	LODHRAN	51.5	40	TAUNSA	14.3
11	KEHROR PACCA	51.5	41	BHAKKAR	14.3
12	LIAQUAT PUR	51.1	42	DARYA KHAN	14.3
13	SADIQ ABAD	48.0	43	KOT ADDU	14.0
14	R.Y.KHAN	47.2	44	PAK PATTAN	13.3
15	KHAN PUR	46.0	45	KALLOR KOT	13.3
16	SHUJABAD	42.5	46	KOT CHUTTA	12.5
17	A.P.EAST	42.5	47	GOJRA	12.5
18	BURE WALA	41.7	48	MULTAN	11.3
19	FORT ABBAS	39.0	49	PIR MAHAL	11.1
20	MAILSI	37.5	50	ISA KHEL	11.1
21	JALAL PUR P.W	35.9	51	PIPLAN	9.5
22	JAHANIAN	34.2	52	TANDLIANWALA	9.1
23	KHANEWAL	34.1	53	ROJHAN	8.9
24	ALI PUR	34.0	54	SAHIWAL	8.0
25	MIAN CHANNU	32.6	55	RAJAN PUR	8.0
26	YAZMAN	30.4	56	JATOI	6.1
27	CHOBARA	29.4	57	ARIF WALA	5.6
28	LAYYAH	27.5	58	18-HAZARI	5.0
29	KAROR L.E.	25.0	59	JAM PUR	2.5
30	MANKERA	25.0			

**American Bollworm:** On overall Punjab basis 0.14% above ETL spots have been observed as compared to 0.10 in last week and 0.00% during same corresponding period of last year. And 0.65% below ETL spots have been observed as compared to 0.67% in last week and 0.14% during same corresponding period of last year.

**Tehsil wise percentage of hot spots of ABW**

S. NO.	TEHSIL	%AGE	S.NO.	TEHSIL	%AGE
1	KOT CHUTTA	4.2	2	MIANWALI	3.8

**Spotted Bollworm:** On overall Punjab basis 0.14% above ETL spots have been observed as compared to 0.31% in last week and 0.00% during same corresponding period of last year & 1.16% below ETL spots have been observed as compared to 1.29% in last week and 0.80% during same corresponding period of last year.

**Tehsil wise percentage of hot spots of SBW**

S. NO.	TEHSIL	%AGE
1	D.G.KHAN	6.3

**CLCuV:** On overall Punjab basis 25.76% spots (all considered above ETL) of CLCV have been observed as compared to 27.89% in last week and 19.28% during the same corresponding period of the last year.

#### **Tehsil wise percentage of hot spots CLCuV**

S. NO.	TEHSIL	%AGE	S.NO.	TEHSIL	%AGE
1	KOT ADDU	92.0	27	T.T.SINGH	25.0
2	VEHARI	67.5	28	MANKERA	25.0
3	KABIR WALA	66.7	29	R.Y.KHAN	24.5
4	ALI PUR	64.0	30	LIAQUAT PUR	23.4
5	MAILSI	52.5	31	A.P.EAST	22.5
6	MUZUFAR GARH	51.0	32	CHOBARA	21.6
7	TAUNSA	50.0	33	JALAL PUR P.W	20.5
8	MULTAN	48.8	34	18-HAZARI	20.0
9	BURE WALA	45.8	35	KALLOR KOT	20.0
10	MIAN CHANNU	45.7	36	PIR MAHAL	18.5
11	BHAKKAR	42.9	37	KHAN PUR	16.0
12	JATOI	40.8	38	SADIQ ABAD	14.0
13	CHICHA WATNI	40.0	39	PAK PATTAN	13.3
14	LAYYAH	40.0	40	SAHIWAL	12.0
15	PIPLAN	38.1	41	ARIF WALA	11.1
16	D.G.KHAN	37.5	42	DEPALPUR	10.0
17	KOT CHUTTA	37.5	43	SHORKOT	10.0
18	SHUJABAD	35.0	44	DUYAPUR	9.4
19	KAROR L.E.	35.0	45	BAHAWAL NAGAR	7.5
20	KHANEWAL	31.8	46	HAROON ABAD	7.5
21	GOJRA	31.3	47	LODHRAN	6.1
22	MIANWALI	30.8	48	CHISHTIAN	6.0
23	JHANG	28.6	49	SUMUNDRI	5.0
24	DARYA KHAN	28.6	50	FORT ABBAS	3.4
25	KEHROR PACCA	27.3	51	MINCHAN ABAD	2.4
26	JAHANIAN	26.3			

**Wilting:** On overall Punjab basis during the current week 2.56% spots (all considered above ETL) of wilting have been observed as compared to 3.87% spots in the last week.

#### **Tehsil wise percentage of hot spots Wilting**

S. NO.	TEHSIL	%AGE	S.NO.	TEHSIL	%AGE
1	ALI PUR	28.0	7	ISA KHEL	11.1
2	KOT ADDU	26.0	8	KHANEWAL	9.1
3	MULTAN	17.1	9	JALAL PUR P.W	5.1
4	KABIR WALA	14.3	10	SHUJABAD	5.0
5	DARYA KHAN	14.3	11	PIPLAN	4.8
6	KALLOR KOT	13.3			

**FORECAST FOR THE NEXT WEEK****Meteorological data of the current week 2020-2021**

Districts	2021				2020			
	Temperature		R.H%	Rainfall (mm)	Temperature °C		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
MULTAN	35.57	23.57	68.36	0.00	34.38	19.88	65.94	0.00
KHANEWAL	36.00	23.75	64.63	0.00	35.14	20.54	62.71	0.00
VEHARI	36.00	24.14	61.14	0.00	35.86	21.86	60.57	0.00
LODHRAN	35	23	71	0.00	34.14	21.14	67.07	0.00
Sahiwal	35.00	22.00	67.00	0.00	35.00	20.00	64.00	0.00
Pakpattan	36.00	23.00	71.00	0.00	35.00	22.00	53.86	0.00
Okara	34.00	24.00	72.00	0.00	36.21	23.70	76.25	0.00
Bahawalpur	35.97	23.21	60.29	23.50	37.10	21.63	44.14	0.00
Bahawalnagar	35.03	22.10	55.22	0.00	37.93	20.79	52.57	0.00
R.Y.Khan	36.12	23.20	60.66	0.00	36.67	23.50	47.33	0.00
D.G. Khan	37.57	20.86	55.36	0.00	37.00	22.57	49.79	0.00
Muzaffar Garh	35.00	22.08	58.00	3.00	36.28	22.38	48.75	2.00
Rajanpur	40.5	25.7	50.70	0.00	38.60	24.8	58.20	0.00
Layyah	34.20	22.40	56.60	0.00	33.80	20.60	56.20	0.00
<b>TOT/AVG</b>	<b>35.85</b>	<b>23.07</b>	<b>62.28</b>	<b>26.50</b>	<b>35.94</b>	<b>21.81</b>	<b>57.67</b>	<b>2.00</b>

**Weather forecast for next 7 day in cotton zone**

Division	Dated	6/10	7/10	8/10	9/10	10/10	11/10	12/10
Multan	Max.Temp.	36	36	35	34	24	35	37
	Min.Temp.	20	20	18	19	21	20	21
	Humidity %	14	13	14	21	24	15	4
Sahiwal	Max.Temp.	35	35	35	35	33	35	36
	Min.Temp.	18	16	16	19	20	20	20
	Humidity %	16	15	13	27	34	24	7
Bahawalpur	Max.Temp.	36	35	35	35	34	36	38
	Min.Temp.	20	19	17	18	20	20	20
	Humidity %	17	16	15	22	23	15	4
D.G. Khan	Max.Temp.	36	36	36	34	35	36	37
	Min.Temp.	20	19	18	19	16	14	4
	Humidity %	13	11	11	15	16	14	4
Average Cotton Region	Max.Temp.	35						
	Min.Temp.	18.29						
	Humidity %	15.61						

Source: [timeanddate.com](http://timeanddate.com)**Summary of weather forecast**

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

**Forecast of Sucking Pests:**

**Whitefly:** This pest flourishes best in hot dry climate with optimum temperature 35-42 °C with relative humidity below 50%. Maximum lethal temperature for this pest is 45-51 °C. The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max. 35.00 °C, Min. 18.29°C with humidity 15.61%. Keeping in view, **it is predicted that population of this pest will decrease during the coming week.**

**Jassid:** This pest flourishes best in hot and humid climate with optimum temperature 35-40 °C with relative humidity above 70%. The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max. 35.00 °C, Min. 18.29°C with humidity 15.61%. Keeping in view, **it is predicted that population of this pest will decrease during the coming week.**

**Thrips:** This pest flourishes best in hot dry climate with optimum temperature 35-40 °C with relative humidity below 60%. Maximum lethal temperature for this pest is 45-51 °C .The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max. 35.00 °C, Min. 18.29°C with humidity 15.61%. Keeping in view, **it is predicted that population of this pest will decrease during the coming week.**

**Mealy Bug:** This pest flourishes best in moderate climate with optimum temperature 35-40 °C with relative humidity above 60-80%. Maximum lethal temperature for this pest is 45-51 °C. The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max. 35.00 °C, Min. 18.29°C with humidity 15.61%. Keeping in view, **it is predicted that population of this pest will sustain on cotton crop.**

**Mites:** This pest flourishes best in dry climate with optimum temperature 28-40 °C with relative humidity above 40-50. The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max. 35.00 °C, Min. 18.29°C with humidity 15.61%. Keeping in view, **it is predicted that population of this pest will sustain during the coming week.**

**Dusky Cotton Bug:** This pest flourishes best in moderate climate with optimum temperature 28-40°C with relative humidity above 50-80%. The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max. 35.00 °C, Min. 18.29°C with humidity 15.61%. Keeping in view, **it is predicted that population of this pest increase during coming week.**

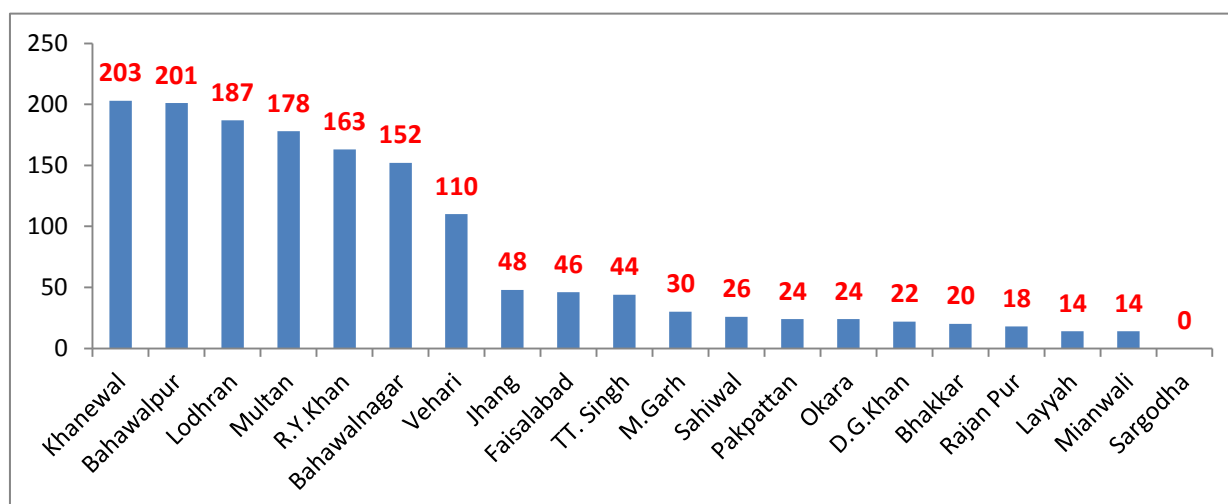
**Pink Bollworm:** This pest flourishes best at moderate climate with optimum temperature 32-40 °C with relative humidity above 60-80%. Maximum lethal temperature for this pest is 45-53 °C. The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max. 35.00 °C, Min. 18.29°C with humidity 15.61%. **It is predicted that population of this pest will sustain on cotton during the coming week .**



### Moth Catches in Pheromone Traps during 2nd Week of October, 2021

Moth Catches in Pheromone Traps During 2nd Week of October 2021			
District	Traps Installed	Moth catches/Trap/week	Av. Moth catches/Trap/night
Multan	6	178	4.24
Khanewal	8	203	3.63
Vehari	6	110	2.62
Lodhran	6	187	4.45
Sahiwal	4	26	0.93
Pakpattan	4	24	0.86
Okara	4	24	0.86
Bahawalpur	8	201	3.59
Bahawalnagar	10	152	2.17
R.Y.Khan	8	163	2.91
D.G.Khan	6	22	0.52
M.Garh	8	30	0.54
Rajan Pur	6	18	0.43
Layyah	6	14	0.33
Sargodha	0	0	0.00
Mianwali	4	14	0.33
Bhakkar	8	20	0.36
Faisalabad	6	46	1.10
TT. Singh	6	44	1.05
Jhang	4	48	1.71

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



**American Bollworm:** This pest flourishes best at dry & moderate climate with optimum temperature 32-40 °C with relative humidity above 50-70%.humidity above 60-80%. Maximum lethal temperature for this pest is 45-53 °. The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max. 35.00 °C, Min. 18.29°C with humidity 15.61%. **It is predicted that population of this pest will sustain on cotton crop during the coming week.**

### **Moth catches on light traps during 2nd week of October, 2021**

<b>Moth Catches on Light Traps/Trap/week During 2nd Week of October, 2021</b>				
<b>District</b>	<b>Traps Installed</b>	<b>A.B.W</b>	<b>S.B.W</b>	<b>Armyworm</b>
Multan	3	13	2	13
Khanewal	4	15	0	40
Vehari	3	0	0	6
Lodhran	3	4	0	21
Sahiwal	2	1	0	4
Pakpattan	2	1	0	2
Okara	3	2	0	5
Bahawalpur	4	3	3	9
Bahawalnagar	5	5	5	9
R.Y.Khan	4	2	2	2
D.G.Khan	3	2	3	2
M.Garh	4	2	1	1
Rajan Pur	3	0	0	0
Layyah	3	0	0	2
Note. 3 moth catches of a pest on 3 consecutive nights in a trap is considered as ETL				

**Spotted Bollworm:** This pest flourishes best at mild & humid climate with optimum temperature 30-40 °C with relative humidity above 60-100%.Maximum lethal temperature for this pest is 45-53 °C.Maximum lethal temperature for this pest is 45-53 °C.%.humidity above 60-80%. Maximum lethal temperature for this pest is 45-53 °C. The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max.

35.00 °C, Min. 18.29°C with humidity 15.61%. Due to cultivation of more BT varieties, **it is predicted that population of this pest will remain as such on cotton crop in the coming week.**

**Armyworm:** This pest flourishes best in mild & humid climate with optimum temperature 30-40 °C with relative humidity below 70-100%. Maximum lethal temperature for this pest is 45-53 °C. It is % humidity above 60-80%. Maximum lethal temperature for this pest is 45-53 °C. The current weather conditions on overall Punjab basis (temp. Max. 35.85 °C, Min. 23.07°C with R. humidity 62.28%) & forecast for the next week temp. Max. 35.00 °C, Min. 18.29°C with humidity 15.61%. Keeping in view, **it is predicted that population of this pest will decrease during the coming week.**

**CLCuV: The incidence of this disease is expected to sustain on cotton crop to the next week.**

**Wilting: The incidence of this disease sustain on cotton crop to the next week.**

## 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	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

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**

<b>Crops</b>	<b>Vegetables</b>	<b>Ornamentals</b>	<b>Weeds</b>
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**

<b>Insect pests</b>	<b>Economic threshold levels</b>
Jassid	1 Adult and 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 Bt and Non Bt varieties.
Army worm	(On appearance)
Aphid	On visible damage on top terminals.
Dusky Cotton bug	10 per leaf/bud