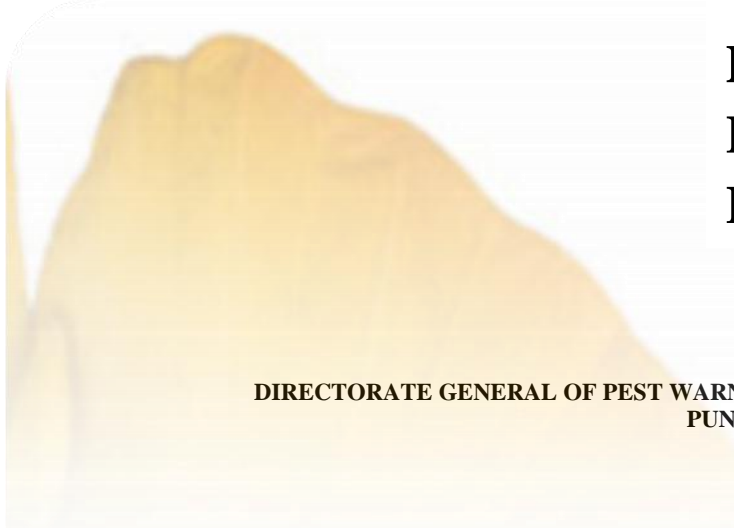




**Pest Situation of Sugarcane  
Crop in Punjab  
(15<sup>TH</sup> – 31<sup>ST</sup> MARCH 2022)**



**Directorate General  
Pest Warning & Quality Control of  
Pesticides Punjab, Lahore**

**FORTNIGHTLY PEST SCOUTING AND FORECAST REPORT OF SUGARCANE  
CROP FOR THE 2nd FORTNIGHT OF MARCH 2022**

<b>Pest Situation of Sugarcane Pests</b>								
Sr. No.	Pest Name	%age of spots						Remarks
		Current F.Night		Previous F.Night		Corresponding F.Night of Last Year		
		AETL	BETL	AETL	BETL	AETL	BETL	
1	BORER	0.00	9.39	0.00	2.44	0.00	6.34	-
2	PYRILLA	0.00	1.02	0.00	0.00	0.15	0.46	Decreasing
3	WHITEFLY	0.00	0.41	0.00	0.44	0.00	0.15	-
4	BLACK BUG	4.29	20.41	0.00	9.11	2.94	21.02	<b>Increasing</b>
-5	MITES	0.00	0.00	0.00	0.00	0.00	0.00	-
6	TOKA	0.00	0.61	0.00	1.11	0.00	0.31	-
7	MEALY BUG	0.00	-	0.00	-	0.00	-	-
8	RED ROT	0.61	-	0.89	-	1.24	-	Decreasing
9	WHIP SMUT	0.00	-	0.00	-	0.00	-	-
10	MOSAIC VIRUS	0.00	-	0.00	-	0.00	-	-
11	RUST	0.41	-	0.00	-	0.15	-	<b>Increasing</b>

**METEOROLOGICAL DATA OF THE FORTNIGHT**

Districts	2022				2021			
	Temperature		R.H%	Rainfall (mm)	Temperature		RH%	Rainfall ( mm)
	Max.	Min.			Max.	Min.		
<b>Multan</b>	30.2	18.1	68.9	8.5	38.0	18.43	60.25	0.0
<b>Khanewal</b>	30.3	17.8	64.5	5.5	36.8	21.19	55.5	0.0
<b>Vehari</b>	29.1	18.5	64.0	20.5	36.6	21.43	52.96	0.0
<b>Lodhran</b>	28.1	18.0	67.3	7.5	36.3	21	59.94	0.0
<b>Sahiwal</b>	34.8	20.0	60.2	0.0	28.0	16	58	16.0
<b>Pakpattan</b>	36.8	18.8	60.7	0.0	31.0	18	52	4.0
<b>Okara</b>	35.9	20.1	61.5	0.0	32.0	16.5	54	6.0
<b>Bahawalpur</b>	37.0	17.7	49.6	0.0	33.0	16.67	55.11	10.7
<b>Bahawalnagar</b>	37.9	20.1	48.4	0.0	33.3	17.59	55.2	4.0
<b>R.Y. Khan</b>	38.9	20.7	45.6	0.0	36.0	19.93	52.21	30.3
<b>D.G Khan</b>	39.6	20.9	37.2	0.0	34.8	19.5	41.79	0.0
<b>M. Garh</b>	35.4	21.9	56.5	0.0	28.2	14.33	60.83	2.0
<b>Rajanpur</b>	40.0	21.5	53.0	0.0	33.8	18.86	40.12	0.0
<b>Layyah</b>	28.8	14.1	54.5	0.0	29.1	12.4	51.59	0.5
<b>TOT/AVG</b>	<b>34.5</b>	<b>19.1</b>	<b>56.6</b>	<b>42.0</b>	<b>33.3</b>	<b>18.0</b>	<b>53.5</b>	<b>73.5</b>

## **FORECAST FOR THE NEXT FORTNIGHT**

### **BORERS**

This pest flourish best at optimum temperature 35-41C° with relative humidity below 65-70%. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5** C°, minimum **19.1** C° with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

### **PYRILLA**

This pest flourish best at optimum temperature 29-40C with relative humidity 75-84 The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5** C°, minimum **19.1** C° with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

### **WHITEFLY**

This pest flourish best at optimum temperature 29-40C with relative humidity 75-84%. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5** C°, minimum **19.1** C° with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

### **BLACK BUG**

This pest flourish best at optimum temperature 22.9-40.9C with relative R. humidity 46%. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5** C°, minimum **19.1** C° with R. humidity **56.6**. It is predicted that the population of this pest will increase during the next fortnight.

### **TOKA**

The optimal temperature and RH conditions for the feeding activities are 28.5-33C and 60-70 C° % respectively. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5** C°, minimum **19.1** C° with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

### **MEALY BUG**

This pest flourish best at optimum temperature 29-40C with relative humidity 75-84%. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5** C°, minimum **19.1** C° with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

## **TERMITES**

The optimal temperature and RH conditions for the feeding activities are 35°-40C and 70-80% respectively. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5 C°**, minimum **19.1 C°** with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

## **MITES**

The optimal temperature and RH conditions for the feeding activities are 30°-36C and 20-40% respectively. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5 C°**, minimum **19.1 C°** with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

## **RUST**

This disease flourish best at optimum temperature 12-14C with relative humidity below 80-85%. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5 C°**, minimum **19.1 C°** with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

## **RED ROT**

This disease flourish best at optimum temperature 25.5-26.5C with relative humidity 60. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5 C°**, minimum **19.1 C°** with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

## **WHIP SMUT**

This disease flourish best at optimum temperature 14-35C with relative humidity 55-80%. The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5 C°**, minimum **19.1 C°** with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

## **MOSAIC VIRUS**

The current weather conditions on overall South Punjab basis is as; maximum temperature **34.5 C°**, minimum **19.1 C°** with R. humidity **56.6**. It is predicted that the population of this pest will sustain during the next fortnight.

## **RECOMMENDATIONS**

### **BORERS MANAGEMENT**

- ❖ Install cards of beneficial insects (*Trichogramma*) from the start of crop.
- ❖ Apply granular insecticide carbofuron 3G@ 12-14 kg/acre to the fields where infestation of sugarcane borers observed above ETL.

### **PYRILLA MANAGEMENT**

- ❖ Promote parasitic insects (*Tetrastichus pyrillae*) against eggs of pyrilla and (*Epiricania melanoleuca*) against nymphs and adults of pyrilla.
- ❖ Cut the leaves 6 inch in length from those fields having parasite eggs and pupae in abundance and shift/hang them in fields where parasites are not found.
- ❖ Apply Granular insecticide Carbofuron 3G@ 12-14 kg/acre to the fields where infestation of sugarcane Pyrilla reaches ETL and parasites are not found. Application of granules may be done till the 6 feet height of canes.

### **WHITEFLY MANAGEMENT**

- ❖ Cut severe infested leaves of whitefly and bury in the soil.
- ❖ Install cards of beneficial insects i.e *Chrysoperla carnea*

### **BLACK BUG MANAGEMENT**

- ❖ Avoid the cane fields from water stress.
- ❖ Apply granular insecticide carbofuron 3G@ 12-14 kg/acre

### **RUST MANAGEMENT**

- ❖ Cultivate resistant varieties.
- ❖ Cut and burn the diseased plants/ Plant pests.

### **WHIP SMUT MANAGEMENT**

- ❖ Cut and burn the diseased plants / Plant pests

### **ECONOMIC THRESHOLD LEVELS (ETLs) OF SUGARCANE PESTS**

<b>INSECT PESTS</b>	<b>ECONOMIC THRESHOLD LEVEL</b>
Borers	10% infested canes.
Pyrilla	3 per leaf.
Whitefly	10 per Leaf
Black bug	10 per sheath.
Toka	3 per sweep
Mites	10 per Leaf
Mealy bug	Only presence
Termites	10% damage
Rodents	5 live burrows per acre
Diseases	Only presence