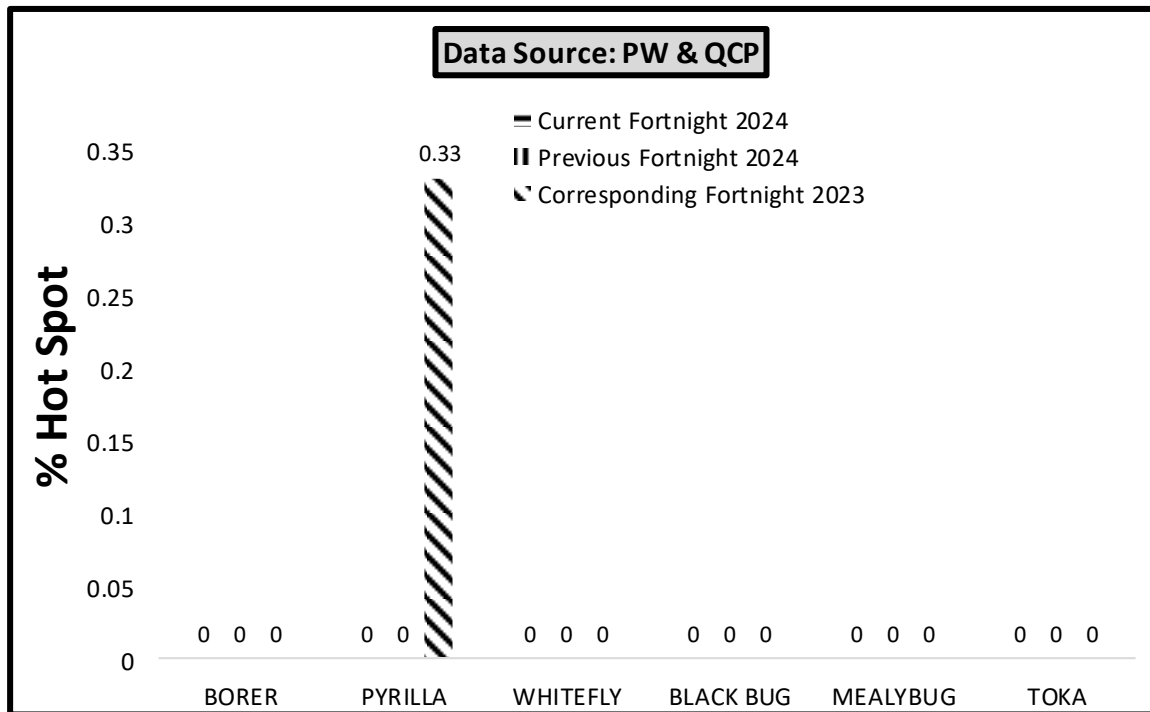


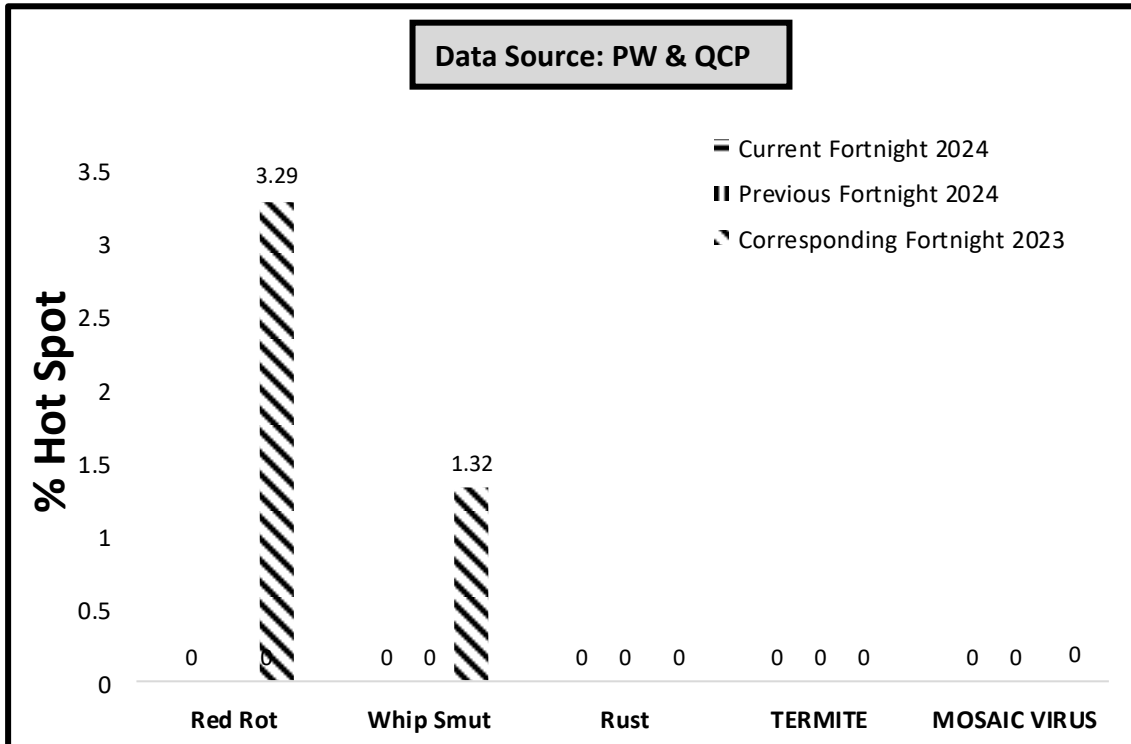
**Pest Situation of Sugarcane  
Crop in Punjab  
(1<sup>ST</sup> – 15<sup>TH</sup> FEBRUARY 2024)**

# GRAPHICAL PEST SITUATION ON SUGARCANE CROP IN PUNJAB FOR THE 1ST FORTNIGHT OF FEBRUARY 2024

## A- Insect Pest



## B- Disease



## FORTNIGHTLY PEST SCOUTING AND FORECAST REPORT OF SUGARCANE CROP FOR THE 1ST FORTNIGHT OF FEBRUARY 2024

Pest Situation of Sugarcane Pests								
		%age of spots						Remarks
Sr. No.	Pest Name	Current F.Night 2024		Previous F.Night 2023		Corresponding F.Night of 2023		
		AETL	BETL	AETL	BETL	AETL	BETL	
1	BORER	0.00	1.05	0.00	2.73	0.00	5.26	-
2	PYRILLA	0.00	0.00	0.00	0.00	0.33	0.00	-
3	WHITEFLY	0.00	0.00	0.00	0.00	0.00	0.00	-
4	BLACK BUG	0.00	0.00	0.00	0.00	0.00	2.63	-
-5	MITES	0.00	0.00	0.00	0.00	0.00	0.00	-
6	TOKA	0.00	0.00	0.00	1.17	0.00	0.66	-
7	MEALY BUG	0.00	-	0.00	-	0.00	-	-
8	RED ROT	0.00	-	0.00	-	3.29	-	-
9	WHIP SMUT	0.00	-	0.00	-	1.32	-	-
10	MOSAIC VIRUS	0.00	-	0.00	-	0.00	-	-
11	RUST	0.00	-	0.00	-	0.00	-	-

### METEOROLOGICAL DATA OF THE FORTNIGHT

Districts	2024				2023			
	Temperature		R.H%	Rainfall (mm)	Temperature		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
Multan	18.4	8.6	62.4	0.0	27.2	10.1	60.5	0.0
Khanewal	17.4	7.3	67.5	0.0	24.9	9.3	62.5	0.0
Vehari	18.6	7.4	63.8	1.0	25.4	10.4	61.8	0.0
Lodhran	18.9	9.1	65.0	1.3	24.7	9.7	64.9	0.0
Sahiwal	20.9	8.7	68.5	0.0	24.8	9.5	64.0	0.0
Pakpattan	20.2	9.0	67.4	0.0	24.0	9.0	66.0	0.0
Okara	20.4	8.9	66.0	0.0	25.1	9.3	65.5	0.0
Bahawalpur	22.6	8.0	62.8	3.6	24.0	7.4	63.3	0.0
Bahawalnagar	22.6	9.2	64.5	0.0	25.1	9.8	59.8	0.0
R.Y. Khan	21.8	10.2	60.4	4.4	27.6	11.6	63.1	0.0
D.G Khan	22.1	10.3	69.6	1.0	25.6	11.7	68.4	0.0
M. Garh	23.1	9.0	73.8	1.0	20.0	6.4	72.3	0.0
Rajanpur	21.6	9.4	80.1	1.0	24.1	9.5	65.1	0.0
Layyah	17.0	6.5	73.0	0.0	20.5	6.0	49.0	0.0
<b>TOT/AVG</b>	<b>20.4</b>	<b>8.7</b>	<b>67.5</b>	<b>13.3</b>	<b>24.5</b>	<b>9.3</b>	<b>63.3</b>	<b>0.00</b>

## **FORECAST FOR THE NEXT FORTNIGHT**

### **BORERS**

This pest flourish best at optimum temperature 35-41°C with relative humidity below 65-70%. The current weather conditions on overall Punjab basis is as; maximum temperature 20.4 °C , minimum 8.7°C with R. humidity 67.5. It is predicted that the population of this pest will sustain during the next fortnight.

### **PYRILLA**

This pest flourish best at optimum temperature 29-40°C with relative humidity 75-84%. The current weather conditions on overall Punjab basis is as; maximum temperature 20.4°C , minimum 8.7°C with R. humidity 67.5. It is predicted that the population of this pest will sustain during the next fortnight.

### **WHITEFLY**

This pest flourish best at optimum temperature 29-40°C with relative humidity 75-84%. The current weather conditions on overall Punjab basis is as; maximum temperature 20.4°C , minimum 8.7°C with R. humidity 67.5. It is predicted that the population of this pest will sustain during the next fortnight.

### **BLACK BUG**

This pest flourish best at optimum temperature 22.9-40.9°C with relative R. humidity 46%. The current weather conditions on overall South Punjab basis is as; maximum temperature 20.4°C , minimum 8.7°C with R. humidity 67.5. It is predicted that the population of this pest will sustain during the next fortnight.

### **TOKA**

The optimal temperature and RH conditions for the feeding activities are 28.5-33°C and 60-70 % respectively. The current weather conditions on overall Punjab basis is as; maximum temperature

20.4°C , minimum 8.7°C with R. humidity 67.5. It is predicted that the population of this pest will sustain during the next fortnight.

### **MEALY BUG**

This pest flourish best at optimum temperature 29-40°C with relative humidity 75-84%. The current weather conditions on overall Punjab basis is as; maximum temperature 20.4°C , minimum 8.7°C with R. humidity 67.5. 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 35-40°C and 70-80% respectively. The current weather conditions on overall Punjab basis is as; maximum temperature 20.4°C , minimum 8.7°C with R. humidity 67.5. 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 30-36°C and 20-40% respectively. The current weather conditions on overall Punjab basis is as; maximum temperature 20.4°C , minimum 8.7°C with R. humidity 67.5. It is predicted that the population of this pest will sustain during the next fortnight.

### **RUST**

This disease flourish best at optimum temperature 12-14°C with relative humidity below 80-85%. The current weather conditions on overall Punjab basis is as; maximum temperature 20.4°C , minimum 8.7°C with R. humidity 67.5. It is predicted that this disease will sustain during the next fortnight.

### **RED ROT**

This disease flourish best at optimum temperature 25.5-26.5°C with relative humidity 60%. The current weather conditions on overall Punjab basis is as; maximum temperature 20.4°C ,

minimum 8.7°C with R. humidity 67.5. It is predicted that the population of this pest will decrease during the next fortnight.

### **WHIP SMUT**

This disease flourish best at optimum temperature 14-35°C with relative humidity 55-80%. The current weather conditions on overall Punjab basis is as; maximum temperature 20.4°C , minimum 8.7°C with R. humidity 67.5. It is predicted that the population of this pest will sustain during the next fortnight.

### **MOSAIC VIRUS**

The current weather conditions on overall Punjab basis is as; maximum temperature 20.4°C , minimum 8.7°C with R. humidity 67.5. 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

INSECT PESTS	ECONOMIC THRESHOLD LEVEL
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