



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

**FORTNIGHTLY PEST SCOUTING AND FORECAST REPORT OF SUGARCANE  
CROP FOR THE 2ND FORTNIGHT OF MAY 2022**

<b>Pest Situation of Sugarcane Pests</b>								
Sr. No.	Pest Name	%age of spots						Remarks
		Current F.Night 2022		Previous F.Night 2022		Corresponding F.Night of 2021		
		AETL	BETL	AETL	BETL	AETL	BETL	
1	BORER	2.81	29.64	2.25	28.43	1.87	29.86	<b>Increasing</b>
2	PYRILLA	0.84	18.01	0.79	13.03	0.00	1.87	<b>Increasing</b>
3	WHITEFLY	0.00	0.75	0.00	0.11	0.00	0.00	-
4	BLACK BUG	2.91	33.02	5.73	35.96	2.41	28.54	Decreasing
-5	MITES	0.94	3.75	0.00	0.34	0.00	0.77	<b>Increasing</b>
6	TOKA	0.47	9.19	0.34	4.72	0.00	8.12	<b>Increasing</b>
7	MEALY BUG	0.09	-	0.00	-	0.00	-	<b>Increasing</b>
8	RED ROT	4.22	-	2.58	-	2.52	-	<b>Increasing</b>
9	WHIP SMUT	7.88	-	5.62	-	3.84	-	<b>Increasing</b>
10	MOSAIC VIRUS	0.00	-	0.00	-	0.00	-	-
11	RUST	0.19	-	0.00	-	0.33	-	<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>	42.9	28.2	61.5	0.0	39.4	26.4	61.86	3.0
<b>Khanewal</b>	41.4	28.4	53.2	0.0	39.5	26.56	53.56	0.0
<b>Vehari</b>	41.4	28.7	51.3	0.0	39.1	26.34	53.75	0.0
<b>Lodhran</b>	43.1	28.2	58.0	0.0	39.1	26.83	60.46	10.0
<b>Sahiwal</b>	38.8	24.2	45.0	0.5	38.0	24	50	9.0
<b>Pakpattan</b>	39.6	25.2	42.0	0.3	34.0	23	54	0.0
<b>Okara</b>	39.8	26.4	41.0	1.0	41.0	24	48	0.0
<b>Bahawalpur</b>	45.1	28.1	30.0	0.0	39.3	25.11	40.14	0.0
<b>Bahawalnagar</b>	44.1	27.1	32.8	0.0	38.2	26.02	35.05	0.0
<b>R.Y. Khan</b>	44.1	28.1	38.2	0.0	43.0	29.22	34.54	0.0
<b>D.G Khan</b>	44.0	28.8	24.8	0.0	42.3	26.5	27.75	0.0
<b>M. Garh</b>	43.9	24.0	39.1	0.0	31.7	18.08	52.83	0.0
<b>Rajanpur</b>	45.8	29.8	33.1	0.0	39.1	26.07	39.12	4.0
<b>Layyah</b>	48.0	28.0	32.0	0.0	40.0	24	36	0.0
<b>TOT/AVG</b>	<b>43.0</b>	<b>27.4</b>	<b>41.6</b>	<b>1.8</b>	<b>38.8</b>	<b>25.2</b>	<b>46.2</b>	<b>26.0</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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**. It is predicted that the population of this pest will increase 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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**.It is predicted that the population of this pest can increase 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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**.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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**.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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**.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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**.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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**.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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**.It is predicted that the population of this pest will increase 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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**. 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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**. It is predicted that the population of this pest will increase 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 **43.0** C°, minimum **27.4** C° with R. humidity **41.6**. It is predicted that the population of this pest will increase during the next fortnight.

**MOSAIC VIRUS**

The current weather conditions on overall South Punjab basis is as; maximum temperature **43.0** C°, minimum **27.4** C° with R. humidity **41.6**. 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.
Pyrrilla	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