



**Pest Situation of Sugarcane  
Crop in Punjab  
(15<sup>TH</sup> – 30<sup>TH</sup> APRIL 2022)**

**FORTNIGHTLY PEST SCOUTING AND FORECAST REPORT OF SUGARCANE  
CROP FOR THE 2nd FORTNIGHT OF APRIL 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	1.76	25.96	0.93	19.37	1.02	25.31	<b>Increasing</b>
2	PYRILLA	1.14	16.44	1.51	12.76	0.00	2.86	<b>Increasing</b>
3	WHITEFLY	0.00	0.10	0.00	0.23	0.00	0.10	-
4	BLACK BUG	6.83	36.50	6.84	33.99	5.61	35.71	<b>Increasing</b>
-5	MITES	0.00	0.00	0.00	0.00	0.00	0.00	-
6	TOKA	1.99	2.59	0.00	1.74	0.00	2.14	<b>Increasing</b>
7	MEALY BUG	0.00	-	0.00	-	0.00	-	-
8	RED ROT	2.38	-	0.46	-	1.33	-	<b>Increasing</b>
9	WHIP SMUT	1.86	-	0.46	-	2.55	-	Decreasing
10	MOSAIC VIRUS	0.00	-	0.00	-	0.00	-	-
11	RUST	0.21	-	0.35	-	0.00	-	<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>	39.9	28.4	57.6	0.0	36.2	21.6	62.15	Traces
<b>Khanewal</b>	40.4	26.1	53.0	4.0	35.3	22.02	51.38	Drizzling
<b>Vehari</b>	39.2	27.3	50.2	0.0	34.1	21.5	56.71	0.0
<b>Lodhran</b>	41.4	28.5	59.9	0.0	33.8	21.86	68.54	0.0
<b>Sahiwal</b>	41.2	24.0	36.0	0.0	35.0	18	49	0.0
<b>Pakpattan</b>	41.5	22.8	37.5	0.0	35.0	20	46	0.0
<b>Okara</b>	41.8	23.0	36.4	0.0	36.0	22	48	0.0
<b>Bahawalpur</b>	41.5	23.6	36.5	0.0	35.8	20.63	43.81	1.9
<b>Bahawalnagar</b>	43.5	24.8	31.4	0.2	34.9	20.23	50.36	0.2
<b>R.Y. Khan</b>	42.5	25.7	33.5	0.0	37.9	22.88	38.62	3.8
<b>D.G Khan</b>	28.4	13.1	48.9	0.0	31.1	13.79	48.36	0.0
<b>M. Garh</b>	24.4	10.2	62.7	0.0	23.4	7.583	61.04	0.0
<b>Rajanpur</b>	29.7	13.2	58.6	0.0	21.0	19.08	58.87	0.0
<b>Layyah</b>	42.0	25.0	48.0	0.0	36.0	24	38	2.0
<b>TOT/AVG</b>	<b>38.4</b>	<b>22.5</b>	<b>46.4</b>	<b>4.2</b>	<b>33.2</b>	<b>19.7</b>	<b>51.5</b>	<b>7.9</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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**. 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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**. 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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**.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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**.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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**.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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**.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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**.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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**.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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**. 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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**. 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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**. 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 **38.4** C°, minimum **22.5** C° with R. humidity **46.4**. 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