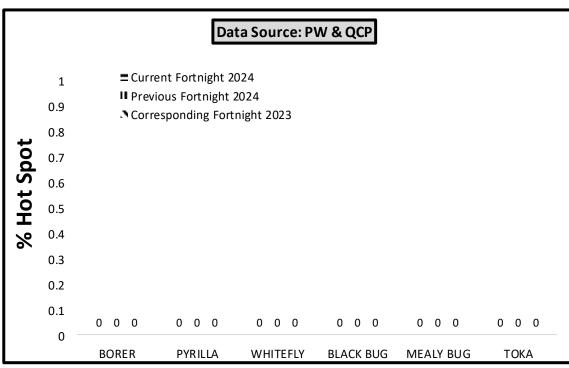
Pest Situation of Sugarcane Crop in Punjab (15TH – 29TH FEBRUARY 2024)

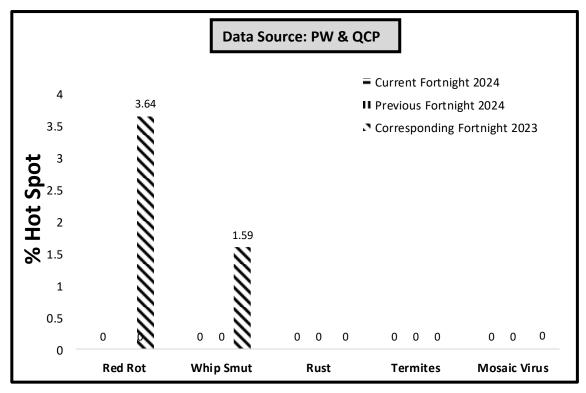
DIRECTORATE GENERAL OF PEST WARNING AND QUALITY CONTROL OF PESTICIDES PUNJAB, LAHORE

GRAPHICAL PEST SITUATION ON SUGARCANE CROP IN PUNJAB FOR THE 2ND FORTNIGHT OF FEBRUARY 2024



A- Insect Pest

B- Disease



FORTNIGHTLY PEST SCOUTING AND FORECAST REPORT OF SUGARCANE CROP FOR THE 2ND FORTNIGHT OF FEBRUARY 2024

	Pest Situation of Sugarcane Pests							
	%age of spots							
Sr. No.	Pest Name	Current F.Night 2024		Previous F.Night 2023		Corresponding F.Night of 2023		Remarks
		AETL	BETL	AETL	BETL	AETL	BETL	
1	BORER	0.00	1.22	0.00	1.05	0.00	4.55	-
2	PYRILLA	0.00	0.00	0.00	0.00	0.00	0.00	-
3	WHITEFLY	0.00	0.00	0.00	0.00	0.00	0.45	-
4	BLACK BUG	0.00	0.00	0.00	0.00	0.00	1.14	-
-5	MITES	0.00	0.00	0.00	0.00	0.00	0.00	-
6	TOKA	0.00	0.00	0.00	0.00	0.00	0.68	-
7	MEALY BUG	0.00	-	0.00	-	0.00	-	-
8	RED ROT	0.00	-	0.00	-	3.64	-	-
9	WHIP SMUT	0.00	-	0.00	-	1.59	-	-
10	MOSAIC VIRUS	0.00	-	0.00	-	0.00	-	-
11	RUST	0.00	-	0.00	-	0.00	-	-

METEOROLOGICAL DATA OF THE FORTNIGHT

			2024		2023			
Districts	Temperature		D 110/	Rainfall	Temperature		DU0/	Rainfall
	Max.	Min.	R.H%	(mm)	Max.	Min.	RH%	(mm)
Multan	25.6	10.7	67.6	Drizzling	30.6	15.1	57.4	0.0
Khanewal	24.4	10.3	54.5	0.0	28.3	12.4	60.6	0.0
Vehari	24.5	9.9	58.0	0.0	27.4	13.3	57.7	0.0
Lodhran	23.8	11.5	61.6	0.0	26.5	15.3	63.3	0.0
Sahiwal	23.4	9.6	64.3	0.0	29.2	13.6	64.4	0.0
Pakpattan	24.2	9.8	65.2	0.0	28.6	12.5	65.0	0.0
Okara	24.8	9.4	66.2	0.0	28.1	12.9	66.0	0.0
Bahawalpur	26.4	9.6	62.9	0.0	29.9	11.9	63.2	0.0
Bahawalnagar	29.2	15.6	64.3	0.0	31.0	18.0	68.3	0.0
R.Y. Khan	27.3	11.4	67.1	2.4	33.3	15.4	58.9	0.0
D.G Khan	24.3	10.7	65.8	0.0	30.1	15.5	55.5	0.0
M. Garh	26.4	12.4	69.0	0.5	25.8	10.7	67.5	0.0
Rajanpur	25.2	11.4	67.2	0.5	29.7	14.9	62.3	0.0
Layyah	19.0	8.0	55.0	0.0	27.5	13.0	53.5	0.0
TOT/AVG	24.9	10.7	63.5	3.4	29.0	13.9	61.7	0.0

FORECAST FOR THE NEXT FORTNIGHT

BORERS

This pest flourish best at optimum temperature $35-41^{\circ}$ C with relative humidity below 65-70%. The current weather conditions on overall Punjab basis is as; maximum temperature 24.9° C, minimum 10.7° C with R. humidity 63.5. 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 24.9°C, minimum 10.7°C with R. humidity 63.5. 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 24.9°C, minimum 10.7°C with R. humidity 63.5. 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 Punjab basis is as; maximum temperature 24.9°C, minimum 10.7°C with R. humidity 63.5. 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 24.9°C, minimum 10.7°C with R. humidity 63.5. 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 24.9°C, minimum 10.7°C with R. humidity 63.5. 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 24.9°C, minimum 10.7°C with R. humidity 63.5. 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 24.9°C, minimum 10.7°C with R. humidity 63.5. 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 24.9°C, minimum 10.7°C with R. humidity 63.5. 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 24.9°C, minimum 10.7°C with R. humidity 63.5. It is predicted that the population of this pest will sustain during the next fortnight.

WHIP SMUT

This disease flourish best at optimum temperature 14-35°C with relative humidity 55-80%. The current weather conditions on overall Punjab basis is as; maximum temperature 24.9°C, minimum 10.7°C with R. humidity 63.5. 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 24.9°C, minimum 10.7°C with R. humidity 63.5. It is predicted that the population of this pest will sustain during the next fortnight.

RECOMMENDATIONS

BORERS MANAGEMENT

- Install cards of beneficial insects (*Trichograma*) 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	