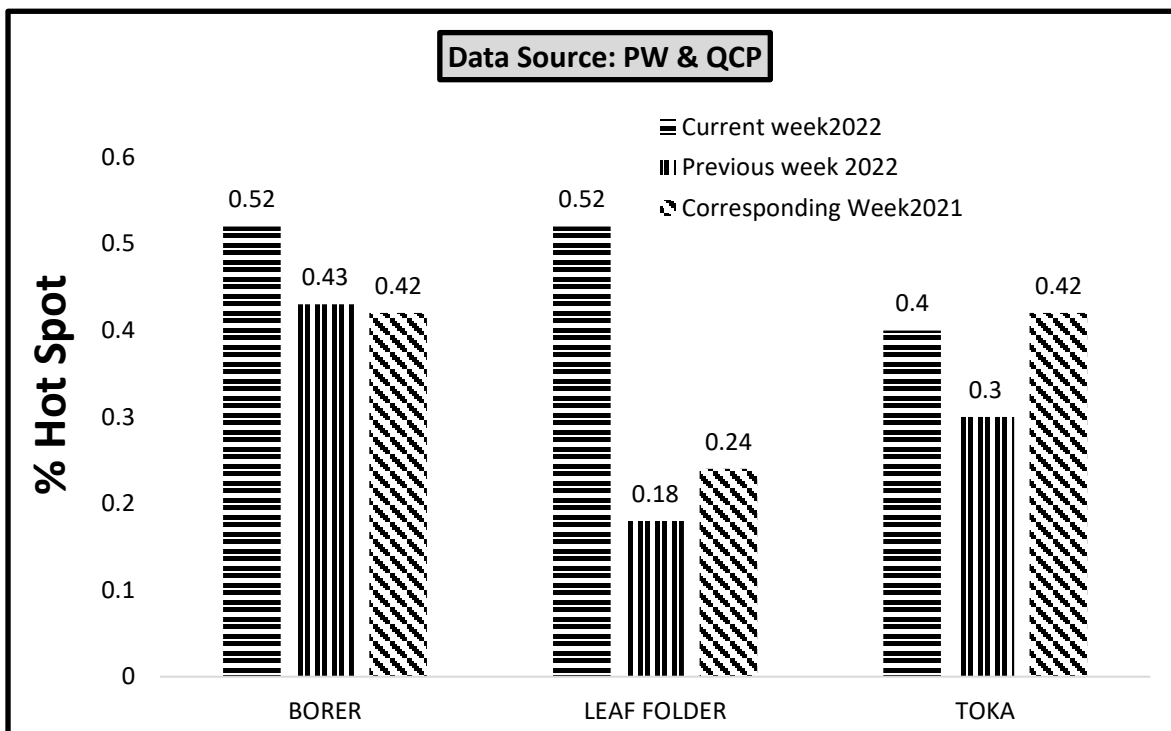
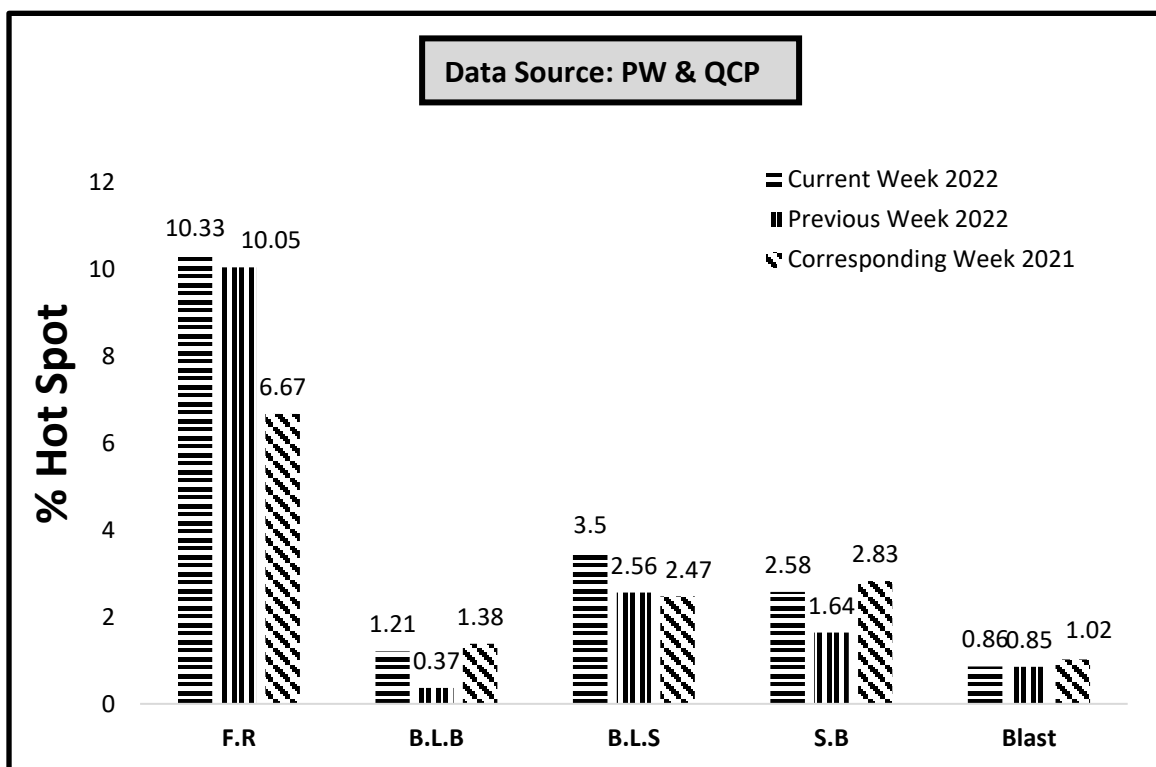


PEST SITUATION ON RICE CROP IN PUNJAB DURING 4TH WEEK OF AUGUST, 2022

A- Insect Pest



B- Disease



(**FR:** Foot Rot, **BLB:** Bacterial Leaf Blight, **BLS:** Brown Leaf spot, **SB:** Sheath Blight)

PEST SITUATION ON RICE CROP IN PUNJAB DURING 4TH WEEK OF AUGUST, 2022

Pest Situation of Rice Pests								
Sr. No.	Pest Name	%Age of spots						Remarks
		Current Week		Previous Week		Corresponding week of Last Year		
		AETL	BETL	AETL	BETL	AETL	BETL	
1	RICE BORER	0.52	13.09	0.43	10.29	0.42	7.88	Increasing
2	LEAF FOLDER	0.52	12.86	0.18	8.95	0.24	5.23	Increasing
3	WPBH	0.00	0.00	0.00	0.06	0.00	0.00	-
4	BPH	0.00	0.00	0.00	0.12	0.00	0.00	-
5	TOKA	0.40	19.69	0.30	17.54	0.42	18.70	Decreasing
6	FOOT ROT	10.33	-	10.05	-	6.67	-	Increasing
7	B.L.B	1.21	-	0.37	-	1.38	-	Decreasing
8	B.L.S	3.50	-	2.56	-	2.47	-	Increasing
9	SHEATH BLIGHT	2.58	-	1.64	-	2.83	-	Decreasing
10	BLAST	0.86	-	0.85	-	1.02	-	Decreasing
NO. OF TOTAL SPOTS VISITED			1742					
TOTAL AREA VISITED (Acres)			14314					

Tehsil wise percentage of hot spots of Rice Borer

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Chistian	25	4	Bahawalnagar	20.0
2	Shujabad	20.0	5	Multan	16.7
3	Minchinabad	20.0			

Tehsil wise percentage of hot spots of Rice Leaf Folder

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Shujabad	40	4	Minchinabad	13.3
2	Dunyapur	25.0	5	Chiniot	3.2
3	Multan	16.7			

Tehsil wise percentage of hot spots of White-Backed Plant Hoppe

Nil

Tehsil wise percentage of hot spots of Brown Plant Hopper

Nil

Tehsil wise percentage of hot spots of Rice Toka

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Phalia	10	4	Lahore	2.8
2	Malikwal	5.3	5	Narang Mandi	1.6
3	M.B.Din	3.1			

Tehsil wise percentage of hot spots of Foot Rot

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Shahpur	100	25	Daska	12.2
2	Bhalwal	66.7	26	Zafarwal	11.3
3	Kharian	54.5	27	Sambrial	11.1
4	Bhera	42.9	28	Chak Jhumra	11.1
5	Pattoki	41.7	29	Shorkot	11.1
6	Kot Radha Kishan	40.0	30	kamoke	10.5
7	Chunian	38.6	31	Lalian	10.5
8	Narowal	37.5	32	Pirmahal	9.5
9	Shakargarh	35.7	33	Hafizabad	8.6
10	Muzaffargarh	33.3	34	Baddomalhi	8.3
11	Sahiwal	27.3	35	Jalal Pur Jattan	8.3
12	Sahiwal	25.0	36	Narang Mandi	8.2
13	Kabirwala	25.0	37	Bhowana	8.0
14	Sargodha	21.4	38	Muridke	7.9
15	Pasrur	16.7	39	Gujrat	7.4
16	Ferozwala	15.4	40	Kot Momin	6.7
17	Pakpattan	15.0	41	M.B.Din	6.3
18	Sialkot	14.3	42	Jaranwala	5.7
19	Nankana Sahib	14.3	43	Gujranwala	5.6
20	Noshehra Virkan	13.9	44	Phalia	4.8
21	Sangla Hill	13.7	45	Safdarabad	4.3
22	18-Hazari	13.3	46	Wazirabad	3
23	Pindi Bhattian	13.0	47	Kamalia	3
24	Kasur	12.5	48	Lahore	1.4

Tehsil wise percentage of hot spots of Bacterial Leaf Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Gujranwala	22	7	Malikwal	5.3
2	Phalia	9.5	8	Daska	4.9
3	M.B.Din	9.4	9	Bhowana	4.0
4	Noshehra Virkan	8.3	10	Wazirabad	3.4
5	Kot Momin	6.7	11	Pindi Bhattian	2.2
6	kamoke	5.3	12	Lahore	1.4

Tehsil wise percentage of hot spots of Brown Leaf Spots

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Shahpur	100	14	Kasur	7.5
2	Sahiwal	35.0	15	Chunian	5.7
3	Kabirwala	25.0	16	kamoke	5.3
4	Malikwal	15.8	17	Lalian	5.3
5	Phalia	14.3	18	Khushab	5.0
6	Silanwali	14.3	19	Lahore	4.2
7	Minchinabad	13.3	20	Chiniot	3.2
8	M.B.Din	12.5	21	Kamalia	2.9
9	Pindi Bhattian	10.9	22	Noshehra Virkan	2.8
10	Kot Radha Kishan	10.0	23	Muridke	2.6
11	Hafizabad	8.6	24	Sheikhupura	2.6

12	Pattoki	8.3	25	Ferozwala	2.6
13	Sangla Hill	7.8			

Tehsil wise percentage of hot spots of Sheath Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Kamonke	26	13	Kasur	5.0
2	Malikwal	15.8	14	Safdarabad	4.3
3	Gujranwala	11.1	15	Bhowana	4.0
4	Sangla Hill	9.8	16	Pasrur	3.3
5	Phalia	9.5	17	Narang Mandi	3.3
6	M.B.Din	9.4	18	Lahore	2.8
7	Jalal Pur Jattan	8.3	19	Noshehra Virkan	2.8
8	Pattoki	8.3	20	Muridke	2.6
9	Gujrat	7.4	21	Hafizabad	2.5
10	Shahkot	7.1	22	Daska	2.4
11	Wazirabad	6.9	23	Pindi Bhattian	2.2
12	Sheikhupura	5.1			

Tehsil wise percentage of hot spots of Rice Blast

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Depalpure	16	6	Multan	5.6
2	Bhera	14.3	7	Malikwal	5.3
3	Kamalia	11.4	8	Pakpattan	5.0
4	Pattoki	8.3	9	Baddomalhi	2.8
5	Kot Momin	6.7	10	Chunian	1.4

Meteorological data of the current week 2022

METEOROLOGICAL DATA FOR 4TH WEEK OF AUGUST 2022								
Districts	2022				2021			
	Temperature		R.H%	Rainfall (mm)	Temperature		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
Gujranwala	34.5	26.5	72.5	8.0	36.5	24.5	74.9	0.0
Hafizbad	36.0	27.0	67.0	0.6	38.0	27.0	60.0	0.0
Sialkot	35.0	21.0	82.0	65.0	42.0	22.0	0.7	40.0
Narowal	35.4	22.4	81.9	25.0	34.9	23.6	83.4	0.0
Gujrat	34.0	26.0	82.0	69.0	37.0	28.6	78.0	57.0
M.B.Din	38.0	24.0	0.7	8.0	36.0	23.0	73.0	12.0
Lahore	35.4	26.7	72.4	0.6	23.2	17.9	44.2	1.8
Sheikhupura	33.3	26.0	78.6	0.6	35.1	25.3	55.4	0.0
Nankana	34.4	25.2	52.0	8.0	35.6	26.5	48.0	0.0
Kasur	36.0	28.3	59.1	0.5	35.2	27.2	57.0	0.0
Faisalabad	36.7	27.0	79.0	3.3	38.1	26.6	66.8	0.0
Jhang	35.8	26.4	61.1	21.4	39.2	29.5	53.5	0.0
Toba Tek Singh	36.2	26.9	83.9	0.6	38.3	27.7	81.4	0.0
Chiniot	33.8	26.8	57.0	0.0	38.0	28.0	52.6	0.0
Sargodha	35.0	27.0	51.0	0.0	40.0	38.0	75.0	0.0
Khushab	36.5	26.5	68.0	75.0	38.5	28.5	66.6	20.0
Mianwali	38.0	24.0	0.7	8.0	36.0	23.0	73.0	12.0
Bhakkar	39.5	28.5	70.0	4.0	39.5	26.3	52.0	12.0
Multan	33.4	26.6	65.1	7.0	36.6	28.9	66.5	0.0
Khanewal	34.3	26.4	73.3	2.0	39.3	28.5	57.4	0.0
Vehari	32.3	24.9	61.8	6.0	37.9	29.4	59.3	0.0
Lodhran	34.3	23.6	80.0	2.6	39.5	26.5	57.4	0.0
Sahiwal	34.8	27.0	73.5	1.0	38.0	27.0	64.0	0.0
Pakpattan	34.4	27.5	75.0	0.0	39.0	29.0	52.0	0.0
Okara	35.2	26.8	72.4	0.0	38.0	27.0	62.0	0.0
Bahawalpur	34.4	25.7	78.5	29.0	39.4	27.4	58.4	0.0
Bahawalnagar	35.7	26.6	66.5	0.0	39.2	27.6	57.9	0.0
R.Y.Khan	31.1	25.0	80.7	66.0	39.4	26.6	52.6	0.0
D.G. Khan	29.7	25.4	80.8	6.6	41.4	28.6	52.8	0.0
Muzaffar Garh	31.2	20.9	81.0	17.0	38.8	28.0	43.8	3.0
Rajanpur	30.2	26.0	81.6	11.6	39.6	31.0	47.2	0.0
Layyah	30.6	24.2	92.0	40.0	35.5	26.7	42.0	1.2
TOT/AVG	44.80	25.71	68.16	486.4	37.59	27.04	58.40	159.0

Forecast of Rice Pests:

Borer: This pest flourishes best in warm humid climate with optimum temperature 17-30 °C with relative humidity between 45-80%. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may decrease during the coming week as the temperature remain not favorable for the development of this pest.

Leaf Folder: This pest flourishes best in warm humid climate with optimum temperature 25-30°C. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may decrease during the coming week as the temperature remain not favorable for the development of this pest.

White-backed plant hopper: This pest flourishes best in warm humid climate with optimum temperature 25-29°C with relative humidity between 80-90%. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may

decrease during the coming week as the temperature remain not favorable for the development of this pest.

Brown plant hopper: This pest flourishes best in warm humid climate with optimum temperature 28-30°C with relative humidity below 80-90%. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may decrease during the coming week as the temperature remain not favorable for the development of this pest.

Toka: This pest flourishes best in warm humid climate with optimum temperature 24-40°C with relative humidity between 30-80%. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may decrease during the coming week as the temperature remain not favorable for the development of this pest.

Foot rot: High humidity and cloudy weather during heading stage are favorable for the development of foot rot of rice. The fungus have a wide range of temperature for optimum growth which is between 30-35 °C. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may increase during the coming week as the temperature remain favorable for the development of this disease.

Bacterial Leaf Blight: Heavy rain, heavy dew, flooding, deep irrigation water are favorable factors for the development of disease. Temperature for optimum growth is between 25-34 °C with relative humidity above 70%. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may increase during the coming week as the temperature remain favorable for the development of this disease.

Brown Leaf spots: Non-flooded and nutrient deficient soils or soils with accumulation of toxic substances are favorable for the development of disease. Temperature for optimum growth is between 16-36 °C with relative humidity from 86-100%. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may increase during the coming week as the temperature remain favorable for the development of this disease.

Sheath Blight: Crop plants during rainy season are more vulnerable to the disease. Temperature for optimum growth is between 28-32 °C with relative humidity from 85-100%. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may increase during the coming week as the temperature remain favorable for the development of this disease.

Blast: Intermittent [drizzles](#), cloudy weather, more of rainy days, Low night temperature and longer duration of dew are favorable factors for the development of disease. Keeping in view the temperature for current week and weather forecast of next week, it is predicted that population of this pest may increase during the coming week as the temperature remain favorable for the development of this disease.

RECOMMENDATION

RICE BORER MANAGEMENT

- Handpick and destroy egg masses.
- Install light traps up to September to monitor moth population of stem borers.

- Use balanced Fertilizers (NPK) within 45 days after transplanting of nursery.
- Complete application of nitrogen up to 31st August because due to late application of nitrogenous fertilizer, the plant becomes succulent and dark-green which attracts the insects, and helps in their rapid multiplication along with increasing disease incidence.

BOWN LEAF SPOT MANAGEMENT

- Avoid water stress before maturity.
- Control the disease with one of the following pesticides.

S#	Common Name	Brand Name	Dose / Acre
1	Propineb 70 WP	Gift, Cover, Protest	800 gm
2	Mancozeb 80 WP	Shelter, Dithane-M	800 gm
3	Propiconazole 25 EC	Tilt	80 ml

FOOT ROT MANAGEMENT

- Uproot the diseased plants and destroy them.
- Use Potash 1 Bag within 14 days of transplanting.
- Flooding of Copper Sulphate 1.5-2 Kg/Acre.

BACTERIAL LEAF BLIGHT MANAGEMENT

- Use disease free seeds for next crop.
- Spray copper based fungicides without delay when disease incidence is observed.

PADDY BLAST MANAGEMENT

- For leaf blast, re-flood if field has been drained. Maintain water level at 3-4inches to ensure that soil is covered.
- Avoid late use of nitrogenous fertilizers.
- Control the disease with one of the following fungicides;

S#	Common Name	Brand Name	Dose / Acre
1	Kasugamycin 6% WP	Fork	250 gm
2	Trifloxystrobin+Tebuconazole 75%WP	Nativo	65 gm
3	Azoxystrobin 25 % SC	Primacy	200 ml
4	Difenoconazole 250 EC	Score	125 ml

ECONOMIC THRESHOLD LEVELS OF RICE PESTS

INSECT PESTS	ECONOMIC THRESHOLD LEVELS
Borers (White, Yellow & Pink)	0.5% attack on rice nursery while 8-10 Moth/Trap/Night & 5% dead heart on rice crop.
Toka	3 per net on rice nursery & 5 on rice crop.
Leaf Folder	2 rolled leaves per plant in July-August & 3 rolled leaves per plant in September-October.
Brown Plant Hopper	15 Nymphs or Adults per plant in July-August & 20 Nymphs or Adults per plant in September-October. Or 7-10 Nymphs or Adults per net
White Backed Plant Hopper	15 Nymphs or Adults per plant in July-August & 20 Nymphs or Adults per plant in September-October. Or 7-10 Nymphs or Adults per net
Hispa	1 per plant
Diseases	On appearance