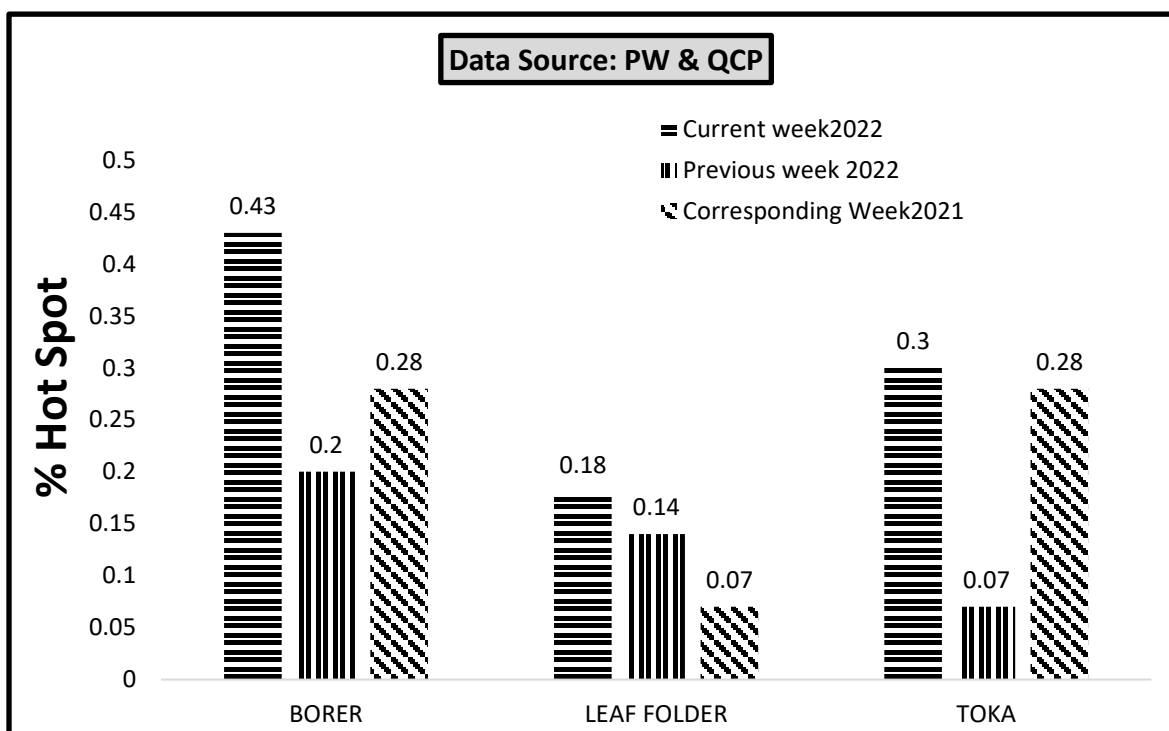
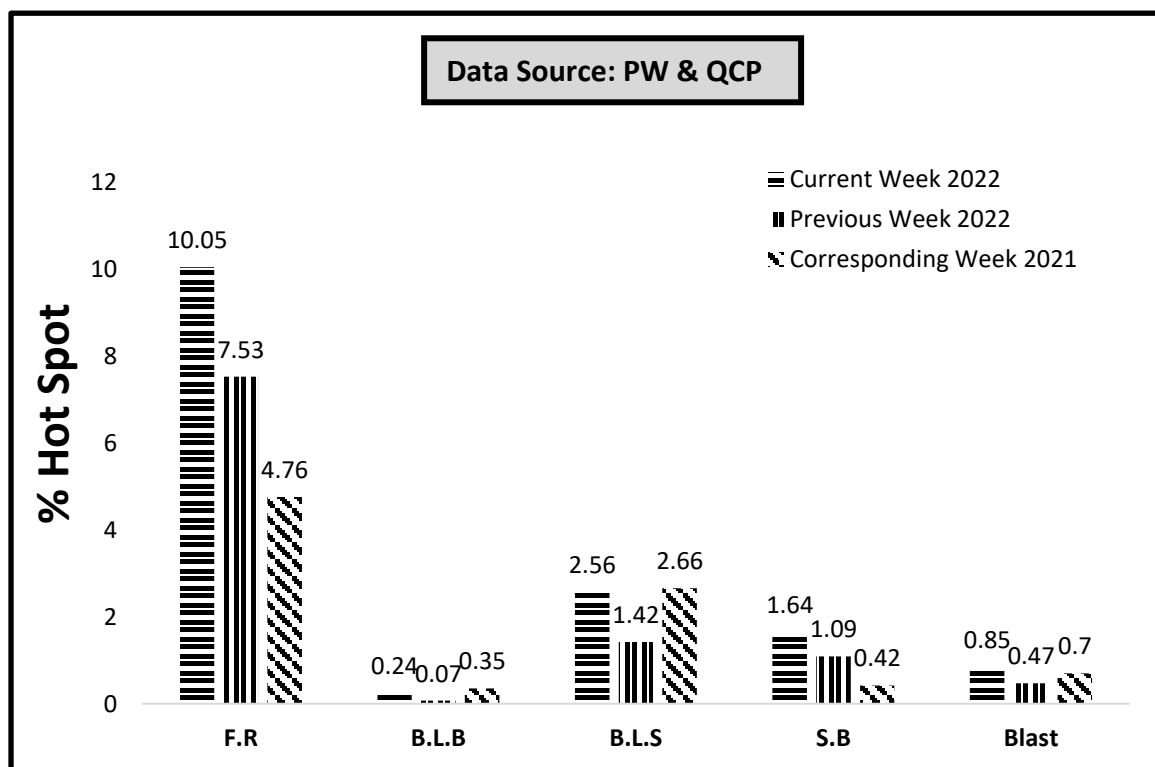


**PEST SITUATION ON RICE CROP IN PUNJAB
DURING 3RD WEEK OF AUGUST, 2022
DEPARTMENT OF PEST WARNING & QCP, PUNJAB**

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 3RD 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	0.43	10.29	0.20	6.65	0.28	7.07	Increasing
2	LEAF FOLDER	0.18	8.95	0.14	4.34	0.07	4.55	Increasing
3	WPBH	0.00	0.06	0.00	0.00	0.00	0.00	-
4	BPH	0.00	0.12	0.00	0.00	0.00	0.00	-
5	TOKA	0.30	17.54	0.07	11.67	0.28	17.91	Increasing
6	FOOT ROT	10.05	-	7.53	-	4.76	-	Increasing
7	B.L.B	0.37	-	0.07	-	0.35	-	Increasing
8	B.L.S	2.56	-	1.42	-	2.66	-	Increasing
9	SHEATH BLIGHT	1.64	-	1.09	-	0.42	-	Increasing
10	BLAST	0.85	-	0.47	-	0.70	-	Increasing
NO. OF TOTAL SPOTS VISITED			1642					
TOTAL AREA VISITED (Acres)			12504					

Tehsil wise percentage of hot spots of Rice Borer

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Dunya Pur	33	4	Minchanabad	5.0
2	Multan	14.3	5	Pattoki	2.9
3	Pakpattan	11.1			

Tehsil wise percentage of hot spots of Rice Leaf Folder

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Dunya Pur	33	3	Minchinabad	5.0
2	Shujabad	25.0			

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	Muridke	6	2	Lahore	2.6

Tehsil wise percentage of hot spots of Foot Rot

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Sahiwal	100	24	Zafarwal	12.5
2	Sangla Hill	60	25	Pattoki	11.4
3	Jalal Pur Jattan	50.0	26	Kot Momin	10.7

4	Shahkot	45.5	27	Chak Jhumra	10.6
5	Nankana Sahib	41.1	28	Sheikhupura	10.4
6	Sahiwal	30.0	29	18-Hazari	10.0
7	Bhera	25.0	30	Muridke	9.6
8	kamoke	21.9	31	Lahore	7.7
9	Wazirabad	21.1	32	Chunian	7.7
10	Shahpur	20.8	33	Hafizabad	7.6
11	Narowal	20.0	34	Kamalia	7.3
12	Bhalwal	20.0	35	Pindi Bhattian	7.1
13	Kharian	18.2	36	Sambrial	7.1
14	Pakpattan	16.7	37	Bhowana	6.9
15	Jatoi	16.7	38	M.B.Din	6.1
16	Sialkot	16.0	39	Baddomalhi	5.9
17	Pasrur	15.4	40	Ferozwala	5.7
18	Shakargarh	15.0	41	Phalia	5.3
19	Noshehra Virkan	14.8	42	Malikwal	5.0
20	Gujranwala	14.3	43	Pirmahal	5.0
21	Daska	14.3	44	Gujrat	4.3
22	Safdarabad	13.3	45	Chiniot	3
23	Sargodha	13.3	46	Kasur	2

Tehsil wise percentage of hot spots of Bacterial Leaf Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Phalia	5	3	M.B.Din	3.0
2	Bhowana	3.4	4	Sheikhupura	2.1

Tehsil wise percentage of hot spots of Brown Leaf Spots

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Sahiwal	100	12	Khushab	5.6
2	Silanwali	22.2	13	Shakargarh	5.0
3	Vehari	20.0	14	Gujranwala	4.8
4	Phalia	15.8	15	Muridke	3.8
5	Malikwal	15.0	16	Nankana Sahib	3.6
6	Pindi Bhattian	9.5	17	Safdarabad	3.3
7	M.B.Din	9.1	18	Chiniot	3.1
8	Shahkot	9.1	19	Kasur	2.4
9	Hafizabad	7.6	20	Sheikhupura	2.1
10	Ferozwala	5.7	21	Lahore	1.3
11	Pattoki	5.7			

Tehsil wise percentage of hot spots of Sheath Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Sahiwal	33	9	Phalia	5.3
2	Gujrat	13.0	10	Malikwal	5.0
3	Shakargarh	10.0	11	Pasrur	3.8
4	Muridke	9.6	12	Hafizabad	3.0
5	Gujranwala	9.5	13	Daska	2.9
6	Sheikhupura	6.3	14	Pindi Bhattian	2.4

7	M.B.Din	6.1	15	Lahore	1.3
8	Wazirabad	5.3			

Tehsil wise percentage of hot spots of Rice Blast

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Sahiwal	33	5	Pakpattan	5.6
2	Depalpure	16.7	6	Kot Momin	3.6
3	Kamalia	12.2	7	Chunian	2.6
4	Multan	7.1	8	Lahore	1.3

Meteorological data of the current week 2022

METEOROLOGICAL DATA FOR 3RD WEEK OF AUGUST 2022								
Districts	2022				2021			
	Temperature		R.H%	Rainfall (mm)	Temperature		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
Gujranwala	37.5	28.6	68.5	15.0	38.8	28.5	62.2	0.0
Hafizbad	35.0	27.5	60.0	23.0	36.0	28.0	56.0	8.0
Sialkot	35.0	21.0	82.0	65.0	42.0	22.0	0.7	40.0
Narowal	33.6	22.0	85.4	13.0	34.7	23.9	69.2	1.0
Gujrat	32.0	26.0	72.0	255.0	36.8	28.1	53.0	113.0
M.B.Din	37.0	24.0	0.7	10.0	37.4	25.0	0.6	5.0
Lahore	34.5	26.4	70.5	6.6	37.0	28.3	59.7	3.4
Sheikhupura	34.2	25.7	51.0	17.0	35.2	26.5	48.0	0.0
Nankana	34.8	27.1	58.2	1.1	37.3	28.3	42.0	0.0
Kasur	33.3	26.0	78.6	8.1	35.1	25.3	55.4	0.0
Faisalabad	36.8	27.1	73.0	1.4	38.4	26.9	66.5	0.0
Jhang	35.4	26.7	69.1	9.4	36.0	27.9	54.5	0.0
Toba Tek Singh	36.1	26.8	85.2	17.2	38.6	28.3	75.7	1.8
Chiniot	35.8	26.8	53.8	6.6	39.4	27.4	58.8	0.0
Sargodha	35.0	27.0	51.0	0.0	40.0	38.0	75.0	0.0
Khushab	35.5	26.5	76.0	23.5	40.5	32.5	66.6	0.0
Mianwali	34.8	27.1	58.2	1.1	37.3	28.3	42.0	0.0
Bhakkar	35.5	27.0	75.0	51.5	38.5	26.3	56.0	0.0
Multan	33.1	25.3	74.0	7.4	37.4	29.0	62.6	0.0
Khanewal	33.3	26.7	72.1	2.0	38.0	28.5	58.5	0.0
Vehari	32.3	25.9	62.6	6.0	38.0	29.6	57.1	0.0
Lodhran	34.3	25.4	78.9	3.1	38.5	29.0	67.9	0.0
Sahiwal	33.7	26.5	81.5	15.0	40.0	28.0	55.0	0.0
Pakpattan	34.6	27.2	79.6	13.0	41.0	30.0	50.0	0.0
Okara	35.6	27.6	80.2	12.0	39.0	28.0	54.0	0.0
Bahawalpur	33.7	26.0	73.8	73.3	39.0	27.7	57.9	0.0
Bahawalnagar	35.6	25.7	70.0	5.3	38.2	26.7	62.0	0.0
R.Y.Khan	31.7	26.2	80.7	7.5	36.9	27.0	42.0	0.0
D.G. Khan	33.0	26.0	64.0	54.0	40.1	28.6	62.0	0.0
Muzaffar Garh	32.8	21.3	82.0	10.0	40.8	30.5	39.8	3.0
Rajanpur	33.0	28.0	81.6	15.8	40.0	29.3	43.6	0.0
Layyah	32.0	25.4	94.0	70.0	47.9	32.6	50.1	0.0
TOT/AVG	34.38	26.01	70.10	818.09	38.55	28.24	53.26	175.2

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