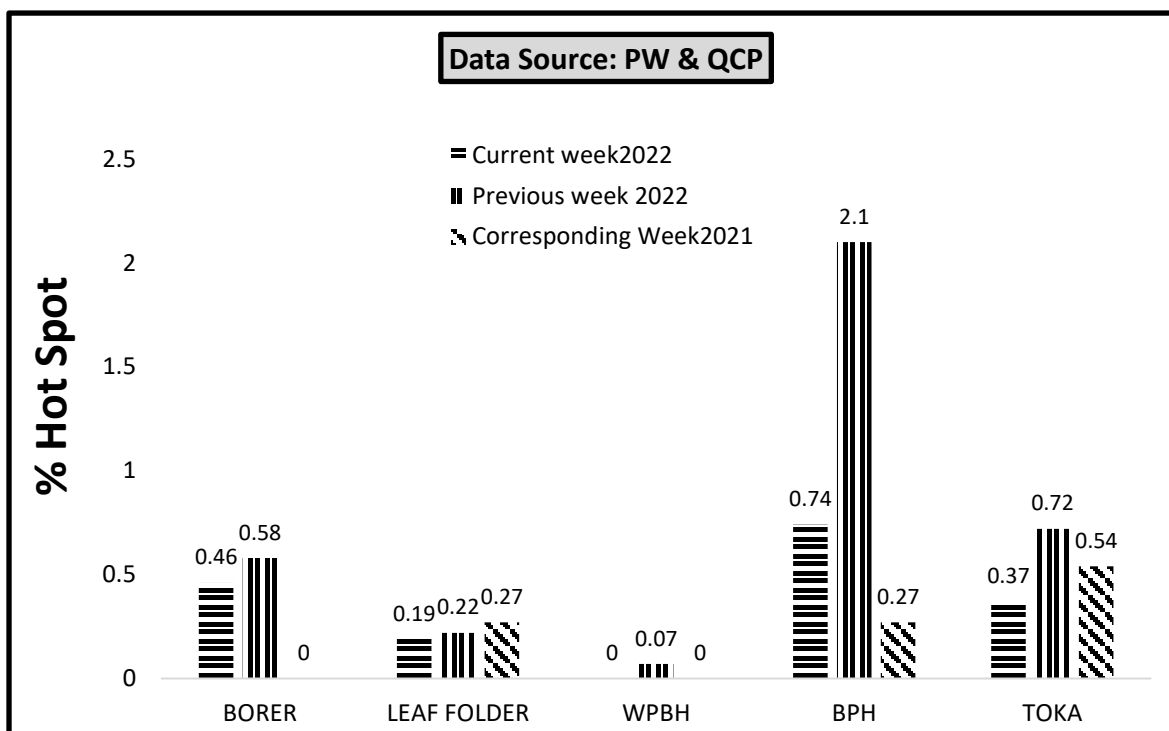
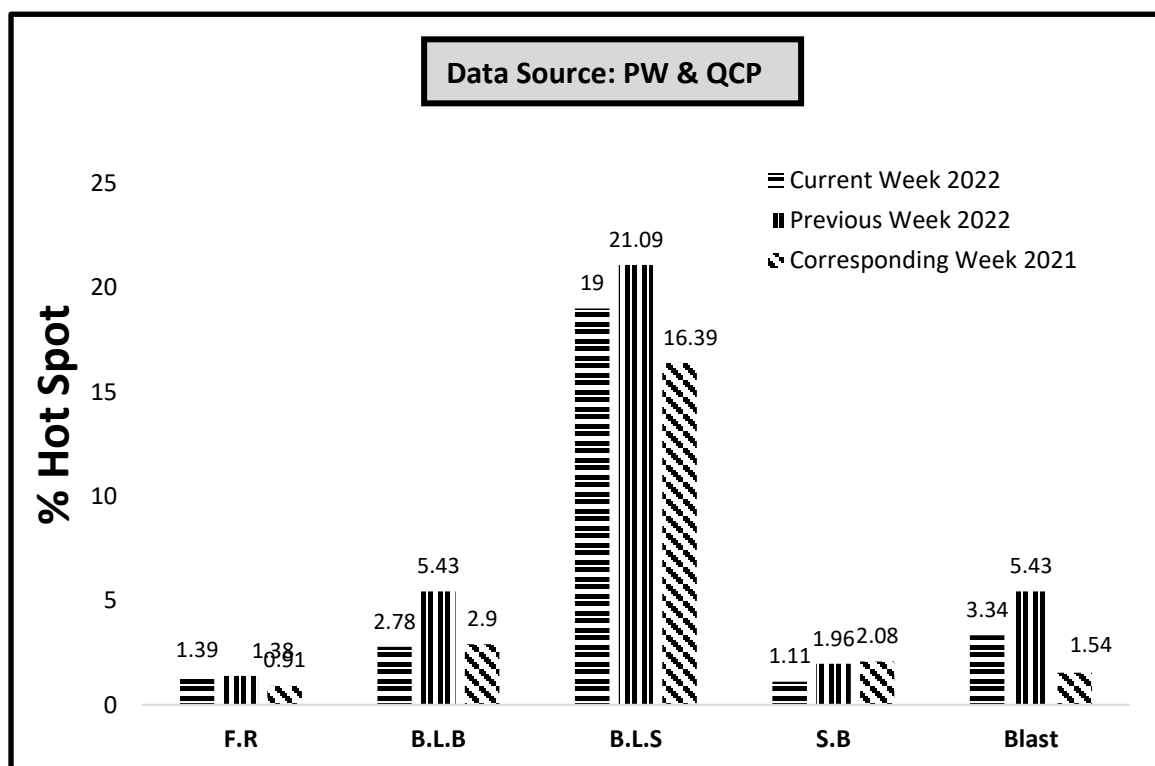


GRAPHICAL PEST SITUATION ON RICE CROP IN PUNJAB DURING 1st WEEK OF NOVEMBER, 2022

A- Insect Pest



B- Disease



(FR: Foot Rot, BLB: Bacterial Leaf Blight, BLS: Brown Leaf spot, SB: S

PEST SITUATION ON RICE CROP IN PUNJAB DURING 1ST WEEK OF NOVEMBER, 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	0.46	11.31	0.58	14.28	0.00	8.88	Decreasing
2	LEAF FOLDER	0.19	2.97	0.22	4.20	0.27	2.54	Decreasing
3	WPBH	0.00	1.48	0.07	1.96	0.00	0.63	Decreasing
4	BPH	0.74	12.33	2.10	13.04	0.27	8.15	Decreasing
5	TOKA	0.37	24.84	0.72	25.22	0.54	14.86	Decreasing
6	FOOT ROT	1.39	-	1.38	-	0.91	-	Decreasing
7	B.L.B	2.78	-	5.43	-	2.90	-	Decreasing
8	B.L.S	19.00	-	21.09	-	16.39	-	Decreasing
9	SHEAT H BLIGHT	1.11	-	1.96	-	2.08	-	Decreasing
10	BLAST	3.34	-	5.43	-	1.54	-	Decreasing
NO. OF TOTAL SPOTS VISITED		1079						
TOTAL AREA VISITED (Acres)		6642						

Tehsil wise percentage of hot spots of Rice Borer

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Shujabad	14	3	Multan	9.5
2	Bahawalpur	11.1			

Tehsil wise percentage of hot spots of Rice Leaf Folder

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Shujabad	7	2	Multan	4.8

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

Nil

Tehsil wise percentage of hot spots of Brown Plant Hopper

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Bahawalpur	22	4	Ferozwala	5.6
2	Malikwal	11.1	5	Minchinabad	3.6
3	Pindi Bhattian	5.9	6	Lahore	2.0

Tehsil wise percentage of hot spots of Rice Toka

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Lahore	6	2	Sheikhupura	3.6

Tehsil wise percentage of hot spots of Foot Rot

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Kot Addu	71	4	Muzaffargarh	40
2	Dunya Pur	50	5	Lodhran	33
3	Jatoi	45	6	Kehror Pacca	33

Tehsil wise percentage of hot spots of Bacterial Leaf Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Ferozwala	33	7	Sambrial	10.5
2	Gujranwala	14	8	Phalia	10.0

3	Daska	14	9	Pindi Bhattian	5.9
4	Pasrur	12	10	Hafizabad	5.0
5	Malikwal	11	11	M.B.Din	5.0
6	Sialkot	11	12	Zafarwal	4.3

Tehsil wise percentage of hot spots of Brown Leaf Spots

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Khanewal	67	30	Karor	25.0
2	Mian Channu	67	31	Pindi Bhattian	23.5
3	Kehror Pacca	67	32	Wazirabad	23.1
4	Layyah	67	33	Shujabad	21.4
5	Hasilpur	60	34	Sialkot	21.1
6	Kharian	57	35	Narang Mandi	20.0
7	Jalal Pur Jattan	57.1	36	Jhang	20.0
8	Sharqpur	50.0	37	Jatoi	18.2
9	Jahanain	50.0	38	Sheikhupura	17.9
10	Dunya Pur	50.0	39	Minchinabad	17.9
11	M.B.Din	45.0	40	Muridke	16.7
12	Bahawalpur	44.4	41	Chistian	16.7
13	Lahore	40.8	42	Bahawalnagar	16.7
14	Phalia	40.0	43	kamoke	15.8
15	Gujrat	38.2	44	Shakargarh	15.8
16	Narowal	35.7	45	Noshehra Virkan	14.3
17	Baddomalhi	33.3	46	Multan	14.3
18	Malikwal	33.3	47	Chunian	13.3
19	Kabirwala	33.3	48	Kot Radha Kishan	12.5
20	Lodhran	33.3	49	Pasrur	11.5
21	Yazman	33.3	50	Jaranwala	10.5
22	Bhowana	30.0	51	Kasur	10.0
23	Gujranwala	28.6	52	Chak Jhumra	10
24	Chiniot	26.7	53	Daska	9.5
25	Lalian	26.7	54	Khushab	8.6
26	Hafizabad	25.0	55	Zafarwal	8.5
27	Safdarabad	25.0	56	Pakpattan	6.25
28	Ferozwala	25.0	57	Sambrial	5.2
29	Sahiwal	25.0			

Tehsil wise percentage of hot spots of Sheath Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Ferozwala	17	4	M.B.Din	10
2	Pindi Bhattian	12	5	Hafizabad	5
3	Malikwal	11			

Tehsil wise percentage of hot spots of Rice Blast

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Jalal Pur	50	13	Zafarwal	8.5
2	Layyah	33	14	Depalpure	8.3
3	Karor	25	15	Shujabad	7.1
4	Phalia	20	16	Ferozwala	5.6

5	Chistian	17	17	Sambrial	5.3
6	Bahawalnagar	17	18	Hafizabad	5.0
7	Multan	14.3	19	Kasur	5.0
8	Pakpattan	12.5	20	Pattoki	5.0
9	Malikwal	11.1	21	Pasrur	3.8
10	kamoke	10.5	22	Minchinabad	3.6
11	M.B.Din	10.0	23	Chunian	3.3
12	Daska	9.5	24	Khushab	2.2

Meteorological data of the current week 2022

METEOROLOGICAL DATA FOR 1ST WEEK OF NOVEMBER 2022								
Districts	2022				2021			
	Temperature		R.H%	Rainfall (mm)	Temperature		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
Gujranwala	27.5	17.5	66.6	5.0	29.5	19.5	39.5	0.0
Hafizbad	29.0	18.0	62.0	0.0	28.9	18.1	62.2	0.0
Sialkot	23.0	17.0	70.0	0.0	21.0	16.0	69.0	5.0
Narowal	27.0	14.8	74.5	0.0	26.4	13.0	68.1	0.0
Gujrat	29.0	20.0	65.0	0.0	34.8	24.5	62.0	0.0
M.B.Din	28.0	17.0	0.6	0.0	27.9	17.0	0.6	0.0
Lahore	30.6	17.5	60.9	0.0	25.5	20.8	52.5	0.1
Sheikhupura	28.2	18.7	41.0	0.0	30.2	21.0	44.0	0.0
Nankana	30.4	17.6	45.9	0.0	28.9	16.4	28.1	0.0
Kasur	26.6	15.1	1.4	0.0	26.3	16.0	53.9	0.0
Faisalabad	32.4	16.6	76.1	0.0	27.5	16.5	53.4	0.0
Jhang	30.3	13.0	86.5	0.0	31.7	17.8	79.7	0.0
Toba Tek Singh	32.1	17.8	85.0	0.0	30.7	14.7	77.0	0.0
Chiniot	31.8	16.5	56.0	0.0	29.0	16.4	44.4	0.0
Sargodha	33.0	27.0	77.0	100.0	40.0	38.0	75.0	0.0
Khushab	28.5	16.0	65.0	0.0	31.5	21.5	68.0	0.0
Mianwali	28.0	17.0	0.6	0.0	27.9	17.0	0.6	0.0
Bhakkar	30.6	17.5	60.9	0.0	25.5	20.8	52.5	0.1
Multan	35.3	18.1	62.7	0.0	29.6	16.3	62.6	0.0
Khanewal	33.1	19.1	57.0	0.0	30.6	17.0	61.6	0.0
Vehari	35.0	18.0	72.1	0.0	29.9	17.0	64.3	0.0
Lodhran	30.1	18.0	71.9	0.0	29.0	17.5	64.0	0.0
Sahiwal	30.0	17.5	70.0	0.0	28.0	15.0	62.0	0.0
Pakpattan	29.9	18.1	69.5	0.0	29.0	16.0	63.0	0.0
Okara	29.0	17.2	70.3	0.0	30.0	15.5	62.0	0.0
Bahawalpur	34.4	17.3	61.5	0.0	30.0	14.1	52.3	0.0
Bahawalnagar	32.0	18.9	69.9	0.0	29.8	13.5	70.2	0.0
R.Y.Khan	36.7	20.1	34.8	0.0	33.3	17.2	40.6	0.0
D.G. Khan	30.7	19.7	73.9	0.0	32.0	16.4	57.2	0.0
Muzaffar Garh	29.8	18.2	65.8	0.0	31.8	18.8	57.1	0.0
Rajanpur	28.5	17.4	62.8	9.0	29.0	16.5	56.8	0.0
Layyah	28.0	19.0	65.0	0.0	30.1	17.6	75.0	0.0
Average	30.27	17.85	59.45	3.56	29.54	17.92	55.60	0.16

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