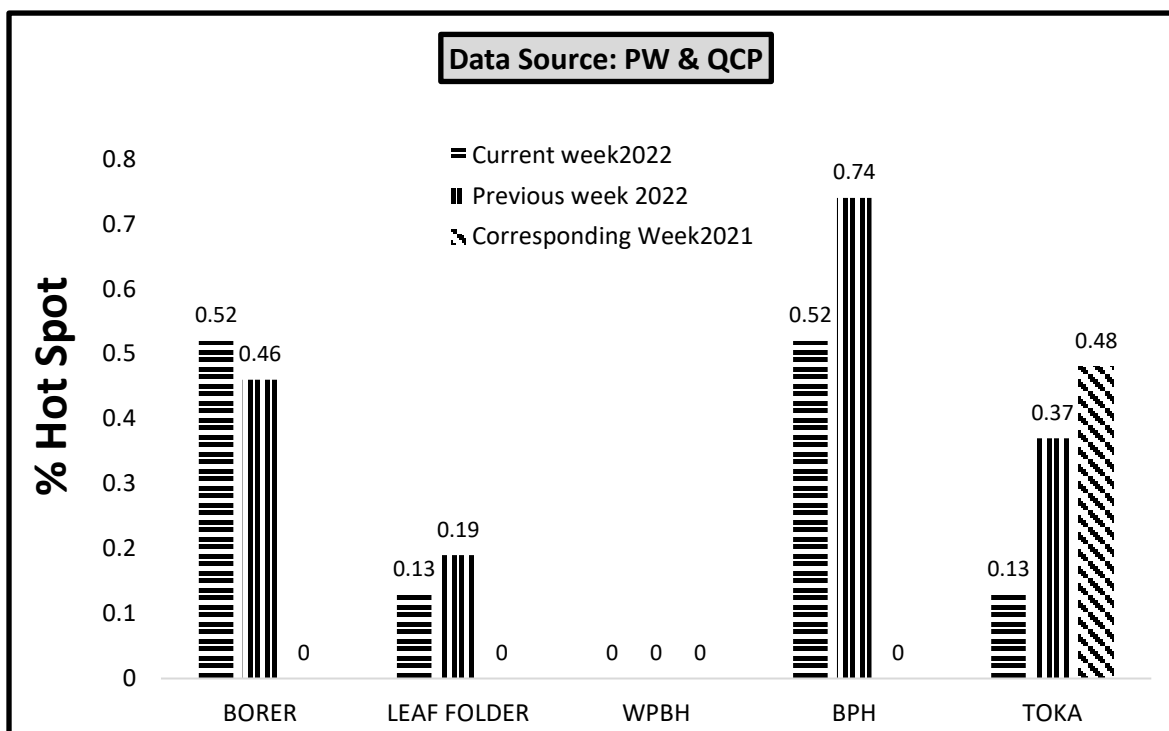
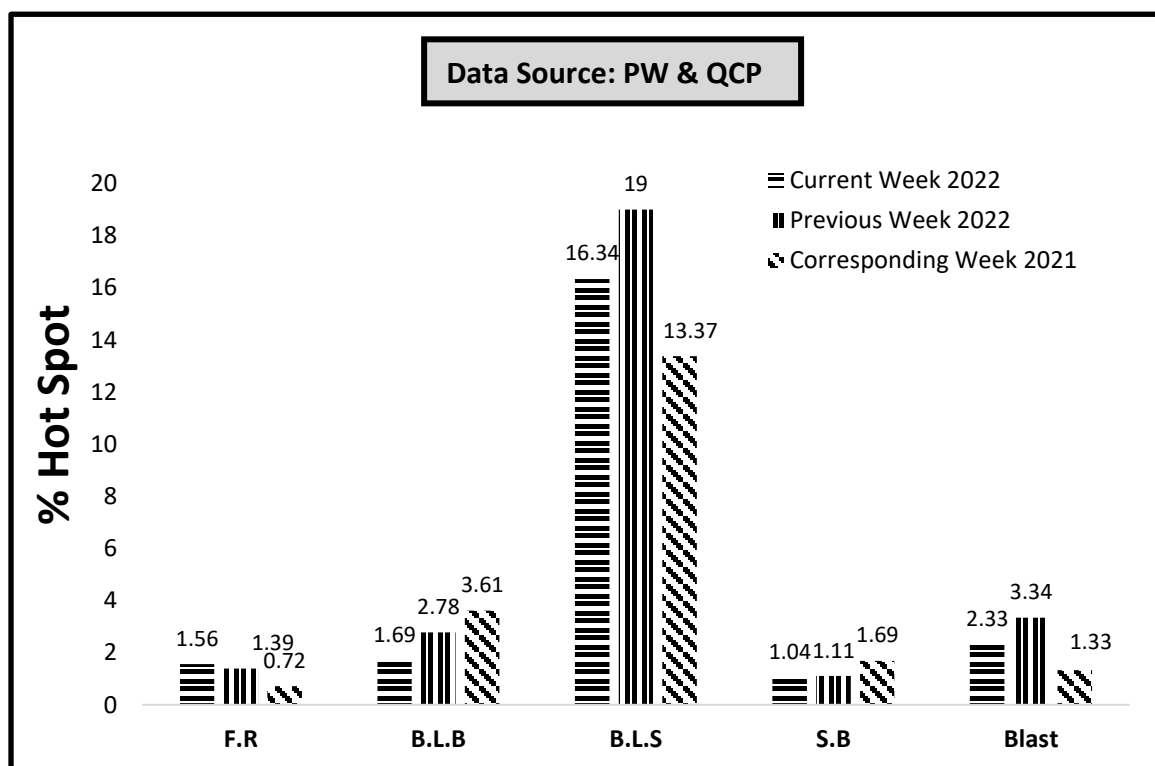


## GRAPHICAL PEST SITUATION ON RICE CROP IN PUNJAB DURING 2<sup>ND</sup> WEEK OF NOVEMBER, 2022

### 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 2<sup>ND</sup> 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	0.52	7.39	0.46	11.31	0.00	4.82	Increasing
2	LEAF FOLDER	0.13	2.59	0.19	2.97	0.00	1.69	Decreasing
3	WPBH	0.00	0.26	0.00	1.48	0.00	0.48	-
4	BPH	0.52	8.04	0.74	12.33	0.00	7.11	Decreasing
5	TOKA	0.13	21.27	0.37	24.84	0.48	12.41	Decreasing
6	FOOT ROT	1.56	-	1.39	-	0.72	-	Increasing
7	B.L.B	1.69	-	2.78	-	3.61	-	Decreasing
8	B.L.S	16.34	-	19.00	-	13.37	-	Decreasing
9	SHEAT H BLIGHT	1.04	-	1.11	-	1.69	-	Decreasing
10	BLAST	2.33	-	3.34	-	1.33	-	Decreasing
NO. OF TOTAL SPOTS VISITED				771				
TOTAL AREA VISITED (Acres)				4196				

### Tehsil wise percentage of hot spots of Rice Borer

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Shujabad	16	2	Multan	9.1

### Tehsil wise percentage of hot spots of Rice Leaf Folder

Sr.	TEHSIL	%AGE
1	Shujabad	5

### 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	Ferozwala	8	2	Minchinabad	4

### Tehsil wise percentage of hot spots of Rice Toka

Sr.	TEHSIL	%AGE
1	Lahore	3

### Tehsil wise percentage of hot spots of Foot Rot

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Kot Addu	67	3	Muzaffargarh	40.0
2	Jatoi	54.5			

### Tehsil wise percentage of hot spots of Bacterial Leaf Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Ferozwala	30	3	Hafizabad	3.8
2	Pattoki	7.7			

### Tehsil wise percentage of hot spots of Brown Leaf Spots

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Baddomalhi	53	19	Sharqpur	25.0
2	Yazman	50.0	20	Khushab	20.6
3	Gujrat	47.4	21	Kharian	20.0
4	M.B.Din	41.2	22	Narang Mandi	18.2
5	Jalal Pur Jattan	40.0	23	Multan	18.2
6	Malikwal	37.5	24	Lahore	17.2
7	Layyah	33.3	25	Minchinabad	16.0
8	Karor	33.3	26	Sialkot	15.8
9	Chistian	33.3	27	Sheikhupura	15.8
10	Bahawalnagar	33.3	28	Wazirabad	15.4
11	Ferozwala	32.4	29	Daska	15.4
12	Phalia	30.8	30	Chunian	15.0
13	Narowal	29.4	31	Safdarabad	14.7
14	Jatoi	27.3	32	Muridke	11.4
15	Hafizabad	26.9	33	Sambrial	11.1
16	Gujranwala	25.0	34	Pasrur	11.1
17	Pindi Bhattian	25.0	35	Shujabad	10.5
18	Shakargarh	25.0	36	Kasur	5.9

### Tehsil wise percentage of hot spots of Sheath Blight

Sr.	TEHSIL	%AGE
1	Ferozwala	22

### Tehsil wise percentage of hot spots of Rice Blast

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Depalpure	22	6	Khushab	8.8
2	Multan	18.2	7	Phalia	7.7
3	Ferozwala	13.5	8	Pattoki	7.7
4	Shujabad	10.5	9	M.B.Din	5.9
5	Pakpattan	10.0			

## Meteorological data of the current week 2022

METEOROLOGICAL DATA FOR 2ND 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	18.5	63.0	0.0	28.0	15.0	60.0	0.0
Sialkot	23.0	17.0	70.0	0.0	21.0	16.0	69.0	5.0
Narowal	24.8	11.5	72.8	5.0	25.3	11.0	71.4	0.0
Gujrat	29.0	20.0	65.0	0.0	34.8	24.5	62.0	0.0
M.B.Din	27.0	17.4	0.6	14.0	27.1	17.5	0.6	8.0
Lahore	27.0	16.0	66.9	0.0	24.9	18.9	56.5	0.2
Sheikhupura	26.2	16.5	38.0	0.0	25.5	15.5	36.0	0.0
Nankana	27.1	15.7	53.2	0.0	28.7	15.1	23.1	0.0
Kasur	26.9	14.0	1.4	0.0	26.3	16.0	55.3	0.0
Faisalabad	30.6	16.9	76.4	0.0	27.5	15.8	54.2	0.0
Jhang	25.1	15.1	62.6	0.0	26.8	15.0	67.3	0.0
Toba Tek Singh	27.8	15.3	85.1	0.0	29.0	13.8	80.1	0.0
Chiniot	27.8	15.8	74.7	0.0	27.8	14.9	67.2	0.0
Sargodha	27.8	15.3	85.1	0.0	29.0	13.8	80.1	0.0
Khushab	28.5	16.0	65.0	0.0	31.5	21.5	68.0	0.0
Mianwali	27.0	16.0	66.9	0.0	24.9	18.9	56.5	0.2
Bhakkar	26.2	16.5	38.0	0.0	25.5	15.5	36.0	0.0
Multan	31.3	16.3	62.0	0.0	28.7	16.1	64.9	0.0
Khanewal	29.6	15.9	65.1	0.0	29.3	15.6	61.6	0.0
Vehari	31.7	16.3	60.6	0.0	28.6	16.0	62.4	0.0
Lodhran	29.1	15.7	69.9	0.0	28.2	16.0	64.2	0.0
Sahiwal	29.3	14.3	67.5	0.0	29.0	14.0	65.0	0.0
Pakpattan	28.4	14.5	68.0	0.0	28.0	13.5	64.0	0.0
Okara	29.1	14.6	67.2	0.0	28.5	13.0	62.4	0.0
Bahawalpur	28.7	16.1	68.9	0.0	30.3	14.2	52.5	0.0
Bahawalnagar	31.2	18.2	69.0	0.0	29.5	13.1	64.1	0.0
R.Y.Khan	32.4	17.6	36.3	0.0	33.9	17.9	44.6	0.0
D.G. Khan	28.9	16.4	65.3	0.0	30.9	14.6	59.2	0.0
Muzaffar Garh	29.0	16.2	58.2	0.0	31.2	16.3	57.3	0.0
Rajanpur	28.5	16.5	59.5	0.0	33.6	16.7	39.1	0.0
Layyah	27.0	17.0	69.0	0.0	28.7	16.1	60.9	0.0
<b>Average</b>	<b>28.21</b>	<b>16.14</b>	<b>60.55</b>	<b>0.75</b>	<b>28.48</b>	<b>15.98</b>	<b>56.40</b>	<b>0.42</b>

### 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 3-4 inches 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



