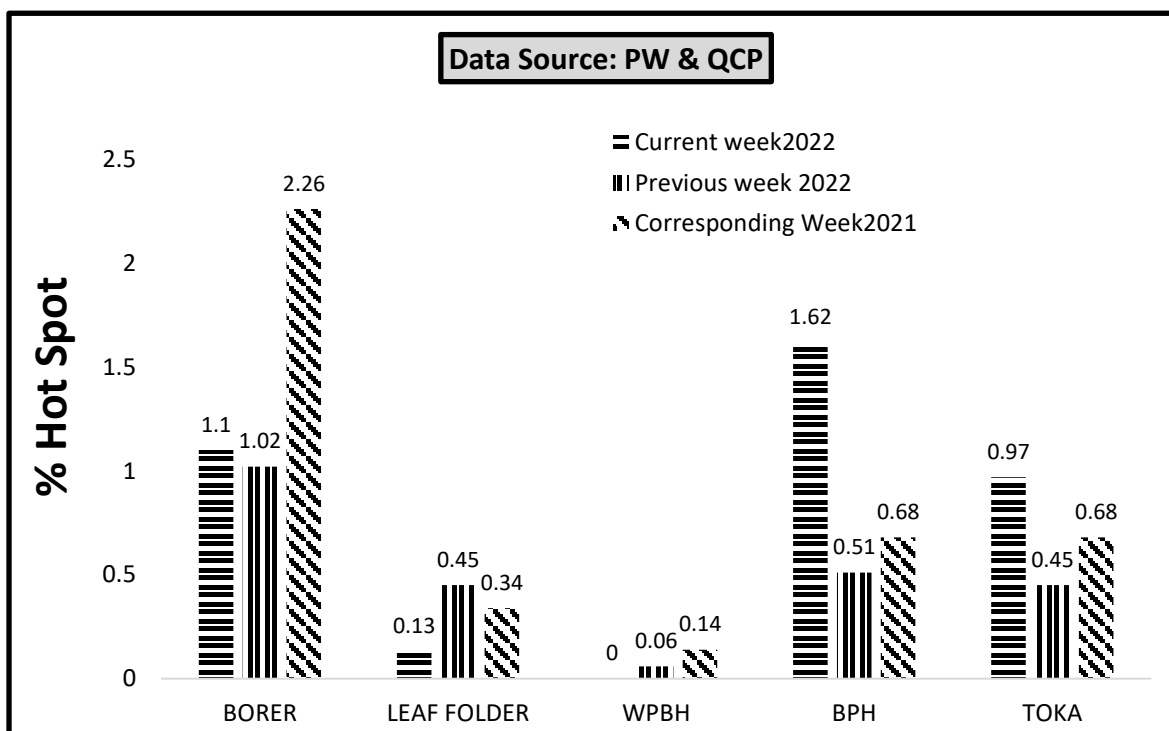
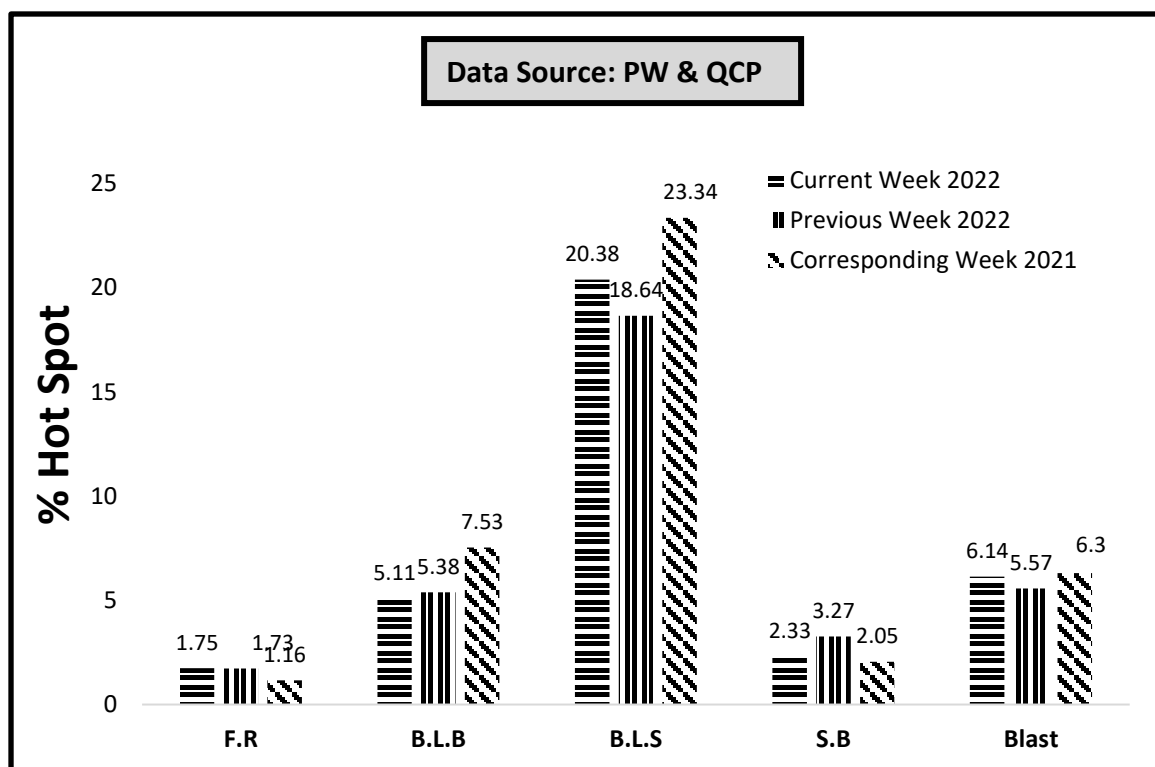


GRAPHICAL PEST SITUATION ON RICE CROP IN PUNJAB DURING 3RD WEEK OF OCTOBER, 2022

A- Insect Pest



B- Disease



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

PEST SITUATION ON RICE CROP IN PUNJAB DURING 3RD WEEK OF OCTOBER, 2022

Pest Situation of Rice Pests								
		%Age of spots						Remarks
Sr. No.	Pest Name	Current Week		Previous Week		Corresponding week of Last Year		
		AETL	BETL	AETL	BETL	AETL	BETL	
1	RICE BORER	1.10	16.17	1.02	15.63	2.26	16.84	Sustaining
2	LEAF FOLDER	0.13	6.34	0.45	10.25	0.34	10.34	Decreasing
3	WPBH	0.00	2.91	0.06	2.24	0.14	2.33	Decreasing
4	BPH	1.62	13.58	0.51	9.42	0.68	9.99	Increasing
5	TOKA	0.97	24.84	0.45	24.47	0.68	21.42	Increasing
6	FOOT ROT	1.75	-	1.73	-	1.16	-	Sustaining
7	B.L.B	5.11	-	5.38	-	7.53	-	Decreasing
8	B.L.S	20.38	-	18.64	-	23.34	-	Increasing
9	SHEAT H BLIGHT	2.33	-	3.27	-	2.05	-	Decreasing
10	BLAST	6.14	-	5.57	-	6.30	-	Increasing
NO. OF TOTAL SPOTS VISITED			1546					
TOTAL AREA VISITED (Acres)			10341					

Tehsil wise percentage of hot spots of Rice Borer

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Bhakkar	29	7	Multan	14.3
2	Mian Channu	25.0	8	Hasilpur	14.3
3	Shujabad	23.1	9	Bahawalpur	10.0
4	Dunya Pur	20.0	10	Kot chutta	7.7
5	Lodhran	16.7	11	Minchanabad	3.6
6	Kehror Pacca	16.7	12	Ferozwala	2.7

Tehsil wise percentage of hot spots of Rice Leaf Folder

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Shujabad	8	2	Multan	7.1

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	Sharqpur	27	6	Ferozwala	10.8
2	Chistian	16.7	7	Minchanabad	10.7
3	Bahawalnagar	16.7	8	Bahawalpur	10.0
4	Shakargarh	14.3	9	Malikwal	7.7
5	Lahore	11.9	10	Sheikhupura	2.9

Tehsil wise percentage of hot spots of Rice Toka

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Gujrat	14	5	Sheikhupura	5.7
2	M.B.Din	10.0	6	Ferozwala	2.7
3	Lahore	8.5	7	Muridke	2.6
4	Phalia	8.3			

Tehsil wise percentage of hot spots of Foot Rot

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Kot Addu	67	7	Kehror Pacca	33.3
2	Jatoi	66.7	8	Dunya Pur	20.0
3	Jahanain	50.0	9	Alipur	20.0
4	Muzaffargarh	50.0	10	Lodhran	16.7
5	Khanewal	33.3	11	Pakpattan	14.3
6	Kabirwala	33.3	12	Khushab	7.3

Tehsil wise percentage of hot spots of Bacterial Leaf Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Daska	37	16	Sahiwal	8.3
2	Sialkot	26.9	17	Ferozwala	8.1
3	Noshehra Virkan	26.7	18	Pindi Bhattian	7.9
4	Dunya Pur	20.0	19	Kamonke	7.1
5	Kharian	18.2	20	Shahkot	7.1
6	Gujranwala	17.6	21	Hafizabad	7.0
7	Jalal Pur Jattan	16.7	22	Kot Momin	6.7
8	Sambrial	15.6	23	Wazirabad	5.9
9	Malikwal	15.4	24	Nankana Sahib	5.9
10	Zafarwal	15.0	25	Pattoki	5.9
11	Pasrur	13.3	26	M.B.Din	5.0
12	Narowal	10.5	27	Pakpattan	4.8
13	Safdarabad	9.8	28	Sheikhupura	2.9
14	Gujrat	9.5	29	Lahore	1.7
15	Phalia	8.3			

Tehsil wise percentage of hot spots of Brown Leaf Spots

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Sadiqabad	100	38	Shahpur	16.7
2	Sahiwal	63.6	39	Lodhran	16.7
3	Narowal	63.2	40	Kehror Pacca	16.7
4	Baddomalhi	61.5	41	Sahiwal	16.7
5	Malikwal	53.8	42	Karor	16.7
6	M.B.Din	50.0	43	Chistian	16.7
7	Jahanain	50.0	44	Bahawalnagar	16.7
8	R.Y.Khan	50.0	45	Ahmadpur	16.7
9	Gujrat	47.6	46	Pirmahal	15.8
10	Sharqpur	46.7	47	Lalian	15.4
11	Lahore	39.0	48	Kot chutta	15.4

12	Bhowana	36.8	49	Shorkot	15.0
13	Jalal Pur Jattan	33.3	50	Nankana Sahib	14.7
14	Phalia	33.3	51	Pattoki	14.7
15	Chiniot	33.3	52	Khushab	14.6
16	Khanewal	33.3	53	Shahkot	14.3
17	Kabirwala	33.3	54	Noshehra Virkan	13.3
18	Bahawalpur	30.0	55	Sangla Hill	13.3
19	Pindi Bhattian	28.9	56	Kot Momin	13.3
20	Bhakkar	28.6	57	D.G Khan	13.3
21	Hasilpur	28.6	58	Sambrial	12.5
22	Safdarabad	25.5	59	Kot Radha Kishan	12.5
23	Layyah	25.0	60	Jaranwala	12.5
24	Minchanabad	25.0	61	Wazirabad	11.8
25	Ferozwala	24.3	62	Pasur	10.0
26	Sheikhupura	22.9	63	AP Sial	10.0
27	Hafizabad	22.8	64	Pakpattan	9.5
28	Shakargarh	21.4	65	Kharian	9.1
29	Silanwali	21.4	66	Chunian	8.6
30	Muridke	21.1	67	Taunsa	8.3
31	Jhang	20.0	68	Sialkot	7.7
32	Bhera	20.0	69	Kasur	7.7
33	Dunya Pur	20.0	70	Shujabad	7.7
34	Yazman	20.0	71	Kamonke	7.1
35	Gujranwala	17.6	72	Multan	7.1
36	Zafarwal	17.5	73	Daska	6.7
37	Chak Jhumra	17.1	74	Kamalia	2.5

Tehsil wise percentage of hot spots of Sheath Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Sahiwal	36	10	Kot chutta	7.7
2	Shahpur	16.7	11	Pasur	6.7
3	Silanwali	14.3	12	Hafizabad	5.3
4	Ferozwala	10.8	13	Pindi Bhattian	5.3
5	M.B.Din	10.0	14	Sheikhupura	2.9
6	Sargodha	10.0	15	Chunian	2.9
7	Sambrial	9.4	16	Muridke	2.6
8	Depalpure	8.0	17	Lahore	1.7
9	Malikwal	7.7			

Tehsil wise percentage of hot spots of Rice Blast

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Jalal Pur	60	21	Shorkot	10.0
2	Sahiwal	54.5	22	Bhera	10.0
3	Bhalwal	50.0	23	Pakpattan	9.5
4	AP Sial	25.0	24	Nankana Sahib	8.8
5	Khushab	17.1	25	Taunsa	8.3
6	Phalia	16.7	26	Sialkot	7.7
7	Karor	16.7	27	Malikwal	7.7
8	Chistian	16.7	28	Kot chutta	7.7

9	Bahawalnagar	16.7	29	Minchanabad	7.1
10	Depalpure	16.0	30	Daska	6.7
11	Sambrial	15.6	31	Sangla Hill	6.7
12	Shujabad	15.4	32	Jhang	6.7
13	M.B.Din	15.0	33	Kot Momin	6.7
14	Pattoki	14.7	34	Pirmahal	5.3
15	Shahkot	14.3	35	Kamalia	5.0
16	Bhakkar	14.3	36	Kasur	3.8
17	Multan	14.3	37	Hafizabad	3.5
18	Pasrur	13.3	38	Chunian	2.9
19	D.G Khan	13.3	39	Chak Jhumra	2.4
20	Zafarwal	10.0			

Meteorological data of the current week 2022

METEOROLOGICAL DATA FOR 3RD WEEK OF OCTOBER 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	32.5	19.0	68.0	0.0	33.0	20.0	70.0	22.0
Sialkot	33.0	18.7	64.7	0.0	32.2	19.5	69.4	0.0
Narowal	29.8	16.7	72.8	0.0	30.7	19.3	78.7	0.0
Gujrat	31.0	18.0	65.0	0.0	34.8	24.5	62.0	0.0
M.B.Din	34.6	18.5	0.7	0.0	34.5	18.4	0.7	0.0
Lahore	32.8	20.1	56.0	0.0	29.3	31.0	55.7	0.6
Sheikhupura	30.4	21.7	41.0	0.0	30.2	22.2	38.0	0.0
Nankana	32.4	20.4	53.6	0.0	33.1	18.0	28.0	0.0
Kasur	32.5	18.5	1.7	0.0	33.0	19.8	72.7	0.0
Faisalabad	34.2	18.8	70.6	0.0	34.9	19.8	80.0	4.2
Jhang	33.9	18.5	48.8	0.0	38.3	29.7	54.5	0.0
Toba Tek Singh	34.8	19.0	76.1	0.0	35.3	17.7	81.9	0.0
Chiniot	36.2	24.8	60.2	0.0	34.8	23.6	46.0	0.0
Sargodha	33.0	27.0	77.0	100.0	40.0	38.0	75.0	0.0
Khushab	32.5	18.5	72.0	0.0	35.5	19.0	68.0	0.0
Mianwali	34.6	18.5	0.7	0.0	34.5	18.4	0.7	0.0
Bhakkar	35.0	18.0	53.0	0.0	35.5	19.0	49.0	0.0
Multan	36.9	18.9	61.1	0.0	35.1	16.6	66.7	0.0
Khanewal	34.9	19.6	56.7	0.0	35.9	18.6	66.9	0.0
Vehari	35.1	19.1	62.9	0.0	34.9	18.3	59.9	0.0
Lodhran	34.1	22.0	62.5	0.0	35.2	18.4	61.1	0.0
Sahiwal	34.5	17.3	62.5	0.0	33.0	19.0	58.0	3.0
Pakpattan	33.8	18.4	65.5	0.0	34.0	20.0	59.0	4.0
Okara	33.5	18.2	64.7	0.0	34.5	22.0	53.0	2.0
Bahawalpur	37.2	18.6	45.3	28.0	36.4	18.1	54.0	0.0
Bahawalnagar	37.8	26.1	66.3	0.0	38.1	26.1	59.6	0.0
R.Y.Khan	37.3	18.7	41.4	0.0	36.6	24.6	33.4	0.0
D.G. Khan	35.3	21.6	70.3	0.0	36.4	19.4	55.6	0.0

Muzaffar Garh	33.5	21.4	69.2	0.0	35.0	20.5	57.0	3.0
Rajanpur	36.3	28.8	48.5	0.0	40.5	25.7	50.8	0.0
Layyah	31.0	20.0	70.0	0.0	31.7	20.9	71.1	0.0
TOT/AVG	33.81	20.03	56.10	4.16	34.58	21.42	55.50	1.21

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

