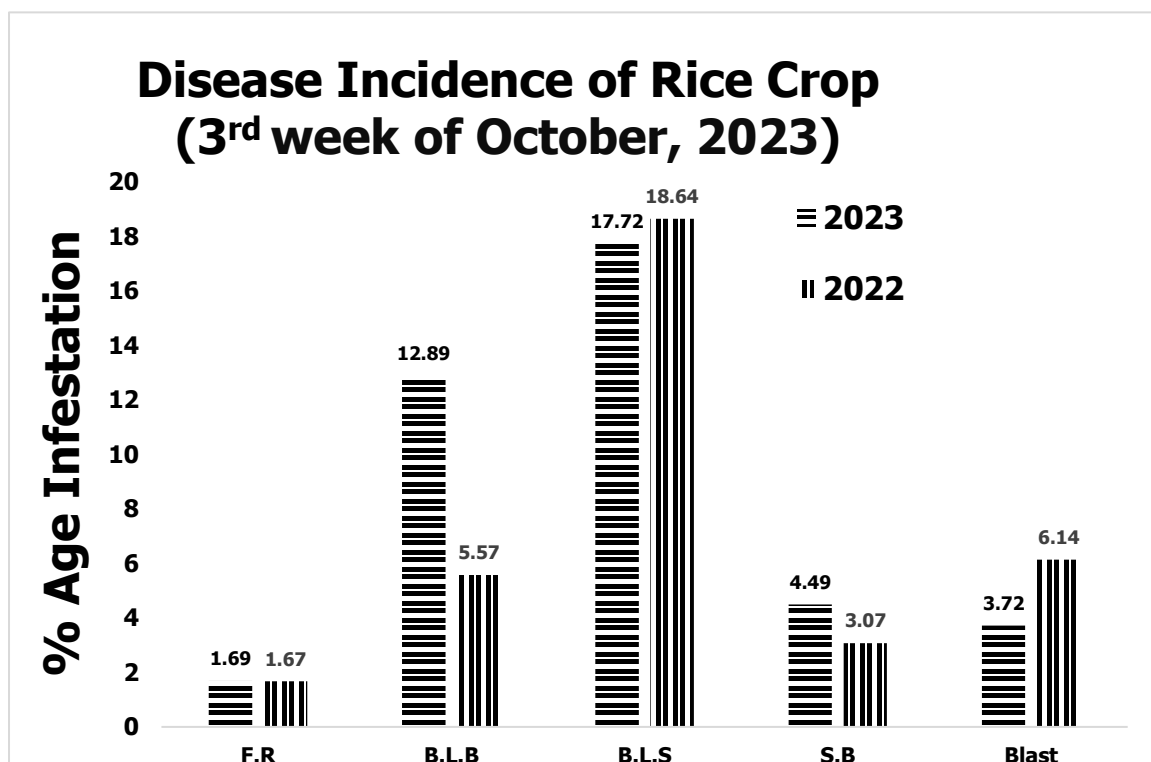
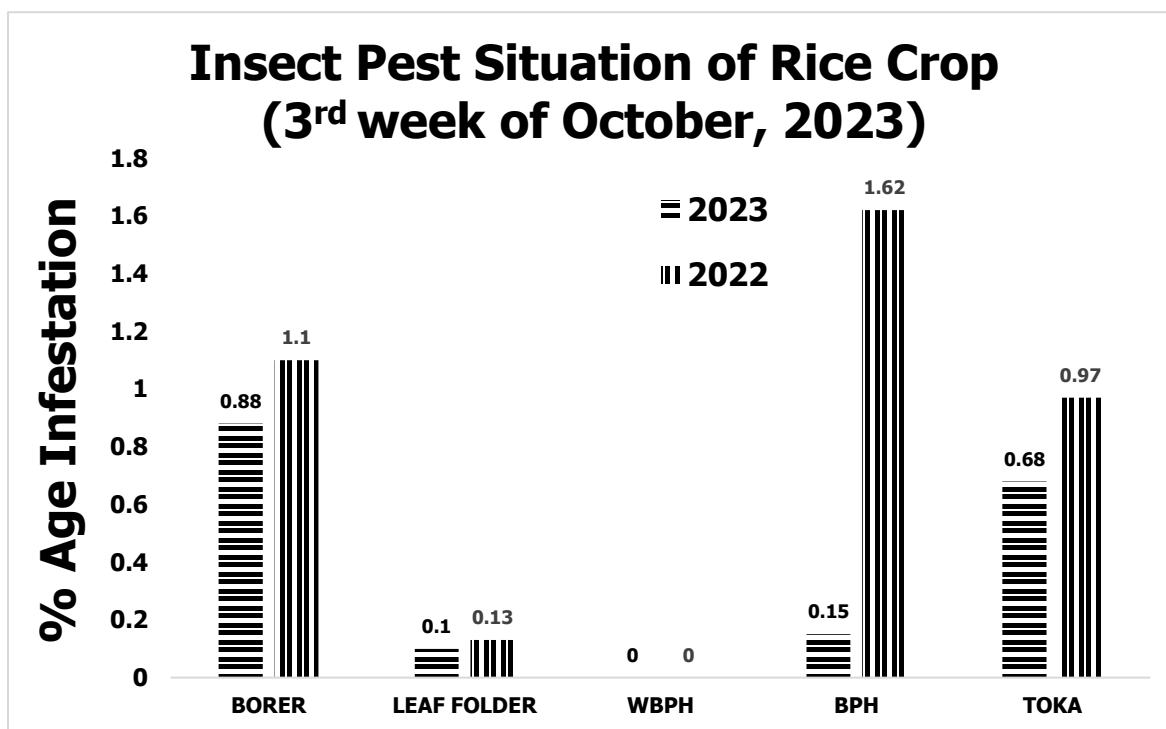


GRAPHICAL PEST SITUATION ON RICE CROP IN PUNJAB DURING 3RD WEEK OF OCTOBER, 2023



PEST SITUATION ON RICE CROP IN PUNJAB DURING 3RD WEEK OF OCTOBER, 2023

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	0.88	10.95	0.48	14.24	1.10	16.17	Increasing
2	LEAF FOLDER	0.10	5.84	0.19	11.78	0.13	6.34	Decreasing
3	WPBH	0.00	1.31	0.00	1.26	0.00	2.91	-
4	BPH	0.15	4.18	0.24	4.78	1.62	13.58	Decreasing
5	TOKA	0.68	20.15	0.68	19.80	0.97	24.84	Sustaining
6	FOOT ROT	0.83	-	1.69	-	1.75	-	Decreasing
7	B.L.B	10.17	-	12.89	-	5.11	-	Decreasing
8	B.L.S	20.39	-	17.72	-	20.38	-	Increasing
9	SHEAT H BLIGHT	3.89	-	4.49	-	2.33	-	Decreasing
10	BLAST	2.29	-	3.72	-	6.14	-	Decreasing
NO. OF TOTAL SPOTS VISITED		2055						
TOTAL AREA VISITED (Acres)		14031						

Tehsil wise percentage of hot spots of Rice Borer

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Lahore	2	8	Depalpure	13.3
2	Pindi Bhattian	2.1	9	Minchanabad	13.6
3	Ferozwala	2.3	10	Bahawalpur	16.7
4	Phalia	2.8	11	Hasilpur	16.7
5	Hafizabad	2.9	12	Ahmadpur	20
6	M.B.Din	5.6	13	Yazman	25
7	Quaidabad	12.5			

Tehsil wise percentage of hot spots of Rice Leaf Folder

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Lahore	2	2	Ferozwala	2.3

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	Shakargarh	3	2	Ferozwala	4.7

Tehsil wise percentage of hot spots of Rice Toka

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Pasrur	1	4	Muridke	7.5
2	Lahore	2.0	5	Ferozwala	9.3
3	Sheikhupura	4.0	6	Narang Mandi	9.4

Tehsil wise percentage of hot spots of Foot Rot

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Sheikhupura	2	6	Alipur	14.3
2	Safdarabad	2.3	7	Muridke	15.0
3	Ferozwala	2.3	8	Muzaffargarh	16.7
4	Narang Mandi	9.4	9	Jatoi	20.0
5	Depalpure	13.3			

Tehsil wise percentage of hot spots of Bacterial Leaf Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Jaranwala	2	22	Noshehra Virkan	15.6
2	Chunian	2.2	23	Narang Mandi	15.6
3	Sharqpur	2.2	24	Gujranwala	16.0
4	Safdarabad	2.3	25	Jahanain	16.7
5	Sheikhupura	4.0	26	Hafizabad	19
6	Sangla Hill	5.0	27	Lahore	20
7	Sahiwal	5.6	28	Vehari	20.0
8	Nankana Sahib	5.7	29	Burewala	20.0
9	Jalal Pur Jattan	6.3	30	D.G Khan	20.0
10	Khanewal	7.7	31	Taunsa	20.0
11	Sarai Alamgir	8.3	32	Sialkot	22.7
12	Pakpattan	8.7	33	Kamonke	23.4
13	Gujrat	9.1	34	Muridke	25.0
14	Minchanabad	9.1	35	Multan	25.0
15	Pattoki	10.0	36	Shujabad	25.0
16	Shahkot	10.6	37	Ferozwala	27.9
17	M.B.Din	11.1	38	Malikwal	33.3
18	Quaidabad	12.5	39	Sambrial	45.8
19	Wazirabad	13.3	40	Pasrur	45.8
20	Phalia	13.9	41	Daska	47.8
21	Pindi Bhattian	14.9			

Tehsil wise percentage of hot spots of Brown Leaf Spots

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Pakpattan	4	32	Muridke	22.5
2	Pirmahal	4.4	33	Minchanabad	22.7
3	Jaranwala	7.1	34	Khanewal	23.1
4	Sangla Hill	7.5	35	Sambrial	23.7
5	Shahkot	8.5	36	Lahore	24
6	Kamalia	8.6	37	Zafarwal	24
7	Kasur	9.1	38	Layyah	25.0
8	Kamonke	10.6	39	Yazman	25.0
9	Chunian	10.9	40	Chiniot	30.0
10	Noshehra Virkan	11.1	41	Kehror Pacca	30.0
11	Mian Channu	11.1	42	Safdarabad	30.2
12	Dunya Pur	11.1	43	Ferozwala	30.2
13	Sheikhupura	12.0	44	Sarai Alamgir	33.3
14	Daska	13.0	45	Bahawalpur	33.3
15	Khushab	13.0	46	Hasilpur	33.3

16	Nankana Sahib	13.2	47	Sialkot	40.9
17	Wazirabad	13.3	48	Bhakkar	42.9
18	Sharqpur	13.3	49	Shakargarh	45.0
19	Lodhran	13.3	50	Hafizabad	45.7
20	Pasrur	13.9	51	Narowal	50.0
21	Kharian	14.3	52	Chistian	50.0
22	Narang Mandi	15.6	53	Bahawalnagar	50.0
23	Bhowana	15.6	54	Baddomalhi	58.3
24	Kot Radha Kishan	16.7	55	Ahmadpur	60.0
25	Karor	16.7	56	Kabirwala	62.5
26	Gujrat	18.2	57	M.B.Din	66.7
27	Jalal Pur Jattan	19	58	Malikwal	66.7
28	Chak Jhumra	19	59	Phalia	72.2
29	Gujranwala	20	60	Pindi Bhattian	72.3
30	Pattoki	20	61	Quaidabad	87.5
31	Lalian	22			

Tehsil wise percentage of hot spots of Sheath Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Sambrial	2	11	Kamonke	6.4
2	Sharqpur	2.2	12	Pattoki	7.5
3	Safdarabad	2.3	13	Kot Radha Kishan	9.5
4	Sheikhupura	4.0	14	Narang Mandi	12.5
5	Pasrur	4.2	15	Muridke	15
6	Shahkot	4.3	16	Zafarwal	20
7	Chunian	4.3	17	Depalpure	20.0
8	Pakpattan	4.3	18	Ferozwala	25.6
9	Noshehra Virkan	4.4	19	Baddomalhi	50.0
10	Shakargarh	5.0	20	Narowal	56.3

Tehsil wise percentage of hot spots of Rice Blast

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Shorkot	3	11	Lodhran	13.3
2	Kasur	3.0	12	Kot Radha Kishan	14.3
3	Minchanabad	4.5	13	Pattoki	15.0
4	Nankana Sahib	5.7	14	Muzaffargarh	16.7
5	Quaidabad	6.3	15	Karor	17
6	Sangla Hill	7.5	16	Depalpure	20
7	Shahkot	8.5	17	Multan	25.0
8	Pakpattan	8.7	18	Shujabad	25.0
9	Chunian	10.9	19	Kehror Pacca	30.0
10	Dunya Pur	11.1	20	Jalal Pur	33.3

Meteorological data of the current week 2023

METEOROLOGICAL DATA FOR 3RD WEEK OF OCTOBER 2023								
Districts	2023				2022			
	Temperature		R.H%	Rainfall (mm)	Temperature		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
Gujranwala	29.0	21.0	68.0	30.0	0.0	0.0	0.0	0.0
Hafizbad	28.9	16.3	66.0	5.0	32.0	20.1	67.0	2.0
Sialkot	30.0	24.0	65.0	10.0	28.0	21.0	70.0	20.0
Narowal	30.0	18.0	86.7	75.0	30.5	18.5	80.1	10.0
Gujrat	29.1	16.4	64.0	4.0	29.2	17.0	66.0	3.0
M.B.Din	29.0	16.0	67.0	4.5	28.9	16.0	65.0	2.0
Lahore	33.0	21.8	62.9	7.0	32.5	22.8	63.7	0.0
Sheikhupura	29.5	20.2	54.0	52.0	30.4	21.7	41.0	0.0
Nankana	28.1	18.0	38.3	0.8	32.4	20.4	53.6	0.0
Kasur	29.3	18.3	73.7	0.0	29.3	20.7	71.6	0.0
Faisalabad	23.5	16.2	84.3	32.4	24.0	17.2	74.0	0.0
Jhang	30.1	17.8	63.7	2.2	32.5	16.6	59.3	0.0
Toba Tek Singh	29.8	18.0	87.1	33.6	34.8	19.0	76.1	0.0
Chiniot	33.7	20.7	63.8	0.0	35.2	23.5	62.2	0.0
Sargodha	28.0	15.0	43.0	2.0	29.0	14.0	40.0	0.0
Khushab	32.7	19.5	51.0	4.5	32.5	18.5	72.0	0.0
Mianwali	34.0	21.0	55.0	3.0	38.0	27.0	45.0	0.0
Bhakkar	30.0	19.0	49.0	0.0	33.0	21.0	46.0	0.0
Multan	35.9	22.8	69.8	0.0	36.9	18.9	61.1	0.0
Khanewal	33.0	19.6	53.9	0.3	34.9	19.6	56.7	0.0
Vehari	30.3	20.0	60.7	21.0	35.1	19.1	62.9	0.0
Lodhran	32.9	23.6	63.8	0.0	34.1	22.0	62.5	0.0
Sahiwal	29.0	18.0	73.0	0.0	34.8	16.7	61.2	0.0
Pakpattan	32.8	20.6	60.0	0.0	40.8	20.8	40.0	0.0
Okara	28.9	17.7	62.5	0.0	30.7	19.4	53.0	0.0
Bahawalpur	31.6	19.6	66.9	26.0	36.3	18.4	49.0	0.0
Bahawalnagar	30.9	18.3	55.3	0.0	34.9	17.8	64.5	0.0
R.Y.Khan	33.4	20.7	66.6	0.0	37.0	20.2	48.9	0.0
D.G. Khan	26.7	24.9	58.1	2.0	37.4	26.7	69.6	0.0
Muzaffar Garh	32.4	21.1	0.0	0.0	33.5	21.4	69.2	0.0
Rajanpur	31.0	22.0	64.0	5.0	38.4	22.2	55.0	0.0
Layyah	34.0	17.0	60.0	1.0	31.0	20.0	70.0	0.0
Average	30.64	19.47	61.16	321.3	32.13	19.31	58.63	37.0

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%. Based on the temperature outlook for the current week and the weather forecast for the next week, it is anticipated that the population of this pest might experience growth in the upcoming week. This

projection is due to the continued favorable temperature conditions that support the pest's development.

Leaf Folder: This pest flourishes best in warm humid climate with optimum temperature 25-30°C. Based on the temperature outlook for the current week and the weather forecast for the next week, it is anticipated that the population of this pest might experience growth in the upcoming week. This projection is due to the continued favorable temperature conditions that support the pest's development.

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 increase 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 increase 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%. Based on the temperature outlook for the current week and the weather forecast for the next week, it is anticipated that the population of this pest might experience growth in the upcoming week. This projection is due to the continued favorable temperature conditions that support the pest's development.

Foot rot: High humidity and cloudy weather during heading stage are favorable for the development of foot rot of rice. The fungus has a wide range of temperature for optimum growth which is between 30-35 °C. Based on the temperature forecast for the current week and the projected weather conditions for the next week, there is a prediction that the intensity of the disease might escalate in the upcoming week. This prognosis is based on the favorable temperature conditions that support the development of this particular 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%. Based on the temperature forecast for the current week and the projected weather conditions for the next week, there is a prediction that the intensity of the disease might escalate in the upcoming week. This prognosis is based on the favorable temperature conditions that support the development of this particular 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%. Based on the temperature forecast for the current week and the projected weather conditions for the next week, there is a prediction that the intensity of the disease might escalate in the upcoming week. This prognosis is based on the favorable temperature conditions that support the development of this particular 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%. Based on the temperature forecast for the current week and the projected weather conditions for the next week, there is a prediction that the intensity of the disease might escalate in the upcoming week. This prognosis is based on the favorable temperature conditions that support the development of this particular 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. Based on the temperature forecast for the current week and the projected weather conditions for the next week, there is a prediction that the intensity of the disease might escalate in the upcoming week. This prognosis is based on the favorable temperature conditions that support the development of this particular 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