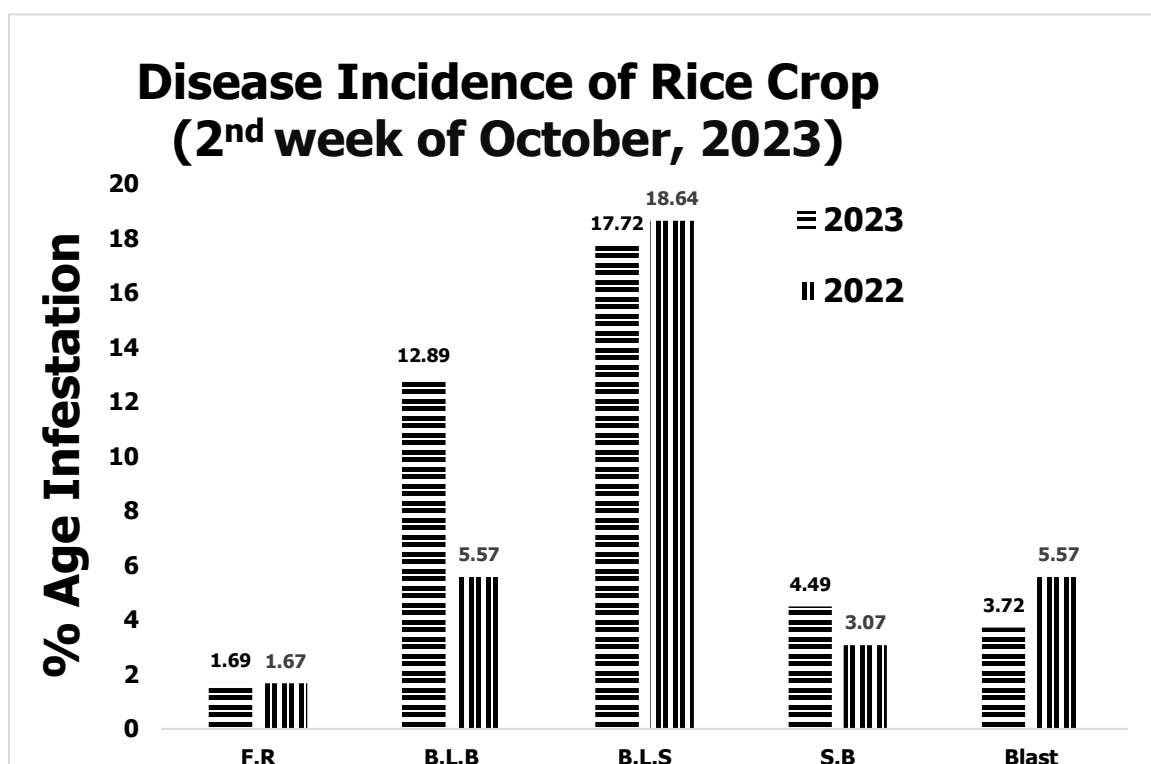
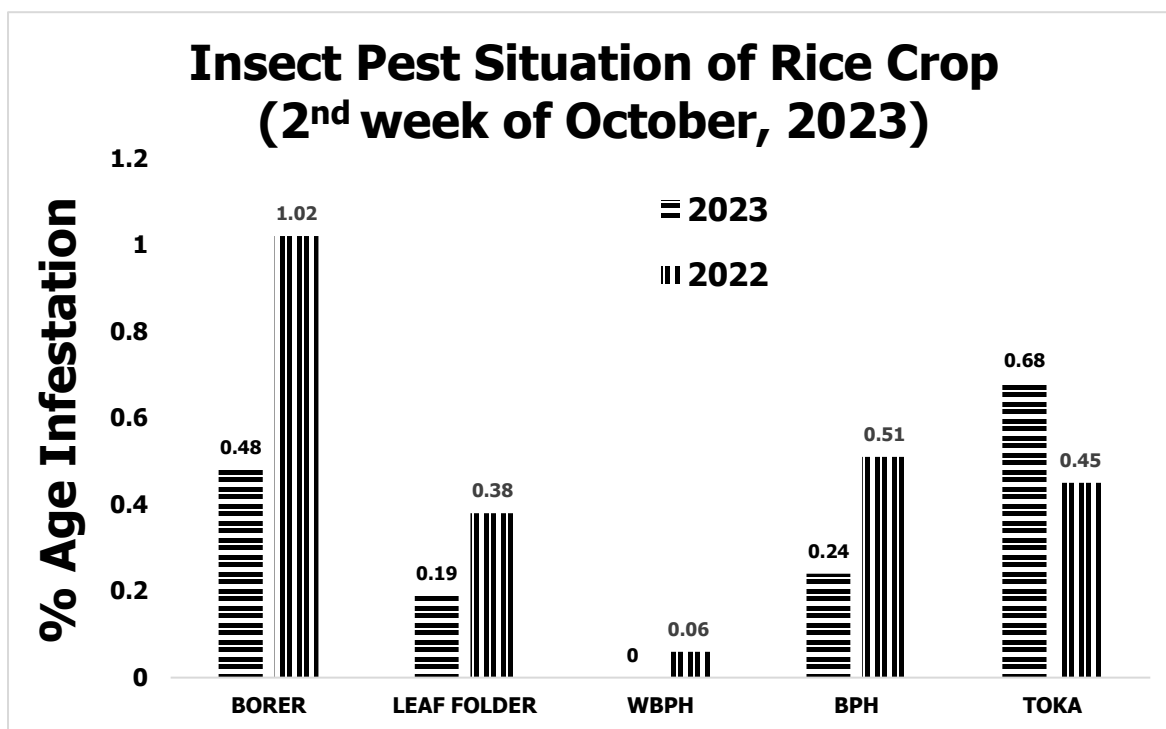


GRAPHICAL PEST SITUATION ON RICE CROP IN PUNJAB DURING 2ND WEEK OF OCTOBER, 2023



PEST SITUATION ON RICE CROP IN PUNJAB DURING 2ND 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	0.48	14.24	0.65	13.14	1.02	15.63	Decreasing
2	LEAF FOLDER	0.19	11.78	0.78	16.88	0.38	10.25	Decreasing
3	WPBH	0.00	1.26	0.00	0.39	0.06	2.24	-
4	BPH	0.24	4.78	0.04	3.39	0.51	9.42	Increasing
5	TOKA	0.68	19.80	0.61	22.14	0.45	24.47	Increasing
6	FOOT ROT	1.69	-	2.00	-	1.67	-	Decreasing
7	B.L.B	12.89	-	15.92	-	5.57	-	Decreasing
8	B.L.S	17.72	-	16.66	-	18.64	-	Increasing
9	SHEAT H BLIGHT	4.49	-	2.31	-	3.07	-	Increasing
10	BLAST	3.72	-	2.35	-	5.57	-	Increasing
NO. OF TOTAL SPOTS VISITED		2071						
TOTAL AREA VISITED (Acres)		14874						

Tehsil wise percentage of hot spots of Rice Borer

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Ferozwala	2	6	Hasilpur	14.3
2	Minchanabad	4.0	7	Ahmadpur	14.3
3	Pir Mahal	4.3	8	Alipur	20.0
4	Muzaffargarh	12.5	9	Yazman	25.0
5	Bahawalpur	12.5			

Tehsil wise percentage of hot spots of Rice Leaf Folder

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Pindi Bhattian	2	3	Alipur	10.0
2	Ferozwala	2.4	4	Muzaffargarh	12.5

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	Shakargarh	2	3	Chistian	16.7
2	Minchanabad	8.0	4	Bahawalnagar	20.0

Tehsil wise percentage of hot spots of Rice Toka

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Malikwal	2	5	Narowal	4.9
2	Pasrur	1.9	6	Wazirabad	7.1
3	Baddomalhi	2.6	7	Kot Radha Kishan	7.1

4	Phalia	3.0	8	Chunian	9.4
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Tehsil wise percentage of hot spots of Foot Rot

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Sheikhupura	2	8	Jatoi	18.2
2	Ferozwala	4.8	9	Alipur	20.0
3	Sharqpur	6.1	10	Bhera	21.4
4	Safdarabad	9.8	11	Muridke	21.9
5	Depalpure	11.8	12	Silanwali	25.0
6	Muzaffargarh	12.5	13	Sargodha	28.6
7	Narang Mandi	17.9			

Tehsil wise percentage of hot spots of Bacterial Leaf Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Chunian	2	21	D.G Khan	18.2
2	Sarai Alamgir	4.0	22	M.B.Din	19.5
3	Nankana Sahib	6.3	23	Sheikhupura	19.5
4	Shahkot	6.4	24	Malikwal	20.0
5	Kot chutta	6.7	25	Multan	20.0
6	Jaranwala	8.8	26	Burewala	20.0
7	Pakpattan	9.1	27	Taunsa	20.0
8	Sangla Hill	10.4	28	Muridke	21.9
9	Jalal Pur Jattan	11.1	29	Shakargarh	23.8
10	Lahore	11.5	30	Shujabad	25.0
11	Noshehra Virkan	12.5	31	Ferozwala	26.2
12	Jahanain	12.5	32	Kamonke	27.5
13	Sahiwal	12.5	33	Narang Mandi	32.1
14	Wazirabad	13.0	34	Gujranwala	35.9
15	Phalia	13.3	35	Vehari	40.0
16	Khanewal	14.3	36	Sialkot	43.5
17	Safdarabad	14.6	37	Sambrial	44.3
18	Pattoki	15.0	38	Daska	51.5
19	Hafizabad	16.7	39	Pasrur	65.6
20	Pindi Bhattian	18.2			

Tehsil wise percentage of hot spots of Brown Leaf Spots

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Daska	3	35	Pirmahal	21.7
2	Kasur	4.9	36	Kehror Pacca	22.2
3	Sharqpur	6.1	37	Hafizabad	23.1
4	Sangla Hill	6.3	38	Pindi Bhattian	25.0
5	Kharian	7.1	39	Muridke	25.0
6	Kamalia	8.3	40	Karor	25.0
7	Chunian	9.5	41	Yazman	25.0
8	Sheikhupura	9.8	42	Bhakkar	27.3
9	Sambrial	9.8	43	Jalal Pur Jattan	27.8
10	Jaranwala	10.5	44	Minchanabad	28.0
11	Lalian	10.5	45	Ferozwala	28.6

12	Chak Jhumra	11.4	46	Sargodha	28.6
13	Kot Radha Kishan	11.9	47	Khanewal	28.6
14	Nankana Sahib	12.5	48	Hasilpur	28.6
15	Khushab	12.5	49	Phalia	28.9
16	Bahawalpur	12.5	50	Zafarwal	29.2
17	Shahkot	12.8	51	Chistian	33.3
18	Wazirabad	13.0	52	Khan pur	33.3
19	Pasrur	14.1	53	M.B.Din	34.1
20	Narang Mandi	14.3	54	Silanwali	37.5
21	Kot Momin	14.3	55	Safdarabad	39.0
22	Dunya Pur	14.3	56	Bahawalnagar	40.0
23	Noshehra Virkan	14.6	57	Narowal	41.2
24	Lahore	17.3	58	Ahmadpur	42.9
25	Bhowana	17.6	59	Bhera	50.0
26	Gujranwala	17.9	60	Kabirwala	50.0
27	Mian Channu	18.2	61	Layyah	50.0
28	Chiniot	18.8	62	R.Y.Khan	50.0
29	Sarai Alamgir	20.0	63	Sadiqabad	50.0
30	Malikwal	20.0	64	Liaqautpur	50.0
31	Pattoki	20.0	65	Shakargarh	52.4
32	Lodhran	20.0	66	Bhalwal	75.0
33	Gujrat	21.4	67	Baddomalhi	88.4
34	Sialkot	21.7			

Tehsil wise percentage of hot spots of Sheath Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Hafizabad	3	11	Ferozwala	11.9
2	Sharqpur	3.0	12	Narang Mandi	14.3
3	Sangla Hill	4.2	13	Chunian	14.3
4	Kot Radha Kishan	4.8	14	Gujranwala	15.4
5	Sheikhupura	4.9	15	Muridke	15.6
6	Kasur	4.9	16	Depalpure	17.6
7	Kamonke	7.8	17	Pakpattan	18.2
8	Daska	9.1	18	Zafarwal	25
9	Shakargarh	9.5	19	Baddomalhi	50
10	Pattoki	10.0	20	Narowal	64.7

Tehsil wise percentage of hot spots of Rice Blast

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Kasur	2	15	Pakpattan	18.2
2	Minchanabad	4.0	16	Lodhran	20.0
3	Nankana Sahib	4.2	17	Bahawalnagar	20.0
4	Kot Radha Kishan	4.8	18	Kehror Pacca	22.2
5	Sangla Hill	6.3	19	Silanwali	25.0
6	Kot Momin	7.1	20	Layyah	25.0
7	Shahkot	8.5	21	Karor	25.0
8	Shorkot	8.9	22	Chunian	26
9	AP Sial	10.7	23	Sargodha	29
10	Zafarwal	12.5	24	Bhera	28.6

11	Muzaffargarh	12.5	25	Depalpure	29.4
12	Dunya Pur	14.3	26	Jalal Pur	33.3
13	Chistian	16.7	27	Bhalwal	62.5
14	Pattoki	17.5			

Meteorological data of the current week 2023

METEOROLOGICAL DATA FOR 2ND WEEK OF OCTOBER 2023								
Districts	2023				2022			
	Temperature		R.H%	Rainfall (mm)	Temperature		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
Gujranwala	31.0	21.0	64.0	25.0	29.8	21.5	62.0	10.0
Hafizbad	30.8	18.2	59.0	4.0	31.0	19.1	60.0	2.0
Sialkot	30.0	24.0	65.0	10.0	28.0	21.0	70.0	20.0
Narowal	31.5	19.0	86.7	15.0	30.5	18.5	80.1	10.0
Gujrat	30.7	18.9	60.0	3.5	30.0	19.0	61.0	5.0
M.B.Din	30.9	17.6	63.0	5.0	32.0	20.2	59.0	4.0
Lahore	31.8	23.7	79.0	15.5	29.5	23.7	78.7	1.1
Sheikhupura	33.2	22.5	44.0	0.0	32.6	21.7	48.0	0.0
Nankana	32.7	21.3	27.4	0.0	32.1	23.6	58.1	0.0
Kasur	31.0	20.4	73.4	0.0	30.3	20.9	71.6	0.0
Faisalabad	38.6	29.6	68.3	0.0	37.2	24.8	76.6	11.2
Jhang	35.7	21.4	57.1	0.0	35.9	20.8	53.5	0.0
Toba Tek Singh	34.8	21.4	82.5	0.0	34.9	17.8	81.0	5.0
Chiniot	33.7	20.7	63.8	0.0	35.2	23.5	62.2	0.0
Sargodha	34.0	20.0	63.0	0.0	35.0	20.0	54.0	0.0
Khushab	35.3	23.5	66.6	0.0	34.5	21.5	72.0	0.0
Mianwali	34.0	21.0	55.0	3.0	38.0	27.0	45.0	0.0
Bhakkar	36.0	21.0	31.0	0.0	38.0	24.0	45.0	0.0
Multan	37.0	22.0	65.0	0.0	35.0	21.6	66.3	0.0
Khanewal	35.7	23.6	53.9	0.0	35.3	22.4	65.6	0.0
Vehari	35.6	23.6	50.0	0.0	34.1	20.9	70.2	0.0
Lodhran	35.3	23.9	64.8	0.0	33.6	22.8	71.0	0.0
Sahiwal	35.5	21.0	63.0	0.0	31.4	19.0	67.5	0.0
Pakpattan	32.2	24.6	36.0	0.0	40.8	20.8	54.4	0.0
Okara	33.0	22.5	59.7	0.0	33.7	23.3	60.2	0.0
Bahawalpur	35.7	17.6	59.4	0.0	36.0	21.6	58.9	0.0
Bahawalnagar	36.7	22.2	66.4	0.0	32.9	22.5	67.8	0.0
R.Y.Khan	38.0	24.2	65.2	0.0	37.0	20.2	41.6	0.0
D.G. Khan	32.1	24.1	61.8	0.0	37.4	26.7	69.6	0.0
Muzaffar Garh	36.9	23.9	0.0	0.0	34.2	22.1	68.2	0.0
Rajanpur	37.5	25.0	60.1	0.0	36.3	28.8	53.7	0.0
Layyah	35.0	18.0	50.0	0.0	34.0	21.0	74.0	0.0
TOT/AVG	34.12	21.91	58.25	2.53	33.94	21.94	63.33	2.13

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