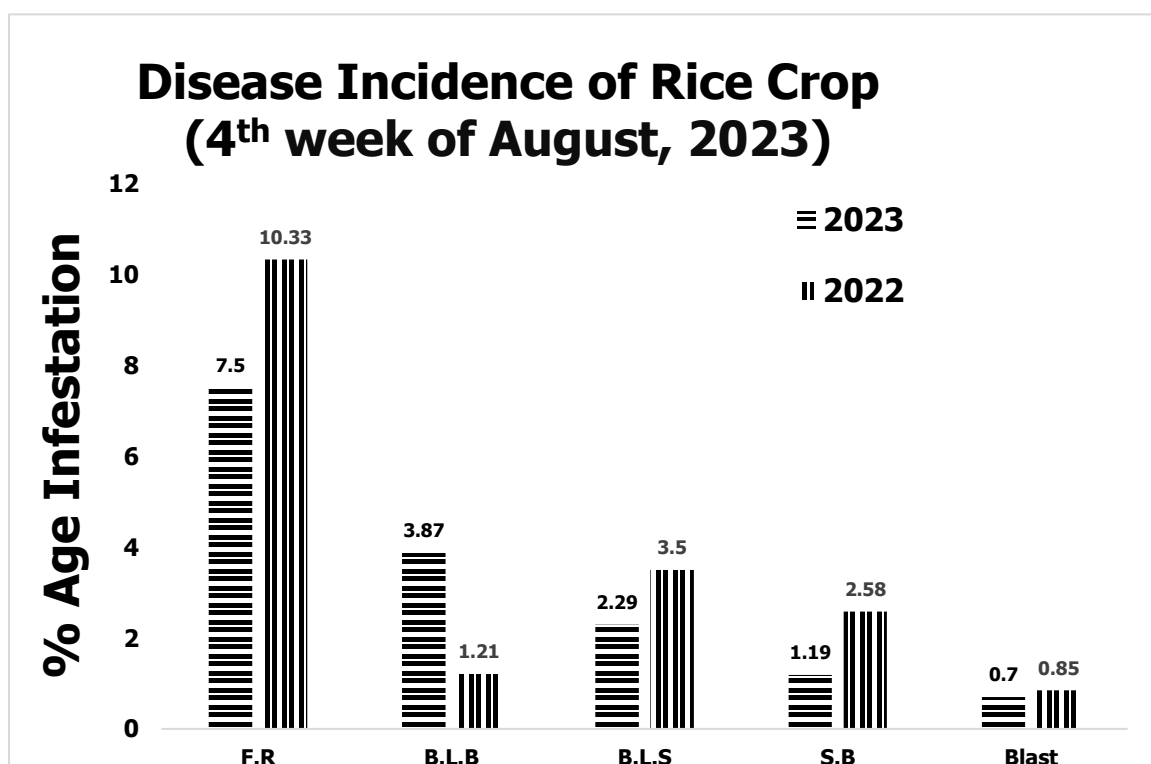
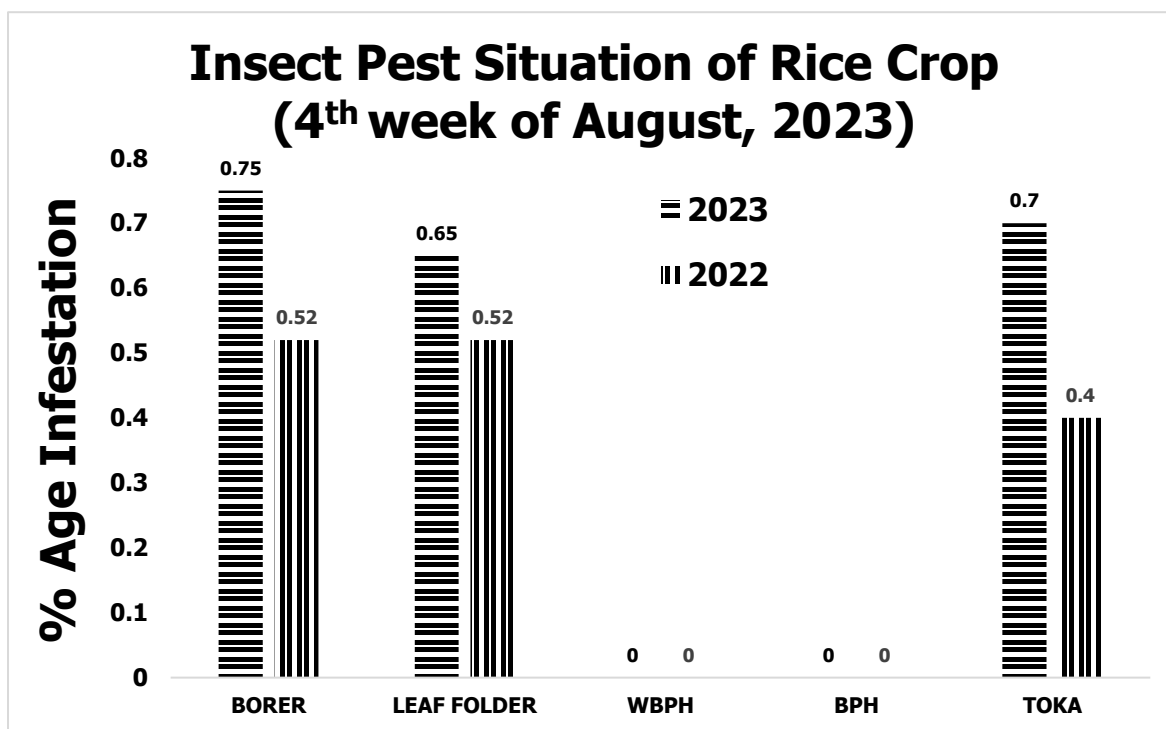


GRAPHICAL PEST SITUATION ON RICE CROP IN PUNJAB DURING 4TH WEEK OF AUGUST, 2023



PEST SITUATION ON RICE CROP IN PUNJAB DURING 4TH WEEK OF AUGUST, 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	0.75	11.03	0.53	10.48	0.52	13.09	Increasing
2	LEAF FOLDER	0.65	12.02	0.32	9.21	0.52	12.86	Increasing
3	WPBH	0.00	0.00	0.00	0.00	0.00	0.00	-
4	BPH	0.00	0.00	0.00	0.00	0.00	0.00	-
5	TOKA	0.70	18.38	0.32	17.15	0.40	19.69	Increasing
6	FOOT ROT	7.50	-	8.31	-	10.33	-	Decreasing
7	B.L.B	3.87	-	2.65	-	1.21	-	Increasing
8	B.L.S	2.29	-	1.43	-	3.50	-	Increasing
9	SHEAT H BLIGHT	1.19	-	0.85	-	2.58	-	Increasing
10	BLAST	0.70	-	0.21	-	0.86	-	Increasing
NO. OF TOTAL SPOTS VISITED		2013						
TOTAL AREA VISITED (Acres)		16474						

Tehsil wise percentage of hot spots of Rice Borer

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Muzaffargarh	25	5	Minchanabad	9.1
2	Alipur	20.0	6	Sangla Hill	7.5
3	Mian Channu	12.5	7	Nankana Sahib	5.9
4	Pakpattan	10.0			

Tehsil wise percentage of hot spots of Rice Leaf Folder

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Shujabad	33	5	Mian Channu	12.5
2	Alipur	30.0	6	D.G Khan	12.5
3	Khanewal	20.0	7	Shahkot	4.4
4	Minchanabad	18.2			

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

Nil

Tehsil wise percentage of hot spots of Brown Plant Hopper

Nil

Tehsil wise percentage of hot spots of Rice Toka

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Alipur	10	6	Phalia	4.0
2	Gujrat	7.1	7	Sheikhupura	3.3
3	Shahkot	6.7	8	Narang Mandi	2.3
4	M.B.Din	6.3	9	Muridke	1.9
5	Malikwal	5.3	10	Lahore	0.9

Tehsil wise percentage of hot spots of Foot Rot

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Bhalwal	67	24	Safdarabad	9.8
2	R. Y.Khan	60.0	25	Sangla Hill	9.4
3	Sadiqabad	50.0	26	Jhang	8.7
4	Liaqautpur	50.0	27	Gujranwala	8.2
5	Khan pur	50.0	28	Bhowana	7.7
6	Jatoi	37.5	29	Narang Mandi	7.0
7	Kamonke	25.7	30	Pindi Bhattian	6.8
8	Sambrial	25.0	31	Chunian	6.7
9	Sargodha	23.5	32	Hafizabad	6.3
10	Pasrur	23.3	33	Baddomalhi	6.3
11	Lodhran	20.0	34	M.B.Din	6.3
12	Nankana Sahib	17.6	35	Daska	6.1
13	Ferozwala	16.7	36	Muridke	5.8
14	Sahiwal	16.7	37	Lahore	5.6
15	Pattoki	15.2	38	Shahpur	4.5
16	Gujrat	14.3	39	Sahiwal	4.5
17	Sialkot	13.9	40	Phalia	4.0
18	Muzaffargarh	12.5	41	Kamalia	3.9
19	Noshehra Virkan	11.6	42	Lalian	3.3
20	Shahkot	11.1	43	Chiniot	3.1
21	Zafarwal	10.5	44	Shakargarh	2.9
22	Sharqpur	10.0	45	Kasur	1.8
23	Pakpattan	10.0	46	Sheikhupura	1.7

Tehsil wise percentage of hot spots of Bacterial Leaf Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Daska	42	13	M.B.Din	9.4
2	Gujrat	21.4	14	Sambrial	7.1
3	Pasrur	20.0	15	Shakargarh	5.7
4	Vehari	20.0	16	Noshehra Virkan	4.7
5	Alipur	20.0	17	Shahkot	4.4
6	Sialkot	16.7	18	Lahore	2.8
7	Kabirwala	16.7	19	Pindi Bhattian	2.3
8	Narang Mandi	16.3	20	Chunian	2.2
9	Gujranwala	12.2	21	Muridke	1.9
10	Phalia	12.0	22	Sangla Hill	1.9
11	Kamonke	11.4	23	Hafizabad	1.6

Tehsil wise percentage of hot spots of Brown Leaf Spots

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Khanewal	20	11	Pindi Bhattian	6.8
2	Sahiwal	13.6	12	Hafizabad	6.3
3	M.B.Din	12.5	13	Muridke	5.8
4	Sargodha	11.8	14	Sangla Hill	5.7
5	Malikwal	10.5	15	Shahkot	4.4
6	Lodhran	10.0	16	Safdarabad	3.9
7	Pattoki	9.1	17	Kamalia	2.0

8	Phalia	8.0	18	Lahore	1.9
9	Nankana Sahib	7.8	19	Kasur	1.8
10	Narang Mandi	7.0			

Tehsil wise percentage of hot spots of Sheath Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Daska	15	8	Shakargarh	2.9
2	M.B.Din	9.4	9	Sharqpur	2.5
3	Sahiwal	9.1	10	Nankana Sahib	2.0
4	Kamonke	8.6	11	Muridke	1.9
5	Phalia	8.0	12	Sangla Hill	1.9
6	Malikwal	5.3	13	Kasur	1.8
7	Pattoki	3.0	14	Sheikhupura	1.7

Tehsil wise percentage of hot spots of Rice Blast

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Depalpure	17	6	Chunian	4.4
2	Muzaffargarh	12.5	7	Daska	3.0
3	Sahiwal	8.3	8	Nankana Sahib	2.0
4	Pattoki	6.1	9	Sangla Hill	1.9
5	Malikwal	5.3			

Meteorological data of the current week 2023

METEOROLOGICAL DATA FOR 2ND4TH WEEK OF AUGUST 2023								
Districts	2023				2022			
	Temperature		R.H%	Rainfall (mm)	Temperature		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
Gujranwala	32.0	26.0	72.0	40.0	34.5	26.5	72.5	1.0
Hafizabad	36.0	27.0	67.0	1.0	38.0	24.0	65.0	4.0
Sialkot	38.0	26.0	75.0	65.0	37.0	25.0	70.0	50.0
Narowal	34.3	23.7	85.0	20.0	35.4	22.4	81.9	25.0
Gujrat	36.0	23.0	80.0	1.0	38.0	25.0	0.7	5.0
MB. Din	37.8	24.0	0.7	1.5	38.0	24.0	0.7	8.0
Lahore	36.4	28.4	68.4	1.4	34.7	26.5	70.7	5.7
Sheikhupura	36.8	25.9	48.0	0.0	35.5	24.8	51.0	5.0
Nankana	36.7	28.3	40.6	0.9	36.0	28.3	59.1	0.5
Kasur	37.3	26.3	54.4	0.0	36.3	27.1	55.4	0.0
Faisalabad	38.6	29.6	68.3	0.0	37.2	24.8	76.6	11.2
Jhang	36.8	25.9	48.0	0.0	35.5	24.8	51.0	5.0
Toba Tek Singh	38.6	29.8	74.7	0.0	36.6	27.1	83.7	0.0
Chiniot	36.4	28.2	69.0	1.0	34.2	27.0	55.6	0.0
Sargodha	34.0	25.0	56.0	13.0	36.0	27.0	50.0	0.0
Khushab	38.8	27.5	71.7	2.0	37.2	26.1	16.8	78.5
Mianwali	38.0	32.0	41.0	0.0	37.0	23.0	51.0	0.0
Bhakkar	39.0	39.0	43.0	0.0	42.0	28.0	57.0	0.0

Multan	38.7	29.3	70.0	6.3	33.4	26.6	65.1	7.0
Khanewal	38.0	28.0	55.9	1.1	34.3	26.4	73.3	2.0
Vehari	38.4	28.0	60.9	0.0	32.3	24.9	61.8	6.0
Lodhran	36.3	27.1	67.1	1.0	34.3	23.6	80.0	2.6
Sahiwal	36.8	27.0	72.2	0.2	34.8	27.0	73.5	1.0
Pakpattan	36.5	27.1	71.8	0.0	34.4	27.5	75.0	0.0
Okara	34.2	26.2	72.0	5.0	35.2	26.8	72.4	0.0
Bahawalpur	38.1	27.7	48.1	0.0	34.2	25.7	76.8	29.2
Bahawalnagar	38.6	27.7	58.7	0.0	35.5	26.2	67.8	32.0
R.Y.Khan	38.1	26.0	59.1	0.0	31.4	25.0	79.1	0.0
D.G. Khan	36.1	29.0	66.4	2.6	29.7	25.4	82.6	7.7
Muzaffargarh	35.1	27.8	59.0	8.0	31.2	20.9	81.0	17.0
Rajapur	38.9	27.9	54.8	4.0	31.0	25.7	78.4	49.0
Layyah	37.0	23.0	50.0	0.0	30.6	24.2	92.0	40.0
TOT/AVG	36.95	27.42	60.27	175.0	35.04	25.54	63.36	392.4

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.

BROWN 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