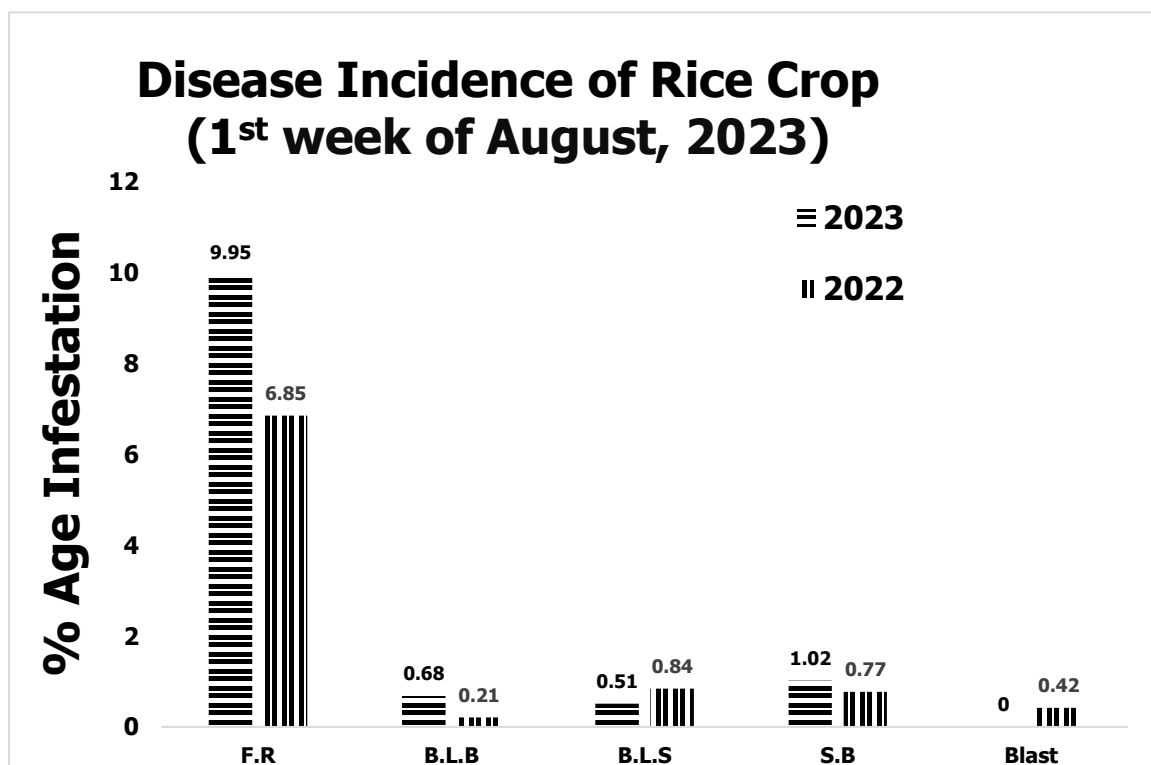
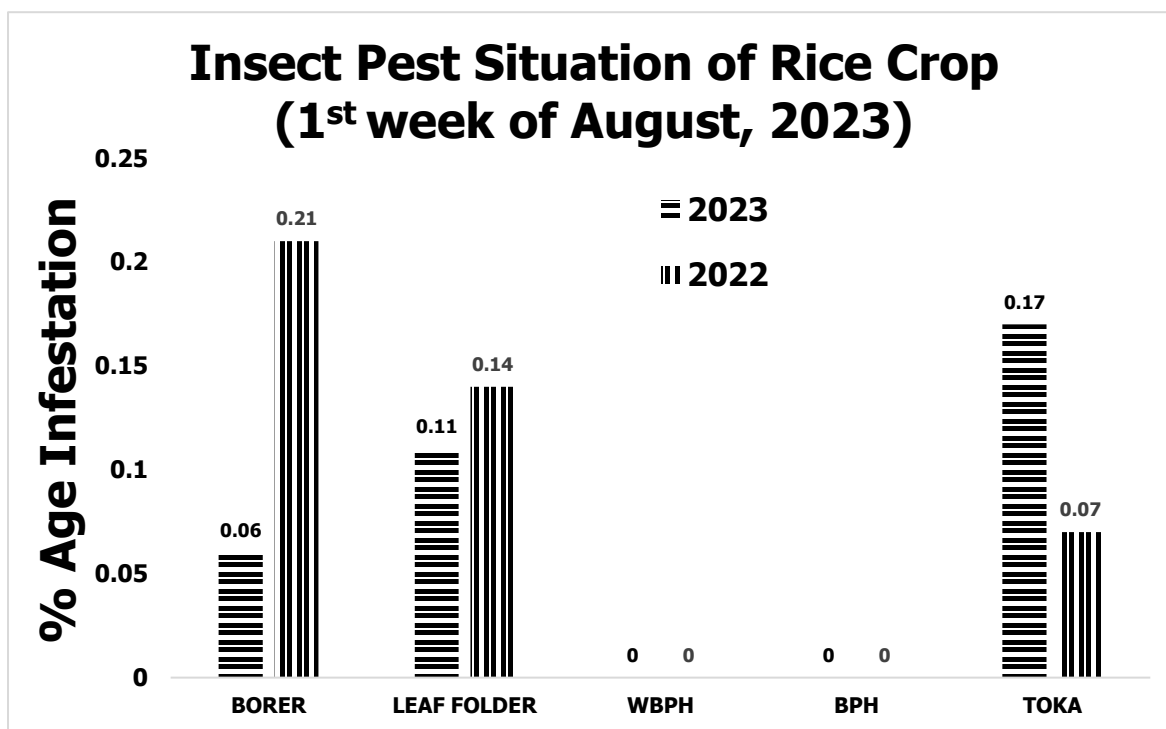


GRAPHICAL PEST SITUATION ON RICE CROP IN PUNJAB DURING 1ST WEEK OF AUGUST, 2023



PEST SITUATION ON RICE CROP IN PUNJAB DURING 4TH WEEK OF JULY, 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	0.06	6.77	0.00	4.60	0.21	6.99	Increasing	
2	LEAF FOLDER	0.11	3.19	0.00	2.10	0.14	4.19	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	0.17	15.70	0.00	11.30	0.07	11.18	Increasing	
6	FOOT ROT	9.95	-	6.99	-	6.85	-	Increasing	
7	B.L.B	0.68	-	0.12	-	0.21	-	Increasing	
8	B.L.S	0.51	-	0.17	-	0.84	-	Increasing	
9	SHEAT H BLIGHT	1.02	-	0.12	-	0.77	-	Increasing	
10	BLAST	0.00	-	0.00	-	0.42	-	-	
NO. OF TOTAL SPOTS VISITED		1758							
TOTAL AREA VISITED (Acres)		14781							

Tehsil wise percentage of hot spots of Rice Borer

Sr.	TEHSIL	%AGE
1	Minchanabad	7

Tehsil wise percentage of hot spots of Rice Leaf Folder

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Jalal Pur	20	2	Minchanabad	7.1

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	Sheikhupura	3	2	Muridke	2.3

Tehsil wise percentage of hot spots of Foot Rot

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Bhalwal	60	25	Sheikhupura	10.2
2	Silanwali	50.0	26	Sahiwal	10.0
3	Shahpur	50.0	27	Sangla Hill	9.8
4	Jatoi	42.9	28	Shakargarh	9.4
5	Kamonke	32.1	29	Muridke	9.3
6	Sargodha	30.0	30	Bhowana	9.1

7	Narowal	21.9	31	Pattoki	8.8
8	Depalpure	20.8	32	Shahkot	8.3
9	Nankana Sahib	20.4	33	Kot Momin	8.3
10	Sialkot	17.6	34	Sahiwal	8.3
11	Sambrial	16.7	35	Pindi Bhattian	7.4
12	Pasrur	16.7	36	Kharian	7.1
13	Lahore	15.1	37	Pakpattan	6.7
14	Chak Jhumra	14.3	38	Hafizabad	6.4
15	Jalal Pur Jattan	13.3	39	Chunian	6.3
16	Noshehra Virkan	13.2	40	Lalian	6.3
17	Baddomalhi	13.0	41	M.B.Din	5.9
18	Zafarwal	13.0	42	Phalia	5.6
19	Daska	12.5	43	Kasur	5.1
20	Sharqpur	11.1	44	Jaranwala	4.2
21	Kot Radha Kishan	11.1	45	Chiniot	3.2
22	Gujranwala	10.5	46	Jhang	3.0
23	Safdarabad	10.3	47	Kamalia	2.5
24	Ferozwala	10.2			

Tehsil wise percentage of hot spots of Bacterial Leaf Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Gujranwala	11	4	Daska	3.1
3	Kamonke	7.1	6	Sheikhupura	1.7

Tehsil wise percentage of hot spots of Brown Leaf Spots

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Muridke	7	4	M.B.Din	2.9
2	Phalia	5.6	5	Gujranwala	2.6
3	Pindi Bhattian	3.7	6	Lahore	2.3

Tehsil wise percentage of hot spots of Sheath Blight

Sr.	TEHSIL	%AGE	Sr.	TEHSIL	%AGE
1	Gujrat	18	6	Gujranwala	5.3
2	Kamonke	10.7	7	Muridke	4.7
3	Kharian	7.1	8	Safdarabad	3.4
4	M.B.Din	5.9	9	Sheikhupura	3.4
5	Phalia	5.6	10	Noshehra Virkan	2.6

Tehsil wise percentage of hot spots of Rice Blast

Nil

Meteorological data of the current week 2023

METEOROLOGICAL DATA FOR 1ST WEEK OF AUGUST 2023								
Districts	2023				2022			
	Temperature		R.H%	Rainfall (mm)	Temperature		RH%	Rainfall (mm)
	Max.	Min.			Max.	Min.		
Gujranwala	37.3	28.5	75.5	60.0	36.8	27.5	75.5	64.0
Hafizbad	36.0	27.0	67.0	23.0	38.0	27.0	60.0	15.0
Sialkot	36.5	28.0	76.0	52.0	35.0	24.0	70.0	45.0
Narowal	35.8	23.5	80.1	50.0	32.8	21.8	87.2	73.0
Gujrat	36.0	23.0	80.0	40.0	35.5	23.0	78.0	30.0
M.B.Din	35.0	22.0	75.0	45.0	35.2	22.3	74.0	32.0
Lahore	34.7	25.3	72.8	21.6	33.0	27.4	73.8	1.5
Sheikhupura	33.5	23.2	49.0	26.0	33.7	24.2	59.0	35.0
Nankana	34.4	26.1	54.2	7.2	33.1	26.8	61.6	0.7
Kasur	33.4	23.8	86.4	0.0	33.6	24.8	85.2	0.0
Faisalabad	36.8	27.8	81.1	21.2	36.5	28.0	80.5	17.4
Jhang	29.3	38.9	56.9	0.0	28.7	41.2	61.5	0.0
Toba Tek Singh	38.1	29.1	77.0	0.0	34.6	25.6	89.2	41.8
Chiniot	36.6	26.4	75.0	0.0	34.0	26.8	63.2	0.0
Sargodha	37.0	26.0	67.0	70.0	38.0	28.0	70.0	0.0
Khushab	34.5	21.5	72.0	0.0	25.5	38.5	75.0	68.0
Mianwali	34.0	19.0	0.7	2.0	33.5	19.2	71.2	3.0
Bhakkar	37.0	22.0	50.0	0.0	36.0	21.0	48.0	0.0
Multan	36.7	27.6	62.8	3.8	34.9	26.4	77.4	8.8
Khanewal	34.7	29.1	68.3	1.1	31.9	26.9	78.5	3.4
Vehari	34.4	27.7	76.6	14.4	33.4	26.9	83.1	8.1
Lodhran	36.0	25.5	73.1	11.1	31.7	24.4	80.4	13.4
Sahiwal	37.4	29.3	72.0	0.0	34.9	26.0	81.0	0.0
Pakpattan	36.8	28.4	74.3	0.0	34.5	26.3	82.0	9.5
Okara	37.0	28.2	74.0	0.0	35.2	26.8	82.6	0.0
Bahawalpur	37.5	27.7	67.9	0.0	37.0	27.0	73.4	16.0
Bahawalnagar	38.3	27.6	68.6	0.0	34.2	26.4	75.2	2.2
R.Y.Khan	37.6	27.1	59.4	0.0	37.3	27.9	58.6	0.0
D.G. Khan	37.7	29.7	65.7	0.0	31.7	28.4	75.2	0.8
Muzaffar Garh	38.5	29.5	62.0	0.0	32.5	28.5	75.0	0.0
Rajanpur	38.8	28.2	64.8	0.0	38.2	28.7	71.2	0.0
Layyah	39.0	28.0	60.0	0.0	48.0	25.0	87.0	12.0
TOT/AVG	36.14	26.71	67.03	448.4	34.65	26.64	73.85	500.6

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 have 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