

VOL. 1

A PEER-REVIEWED · MULTIDISCIPLINARY · MULTILINGUAL JOURNAL



Knowledge Beyond Boundaries...

SHIBLI NATIONAL ACADEMIC JOURNAL

S N A J

Open Access · Online · Biannual · Double-Blind Peer Reviewed
Crossref Indexed DOI · Multidisciplinary · Multilingual

VOLUME 1 · ISSUE 1

JANUARY – JUNE 2026

CHIEF EDITOR

Dr. Mohammad Zahid

www.snaj.org.in

ISSUE 1



SHIBLI NATIONAL ACADEMIC JOURNAL
Volume 1 · Issue 1 · January – June 2026

FOREWORD

It is with immense pride and a deep sense of purpose that I present the inaugural issue of the Shibli National Academic Journal (SNAJ) to the global community of scholars, researchers, and students. Named in reverence to the towering legacy of Allama Shibli Nomani — a scholar whose intellectual contributions transcended boundaries of language, discipline, and geography — this journal aspires to carry forward that same spirit of rigorous, cross-cultural inquiry.



SNAJ was conceived from a simple but pressing conviction: that meaningful scholarship should not be confined by the language in which it is written, nor by the discipline from which it emerges. India's intellectual tradition has long thrived at the confluence of languages — English, Hindi, and Urdu among them — and it is this confluence that our journal seeks to honour. By welcoming original research across the humanities, social sciences, education, and emerging interdisciplinary, multilingual fields, we hope to build a genuinely inclusive platform for academic dialogue.

As Chief Editor, I have had the privilege of witnessing the dedication of our editorial board, reviewers, and contributors, whose collective commitment has shaped this first issue. Every article herein has passed through a rigorous double-blind peer review/ indexed process, and each is assigned a Crossref indexing, registered DOI, reflecting our unwavering commitment to academic integrity, originality, and permanence in the global research ecosystem.

I extend my heartfelt gratitude to our esteemed reviewers, editorial board members, and the scholars who entrusted us with their research. It is through their collective effort that this journal has moved from vision to reality. I also invite researchers, academicians, and students from across disciplines and linguistic traditions to consider SNAJ as a home for their scholarship in the issues to come.

It is my sincere hope that this journal will serve not merely as a repository of research, but as a living, evolving conversation — one that bridges languages, disciplines, and generations of scholars in pursuit of knowledge.

With warm regards,

Dr. Mohammad Zahid

Chief Editor
Shibli National Academic Journal (SNAJ)

A Survey of Brown Leaf Spot Disease of Rice in Azamgarh District of Eastern Uttar Pradesh

Shreya Yadav¹ and Mirza Jaish Beg²

ORCID ID: 0009-0009-0524-8623

Abstract

Rice (*Oryza sativa* L.) is the most significant cereal crop in the world, belonging to the family Gramineae (Poaceae). In order to study the brown leaf spot of rice, a field survey was conducted to record the disease incidence in five blocks of the Azamgarh district, viz. Palhani, Rani ki Sarai, Tahabarpur, Bilariyaganj, and Sathiyaon. Disease incidence recorded in local seedling nurseries revealed that brown leaf spot is prevalent throughout all paddy-growing regions of the Azamgarh district in eastern Uttar Pradesh. During the 2024–25 season, disease incidence varied from 20.5% to 45.5% across different locations. The maximum average disease incidence (45.5%) was recorded at a farmer's field in Makhdumpur village of Palhani block, followed by Rani ki Sarai (44%), Tahabarpur (30%), and Sathiyaon (28.25%), while the minimum was recorded in Chhihin Sharif of Bilariyaganj block (20.5%). In the 2025–26 season, disease incidence varied from 18.5% to 43.5%; the highest average was again recorded in Palhani (43.5%), followed by Rani ki Sarai (40%), Tahabarpur (33.5%), and Sathiyaon (24%), with the minimum recorded in Chhihin Sharif of Bilariyaganj block (18.5%). Overall, the findings showed that disease incidence ranged from 18.5% to 45.5% across the surveyed locations during the 2024–2026 period.

Key words: Rice, Brown leaf spot, disease incidence, Azamgarh.

Introduction

Our earth, as an ecosystem, has many abiotic and biotic components which are continuously in a state of action-reaction and interaction. Our environment has a fascinating world of microbes which not only affect our life but also our natural resources. Rice porridge is usually eaten for breakfast and is a traditional food for the sick. Rice is infected by a number of seed-borne fungal pathogens, namely *Alternariapadwickii*, *Helminthosporiumoryzae*, *Pyriculariaoryzae*, and *Ustilaginoideavirens*

(Shoemaker, R.A. 1959). Among these, the most important pathogens are *Pyriculariaoryzae* (Blast) and *Helminthosporiumoryzae* (Brown spot); diseases of plants adversely affect plant health, damage the plant, and lead to significant yield reduction (Nguyen and Ferrero, 2006). The typical spots on rice leaves are brown with a gray to whitish center, having a cylindrical oval shape similar to a sesame seed, usually with yellow halos, while young spots are small and round. Losses due to fungal diseases have sometimes created history.

We cannot forget the famous Great Bengal Famine that occurred in the Bengal province of India during 1943, due to the Brown spot disease of rice caused by *Helminthosporiumoryzae*. It is estimated that 2-3 million people died from starvation, malnutrition, and disease (Ghose *et al.*, 1960). Fungi adversely affect the quality as well as quantity of agricultural products (Vidhyasekharan *et al.*, 1973). Brown spot of rice is caused by *Helminthosporiumoryzae*, a global disease of rice causing great economic loss up to 90% and reducing grain quality and market value (David *et al.*, 2018). Chakrabarti (2001) recorded a reduction in yield ranging from 26-52%.

Material and Methods

The survey was done in 5 blocks—viz. Palhani, Rani ki Sarai, Tahabarpur, and Bilariyaganj— including 10 villages of the Azamgarh district in the years 2024-25 and 2025-26 during the kharif season in the farmers' fields. In each block, two villages, and two farmers' crop fields in each village, were selected for the study. The plants were randomly selected from farmers' rice crop fields across 10 villages in 5 different blocks of Azamgarh (Fig. 1 and 3). The survey was done to record the severity of the disease by the percentage of disease incidence using the formula (Sintoo *et al.* 2023) given below:

$$\text{Percent Disease Incidence} = \frac{\text{Total Number of Infected Plants}}{\text{Total Number of Screened Plants}} \times 100$$

Results and Discussion

To determine the incidence of brown leaf spot in rice, a field survey was conducted across five blocks of the Azamgarh district in eastern Uttar Pradesh: Palhani and its adjoining areas, namely Rani ki Sarai, Tahabarpur, Bilariyaganj, and Sathiyaon. Field symptoms were characterized by gray-brown spots (Fig. 3). Typical mature spots on the rice leaves were brown with a gray-to whitish center, exhibited a cylindrical or oval shape resembling a sesame seed, and were frequently surrounded by a yellow halo. In contrast, younger spots appeared small and round (Fig. 2). These observations align with the symptomology described by Hafiz *et al.* (2013) and Thera *et al.* (2021).

Assessments of seed germination and affected rice nursery beds across various farmers'

fields confirmed that brown leaf spot is prevalent throughout all paddy-growing areas of the Azamgarh district. As detailed in Table -1 and illustrated in the corresponding histogram (Fig. 1), disease incidence varied significantly across the surveyed locations over the two-year study period.

During the 2024–25 season, the highest average disease incidence (45.5%) was recorded at a farmer's field in Makhdumpur village (Palhani block), followed by Rani ki Sarai (44%), Tahabarpur (30%), and Sathiyaon (28.25%). Conversely, the lowest disease incidence (20.5%)

was observed in Chhihin Sharif village (Bilariyaganj block). In the subsequent 2025–26 season, overall disease incidence varied from 18.5% to 43.5%. The highest average was again recorded in Palhani (43.5%), followed by Rani ki Sarai (40%), Tahabarpur (33.5%), and Sathiyaon (24%), with the minimum incidence persistently recorded in Chhihin Sharif of Bilariyaganj block (18.5%). This widespread variation in disease prevalence across different geographic locations is consistent with the findings reported by Sintoo *et al.* (2023) and Thera *et al.* (2021).

Conclusion

A comprehensive field survey was conducted to assess the severity of brown leaf spot disease of five blocks During the 2024–25 season, disease incidence varied from 20.5% to 45.5% across the surveyed locations. The highest disease incidence was recorded at farmers' fields in Makhdumpur village of Palhani block (45.5%), while the minimum was observed in Chhihin Sharif village of Bilariyaganj block (20.5%).

During the subsequent 2025–26 season, overall disease incidence showed a slight decrease, ranging from 18.5% to 43.5%. However, the geographic trend remained consistent; the highest average incidence was again recorded in Palhani (43.5%), and the lowest in Bilariyaganj (18.5%). Based on these findings, it is recommended that local farmers adopt disease-resistant rice varieties or utilize natural fungicides (Yadav and Beg, 2026) to effectively lower disease severity and protect future yields.

Acknowledgement

The author is very much grateful to Prof. Dr. Tausif Ahmad, Department of Botany, SNPG College Azamgarh, for valuable guidance and support while conducting the investigation. I am also thankful to Prof. Dr. M.A. Beg, Dr. Abdullah, Dr. Kaashif, Dr. Javed, and all the faculty of the Botany Department of SNPG College Azamgarh for providing suggestions, and also thankful to Dr. Heeralal Yadav at BJHS PalhaniAzamgarh for valuable support during the field survey works.

References

1. Chakravarty, D.K. and Priya, S.H. (2001). Inhibition of germination of phytopathogenic fungi in some Indian medicinal plant extracts. *Zeitschrift für Pflanzenkrankheiten und Pflanzenschutz*, 84, 221-223.
2. David, K., Sobita, D.S. and Abhilasha, A. Lal. (2018). Antifungal activities of selected indigenous botanicals of Manipur against *Helminthosporium oryzae* of rice. *The Pharma Innovation J.* (7), 406-411.
3. Ghose, R.L.M., Ghatge, M.B., Subramanian (1960). *Rice in India* (revised ed.). New Delhi, ICAR. 474.
4. Hafiz, M.I.A., Hussain, N., Ali, S., Khan, J.A., Saleem, K., Babar, M.M. (2013). Behaviour of *Bipolaris oryzae* at different temperatures, culture media, fungicides and rice germplasm for resistance. *Pak J Phytopath*; 25 (1): 84-90.
5. Nguyen, N.V., Ferrero, A. (2006). Meeting the challenges of global rice production. *Paddy, Water and Environment*, 4: 1-9.
6. Shoemaker, R.A. (1959). Nomenclature of *Drechslera* and *Bipolaris* grass parasite segregated from *Helminthosporium*. *Canadian J. Bot.* 27: 879-889.

7. Sintoo, P., Sing, P., Sing, R. (2023). Survey for incidence of brown spot of rice in Eastern UP. *The Pharma Innovation Journal*, 12 (8): 1575-1577.
8. Yadav S. and Beg M. J., (2026). Studies on in vitro control of *Helminthosporium oryzae*, causing Brown spot disease of Rice, by some higher plants. *Multidisciplinary International conference org., Jharkhand and MITRA, Bengaluru*, p. 14, 15-16 Feb. 2026.
9. Thera, U.K., Timsina, A., Ramaswamy, N., Sowmya, V. & Singh, V. (2021). Survey and incidence of rice sheath blight in major rice growing areas of eastern Uttar Pradesh. *International Journal of Chemical Studies*, 9(1), 2164-2167.
10. Vidhyasekharan, P., Ramadoss, N. and Srinivasalu, N. (1973). Quantitative and qualitative losses in paddy due to *Helminthosporium* epidemic. *Indian Phytopathology*. 26, 479-484.

Table-1: Incidence of *H. oryzae* Brown Leaf spot of Rice at different location in Azamgarh, U. P., 2024-25 & 2025-26.

S. No	Location: Blocks and their Villages	Mean % of Disease Incidence (2024-25)	Mean % of Disease Incidence (2025-26)
1	Palhani (MakhdumpurPalhani)	45.5	43.5
2	Rani kisarai (SethwalUnchaGaon)	44	40
3	Tahbarpur (BasahiChirawar)	30	30.5
4	Bilariyaganj (ChihinJaigaha)	20.5	18.5
5	Sathiyaon (RanipurJamudi)	28.25	24

Fig. 1 : Comparative analysis of Mean % Disease incidence by Location

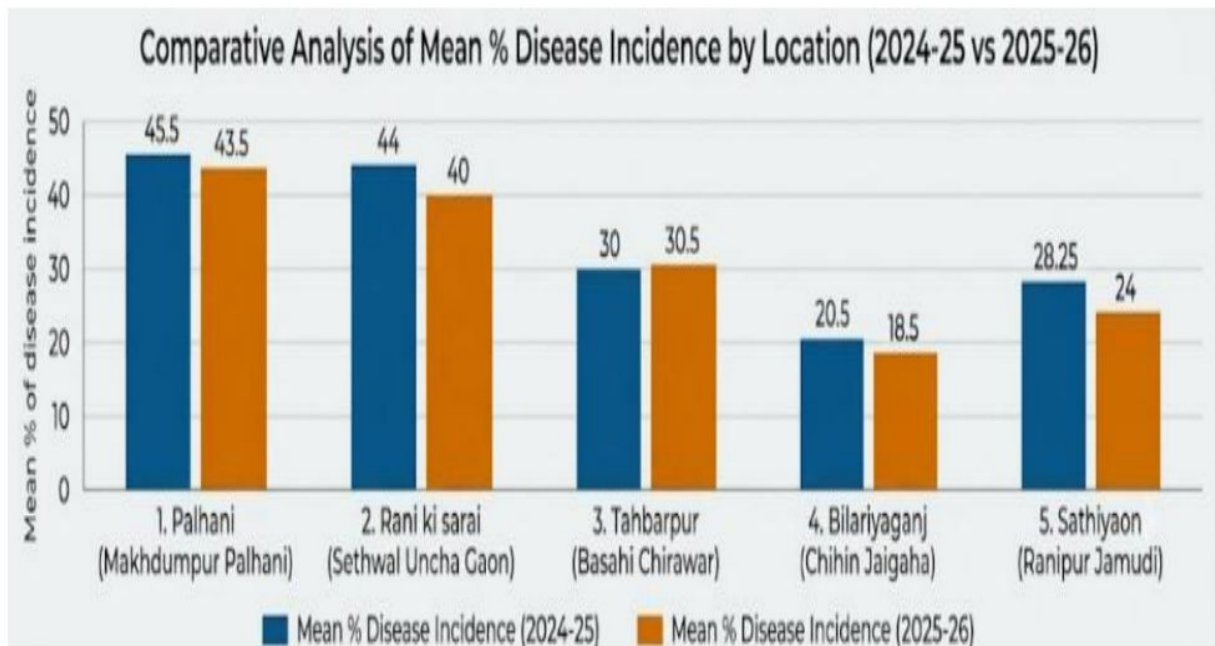
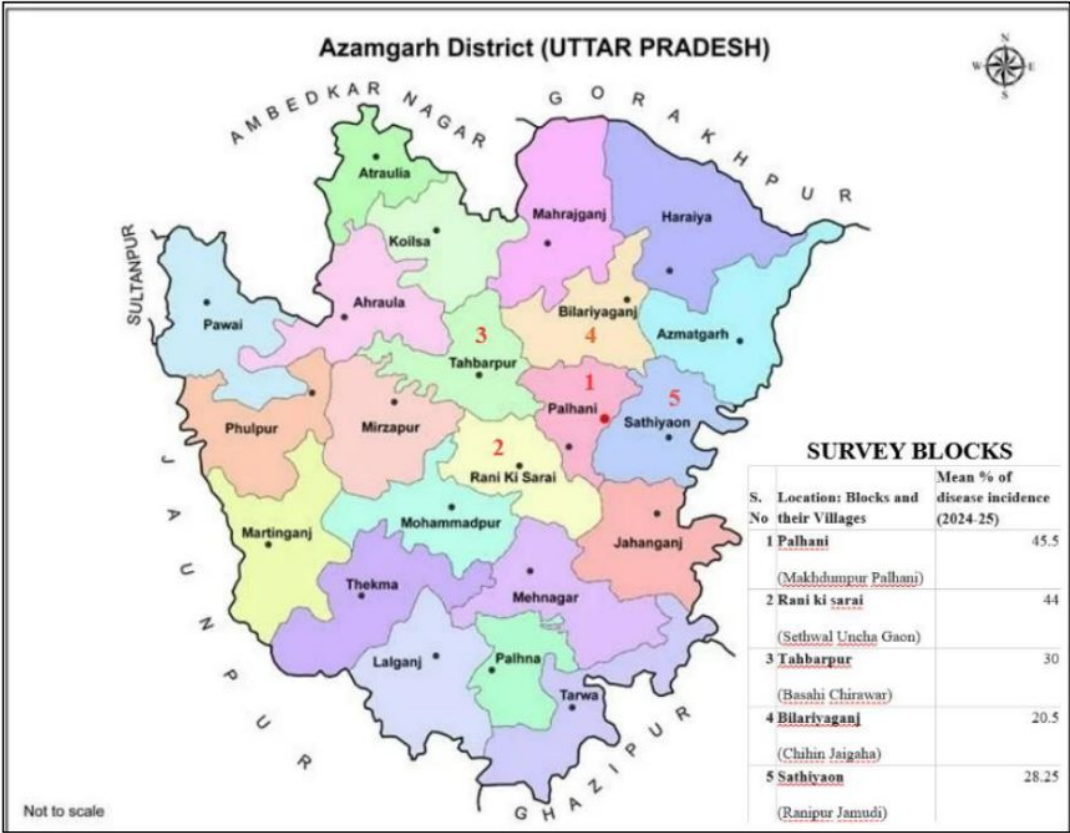


Fig. 2 Symptoms showed brown spot of rice



Fig. 3 Survey for the incidence of Brown Leaf Spot of Rice in Azamgarh, Uttar Pradesh:



ABOUT

*Knowledge Beyond Boundaries...***ABOUT THE JOURNAL**

The Shibli National Academic Journal (SNAJ) is an international, multidisciplinary and multilingual research publication dedicated to advancing rigorous scholarship across the humanities, social sciences, education, language and emerging interdisciplinary fields. Published biannually in fully open access online format, SNAJ upholds a double-blind peer review process to ensure the highest standards of academic integrity, originality and scholarly merit. Every article published in the journal is assigned a Crossref-registered Digital Object Identifier (DOI), ensuring permanent discoverability and citation traceability in the global research ecosystem.

AIMS & SCOPE

SNAJ welcomes original research articles, review papers, case studies and scholarly notes in English, Hindi and Urdu, fostering cross-linguistic and cross-cultural academic dialogue while maintaining internationally recognised standards of research publishing.

ISSN 3139-3284 (Online) · Crossref DOI Indexed

chiefeditor@snaj.org.inwww.snaj.org.in