

Dr. Rashmi Singh

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Designation: Professor and Head

Department: Botany, Kashi Naresh University, Bhadohi, U.P. 221304

Qualification: M.Sc. (Botany), Ph.D, NET

Date of Birth: 06/04/1981

Area of Interest/ Fields of Specialization

- Knowledge of isolation and characterization of biocontrol agents viz., *Trichoderma*, *Gliricladium*, *Penicillium*, *Aspergillus* etc. and plant growth promoting rhizobacteria (PGPRs), testing their biological efficacy against soil-borne phytopathogens.
- Knowledge of spawn production technology in mushroom cultivation.

Awards Received

- Received ISCA Young Scientist Award in Plant Science Section (2011-2012).
- Gold Medalist in M.Sc. (Botany) 2002.

Work Experience as Committee In-charge and Member

- DBT Star College Scheme Project Co-ordinator
- Unnat Bharat Abhiyan- Nodal Officer
- DST-FIST Project Implementation Group
- NAAC Coordinator of the K.N.Govt.P.G College, Gyanpur, Bhadohi
- IQAC Coordinator
- Centre Superintendent and Assistant Centre Superintendent for several competitive exam
- ARIIA Nodal Officer
- Institute Innovation Council, President
- Innovation Ambassador
- Member of District Science Club, Bhadohi
- Working as Expert Member in District Clean Ganga Mission, Bhadohi.
- Worked as Expert member of District Children Science Congress, Bhadohi (2018-19)
- District Co-ordinator of Outreach Programme in Remote Sensing organized by ISRO.

Minor Research Project

- “Biocontrol potential of ecofriendly *Trichoderma* species for the management of collar rot of chickpea caused by *Sclerotium rolfsii*”, sponsored by UGC (2011), Rs.1,70,000/ , **Completed**
- “Agriprenurship and Capacity Building through Mushroom Cultivation in Eastern U.P.” sponsored by UP Higher Education (2021),Rs.3,25,000/-, **Completed**

Research Publications: Research article: 2 1

1. **Rashmi Singh and Shubhankar Srivastava.2026.** Ethnomedicinal Knowledge and traditional use of medicinal plants in rural communities of Bhadohi District, Uttar Pradesh, India. Journal of Medicinal Plant Studies. Vol 14(4):167-170.
2. **Rashmi Singh and Sudarshan Maurya. 2025.** Agri-prenurship through Oyster Mushroom Cultivation in Eastern U.P. Current Agriculture Research Journal. Vol. 13 (1), 88-93
3. **Rashmi Singh, Ranjit Singh, Anurag Singh and Alok. 2024.** Assessments Of Sclerotium Rolfsii Potential Biocontrol By The Environment Friendly Trichoderma Species. Korean Journal of Physiology and Pharmacology.Vol. 28 (1), 35-41.
4. **Rashmi Singh, Ranjit Singh, Anurag Singh, Santosh Kumar Singh, Anuj Kumar Singh, Alok. 2023.** Reviewing Trichoderma Species as Most Potent Fungal Partner in Biocontrol of Plant Pathogen by in Vitro and Field Studies: A Special Reference to Collar Rot of Chickpea. Journal of Chemical Health Risks.Vol. 13 (6), 2862-2870.
5. **Rashmi Singh, Madhu Shastri, A. K. Singh and P. N. Dongre. 2023.** Approaches towards Integrated Disease

Management of Sheath Blight disease of Corn. Current Agriculture Research Journal. Vol.11 (3), 781-787

6. **Rashmi Singh, Madhu Shastri, A. K. Singh and P. N. Dongre. 2023.** Sheath blight disease and its bio management. Journal of Asiatic Society of Mumbai. Vol 97 (4) 133-138.
7. **Rashmi Singh, Madhu Shastri, A. K. Singh and P. N. Dongre. 2022.** Study of Disease severity of sheath blight symptoms of Corn in Purvanchal, (U.P.), India. NIU International Journal of Human Rights. vol 9 July (I) 64-70
8. **Rashmi Singh, M. P. Singh and A. K. Mishra. 2021.** Antifungal potential of some essential oil as fumigant against *Aspergillus flavus*. International Journal of Agricultural technology
9. **Rashmi Singh and R.S. Upadhyay. 2018.** Mentha and citrus oil against post harvest deterioration of Wheat during storage. International Journal of Agricultural technology.
10. **Rashmi Singh. 2018.** Effect of Different Carbon Sources on the Antifungal efficacy of *Trichoderma* species against *Macrophomina*. Remarking an analysis. page no 42-44 vol 3
11. **Rashmi Singh. 2018.** A rhizosphere competent strain of *Trichoderma* against dry root rot of Blackgram. International journal of Research and Analytical Reviews.
12. **Rashmi Singh, S. Maurya and R.S. Upadhyay. 2016.** The improvement of competitive saprophytic capabilities of *Trichoderma* species through the use of chemical mutagens. **Brazilian J of Microbiology.**
13. **Rashmi Singh, S. Maurya and R.S. Upadhyay. 2012.** Antifungal potential of *Trichoderma* species against *Macrophomina phaseolina*. **Journal of Agricultural Technology** Vol. 8(6): 1925-1933.
14. **Amitabh Singh, Sudarshan Maurya, Rashmi Singh and U.P. Singh. 2012.** Antibiotic potential of plant growth promoting rhizobacteria (PGPR) against *Sclerotium rolfsii*. **Archives of Phytopathology and Plant Protection** Vol. 45, No. 14:1655–1662.
15. **Amitabh Singh, S. Maurya, Rashmi Singh and U.P. Singh. 2011.** Antifungal efficacy of some ethyl acetate extract fractions of *Cyperus rotundus* rhizomes against spore germination of some fungi. **Archives of Phytopathology and Plant Protection** Vol. 44, No. 20: 2004– 2011.
16. **S.L. Yadav, A.K. Mishra, P.N. Dongre and Rashmi Singh. 2011.** Assessment of fungitoxicity of phyloplane fungi against *Alternaria brassicae* causing leaf spot of mustard. **Journal of Agricultural Technology** 2011 Vol. 7(6): 1823-1831.
17. **Rashmi Singh, S. Maurya and R. S. Upadhyay. 2010.** Improvement of antagonistic capability of *Trichoderma harzianum* by UV-Irradiation for management of *Macrophomina phaseolina*. **Archives of Phytopathology and Plant Protection** Vol. 43, No. 16: 1579-1588.
18. **S. Maurya, Rashmi Singh And U. P. Singh, 2010.** Antifungal activity of ethanolic extract of Archu (*Rheum emodi*) on powdery mildew (*Erysiphe cichoracearum*) and its role in induction of resistance in balsam (*Impatiens balsamiana*) **Archives of Phytopathology and Plant Protection** Vol. 43, No. 16:1589-1595.
19. **S. Maurya, U. P. Singh, Rashmi Singh, A. Singh, H. B. Singh. 2010.** Role of air and light in sclerotial development and basidiospore formation in *sclerotium rolfsii*. **Journal of plant protection research** Vol. 50, No. 2.
20. **S. Maurya, Rashmi Singh, D.P. Singh, H.B. Singh, U.P. Singh, J.S. Srivastava. 2008.** Management of collar rot of chickpea (*Cicer arietinum*) by *Trichoderma harzianum* and plant growth promoting rhizobacteria **Journal of Plant Protection Research** 48, 347-354.
21. **Maurya S., Rashmi Singh, D. P. Singh, H. B. Singh, J. S. Srivastava and U. P. Singh. 2007.** Phenolic compounds of *Sorghum vulgare* in response to *Sclerotium rolfsii* infection. **Journal of Plant Interaction**, 2:25-29.

Book Published as co-author: 03

1. Microbiology and Plant Pathology. 2022. A Text Book. Krishna Publication. ISBN: 978-93-91152-61-1.
2. Archegoniate and Plant Architecture. 2022. A Text Book. Krishna Publication: ISBN No. : 978-93-91152-29-1.
3. Economic Botany, Ethnomedicine and Phytochemistry. 2023. A Text Book. Krishna Publication: ISBN No.; 978-93-94511-93-4

Book Chapter Published: 03

4. **Rashmi Singh and Sudarshan Maurya. 2021.** Blast Disease of Rice: Evolution and adaptation in context of changing climate. In Blast Disease of Cereal Crops. Pg no. 125-134, ISBN: 978- 3-030-60585-8. Published by Springer. <https://doi.org/10.1007/978-3-030-60585-8>
5. **Rashmi Singh. 2020.** Mushroom: An approach to sustainable packaging material. In Renewable Energy Sources: An Assessment in Environmental Scenario. Pg no. 164-170. ISBN: 978-81-949793-0-2. Published by Bharti Publication, India
6. **Rashmi Singh. 2019.** Adaptation of *Trichoderma* Species to various carrier materials for mass multiplication, formulation development and delivery system for management of soil borne phytopathogens. In Contemporary Climatic Issues and Challenges. Pg no. 257-273. ISBN No. 978-81-7975-959-2.