

Section of Plant Pathology

Dr. Shruti Vijayrao Gawarkar

Dr. Shruti Vijayrao Gawarkar is an Assistant Professor of Plant Pathology from Wardha, Maharashtra. She holds a Ph.D. in Plant Pathology. Her doctoral research focused on the **biosynthesis of copper and zinc nanoparticles from *Pseudomonas fluorescens* metabolites for the management of soil-borne plant pathogens**. She has **1.6 years of teaching experience** and **5 years of research experience** (2 years during M.Sc. and 3 years during Ph.D.). Her research interests include plant disease management, biological control, nanotechnology in plant pathology, and molecular approaches for crop disease resistance. She is committed to integrating advanced research with quality teaching in Plant Pathology.

Courses Taught

- All undergraduate and postgraduate courses in Plant Pathology.

Book Chapters

- **CRISPR and Genome Editing for Plant Disease Resistance**. In: *Molecular Insight into Plant Pathology* (BioThink Publication).
- **The Microbial Battlefield: Plant vs Pathogen**. In: *Climate Smart Approach in Plant Pathology* (Golden Leaf Publisher).

Research Papers

1. Detection of Mycoflora of Sesamum Seed (*Sesamum indicum* L.). *The Pharma Innovation Journal*, **11(12): 900–903 (2022)**.
2. In Vitro Management of *Fusarium oxysporum* of Sesamum. *The Pharma Innovation Journal*, **11(9): 1671–1673 (2022)**.
3. In Vitro Management of *Aspergillus niger* of Sesamum (*Sesamum indicum*). *The Pharma Innovation Journal*, **11(12): 768–770 (2022)**.
4. Effect of *Fusarium oxysporum* on Germination and Seedling Growth of Sesamum. *The Pharma Innovation Journal*, **12(3): 1187–1191 (2023)**.
5. Management of Seed-Borne Mycoflora with *Trichoderma*-Based Copper Nanoparticles (CuNPs). *Journal of Plant Disease Science*, **20(2): 159–163 (2025)**.

Trainings

- Completed **Seed Learners Online Training Programme**, Agmatrix in collaboration with Seed Works International Pvt. Ltd. (2021).
- Participated in **Mastering Molecular Technique: Microbial Identification to Diversity Analyses**, organized by ICAR–National Bureau of Agriculturally Important Microorganisms (ICAR–NBAIM), Mau, Uttar Pradesh (2023).
- Successfully completed the **7th Hands-on Training Programme on Advanced Analytical Chromatography Techniques (GC, HPLC & FPLC)** (2025).