Faculty Profile

Personal Details

Name	Dr. Sarika Ravindra Bhalerao	
Designation	Professor (CAS)	
E-Mail	sarikasshende@gmail.com	
Mobile No	9922515404	port size photograp

Academic Qualifications

Degree	Specialization	University	Year of passing
UG	Microbiology,	SGB Amravati University,	1999
	Chemistry, Zoology	Amravati	
PG	Biotechnology	SGB Amravati University,	2001
		Amravati	
Ph.D.	Biotechnology	SGB Amravati University,	2005
		Amravati	
Additional Qualification (if any): Additional Degree/Diploma/NET/SET			
NET	Plant Biotechnology	ICAR, New Delhi	2001
NET	Life Sciences	CSIR-UGC, New Delhi	2002
PGDESD	Environmental Science	VMOU, Kota, Rajasthan	2006

Professional Experience

Stream	Years	Stream	Years
Teaching	18	Research	18
Extension	18	Administration	

Research Accomplishments

Particulars	Numbers	Particulars	Numbers
Research Articles	30	Popular Articles	03
Books		Book chapters	08
Research		Varieties Developed	
Recommendations		_	
Patents		Awards/Medals	04
Technical Publication	17	Abstracts	44

Exposure

Participation in Training/Symposia/Conference/Seminar	Numbers
1. National	24

2. International	06
Achievements (Externally Funded Projects (Supervised/Handled/Assisted)) 1. Project Completed as Principal Investigator Department of Biotechnology, New Delhi,	
India funded Project entitled, "Gene tagging for Fusarium wilt resistance in safflower", 2013-	
2017. Rs. 17,76,600.00.	
2. Project Sanctioned as Principal Investigator, Rajiv Gandhi Science and Technology	
Commission, Mumbai Scheme 'Assistance for S & T research proposal entitled "Pigment	
production in safflower tissue culture system", 2024-2026. Rs. 4,00,000.00	
3. Nucleotide Sequence submitted to Genebank NCBI: 17	
4. Developed marker GTS-1, GTS-2, GTS-3, GTS-4, GTS-5 for Fusarium wilt resistant trait in	
safflower.	
5. Developed ITS marker for identification of wilt causing pathogen Fusarium oxyporum.	
6. Developed nano formulation for control of bacterial blight of pomegranate.	

Research Guidance

Degree	No. of student guided
M.Sc.	42
Ph. D.	

Recent Ten Most Important Publications

- Sarika R. Bhalerao, Pratiksha R. Gund, Sunita D. Bansod and Mahendra Rai. (2019). Management of Pythium Spp. By Arbuscular Mycorrhizal Fungi. In: Pythium Diagnosis, Diseases and Management (Eds: Mahendra Rai, Kamel A. Abd-Elsalam, Avinash P. Ingale), CRC Press, Taylor & Francis Publication. Pp 344-358.
- 2. Sarika Bhalerao and Mahendra Rai. (2023). Biosynthesis of nanoparticles by fungi and their applications as nanofertilizer. In: Myconanotechnology Emerging Trends and Applications (Eds: Mahendra Rai, Patrycja Golinska), CRC Press, Taylor & Francis Publication. Pp 193-227.
- Sarika R. Bhalerao, Namrata D. Patil, Pramod G. Kabade, Vaishnavi M. Tattapure and Mahendra Rai. (2023). Strategic applications of CRISPR-Cas technology for the management of plant diseases. In: Nanophytopathology (Eds: Graciela Avila-Quezada and Mahendra Rai), CRC Press, Taylor & Francis Publication. Pp 187-235.
- Sarika R. Bhalerao, Indarchand Gupta and Mahendra Rai. (2024). Detoxification of nanoparticles by plants. In: Nanotoxicology for Agricultural and Environmental Applications (Eds: Mahendra Rai and Indarchand Gupta). Elsevier Publication. Pp 171-145.
- 5. <u>Sunita Tanpure</u>, <u>Sarika Bhalerao</u>, <u>Haridas Tanpure</u>, <u>Vaishnavi Tattapure</u>. (2024).

Nano-Agri Products for Plant Health: From Lab to Farms. In: Nanotechnology in plant health (Eds: Graciela Avila-Quezada and Mahendra Rai), CRC Press, Taylor & Francis Publication. Pp 86-106.

- Patil N.D and Bhalerao S.R. (2021). *In vitro* haploid production in sunflower genotypes and homozygosity assessment using microsatellite marker. Research Journal of Biotechnology. 16(6):148-154. (NAAS Rating 5.00).
- Jadhav, B., Bhalerao, S.R. and George, P. (2021). Molecular Characterization of Fusarium oxysporum Causing Chickpea Wilt by Internal Transcribed Spacer (ITS) Marker. Legume Research. 44(7): 842-848. DOI: 10.18805/LR-4151. (NAAS Rating 6.53).
- S.R. Bhalerao and K.R. Kumre. (2019). Multiple shoot formation and plant regeneration of a commercially useful tropical plant, *Citrus aurantifolia* (Swingle). *Research J. of Biotechnology*. 14(11):101-107 (NAAS Rating 5.00). .(Citation Index: 1).
- V Govardhan Rao, DN Dhutraj, SR Bhalerao, KT Apet, CV Ambadkar, B Prasanna Kumar, AT Daunde, PL Sontakke and AG Patil. (2019). Investigation of genetic diversity in Fusarium wilt of egg plant caused by *Fusarium oxysporum* f.sp. *melangene* (Schlecht) Mutuo and Ishigami in Marathwada region of Maharshtra, India. *International Journal of Current Microbiology and Applied Sciences*. 8(7):1079-1093. (NAAS Rating 5.38).
- K.P. Bhokare, S.S. Shende, N.S. Pandhare, D. H. Waghmare, N. D. Gaikwad, K.A. Chormule. (2019). Synthesis and Evaluation of Antimicrobial Potential of CuO Nanoparticles. *The Bioscan.* 14(2):141-144. (NAAS Rating 4.57).

Awards/Recognition

1. Best Poster Presentation Award for poster entitled "Evaluation of effect of copper nanoparticles to manage of stem rot of tomato". National Symposium on "Plant Health Management for Sustainable Agriculture" Dept. of Plant Pathology, College of Agriculture, Udgir, 11-12 December, 2016.

2. Best Poster Presentation Award for poster entitled "Development of Safflower hybrid for *Fusarium* wilt resistance and assessment of hybrid purity by using molecular markers" in International seminar on "Climate Resilient Crops for Feeding the Future" at Swami RamanandTeerthMarathwada University, Nanded. 11-12 December, 2017.

3. Bhalrao S. R., Puneet S. B., Rahul K., Rahul G., Received Excelsier Award First

Position (2021). Molecular Characterization of Okra [*Abelmoschus esculentus* (L.) Moench] Against Yellow Vein Mosaic Virus (YVMV). NATIONAL ONLINE RESEARCH PROJECT PRESENTATION. RICERCA NATIONAL CONFERENCE 2021. Organized by St. Joseph's College for Women, Alappuzha In Collaboration With Society of Biotechnologists India & Kerala Sasthra Sahithya Parishath Alappuzha, Kerala, India 05-10-2021 to 21-10-2021. Proceedings p.no.10.

4. Best Scientist Award Awarded In International Conference on Advancement in Interdisciplinary research organized by Shia PG College and Science Tech Institute, Lucknow, Manraj Kuwar Singh Educational Society, Lucknow, 2021.