

Curriculum Vitae

Full Name:	Dr. SAURABH YADAV			
Designation:	Assistant Professor			
Department:	Biotechnology			
Campus:	Chauras/ Srinagar, Campus			
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Education Qualification:	M.Sc. Biotechnology (University of Allahabad), Ph.D. (DBT-National Institute of Plant Genome Research, (Jawaharlal Nehru University), New Delhi)			
Teaching Experience:	~ 10 Years	Research Experience:	~ 10 Years	
Past Experience- Experimental Medicine and Biotechnology Department (Sr. Demonstrator), PGIMER, Chandigarh, India				
Research Interest and Fields of Specialization				
<ol style="list-style-type: none"> 1. Plant Biotechnology 2. Plant-Pathogen interactions 3. Intellectual Property Rights, Legal Biotechnology 				
Honours & Awards				
<ol style="list-style-type: none"> 1. Qualified UGC-NET JRF (Junior Research Fellowship), jointly organized by Council of Scientific & Industrial Research and University Grant Commission (CSIR-UGC), Govt. of India, Dec.2003. 2. Awarded Post-Graduate scholarship during M. Sc. Biotechnology, University of Allahabad, by Department of Biotechnology (DBT), Ministry of Science and Technology, Govt. of India. 3. Invited participant in FICCI-KAS Dialogue Series titled '<i>Rule of Law: Strengthening Indo-German Ties: IPR and Legal Cooperation</i>' on 9th August 2018, at <i>Federation of Indian Chambers of Commerce and Industry (FICCI)</i>, New Delhi. 4. Invited member in Science for Equity Empowerment and Development (<i>SEED</i>) <i>Division, Department of Science and Technology (DST)</i>, Ministry of Science & Technology, Govt. of India, sponsored "Sensitization programme for the Northern Region: Focus-S&T for Women" September 08-09, 2017, Shimla, Himachal Pradesh. 5. Review Editor- Frontiers of Plant Science 6. Review Editor- Frontiers of Nanotechnology 				
Member of Academic Institutions:- None				
Membership of Scientific Organizations				
<ol style="list-style-type: none"> 1. Life membership of Professor H.S. Srivastava Foundation for Science & Society 2. Life membership of Biotech Research Society of India (BRSI) 				
Research Supervision (No. of Ph.D. Degree Awarded/Submitted/Registered)				
Registered- Two (02)				

Research Projects/MoU undertaken: -

“To study the oxidative stress response on enzymatic, non-enzymatic antioxidants and analysis of Physio-morphological changes of Cicer arietinum, under the Heat-stress”, UGC-BSR Start-up Grant, 06 lakhs, 2015-2017 (Completed)

Others- Certified trainer (Valid upto 2023), under *Skill Development Mission, National Skill Development Corporation, Govt. of India.*

Administrative Experience

1. Program Officer, National Service Scheme
2. Member, IPR cell
3. Member, E-Learning - Teaching Monitoring Committee
4. Member, Ethics Board
5. Member, Board of Studies of Department of Biotechnology
6. Member, Institutional Biosafety committee
7. Assistant Director, IQAC
8. Member, University Admission committee

Conference/Symposium/Workshop Attended

International

1. **Invited Speaker** in “International conference on Nanobiotechnology-2018”, 5-6 Feb. 2018, Centre for Interdisciplinary Research in Basic Sciences, Jamia Milia Islamia, New Delhi.
2. Oral Presentation in “International Conference in Nanotechnology: IDEAS, INNOVATIONS AND INITIATIVES-2017”, 06-08 December 2017 at Indian Institute of Technology, Roorkee, Uttarakhand.

National

1. **Invited Speaker** in "National Conference on Underutilised Plants, Food Security & Climate Link", 20-21 January 2017, DDU Gorakhpur University, Gorakhpur, U.P.
2. **Invited Speaker** in "National Conference on Biotechnology and Environment 2017". 10-11 April, 2017 Jamia Milia Islamia, New Delhi.
3. **Keynote Speaker** in “National conference on Impact of Biotechnology in Agriculture and environment” 17 February, 2018, Khandelwal College of Management Science and Technology, Bareilly.
4. **Invited Speaker** in “National Conference on MODELING, OPTIMIZATION AND COMPUTING FOR ENGINEERING PROBLEMS: USE OF TECHNICAL HINDI TERMINOLOGY”, 12-14 October, 2018, sponsored by Commission for Scientific and Technical Terminology (CSTT), Ministry of Human Resource Development (MHRD), Govt. of India, at Indian Institute of Technology, Roorkee, Uttarakhand.
5. **Invited speaker** in “National Faculty Development Program (FDP) on Innovations and IPRs”, 06 December 2021, organised by CSIR-IMMT, Bhubaneswar and Acharya Nagarjuna University, Guntur, Andhra Pradesh.
6. **Invited speaker** in “National Conference on Biotechnology and Environment”, 11 April 2017, organised by Jamia Milia Islamia, New Delhi.
7. **Invited speaker** in “International Conference on BRE3CH 2021”, 04 April 2021, organised by CSIR-Indian Institute of Petroleum, Dehradun and BRSI.
8. **Resource person** in “One week workshop on Research Methodology and Innovations in Life Sciences”, 27 June 2021, organised by DDU Gorakhpur University.

9. **Resource person** in “National Faculty Development Program on Innovation and Intellectual Property Rights”, 05 October 2021, organised by CSIR-IMMT Bhubaneswar and CTTE College for women.
10. **Resource person** in “PMMMNMTT- FDC” 2018 and 2019, HNB Garhwal University, Srinagar Garhwal, Uttarakhand.
11. **Invited speaker** in “CSIR Integrated Skill Initiative”, 25 January 2023, organized by CSIR- National Physical Laboratory, New Delhi.
12. **Invited speaker** in “Department of Science and Technology (DST), sponsored INSPIRE Science camps” 2015, 2017, 2018, 2019, 2020 organized by HNB Garhwal University, Srinagar Garhwal, Uttarakhand
13. **Invited speaker** in “Department of Science and Technology (DST), sponsored INSPIRE Science camps” 2015 organized by Kumaun University, Nainital, Uttarakhand.

Conference/Symposium/Workshop Organized

Co-organizing secretary, “One day workshop on laboratory Biosafety Protocols”, 24 April, 2018, H.N.B. Garhwal University, Srinagar, Uttarakhand.

Selected Publications

Journals

1. Patent intelligence of RNA viruses: Implications for combating emerging and re-emerging RNA virus based infectious diseases Devarapalli P, Kumari P, Soni S, Mishra V, **Saurabh Yadav***. *International Journal of Biological Macromolecules* 219 (2022): 1208-1215. (IF~8.0)
2. Multitrait *Pseudomonas* sp. isolated from the rhizosphere of *Bergenia ciliata* acts as a growth-promoting bioinoculant for plants. Thakur R, Srivastava S and **Yadav Saurabh*** (2023). *Frontiers in Sustainable Food Systems* 7:1097587. doi: 10.3389/fsufs.2023.1097587 (IF~5.0)
3. Phyto-mediated synthesis of Zinc Oxide nanoparticles of *Berberis aristata*: Characterization, antioxidant activity and antibacterial activity with special reference to Urinary tract pathogens. Chandra H, Patel D, Jangwan JS, Kumari P, **Yadav Saurabh***. *Materials Science and Engineering C*, 102:212-220, (2019), (IF~8.5)
4. Prospects of genetic engineering utilizing potential genes for regulating arsenic accumulation in plants. Kumari P, Rastogi A., Shukla A., Srivastava S., **Yadav Saurabh***. *Chemosphere*, 211: 397-406, (2018), (IF~ 9)
5. Comparative structural modelling of a Monothiol GRX from chickpea: Insight in Iron-Sulfur Cluster assembly. **Yadav Saurabh***, Kushwaha HR, Kumar K, Verma P. *International Journal of Biological Macromolecules*. 51(3):266-273, (2012), (IF~8.0)
6. Phytohormone priming: Regulator for Heavy Metal Stress in Plants. Sytar O, Kumari P, **Yadav Saurabh**, Brestic M, Rastogi A. *Journal of Plant Growth Regulation*.38(2): 739-752. (2018), (IF~ 4.6)
7. Effects of Heat stress and molecular mitigation approaches in orphan legume, Chickpea. Kumari, P., Rastogi, A., & **Yadav Saurabh*** (2020). *Molecular Biology Reports*, 47, 4659-4670. (IF~2.7)
8. Does silicon really matter for the photosynthetic machinery in plants...?. Rastogi, Anshu, **Saurabh Yadav**, Sajad Hussain, Sunita Kataria, Shokoofeh Hajjhashemi, Pragati Kumari, Xinghong Yang, and Marian Brestic. *Plant Physiology and Biochemistry* 169 (2021): 40-48. (IF~5.4)
9. Phytotoxic effect of silver nanoparticles in *Triticum aestivum*: Improper regulation of photosystem I activity as the reason for oxidative damage in the chloroplast. Rastogi A,

- Zivcak Z, Tripathi DK, **Yadav Saurabh**, Kalaji HM, Brestic M, *Photosynthetica*, 57, 209-216. (2019). (IF~2.4)
10. Silver nanoparticle's toxicological effects and phytoremediation. Ihtisham, M., Noori, A., **Yadav Saurabh**, Sarraf, M., Kumari, P., Brestic, M., Imran, M., Jiang, F., Yan, X. and Rastogi, A., 2021. *Nanomaterials*, 11(9), p.2164. (IF~5.7)
 11. The role of potassium on drought resistance of winter wheat cultivars under cold dryland conditions: Probed by chlorophyll a fluorescence. Lotfi R, Abbasi A, Kalaji HM, Eskandari I, Sedghieh V, Khorsandi H, Sadeghian N, **Yadav Saurabh**, Rastogi A. *Plant Physiology and Biochemistry*. 2022 Jul 1; 182:45-54. (IF~5.4)
 12. Kumari P, Singh S, **Yadav Saurabh***, Tran LSP. Pretreatment of seeds with thidiazuron delimits its negative effects on explants and promotes regeneration in chickpea (*Cicer arietinum* L.). *Plant Cell Tissue and Organ Culture*, 133(1):103-114. (2018) (IF~2.7)
 13. Riboswitch regulation in cyanobacteria is independent of their habitat adaptations. Singh P., Kumar N., Jethva M., **Yadav Saurabh**, Kumari P, Thakur A., Kushwaha HR. *Physiology and Molecular Biology of Plants* 24:315-324. (2018), (IF~3.0)
 14. Application of silicon nanoparticles in agriculture. Rastogi, A., Tripathi, D.K., **Yadav Saurabh** et al. *3 Biotech*, 9: 90. (2019) (IF~2.8)
 15. Analysis of thermotolerance behaviour of five chickpea genotypes at early growth stages. Kumari P, Singh, S., **Yadav Saurabh***, *Brazilian Journal of Botany* 41(3): 551-565. (2018) (IF~1.3)
 16. Evaluation of aflatoxin contamination in crude medicinal plants used for the preparation of herbal medicine. Chandra H., Kumari P, **Yadav Saurabh***, *Oriental Pharmacy and Experimental Medicine* 19(2):137-143. (2019).
 17. Differential transcript accumulation in chickpea during early phases of compatible interaction with a necrotrophic fungus *Ascochyta rabiei*. Jaiswal P, Cheruku JR, Kumar K, **Yadav Saurabh**, Singh A, Kumari P, Dube SC, Upadhyaya KC and Verma P. *Molecular Biology Reports*. 39(4):4635-46, (2012), (Equal 2nd author) (IF~2.7)
 18. An alternative approach in Gateway cloning when the bacterial antibiotic selection cassettes of the entry clone and destination vector are the same. Kumar K, **Yadav Saurabh**, Purayannur S and Verma P. *Molecular Biotechnology*. 54(2):133-140, (2012) (IF~2.8)
 19. Promising roles of alternative medicine and plant-based nanotechnology as remedies for urinary tract infections. Chandra H, Singh C, Kumari P, **Yadav Saurabh***, Mishra AP, Laishevtcev A, Brisc C, Brisc MC, Munteanu MA, Bungau S. *Molecules*. 2020 Nov 28;25(23):5593. (IF~4.9)
 20. Plant growth promoting *Pseudomonas aeruginosa* from *Valeriana wallichii* displays antagonistic potential against three phytopathogenic fungi. Chandra, H., Kumari, P., Bisht, R., Prasad, R., & **Yadav Saurabh*** (2020). *Molecular Biology Reports*, 47, 6015-6026. (IF~2.7)
 21. Progress in understanding salt stress response in plants using biotechnological tools. Ibrahimova U, Kumari P, **Yadav Saurabh**, Rastogi A, Antala M, Suleymanova Z, Zivcak M, Tahjib-Ul-Arif MD, Hussain S, Abdelhamid M, Hajjhashemi S. *Journal of Biotechnology*. 2021 Mar 10; 329:180-91. (IF~3.5)
 22. Antioxidant and antimicrobial activity displayed by a fungal endophyte *Alternaria alternata* isolated from *Picrorhiza kurroa* from Garhwal Himalayas, India. Chandra, H., Kumari, P., Prasad, R., Gupta, S. C., & **Yadav Saurabh*** (2021). *Biocatalysis and Agricultural Biotechnology*, 33, 101955.
 23. Influence of different types of explants in chickpea regeneration using thidiazuron seed-priming. Kumari, P., Singh, S., **Yadav Saurabh***, & Tran, L. S. P. (2021). *Journal of plant research*, 134(5), 1149-1154. (IF~3.0)

Book Chapters

1. Checker, V.G., Kushwaha, H.R., Kumari, P., **Yadav Saurabh***. Chapter no.7 on Role of Phytohormones in Plant Defense: Signalling and Cross Talk. In: Singh, A., and Singh, I. (eds.) *Molecular Aspects of Plant-Pathogen Interaction*. Springer Nature Singapore Pte Ltd., pp. 159-184 ISBN-978-981-10-7370-0 (2018)
2. Kumari, P., Gupta, A., & **Yadav Saurabh*** (2021). Thioredoxins as molecular players in plants, pests, and pathogens. *Plant-Pest Interactions: From Molecular Mechanisms to Chemical Ecology: Chemical Ecology*, 107-125.
3. Kumari, P., Gupta, A., Chandra, H., Singh, P., & **Yadav, Saurabh*** (2021). Effects of Salt Stress on the Morphology, Anatomy, and Gene Expression of Crop Plants. *Physiology of Salt Stress in Plants: Perception, Signalling, Omics and Tolerance Mechanism*, 87-105.
4. Chandra, H., Kumari, P., Yadav, A., & **Yadav, Saurabh*** (2022). Green biosynthesized metallic nanoparticles and future biomedical applications. In *Green Nanomaterials for Industrial Applications* (pp. 93-105). Elsevier.
5. Kumari, P., Thakur, R., Gupta, A., Kumar, V., Thakur, A. and **Yadav, Saurabh*** (2022). Ethylene. In *Ethylene in Plant Biology* (eds S. Singh, T. Husain, V.P. Singh, D.K. Tripathi, S.M. Prasad and N.K. Dubey). <https://doi.org/10.1002/9781119744719.ch17>
6. Kumari, P., Thakur, R., Singh, N., Rastogi, A., **Yadav, Saurabh*** (2022). Relationships of Oxidative Stress and Ultraviolet-B Radiation in Plants. In: Kataria, S., Singh, V.P. (eds) *UV-B Radiation and Crop Growth. Plant Life and Environment Dynamics*. Springer, Singapore. https://doi.org/10.1007/978-981-19-3620-3_13

Others-

1. Successfully completed '**Annual Refresher Programme in Teaching (ARPIT-2019) in BIOTECHNOLOGY** (Roll No. 19072020800), conducted by **Ministry of Human Resource Development (MHRD), Govt. of India**, using the **MOOCs platform SWAYAM**.
2. **Post Graduate Diploma in Intellectual Property Rights (PGDIPR-2008)** from **Indira Gandhi National Open University (IGNOU), New Delhi**.
3. Passed **FOUR** Certificate courses (2008-2009) conducted by **World Intellectual Property Organisation (WIPO) Worldwide Academy, Geneva, Switzerland**.