




ZAKIR HUSAIN DELHI COLLEGE
(University of Delhi)

Faculty Details

Title	First Name	Last Name	
Dr.	Deepika	Sharma	
Designation	Assistant Professor		
Address	Department of Botany Zakir Husain Delhi College New Delhi 110 002		
Phone Number	Office	+91-11-23233420	
Email Id	deepikabotany@zh.du.ac.in; sharma.deepika09@outlook.com		
Web Page	https://orcid.org/0000-0003-3730-9493 (ORCID profile) https://scholar.google.com/citations?user=rWq4660AAAJ&hl=en (Google scholar profile) https://www.researchgate.net/profile/Deepika-Sharma-40 (ResearchGate profile)		
Educational Qualifications			
Degree	Institution	Year	
Ph.D.	University of Delhi	2014	
M.Phil. (Botany)	University of Delhi	2007	
M.Sc. (Botany)	University of Delhi	2005	
B.Sc. (H) Botany	University of Delhi	2003	
Career Profile			
Assistant Professor: Department of Botany, Zakir Husain Delhi College (January 2024 – till date)			
Assistant Professor (Ad-hoc): Department of Botany, Zakir Husain Delhi College (January – May 2015; January 2016 – December 2023)			
Assistant Professor (Guest): Department of Botany, Zakir Husain Delhi College (July – November 2014; July – November 2015)			

<p>Administrative Assignments</p> <ul style="list-style-type: none"> • Member, Viksit Bharat Committee, Zakir Husain Delhi College, university of Delhi • Member, Sports Advisory Board, Zakir Husain Delhi College, university of Delhi • Vice-president, Botanical society 'Nargis' of Department of Botany, Zakir Husain Delhi College, University of Delhi (2021 – 22) • Member, Counselling Team for Undergraduate admissions at Zakir Husain Delhi College (2017 – 2022) • Member, NAAC sub-committee (Criteria 7: Innovations and Best Practices) for preparation of SSR Report (2016) • Member, Garden and Greening Committee of Zakir Husain Delhi College (2015 – 2020) • Coordinator, RIO+22 United Nations Sustainable Energy for All India Program at Zakir Husain Delhi College (2015)
<p>Areas of Interest / Specialization</p> <p>Plant-microbe interactions, Microbial Ecology and Conservation Biology</p>
<p>Subjects Taught</p> <ul style="list-style-type: none"> • Bryophytes, Pteridophytes and Gymnosperms • Plant Systematics • Ecology and Evolution • Biofertilizers • Economic Botany and Biotechnology • Reproductive Biology of Angiosperms • Plant Diversity and Systematics • Economic Botany • Intellectual Property Rights • Environmental Studies
<p>Publications Profile</p> <p>(Cumulative impact factor – 96.3, Citations – 650, h-index – 9, i10index – 7)</p>

Refereed Journal Articles:

- Kothamasi D, Vermeulen S and **Deepika S** (2023) Are ecological processes that select beneficial traits in agricultural microbes nature's intellectual property rights? *Nature Biotechnology* 41:1381–1384. **(Impact Factor – 46.9)**
- Goswami V, **Deepika S**, Diwakar S and Kothamasi D (2023) Arbuscular mycorrhizas amplify the risk of heavy metal transfer to human food chain from fly ash ameliorated agricultural soils. *Environmental Pollution* 329:121733. **(Impact factor – 8.9)**
- Goswami V, **Deepika S**, Chandra R, Babu CR and Kothamasi D (2023) Arbuscular mycorrhizas accelerate the degradation of colour containing organic pollutants present in distillery spent wash leachates. *Journal of Hazardous Materials* 452:131291. **(Impact Factor – 13.6)**
- **Deepika S** and Kothamasi D (2021) Plant hosts may influence arbuscular mycorrhizal fungal community composition in mangrove estuaries. *Mycorrhiza* 31:699–711. **(Impact Factor – 3.9)**
- Vashistha G, **Deepika S**, Dhakate PM, Khudsar FA and Kothamasi D (2020) The effectiveness of microsatellite DNA as a genetic tool in crocodilian conservation. *Conservation Genetics Resources* 12:733–744. **(Impact Factor – 1.1)**
- **Deepika S**, Mittal A and Kothamasi D (2019) HCN-producing *Pseudomonas protegens* CHAO affects intraradical viability of *Rhizophagus irregularis* in *Sorghum vulgare* roots. *Journal of Basic Microbiology* 59:1229–1237. **(Impact Factor – 3.1)**
- **Deepika S** and Kothamasi D (2015) Soil moisture – a regulator of arbuscular mycorrhizal fungal community assembly and symbiotic phosphorus uptake. *Mycorrhiza* 25:67–75. **(Impact Factor – 3.9)**
- Devi KK, **Deepika S**, Bhaduri A and Kothamasi D (2013) Polymorphism in *hcnAB* gene in *Pseudomonas* species reveals ecologically distinct hydrogen cyanide producing populations. *Geomicrobiology Journal* 30:131–139. **(Impact Factor – 2.3)**
- **Deepika S**, Kapoor R and Bhatnagar AK (2009) Differential responses of *Curculigo orchioides* Gaertn. plantlets to AM inocula varying in number and type of fungal species. *European Journal of Soil Biology* 45:328–333. **(Impact Factor – 4.2)**
- **Deepika S**, Kapoor R and Bhatnagar AK (2008) Arbuscular mycorrhizal (AM) technology for the conservation of *Curculigo orchioides* Gaertn. plantlets – an endangered medicinal herb. *World Journal of Microbiology and Biotechnology* 24: 395–400. **(Impact Factor – 4.1)**

- Kapoor R, **Deepika S** and Bhatnagar AK (2008) Arbuscular mycorrhizae in micropropagated systems and their potential applications. *Scientia Horticulturae* 116:227–239. **(Impact Factor – 4.3)**

Book Chapter:

- **Deepika S**, Goswami V and Kothamasi D (2023) Arbuscular mycorrhizal fungi (AMF) and climate smart agriculture – prospects and challenges. In: Ansari W, Singh AK and Tuteja N (Eds) *Global Climate Change and Plant Stress Management*. John Wiley & Sons Ltd., Chichester, UK, pp 175–200

Conference poster:

- Kothamasi D, Goswami V and **Deepika S** (2024) Arbuscular mycorrhizas as remediators of pollutants introduced to agricultural soils through industrial wastes. 12th International Conference on Mycorrhiza (ICOM-12), August 4-9, 2024, Manchester, UK

Other Publications:

- Contributed to preparation of electronic study material (eBooks) of the **National Council of Education Research and Training (NCERT)**, Government of India in Biology for secondary school students (2007)

Conference Organization/ Presentations (in the last five years)

- **Organizing Committee Member**, Training Program on **“Food Safety”**, October 20, 2023 organized by the Department of Botany, Zakir Husain Delhi College
- **Organizing Committee Member**, International Conference cum Workshop on **“Proteomics, Transcriptomics and Molecular Drug Design: An Integrated Omics Approach”**, May 25 – 27, 2022 organized by the Department of Botany, Zakir Husain Delhi College
- **Organizing Committee Member**, **“Digital Upskilling Workshop for lab staff”**, February 15 – 17, 2022 organized by the Department of Botany, Zakir Husain Delhi College
- **Organizing Committee Member**, Refresher Course on **“Lab Techniques for lab staff”**, February 7 – 11, 2022 organized by the Department of Botany, Zakir Husain Delhi College
- **Organizing Committee Member**, National Workshop on **“Statistical Analysis of Biological Data”**, January 17 – February 21, 2022 organized by the Department of Botany, Zakir Husain Delhi College
- **Organizing Committee Member**, National Workshop on **“Bioinformatics Resources, Tools and its Applications (for undergraduate students)”**, July 19 – 27, 2021 organized by the Department of Botany, Zakir Husain Delhi College

- **Coordinator**, Webinar on "**Intellectual Property Rights: An Overview**" on October 7, 2020 organized by the Department of Botany, Zakir Husain Delhi College
- **Organizing Committee Member**, Workshop on "**Plant Tissue Culture**", March 8 – 9, 2019 organized by the Department of Botany, Zakir Husain Delhi
- **Organizing Committee Member**, Workshop on "**Analytical Instrumentation Techniques**", October 6 – 7, 2018 organized by the Department of Botany, Zakir Husain Delhi College
- **Organizing Committee Member**, National Conference on "**Genetics – Environment Interface: Science and Spirituality**", January 25, 2018 organized in memory of Late Dr. Virendra Kumar by the Department of Botany, Zakir Husain Delhi College
- **Organizing Committee Member**, National Conference on "**Challenges and Strategies to Improve Crop Productivity in Changing Environment: An Integrated Approach**", January 12, 2018 organized by the Department of Botany, Zakir Husain Delhi College

Awards and Distinctions

- **University of Delhi, Institution of Eminence (IoE) Research award** for paper published in a Q1 Journal (2023)
- **Senior Research Fellowship (SRF)**, Council of Scientific and Industrial Research (CSIR; March, 2012 – April, 2014)
- **CSIR – NET (National Eligibility Test) for Lectureship** (2008)
- **First position** in M.Phil. course in Botany at the Department of Botany, University of Delhi (2006)
- **Second position** in B.Sc. honours course in Botany at Zakir Husain College, University of Delhi (2003)
- Awarded **Certificate of merit** by Zakir Husain College, University of Delhi (2003)