

Curriculum Vitae

Dr Shubhra Barwa

Assistant Professor

Department of Botany

Gargi College, University of Delhi

Siri fort Road

New Delhi-110049, INDIA

Phone No. +9999088644 (M)

E-mail: shubhra.barwa@gargi.du.ac.in



WORK EXPERIENCE

Total Teaching Experience: 12 years

Research Experience: Post Doctoral (5 years)

Date of Joining Gargi College as Assistant Professor: 9th October 2023

EDUCATIONAL QUALIFICATIONS

- Post Doctoral Fellow (2007-2010) IARI Pusa Institute, New Delhi
- Ph.D. (2007) Chaudhary Charan Singh Haryana Agricultural University (CCS HAU) Hisar, Haryana
- M.Sc. (2001) Chaudhary Charan Singh Haryana Agricultural University (CCS HAU) Hisar, Haryana
- B.Sc. (1998) Kurukshetra University. Kurukshetra

ACHIEVEMENTS

- 1 Qualified **CSIR-UGC NET** examination for Lecturership in Life-sciences, 2003. F.No 10-2(5)/2003(II)-E.U.II
- 2 Qualified **ASRB NET** examination for Lecturership, 2004 and 2008
- 3 **University Research Scholarship** during M.Sc. and Ph.D. Programme awarded by CCS HAU, Hisar, 1998-2005.
- 4 Diploma in Science Journalism conducted by Indian Science Communication Society, Lucknow (2010).
- 5 Awarded registration for development of utility model on 'A novel IoT based sustainable system for the treatment of medical waste' on August 19,2022

Research Specialisation

Abiotic Stress, Plant Physiology, Cell Biology, Economic Botany and Biochemistry

Research Publications

1. Exploring the Functional Roles of Secondary Metabolites in Brassica Defense Networks Neha Singh, **Shubhra Barwa**, Neelam Prabha Negi, Geeta Prakash, Khushbu Lamba and Anjana Rustagi. Journal of Biosciences (Ref.: Ms. No. JBSC-D-25-00194R2) accepted for Publication. 2025
2. Various Approaches Used to Increase the Growth and Yield of Linseed Crop. Leena Shakya, Archana Singh, Ashish Agnihotri, Shivangi, Jai P Moyal, Shahid Umar, **Shubhra Barwa** and Sunil K Dhiman. International Journal of Plant and Environment, Vol. 9(4), 291-300, 2023
3. High Temperature Stress: Effects on Seed Germination and Seedling Growth in Wheat. **Shubhra Barwa**, Elixir International Journal of Applied Botany, 108, 47696-47698, 2017

4. Phosphorus: A Potential Nutrient for Alleviating the Water deficit in Clusterbean (*Cyamopsis tetragonoloba* L. Taub). **Shubhra Barwa**, International Journal of Innovative Research in Science Engineering and Technology (IJIRSET), 6(7), 13654-13660, 2017
5. Hyperaccumulation: A Phytoremedial Approach for Pollution Control. **Shubhra Barwa**, Balamram Pani and Manjeet Singh Barwa. International Research Journal of Environmental Sciences. 6(11), 46-52, 2017
6. Global Climate Change and Wheat: Impacts and Adaptations. **Shubhra Barwa**, Manjeet Singh Barwa, Balamram Pani and Renu Munjal. In Proceedings of National Conference on Clean and Green Energy: Chemical and Environmental Aspects (NCGE) at Bhaskaracharya College of Applied Sciences, New Delhi. Feb 16-17/106-117, 2017
7. Impact of Elevated Temperature on Photosynthesis and Grain Yield in Wheat. **Shubhra**, Renu Munjal and CL Goswami. Haryana J Agronomy, 22(1), 79-80, 2006
8. Impact of P Application on Leaf Characteristics Nodule Growth and Plant N Content under Water Deficit in Clusterbean. **Shubhra** and Dayal J. Forage research 31(3) 212-214, 2005
9. Influence of Phosphorus Application on Water Relations, Biochemical Parameters and Gum content in Clusterbean under Water Deficit. **Shubhra**, J Dayal, CL Goswami and Renu Munjal, Biologia Plantarum, 48(3), 445-448, 2004
10. Effect of Phosphorus Application on Growth, Chlorophyll and Proline under Water Deficit in Clusterbean (*Cyamopsis tetragonoloba* L. Taub). **Shubhra**, J Dayal and CL Goswami, Indian J Plant Physiology, 8(2), 150-154, 2003

Book Chapter

- ❖ Clay as Drug Carrier in Pharmaceutical Industry
Shubhra Barwa, M.S. Barwa, and Balamram Pani
Developments in Clay Science and Construction Techniques
Cambridge Scholars Publishing, ISBN: 978-1-83769-607-9, 2024
- ❖ Application of Clay in Construction Industries
Manjeet Singh Barwa, **Shubhra Barwa** and Chandra Mohan
Characterization and Applications of Clay as a Novel Material, Cambridge Scholars Publishing, ISBN: 978-1-5275-1699-1, 195-224; 2023
- ❖ Swasth Bharat Samridh Bharat
Manjeet Singh Barwa, **Shubhra Barwa** and Balamram Pani
Healthcare systems in India, International Publishers, ISBN: 978-93-89198-02-7, 81-87; 2019
- ❖ Nutrients induced physiology of Clusterbean for higher productivity,
MS Kuhad, KD Sharma, AS Nandwal, **Shubhra** and BK Garg
Guar, JV Singh and BS Dahiya, Indian Society of Forage Research, Hisar (2004), 230-250.

Professional Development Activities

1. Presented Paper at National Conference on “Integrating Green Chemistry into Academia and Industry for Sustainable Development” Organized by the Department of Chemistry, Gargi College University of Delhi from November 10-11, 2025
2. Chaired a session at the International Conference on “Indian Knowledge System and Sustainable Development Model for Viksit Bharat: Uniqueness, Challenges and Opportunities” jointly organized by Baba Kanshi Ram Government Degree College, Dada Siba and Central University of Himachal Pradesh on November 1, 2025.
3. Presented Paper at National Seminar on “Harnessing Artificial Intelligence for Advancements in Zoology and Botany: Exploring New Frontiers in Biodiversity, Physiology, Biochemistry Research and Conservation” organized by Shia P.G college, Lucknow on September 8, 2025.

4. Successfully Completed the Hands-on training on Plant Physiological Techniques: Two-day workshop for college teachers Organized by the CSIR Institute of Himalayan Bioresource Technology, Palampur, Himachal Pradesh from June 2 to 3, 2025
5. Presented Paper in National Conference on “Current issues and challenges in Agri and Biosciences” Organized by the Department of Higher Education, Lucknow, Uttar Pradesh from February 21-22, 2025
6. Organizer of the National Seminar “Mastering Research: Strategies and Tools for Enhancing Your Skills” conducted by Research and Development Cell, Gargi College on September 27, 2024
7. Delivered an invited talk on “Natural Farming: A sustainable Approach” in the Add on course on Ecofriendly Agriculture organized by Department of Botany Gargi College from August 2023 to May 2024.
8. Presented paper in Two-day International Conference on “Current Trends in Chemical Sciences for Sustainable Living” held at Shyamlal College, University of Delhi from April 5-6, 2024.
9. Presented paper at International Summit on “Women in STEM: Visualizing the future new guidelines” held at India habitat Centre, Lodhi Road, Delhi on January 20-24, 2020.
10. Oral presentation in the Two-day National Conference on “Clean and Green Energy: The Chemical and Environmental Aspects” Organized by Bhaskaracharya College of Applied Sciences, University of Delhi from September 26 -27, 2019.
11. Presented paper in National Conference on “Recent Trends and Advancements in Chemical Sciences” held at conference Centre, University of Delhi from March 29 -31, 2019.
12. Presented paper at the Sixth International Conference on “Eco-toxicology and Environmental Sciences” held at Netaji Subhash Institute of Technology, Dwarka, New Delhi from February 19-21, 2018.
13. Presented paper at Ninth National Conference on “Recent Advances in Chemical, Biological and Environmental Sciences” Organized by Multani Mal Modi College, Patiala from February 9-10, 2018.
14. Presented paper in the CSIR-NISCAIR-DST National Workshop on “Science, Technology and Innovation Policy: Optimizing, Communication and Information Research” held at Indian Agriculture Research Institute Pusa from January 23-25, 2018.
15. Presented paper in the National Conference on “Recent Trends in Chemical, Environmental and Medical Sciences” held at DAV College Abohar, Punjab on January 24, 2018.
16. Presented paper in International Seminar on “Biodiversity, Status and Significance” Organized by Department of Botany, Maharshi Dayanand University, Rohtak on March 21, 2017.
17. Presented Paper in International Conference on “Green Chemistry in Environmental Sustainability and Chemical Education” Organized by Department of Chemistry Daulat Ram College University of Delhi, held from November 17-18, 2016.
18. Presented paper at DST-SERB Sponsored National Conference on “Climate Change: Impacts Adaptation and Mitigation Scenario and Future Challenges in Indian Perspective” Organized by Deen Dayal Upadhyay College University of Delhi from March 2-3. 2015.
19. Delivered lecture at National Seminar on “Environmental Aspects of Energy–Industrial Prospective” held at Dronacharya College of Engineering, Gurgaon on February 21, 2015.
20. Presented paper at Third National Conference on “Recent Advances in Chemical and Environmental Sciences” Organized by Multani Mal Modi College, Patiala from February 28 to March 1, 2011.
21. Presented Paper at the Second National Conference on “Recent Advances in Chemical and Environmental Sciences” Organized by Multani Mal Modi College, Patiala from January 22-23 2010.

22. Presented Paper at the Annual Conference on “Recent Advances in Chemical and Environmental Sciences” Organized by Multani Mal Modi College Patiala from January 16-17, 2009.
23. Presented Paper at the National Seminar on Plant Physiology held at Indian Agriculture Research Institute, Pusa, New Delhi from November 12-14, 2008.
24. Presented Paper at the National Conference on “Recent Advances and Development in Chemical Sciences” Organized by DAV College, Abohar Punjab from January 7-8, 2008.
25. Presented Paper at International Seminar on the “Role of Biochemistry in Modern Day Agriculture” held at Chaudhary Charan Singh, Haryana, Agriculture University, Hisar on January 24, 2004.

Papers Reviewed for Journals

- ❖ Plant Physiology Reports
- ❖ Science P.G Review
- ❖ Research Journal of Biology
- ❖ Journal of wheat and Barley Research

Membership of Academic Societies

1. Life member Indian Science Congress Association (Membership No.-L20444)
2. Life member Indian Society of Plant Physiology (w.e.f 25th October 2013)
3. Life member Green Chemistry Network Centre, University of Delhi
4. Member of Society for the Advancement of Wheat and Barley Research (SAWBAR), Karnal, India
5. Member Delhi University Botanical Society (DUBS)

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