



DESHBANDHU COLLEGE
(UNIVERSITY OF DELHI)
KALKAJI, NEW DELHI - 110019
Faculty Details Proforma for College Website

Title	Dr.	First Name	Rajender	Last Name	Kumar	Photograph
Designation	Assistant Professor					
Address	Department of Botany Deshbandhu College Kalkaji University of Delhi 110019					
Phone No. Office	011-26439565					
Residence						
Mobile	9958598104					
Email	rksharmabio@yahoo.co.in					
Web-Page						
Educational Qualifications						
Degree	Institution				Year	
Ph.D.	Himachal Pradesh University, Shimla				2008	
M.Phil.	Himachal Pradesh University, Shimla				2002	
PG	Himachal Pradesh University, Shimla				2001	
UG	Himachal Pradesh University, Shimla				1999	
Any other qualification	UGC-NET/CSIR-JRF				2000, 2001	
Career Profile						
<ol style="list-style-type: none"> Postdoctoral research associate: worked as Research Associate (RA) of CSIR, New Delhi (Oct. 2008 to July 2010) at Department of Biosciences, H.P. University, Shimla. Assistant Professor: working as Assistant Professor (Botany), Deshbandhu College, University of Delhi since, July 21, 2010. 						
Administrative Assignments						
Member Prospectus committee	2011-12					
Member Proctorial committee	2011-12					
Member Cultural committee	2012-13					
Member Proctorial committee	2013-14					
Member Sports committee	2013-14					
Liaison Officer	2013-15					
Observer (SC, ST)	2013-15					
Member Sports committee	2014-15					
Member Cultural committee	2014-15					
Member Garden committee	2015-16					
Advisor, Botanical society	2016-17					
Areas of Interest/Specialization						
Plant Physiology and Biochemistry/Seed Physiology						

Subjects Taught

Name of the Course	Name of the Subject			
B.Sc.(H) Botany	Plant physiology			
	Biomolecules and Cell Biology			
	Plant Metabolism			
	Analytical techniques in plant sciences			
B.Sc. Life Sciences	Plant physiology and metabolism			
	Medicinal Botany			

Research Guidance

List against each head (If applicable): none

Publications Profile

1. *Research papers published in Refereed/Peer Reviewed Journals*
 - i. **Rajender Kumar Sharma**, Shashi Sharma and Shanti S. Sharma (2006). Seed germination behaviour of some medicinal plants of Lahaul and Spiti cold desert (Himachal Pradesh): implications for conservation and cultivation. *Current Science* **90**: 1113-1118.
 - ii. **Rajender Kumar Sharma** and Shashi Sharma (2010). Effect of Storage and Cold-stratification on Seed Physiological Aspects of *Bunium persicum*: a Threatened Medicinal Herb of trans-Himalaya. *International Journal of Botany* **6**: 151-156.
 - iii. **Rajender Kumar Sharma**, Shashi Sharma and Shanti S. Sharma (2010). Storage-dependent changes in dormancy and germination of Himalayan Mayapple (*Podophyllum hexandrum* Royle) seeds and their response to gibberellic acid. *Journal of Herbs, Spices & Medicinal plants* **16**: 1-14.
 - iv. Shashi Sharma and **Rajender Kumar Sharma** (2010). Seed physiological aspects of Pushkarmool (*Inula racemosa*), a threatened medicinal herb: response to storage, cold-stratification, light and gibberellic acid. *Current Science* **99**: 1801-1806.
 - v. Shashi Sharma and **Rajender Kumar Sharma** (2010). Long-term storage-dependent changes in seed physiological aspects of *Hyoscyamus niger* from a cold desert region of Trans-Himalaya. *International Journal of Plant Biology* **1:e17**: 84-88.
 - vi. **Rajender Kumar Sharma**, Shashi Sharma and Shanti S. Sharma (2014). The long-term ambient storage-induced alterations in seed viability, germination and seedling vigour of *Saussurea costus*, a critically endangered medicinal herb of North West Himalaya. *Journal of Applied Research on Medicinal and Aromatic Plants* **1(3)**: 92-97.
 - vii. **Rajender Kumar Sharma** and Shashi Sharma (2017). Seed longevity, germination and seedling vigour of *Rheum australe* D. Don.: A step towards conservation and cultivation. *Journal of Applied Research on Medicinal and Aromatic Plants* **5(1)**: 47-52.
2. *Research papers published in Academic Journals other than Refereed/Peer Reviewed Journals*
3. *Research papers published in Refereed/Peer Reviewed Conferences*
4. *Research papers Published in Conferences/Seminar other than Refereed/Peer Reviewed Conferences*
 - i. **Rajender Kumar Sharma**, Shashi Sharma and Shanti S. Sharma (2005). Seed characterization of some medicinal plant species of Lahaul and Spiti cold desert region (Himachal Pradesh). In: *Herbal drugs and environmental pollution*. Jamia Hamdard, New Delhi, pp. 81-83.
5. *Other publications (Edited works, Book reviews, Festschrift volumes, etc.)*

Conference Organization/ Presentations

Organization of a Conference: None

Participation as Paper/Poster Presenter:

- I. **Rajender K. Sharma**, Shashi Sharma and Shanti S. Sharma (2003). Ecophysiological aspects of seeds of some medicinal plant species of Lahaul and Spiti (H.P.). 2nd International Congress of Plant Physiology, IARI New Delhi. Abstract: p-617.
- II. Shashi Sharma, **Rajender K. Sharma** and Shanti S. Sharma (2006). Physiochemical and hormonal methods for dormancy removal in some medicinal plant species of Lahaul and Spiti (Himachal Pradesh): Potential role in field cultivation including agro-forestry systems. Status and potential of agroforestry in North-Western Himalayas, HFRI, Shimla. Abstract: p-12
- III. **Rajender K. Sharma**, Shashi Sharma and Shanti S. Sharma (2008). Storage-dependent changes in dormancy/germination status of seeds and their response to gibberellic acid in Himalayan Mayapple (*Podophyllum hexandrum* Royle). Conference on "Molecular Biology and Biotechnology (ICMBB-2008)" Banasthali University, Rajasthan.
- IV. **Rajender K. Sharma** and Shashi Sharma (2008). Seed germination behaviour of *Hyoscyamus niger* from cold desert area of trans-Himalayan Cold Desert region as affected by storage. National Symposium on "New Biology in Agriculture". Punjab University, Chandigarh. Abstract: p-91.
- V. **Rajender K. Sharma** and Shashi Sharma (2010). Ecophysiological characterization of seeds of Pushkarmool (*Inula racemosa*), a threatened medicinal herb from cold desert region in Lahaul and Spiti (Himachal Pradesh): implications for conservation and cultivation. Biodiversity and Environmental Governance in Canada and India: Safeguarding Ecosystems for Human Welfare (October 21-23, 2010). Organized by Centre for Canadian Studies Department of English, Gurukul Kangri University, Haridwar, India and Department of Biology, McMaster University, Hamilton, Canada.
- VI. **Rajender K. Sharma**, Shashi Sharma and Shanti S. Sharma (2012). Assessment of seed germination, viability and seedling growth performance with respect to long-term storage in *Saussurea costus* (kuth), a critically endangered medicinal herb. National Seminar on "Medicinal Plants Research in India". Department of Botany, Jamia Hamdard University, New Delhi. Abstract: p-82.
- VII. National conference on "BIOTIKOS 2017; trends in Nanobiotechnology" organized by Department of Biotechnology, TERI University, New Delhi, 28-29 September 2017.

Conferences and workshops attended:

- I. Presented research paper in 2nd International Congress of Plant Physiology on "Sustainable Plant Productivity under Changing Environment" at IARI New Delhi, organized by Indian Society of Plant Physiology and International Association of Plant Physiology. Jan. 08-12, 2003.
- II. Actively participated in Conservation Assessment and Management Prioritization (CAMP) workshop on Medicinal Plants of Indian Himalayan Region organized by FRLHT, Bangalore and HFRI, Shimla. May 22-25, 2003.
- III. Attended four days training workshop on "Principles and uses of sophisticated Instruments in Biological Sciences" at CPRI, Shimla in collaboration with sophisticated Analytical Instrumentation Facility, Punjab University Chandigarh. May 24-27, 2004.
- IV. Attended National Roving Seminar on "Patenting in Biotechnology" organized by Department of Biotechnology, H.P. University Shimla and sponsored by Department of Biotechnology, Ministry of Science and Technology Govt. of India, New Delhi. Nov. 21, 2005.
- V. Presented research paper in "Herbal Drugs and Environmental Pollution: a satellite session of Third International conference on Plants and Environment Pollution", organized by Department of Botany, Jamia Hamdard University, New Delhi. Dec. 04, 2005.
- VI. Attended workshop on "Status and Potential of Agroforestry in North-Western Himalayas" organised by HFRI, Shimla, Nov. 14-16, 2006.
- VII. Presented research paper in International Conference on "Molecular Biology and Biotechnology (ICMBB-2008)" at Department of Bioscience and Biotechnology, Banasthali University, Rajasthan. Oct. 19-21, 2008.
- VIII. Presented research paper in National Symposium on "New Biology in Agriculture" at Punjab University, Chandigarh, organized by P.U. Chandigarh in collaboration with All India Biotech Association (AIBA). Nov. 07-08, 2008.
- IX. Participated in national seminar on "Role of Analytical Techniques in Biological & Environmental Sciences" at the conference Centre and Kirori Mal College, University of Delhi. Jan. 27-29, 2011.
- X. Attended International Conference on "Recent Trends in Developing Bioremediation Strategies for Hexachlorocyclohexane (HCH) & other Chlorinated Contaminants" at University of Delhi. Feb. 9-11, 2011.
- XI. Participated in one day orientation programme on "Climate Change & its Mitigation" at Mahatma Gandhi Institute for Combating Climate Change, Alipur, Delhi. Feb. 28, 2011.
- XII. Presented research paper in National Seminar on "Medicinal Plants Research in India" at Jamia Hamdard University, New Delhi. Mar. 16-17, 2012.
- XIII. Actively participated as member organizing committee in the "INSPIRE Internship Program-2012" organized by

	Deshbandhu College, University of Delhi, from October 1-5, 2012.
XIV.	Participated as member organizing committee in the “INSPIRE Internship Program-2013” organized by Deshbandhu College, University of Delhi, from December 16-20, 2013.
XV.	Participated 4-week UGC-sponsored Orientation Programme (OP-114) held at Academic Staff College, Himachal Pradesh University, Shimla from 14-04-2014 to 10-05-2014.
XVI.	Participated as organizing member in the “INSPIRE Internship Program-2015” organized by Deshbandhu College, University of Delhi, from December 14-18, 2015.
XVII.	Presented research paper in National conference on “BIOTIKOS 2017; trends in Nanobiotechnology” organized by Department of Biotechnology, TERI University, New Delhi, 28-29 September 2017.
XVIII.	Participated in national seminar on “Technical terminology in science teaching” at Deshbandhu College, University of Delhi, organized by Commission for scientific and technical terminology, Govt. of India, October 26-27, 2017.
XIX.	Participated in the “Fourth National Symposium on Environment: Green Technology for Environmental Sustainability” at Deshbandhu college, University of Delhi, September 25, 2018
Research Projects (Major Grants/Research Collaboration)	
1.	Completed Innovation Research Project on “Impact of climate change on various physical parameters of weather in a highly polluted area and relatively pollution free area”. Funded by University of Delhi (Innovation Project 2014, DBC-206)
Awards and Distinctions	
1.	CSIR (NET) Fellowship by Council of Scientific and Industrial Research, New Delhi (2002 to 2007).
2.	Postdoctoral Research Associateship by Council of Scientific and Industrial Research (CSIR), New Delhi (2008 to 2010).
3.	First Prize for best Paper Presentation in Third International Conference on “Herbal Drugs and Environmental Pollution”. Organized by Department of Botany, Jamia Hamdard University, New Delhi. December 04, 2005.
Association With Professional Bodies	
	<ul style="list-style-type: none"> ➤ Reviewing manuscripts from different Journals. ➤ Member, Himachal Pradesh University Biological Society. ➤ Member, Delhi University Botanical Society.
Other Activities	
1.	Delivered talks on medicinal uses, cultivation and conservation of threatened medicinal plant species of cold desert region of Himachal Pradesh for Doordarshan Shimla .

Dr. Rajender Kumar