Dr. Rajender Kumar
Associate Professor
Department of Botany

Academic Achievements

Academic session 2022-2023

Publication -Research paper:

1. Krishan, R., **Rajender Kumar Sharma**, Kumar, V. *et al.* (2022). Seed longevity and storage dependent changes in seed germination aspects of *Berberis aristata* and *B. lycium* from Western Himalaya: implications for seed storage and conservation. ***Vegetos***. https://doi.org/10.1007/s42535-022-00505-0
2. Krishan, R., **Rajender Kumar Sharma** & Sharma, S.S. (2022). Assessment of seed biology of the Himalayan medicinal herb *Phytolacca acinosa* Roxb., the Indian pokeweed, from the perspective of longevity, conservation and propagation. ***Nucleus***. https://doi.org/10.1007/s13237-022-00404-4**.**
3. Deepa Sharma and **Rajender Kumar Sharma** (2022). Herbs Loaded with Psychoactive Molecules: A Potential Role to Cure Mental Disorders. ***Indian Journal of Health and Well-Being*** **13(4): 543-549.**
4. **Rajender Kumar Sharma**, Chhibber AK, Saxena V, Kandpal M, Swami M, Sagar S (2023). Assessment of Viability, Germination and Efficacy of Pre-treatments in Seeds of Jurinea dolomiaea, a Critically Endangered Medicinal and Aromatic Herb of Alpine Himalaya, from the Perspective of Conservation. ***Journal of Plant Science and Research*** **10(1): 240.**

Academic session 2021-2022

Publication -Research paper:

1. Anupriya Sharma, **Rajender Kumar Sharma,** Shanti S. Sharma (2021). A comparable stimulation of seed germination by gibberellic acid and sodium nitroprusside in *Hyoscyamus niger* L., a threatened medicinal herb, from Spiti (Himachal Pradesh). ***The Journal of Indian Botanical Society*** **101 (3): 194-203.**

2. **Rajender Kumar Sharma** and Deepa Sharma (2022). Drying Willow (*Salix fragilis* L.) Population Under Agroforestry System in Cold Desert Region of trans-Himalaya: a Possible Consequence of Repeated Vegetative Propagation. ***International Journal of Ecology and Environmental Sciences*** **48(1): 119-125.**

Participation in Seminars/Conferences/Symposia

1. Webinar on **'AVENUES IN PUBLIC HEALTH CARE**' organized by Deshbandhu College, University of Delhi (under the aegis of IQAC) in association with Indian Institute of Public Health – Delhi, Public Health Foundation of India on July 24, 2021.

2. National Webinar on "NEP 2020: Role of Commerce in Education" organised by Department of Commerce, Rajdhani College, University of Delhi, New Delhi on September 02, 2021

3. Three-days Yoga workshop on the concept of **"Foundation of Aasana and Pranayana"** organized by Department of Physical Education & Sports Sciences, Deshbandhu College, University of Delhi under the aegis of Vidya Vistar Scheme during December 22-24, 2021.

4. Webinar on the theme, **"Understanding Sustainable Developments Goals"** organized by Deshbandhu College, University of Delhi & Pettigrew College, Manipur University under the aegis of Vidya Vistar Scheme on January 21, 2022.

5. Webinar on **"Stress Management & Building Resilience"** organized by Deshbandhu College, University of Delhi & Pettigrew College, Manipur University under the aegis of Vidya Vistar Scheme on January 28, 2022.

6. Webinar on "Myth and History" organized by OriGen, Department of History, Deshbandhu College on March 08, 2022

International/ National Conference Organized

1. Member, Organizing Committee- 1st Annual Dr. D. K. Mallick Memorial Alumni Lecture on **"Mendelian Genetics in Genomics Studies"** organized by Department of Botany, Deshbandhu College on July 17, 2021.

2. Member, Organizing Committee -Virtual talk on **"प्रकृति के प्रश्नः"** by Padma Bhushan (2020) & Padma Shree (2006) awardee Dr Anil Prakash Joshi organized by Department of Botany, Deshbandhu College, under the aegis of IQAC and DBT-Star College Scheme on the occasion of World Ozone Day 2021 on September 16, 2021.

3. Member, Organizing Committee- "**Inaugural Ceremony of Vidya Vistar Scheme"** organized by Deshbandhu College, University of Delhi & Pettigrew College, Manipur University under the aegis of Vidya Vistar Scheme in December 21, 2021.
4. Member, Organizing Committee- "**Logo Design Competition"** organized by Deshbandhu College, University of Delhi & Pettigrew College, Manipur University under the aegis of Vidya Vistar Scheme in December 2021.

5. Member, Organizing Committee- Webinar on **"Economic Botany & Plant Genetic Resources– National Perspective"** organized by Department of Botany, Deshbandhu College, under the aegis of IQAC on January 18, 2022.

6. Member, Organizing Committee -Webinar and Paper Reading Contest on the topic "Coastal Wetlands and Climate change", on the occasion of "World Wetlands Day", Organized by Department of Botany, Deshbandhu College, University of Delhi, 2nd February, 2022.

7. Member, Organizing Committee- International Webinar on- **"Plant Biotechnology- RNAi and CRISPR/Cas9 Methods"** organized by

Department of Botany, Deshbandhu College, under the aegis of IQAC and DBT-Star College Scheme on March 12, 2022.

8. Member, Organizing Committee- Webinar on "Virtual Tour to the Indian Sunderbans"organized by the Department of Botany, Deshbandhu college, University of Delhi under the aegis of IQAC and DBT star college scheme on 26 April ,2022.

Academic session 2020-2021

Publication -Research paper:

1. Rajender Kumar Sharma (2021). Physical seed dormancy in *Abrus precatorious* (Ratti): A scientific validation of indigenous technique. *Experimental Results 2*, e8: 1-8. doi:10.1017/exp.2020.64 (Cambridge University Press)

Faculty Development Programme/Refresher course/webinars

1. Attended Two-week FDP on "Blended learning" organized by Ramanujan College, University of Delhi from 14-29 January, 2021.
2. Attended Two weeks Refresher course on "Research methodology" organized by Ramanujan College, University of Delhi from 30 January, 2021 to 14 Feb, 2021.
3. Attended one week FDP on "Academic writing" organized by Ramanujan College, University of Delhi from 18-24 February, 2021.

Webinar organized:

1. Organizing committee member for the Webinar on **"The Intimate World of Winged Jewels"** organized by Department of Botany, Deshbandhu College under the aegis of IQAC & DBT Star Project Scheme held on 17th September, 2020.
2. Organizing committee member for the Invited talk on **"Journey of a biologist: exploring the extreme"** organized by Botanical society, Department of Botany in Valedictory function held on 9th October, 2020.
3. Organizing committee member of the Webinar on the topic **"Introduction to GIS & Remote Sensing in Natural Science"** organized by the Department of Botany, Deshbandhu College, University of Delhi, under the aegis of IQAC & DBT-Star College Scheme on 17th October 2020.
4. Organizing Committee member for invited talk under the aegis of IQAC on **"Plant's Diversity: Its importance in Conservation"** for Inaugural ceremony of Botanical Society held on 30th January, 2021 organised by Botanical Society, Department of Botany, Deshbandhu College

5. Organizing Committee member for 3-days International Webinar on **"Understanding Flora from Aquatic Ecosystems: Towards better conservation & Sustainable Use"** under the aegis of IQAC & DBT Star Scheme held from 26th March-28th March, 2021 jointly organised by Department of Botany, Deshbandhu College, University of Delhi & IOES, University of Malaya, Malaysia.

Academic session 2019-2020

Faculty Development Programme/Refresher course/webinars

1. Attended a one-week Faculty Development Programme organized by Sri Aurobindo College, University of Delhi during 15-20 June, 2020.
2. Attended one-week Faculty Development Programme on "Development and Delivery of MOOCs and E-Content" organized by Deshbandhu College, University of Delhi in association with Central University Haryana from 26 June, 2020 to 01 July, 2020.
3. One week Faculty Development Programme on "**Contemporary Teaching Methodologies: enabling effective teaching learning process"**. Organised by Sri Aurobindo College (Evening), University of Delhi from 15-20 June, 2020.
4. Attended two weeks refresher course in Life Sciences and Biotechnology at UGC-HRDC, Jawaharlal Nehru University, New Delhi from 19-30 August, 2019.

Participation in Seminars/Conferences/Symposia:

1. Participated in an **International Conference on "Natural Products and Human Health - 2020"** organized by Department of Zoology, Deshbandhu college, University of Delhi, 27-29 February, 2020.

Resource Person

1. Organizing member and **resource person** in the **"INSPIRE Internship Programme 2019",** organized by Deshbandhu college, University of Delhi, 17-21December, 2019.

International/ National Conference Organized:

1. Organizing member in online Poster Making Competition on the theme "**Coronavirus Lockdown Rejuvenates Our Environment**" organized by Department of Botany and IQAC, Deshbandhu College under the aegis of DBT-Star College Scheme on 05thJune, 2020.
2. Organizing member in Two days webinar on "**Evolution of Science seen from Historical Perspective**"organized by Department of Botany, Deshbandhu College on 12th and 13thMay, 2020Organizing member in the **"National Conference on Insect-Plant Biology in 21st Century"**organized by Department of Zoology, Deshbandhu College, University of Delhi, 17-21November, 2019.
3. Worked as an organizing member in the National Conference on **Insect-Plant Biology in 21st Century** organized by Department of Zoology, Deshbandhu College, University of Delhi, November 17-21, 2019.

Coordinator of the Students Activities:

- Organized a Botanical Trip to Yamuna Biodiversity Park on February 15th 2020 for the students of B.Sc. (H) Botany and B.Sc. (P) Life Science.
- Organized a Botanical Excursion to Chopta, Uttarakhand during 12 -16 September, 2019 for the students of B. Sc. (Hons) Botany and B. Sc. (Prog) Life Sciences.

Academic session 2018-2019

Training Programs Attended (Workshop/FDP/Orientation Program/Refresher Course:

1. Attended two days Faculty Development Programme on "**Agricullture, Health and Society**" (Interdisciplinary)organized by Hansraj College, University of Delhi on 15th and 16thMarch, 2019.

Participation in Seminars/Conferences/Symposia:

1. Participated in the Fourth National Symposium on "**Environment: Green Technology for Environmental Sustainability**" organized by Deshbandhu College, University of Delhi on 25thSeptember, 2018.

International/ National Conference Organized:

1. Organizing member in two days Symposium on **"Avenues in Plant Science: A Hope for Sustainable future"**organized by Department of Botany,Deshbandhu College, University of Delhi on 8th and 9thMarch, 2019.

Coordinator of the Students Activities:

- Organized a visit to Asola Bhatti Wildlife Sanctuary for the students of B. Sc. (Hons) Botany 1st Year on September 11, 2018.

Academic session 2017-2018

Participation in Seminars/Conferences/Symposia:

1. National conference on "BIOTIKOS 2017; trends in Nanobiotechnology" organized by Department of Biotechnology, TERI University, New Delhi, 28-29 September 2017.
2. 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.

Academic session 2016-2017

Publications:

- 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. https://doi.org/10.1016/j.jarmap.2016.10.004.