

Name: Dr. Laishram Sundari Devi

Department: Botany

Current Designation: Assistant Professor

Email id: laishram.sundari@mirandahouse.ac.in



Academic Qualifications:

Sl.	Degree	Year	Subject	University/Institution
No.				
1	Ph.D.	2021	Botany	University of Delhi
2	M. Sc.	2013	Botany	University of Delhi
3	B.Sc. (Hons.)	2011	Botany	Miranda House

Research Degree(s):

1. Ph.D. degree with the thesis title: "In silico, phylogenetic and differential expression analyses of CcEZ1 in apomictically and sexually reproducing plants of Cenchrus ciliaris L., and optimization of gene gun mediated genetic transformation of Cenchrus ciliaris L."

Field of Specialization under the Subject/Discipline:

Plant Biotechnology, Plant Molecular Biology, Embryology, Apomixis

Total Teaching Experience: Since November 2021

Teaching at Miranda House since: Since November 2021

Fellowships and Awards:

- Awarded as **Indo-U.S. Genome Engineering/Editing Technology Initiative internship (2017)** under Indo-U.S. Science and Technology Forum; funded by Department of Biotechnology, Govt. of India
- Awarded **UGC-Senior Research Fellowship from UGC** in 2017



- Awarded **UGC-Junior Research Fellowship from UGC** in 2015
- Awarded "Joint CSIR-UGC Lectureship" in 2014.
- Qualified "ASRB/ICAR-National Eligibility Test" for Lectureship/Assistant Professorship conducted by Agricultural Scientists Recruitment Board (Indian Council of Agricultural Research) in Agricultural Biotechnology held on 03-04-2014.

List of Publication(s):

• Sundari Devi Laishram, Shipra Goyal, Vishvas M. Kulkarni, Suresh Kumar, Vishnu Bhat. "Assessment of biolistic and *Agrobacterium*- mediated genetic transformation methods in *Cenchrus ciliaris*". Nucleus. 2020. 63:303-312 https://doi.org/10.1007/s13237-020-00332-1.

Book Chapter(s):

• Roy SS, Bahri S, **Devi LS**, Moitra S (2023) Impact of Particulate Matter on the Ecophysiology of Plants. In Tripathi S, Bhadouria R, Srivastava P, Singh R and Devi RS (Eds.) Ecophysiology of Tropical Plants: Recent Trends and Future Perspectives. CRC Press Taylor & Francis. (Chapter 23, in press)

Research Projects:

Worked as Indo-U.S. Genome Engineering/Editing Technologies Intern (2017) under Indo-U.S. Science and Technology Forum, funded by Department of Biotechnology, Govt. of India with the project tittle "Development of CRISPR interference vector for a Polycomb gene *CcEZ1* isolated from apomictic *Cenchrus ciliaris* L." under the supervision of Prof. Jian Kang Zhu at Department of Horticulture and Landscape Architecture, Purdue University, USA.

Poster/Oral Presentations:

- Laishram Sundari Devi, Lingrui Zhang, Jian-Kang Zhu, Suresh Kumar & Vishnu Bhat. 2019, Development of CRISPR/Cas9 construct targeting *CcKIP1* gene of *Cenchrus ciliaris* and its validation in Arabidopsis thaliana using floral-dip method. Proceeding of National Conference on Integrative Plant Biochemistry and Biotechnology at ICAR-IIRR, Hyderabad from 8th to 9th November 2019; organized by Society for Plant Biochemistry and Biotechnology.
- Laishram Sundari Devi & Vishnu Bhat. 2019, Comparative analysis of particle bombardment verse *Agrobacterium*-mediated genetic transformation methods in *Cenchrus ciliaris*. Proceeding of 1st National Conference on Neglected and Underutilizes Crop Species for Food, Nutrition, Energy and Environment at NIPGR, New Delhi on 2nd August 2019.
- Laishram Sundari Devi, Lingrui Zhang, Vishnu Bhat & Jian-Kang Zhu. 2018. Development of



CRISPR vector for a Polycomb gene *CcEZ1* isolated from apomictic *Cenchrus ciliaris*. Proceeding of 1st National Genetics Congress on Genetics for Sustainable Food, Health and Nutrition Security held on 14-16th December 2018 at ICAR (Indian Agricultural Research Institute, New Delhi, India.

Membership of Professional Bodies:

Lifetime membership of Delhi University Botanical Society

Administrative Responsibilities

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Invited talks/Session chair/Resource person:

1. Attended workshop as a Resource person on the topic "Evolving Face of Microscopy: Magnifying Lens to Nanoscope" held on 11-12 December 2019 by Department of Botany, Miranda House, University of Delhi, under the aegis of DBT Star College Scheme in collaboration with Department of Botany, University of Delhi.

Seminars/Workshops/Conferences attended:

- 1. Participation of workshop on **Gene Editing for Enhancing Plant Productivity and Stress Tolerance** at ICAR-IIRR, Hyderabad from 10th to 12th November 2019; organized by Society for Plant Biochemistry and Biotechnology.
- 2. Poster presentation on National Conference on **Integrative Plant Biochemistry and Biotechnology** at ICAR-IIRR, Hyderabad from 8th to 9th November 2019; organized by Society for Plant Biochemistry and Biotechnology on the topic "Development of CRISPR/Cas9 construct targeting CcKIP1 gene of Cenchrus ciliaris and its validation in Arabidopsis thaliana using floral-dip method".
- 3. Poster presentation on 1st National Conference on Neglected and Underutilizes Crop Species for Food, Nutrition, Energy and Environment at NIPGR, New Delhi on 2nd August 2019 on the topic "Comparative analysis of particle bombardment verse Agrobacterium-mediated



genetic transformation methods in Cenchrus ciliaris".

- 4. Oral presentation on 1st National Genetics Congress on Genetics for Sustainable Food, Health and Nutrition Security held on 14-16th December 2018 at ICAR (Indian Agricultural Research Institute, New Delhi, India on the topic "Development of CRISPR vector for a Polycomb gene CcEZ1 isolated from apomictic Cenchrus ciliaris L.".
- 5. **National Seminar** on Identifying and Avoiding Publishing in Predatory Journals: A Lesson for Researchers on March 18, 2017.
- 6. Participation on the workshop in IPR for Researchers on December 14, 2015.
- 7. Attending a lecture by Prof. David W. Galbraith (Department of PlantSciences, University of Arizona, US) on "Flow-cytometry and its application on December 16, 2014.
- 8. Participation in the Biotikos'11 workshop on the topic "Impact of Biotechnology on Man and Environment" at TERI University.