

# DR MONIKA HEIKRUJAM

Assistant Professor  
Department of Botany  
Maitreyi College  
University of Delhi

Email: [mheikrujam@maitreyi.du.ac.in](mailto:mheikrujam@maitreyi.du.ac.in)

Researchgate: <https://www.researchgate.net/profile/Monika-Heikrujam>

Orcid id: <https://orcid.org/0000-0002-4363-1537>

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## EDUCATION

- **Ph.D. (2016)- Department of Botany, University of Delhi**

“ Development of sex linked markers and genetic diversity analysis among different genotypes of *Simmondsia chinensis* (Link) Schneider (Jjoba) employing DNA fingerprinting”

- **M.Sc Botany (2008)- RTM Nagpur University**
  - **B.Sc. (Hons) Botany (2006)- Deshbandhu College, University of Delhi**
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## NET QUALIFICATION

**CSIR-JRF (June and December, 2009)**

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## WORK EXPERIENCE

Assistant Professor (Permanent)  
Department of Botany,  
Maitreyi College  
University of Delhi

January 2024-Till date

Assistant Professor (Ad-hoc)  
Department of Botany,  
Maitreyi College  
University of Delhi

August 2015- December 2023

Assistant Professor (Ad-hoc)  
Department of Botany,  
Gargi College  
University of Delhi

January 2015- May 2015

## PUBLICATIONS

- Gour T.; Sharma A.; Lal R.; **Heikrujam M.**; Gupta A.; Agarwal LK.; Chetri SPK.; Kumar R.; Sharma K. 2023. Amelioration of the physio-biochemical responses to salinity stress and computing the primary germination index components in cauliflower on seed priming. *Heliyon* 8;9(3):e14403. I. F= 3.776
- Kumar J.; **Heikrujam M.**; Sharma K.; Agrawal V. 2019. SRAP and SSR marker-assisted genetic diversity, population structure analysis and sex identification in Jojoba(*Simmondsia chinensis*). *Industrial Crops & Products*, 133, 118–132. I. F= 6.449
- Kumar J.; **Heikrujam M.**; Agrawal V. 2016 Characterization of Male and Female Jojoba Plants Employing Antioxidants, Lipid Peroxidation and Physiological Studies. *Journal of American Oil Chemist' Society* 93:911–920. I. F= 1.952.
- **Heikrujam M.**; Kumar, J & Agrawal, V. 2015. Genetic diversity analysis among male and female Jojoba genotypes employing gene targeted molecular markers; Start codon targeted (SCoT) polymorphism and CAAT box-derived polymorphism (CBDP) markers. *Meta Gene*, 5: 90–97. I. F= 0.7
- **Heikrujam M.**; Sharma K.; Kumar J.; Agrawal V 2014. Generation and validation of unique male sex- specific sequence tagged sites (STS) marker from diverse genotypes of dioecious Jojoba (*Simmondsia chinensis*). *Euphytica* 199:363–372. I. F= 2.185
- **Heikrujam M.**; Sharma K.; Kumar J.; Agrawal V 2014. Validation of male sex-specific UBC-8071200 ISSR marker and its conversion into sequence tagged sites marker in Jojoba: a high precision oil yielding dioecious shrub. *Plant Breeding* 133: 666–671. I. F= 2.536
- **Heikrujam M.**; Sharma K.; Prasad M.; Agrawal V 2014. Review on different mechanisms of sex determination and sex-linked molecular markers in dioecious crops- A current update. *Euphytica* 201:161–194. I. F= 2.185
- **Heikrujam M.**; Singh D.; Agrawal V 2014. High efficiency cyclic production of secondary somatic embryos and ISSR based assessment of genetic fidelity among the emblings in *Calliandra tweedii*- an ornamental woody legume. *Scientia Horticulturae* 177:63–70, I. F= 4.342
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- Chaubey P.; Singh N.P.; Chetri S.K.; **Heikrujam M.**; Agrawal V. 2013. Efficient micropropagation protocol in *Jatropha curcas* L., an important biofuel plant and establishment of ISSR based genetic fidelity among the regenerants. *Phytomorphology* 63:33–34.
- Razaq M.; **Heikrujam, M** & Chetri, S.K. .; Agrawal V. 2012. In vitro clonal propagation and genetic fidelity of the regenerants of *Spilanthes calva* DC. Using RAPD and ISSR markers. *Physiology and Molecular Biology of Plants*, 19:251–260. I. F= 3.023
- Sharma G.; Shankar V.; **Heikrujam M** & Agrawal V. 2011. Evaluation of genetic fidelity among micropropagated plants raised through long term nodal cultures of elite clones of *Artemisia annua* L. using DNA-based RAPD markers. *Phytomorphology*, 61:135–141.

## **BOOK CHAPTERS AND E-LESSON:**

- Sharma K; Chetri S.P.K; **Heikrujam M**; Agrawal V. 2015. Plant Tissue Culture: Historical Perspectives under MHRD project “National Mission on Education through ICT” , Institute Of LifeLong Learning, Delhi; ISBN NO 2349-154X
  - Kumar J; Sharma K; **Heikrujam M**; Kumar R; Agrawal V. 2017. Genetic markers: potential tools for diversity analysis and identification of sex in dioecious plants. Advances in plant science Ed. Dutt S; Tyagi A; Bhati H; Singh S.S.R. Scientific publications,Agra ISBN NO 978-9383774-289.
  - Tiwari P.; Chopra T.; **Heikrujam M**. 2021. Geographical indication (GI) in India: emphasis on agricultural goods ed. Singh D; Baweja P, Imperial Publications, Mumbai ISBN No 978-81-949439-8-3
  - **Heikrujam, M.** et al. 2020. Photoperiod. In: Vonk, J., Shackelford, T. (eds) Encyclopedia of Animal Cognition and Behavior. Springer, Cham.
  - Gour, T., Ratan Lal, **Heikrujam, M.**, ...Chetri, S.P.K., Sharma, K. 2022. Halopriming: Sustainable Approach for Abiotic Stress Management in Crops. In: Roy, S., Mathur, P., Chakraborty, A.P., Saha, S.P. (eds) Plant Stress: Challenges and Management in the New Decade. Advances in Science, Technology & Innovation. Springer, Cham.pp. 135-147
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## **SUMMER INTERNSHIP PROJECTS UNDERTAKEN UNDER THE CENTER FOR RESEARCH, MAITREYI COLLEGE**

**SUMMER INTERNSHIP PROJECT (2019-20):** A review analysis on the role of Chloroquine (CQ) and Hydroxychloroquine (HCQ) in fighting the COVID-19 pandemic.

**SUMMER INTERNSHIP PROJECT (2021-22):** Qualitative and quantitative analysis of plant pigment anthocyanins from selected flowering plants.

**SUMMER INTERNSHIP PROJECT (2023-24):** Copigmentation-Based Enhancement of Stability of Anthocyanin Isolates From Selected Local Flowering Plants