

Dr. Manisha Thakur

Associate Professor

Specialization: Plant tissue culture and Molecular Biology of Temperate fruits, Medicinal and spice crops

Contact: + 91 1792 252310

Mobile: 9805017846

E-mail: manishabtc@yaspuniversity.ac.in; drmanisha72@yahoo.com



Best 10 Research Papers:

- Sharma P, **Thakur M**, Kamal S, Chauhan A, Dev H, Gupta R. 2023. Transcriptome Analysis for Gaining Insight into Gingerol Biosynthesis and MAPK dependent Hormonal signaling Pathway Involved in Resistance Mechanism in Fusarium Wilt Tolerant Ginger (*Zingiber officinale* Rosc.) Produced Through In Vitro Mutagenesis and Selection. *Journal of Plant Growth Regulation* <https://doi.org/10.1007/s00344-023-11078-w> (NAAS: 10.64)
- Sharma V, **Thakur M**, Chauhan A. 2024. Isolation, identification, pathogenicity test and molecular characterization of *Fusarium oxysporum* f. sp. *zingiberi* causing Fusarium yellows disease from infected rhizomes of ginger (*Zingiber officinale* Rosc.). *Journal of Plant Pathology* <https://doi.org/10.1007/s42161-024-01652-w> (NAAS: 8.2)
- Sharma P, **Thakur M**, Chauhan A, Kamal S. 2024. Identification, classification and chromosomal mapping of Fusarium wilt related R-genes in mutagenized ginger (*Zingiber officinale* Rosc.) through comparative transcriptome sequencing. *South African Journal of Botany*, 170: 23-37 <https://doi.org/10.1016/j.sajb.2024.05.016> (NAAS: 8.32)
- Sharma N, **Thakur M**, Sharma P, Dutt B and Sharma YP. 2022. *In vitro* propagation from seeds and enhanced synthesis of podophyllotoxin from root callus of *SinoPodophyllum hexandrum* Royle T.S. Ying (Himalayan Mayapple) – An endangered medicinal plant. *Industrial Crops and Products*. 186: 115300 <https://doi.org/10.1016/j.indcrop.2022.115300> (NAAS Rating 11.65)
- Negi D, **Thakur M**, Dutt B and Sharma R. 2024. *In vitro* propagation and secondary metabolites production of *Angelica glauca* Edgew: a threatened medicinal and aromatic herb of the Himalayas. *Plant Cell, Tissue and Organ Culture* (PCTOC), 158:26 <https://doi.org/10.1007/s11240-024-02825-2> NAAS: 8.71
- Kumar K, Thakur L, **Thakur M**, Bhardwaj V and Gupta M. (2024). *In vitro* polyploidy induction in ginger (*Zingiber officinale* Rosc.) cv. Himgiri: morpho-physiological, biochemical, and molecular evaluation of regenerants. *In*

Vitro Cellular & Developmental Biology – Plant <https://doi.org/10.1007/s11627-024-10468-3> NAAS: 8.60

- Sharma N, **Thakur M**, Sharma P, Sharma YP, Dutt B. 2022. *In vitro* propagation from rhizomes, molecular evaluation and podophyllotoxin production in Himalayan May Apple (*Sinopodophyllum hexandrum* Royle T.S. Ying): an endangered medicinal plant. *Plant Cell, Tissue and Organ Culture (PCTOC)*.149:159–173 <https://doi.org/10.1007/s11240-022-02288-3> (NAAS Rating 8.71)
- Sharma V and **Thakur M**. 2021. Gamma irradiations induced morphological and biochemical variations in *in vitro* regenerated ginger (*Zingiber officinale* Rosc.)- an invaluable medicinal spice. *International Journal of Radiation Biology*. 97:12, 1696-1704. <https://doi.org/10.1080/09553002.2021.1988179> (NAAS Rating 8.69)
- **Thakur M**, Luharch R, Sharma V, Sharma D P. 2022. Molecular markers based genetic relatedness studies in tissue culture propagated japanese plum cultivars Santa Rosa and Frontier. *Genetic Resources and Crop Evolution*. 69: 567–575. <https://doi.org/10.1007/s10722-021-01325-y> (NAAS Rating 7.52)
- Sharma V and **Thakur M**. 2021. Applicability of SCoT markers for detection of variations in Fusarium yellows resistant lines of ginger (*Zingiber officinale* Rosc.) induced through gamma irradiations. *South African Journal of Botany* <https://doi.org/10.1016/j.sajb.2021.01.021> (NAAS Rating 8.32)

Awards & Recognitions

- **Elected Member:** Plant Tissue Culture Association of India
- **Awarded NAHEP fellowship** for overseas training in the Plant Health Institute, Montpellier, France, for a period of one month
- **First Position for outstanding Poster presentation In:** Symposium & Industry Conclave on “Plant Tissue Culture for Boosting Biomanufacturing, Nutritional Security, and Climate Resilience” organized by BRIC-National Institute of Plant Genome Research (NIPGR) during February 17-20, 2026 at Jawaharlal Nehru University, New Delhi, India.
- **Best Oral Presentation In:** 2nd International Conference on Plant Physiology and Biotechnology (ICPPB-2023), Lovely Professional University, Jalandhar, Punjab April 20-21st, 2023
- **Best interactive poster Award In:** International Conference on Next-generation plant production and bioresources utilization technologies, IIT Guwahati, February 14-16th, 2019.

- **Uma Dutt Mamgain Award for Best Research in Ph.D. in the year 2019**, conferred by the Society for Advancement of Human and Nature, Solan (HP) awarded to the Ph.D. student.
- **Best Thesis and Innovative Research Award- 2020**, awarded to the Ph.D. student by the Association of Plant Science Researchers (APSR)- PLANTICA FOUNDATION