



**Dr. Sweta Mishra**  
**Professor**

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### EDUCATIONAL QUALIFICATIONS

- **B. Sc. (Hons.) Ag. :** CCSHAU, Hisar, Haryana
- **M.Sc. Biotechnology & Molecular Biology:** CCSHAU, Hisar, Haryana
- **Ph.D. Plant Molecular Biology & Biotechnology:** SDAU, Gujarat

### PROFESSIONAL AREA

- **Research Area:** Molecular Breeding; DNA Fingerprinting; Functional characterization of Fe and Zn uptake and translocation responsive genes in bread wheat; Marker assisted breeding of bread wheat for enhancing wheat quality characters; Functional genomics for temperature stress tolerance in basmati rice
- **Research Interests:** Crop improvement through genome editing (CRISPR Cas9); Transcriptome analysis; Bioinformatics Short grained aromatic rice of India
- **Memberships/Fellow of Societies:** Society for Plant Biochemistry and Biotechnology; the Indian Science Congress Association; Indian Association for Information Technology in Agriculture. Editorial board Member American Journal of life sciences, New York, USA. Editorial board Member Journal of Plant Sciences, New York, USA.

### PUBLICATIONS

- **Research articles / Review articles /Short Communication: 23**
- **Books & Book Chapter: 12**
- **Popular articles: 10**

### KEY PUBLICATIONS:

- Kumar, S., Mishra, S. and Mishra, A.P., 2016. Plant tissue culture: theory and techniques. Scientific Publishers.
- Reprinted in 2016: Plant Tissue Culture – Theory and Techniques (ISBN: 978-81-7233- 602-8).
- Sweta Mishra, Shailesh Kumar and Ram C. Yadav (2019). Somaclonal variation and transformation with cry1A(c) gene in tomato. Lambert Academic publishing. Europe. (ISBN: 978-620-0-21616-8).
- Shailesh Kumar, Sweta Mishra and Bhupinder Singh (2019). Carbon isotope discrimination and water use efficiency in crop plants. Lambert Academic publishing. Europe. (ISBN: 978-620-0-11520-1)
- Mishra, S. and Acharya, S., 2018. Targeted traits for enhancement of seed Iron and zinc concentrations in Pigeonpea. Proceedings of the National Academy of Sciences, India Section B: Biological Sciences, 88(3), pp.1199-1205.
- Sweta Mishra and Suresh Acharya (2016). Genetic Divergence for Iron and Zinc in Pigeonpea Genotypes Using Molecular Markers. Eco. Env. & Cons. 22: S261-S268
- A.P. Mishra, A.K. Mishra and Sweta Mishra (2007). Classification for core collection of Rapeseed –Mustard (Brassica juncea L.) germplasm. Journal of Plant Genetic Resources. 20(2): 154-159
- Shailesh, K., Singh, V.P., Sweta, M. and Ajay, A., 2017. Exogenous applied salicylic acid alleviates adverse effects of high temperature on photosynthesis in late sown wheat (Triticum aestivum). Indian Journal of Ecology, 44(Special Issue 4), pp.100-104. Sweta Mishra (2018). Conditions for efficient transformation of tomato (Lycopersicon esculentum M.) cultivars with cry1a(c) gene of Bacillus thuringiensis. Journal of Pharmacognosy and Phytochemistry; 7(2): 1772- 1776.