Dr. Hanwant Singh

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1. Research Interest

- Plant stress physiology & Biochemistry
- Plant molecular biology
- Nanotechnology
- Duckweed research
- Photosynthesis research

2. Education

Sr.	Course	Board/University	Year	Subject	Division
1.	10+2	RBSE, Ajmer	2009	Biology, Chemistry, Physics	First
2.	B.Sc.	MLSU, Udaipur	2012	Botany, Zoology, Chemistry	First
3.	RSCIT	VMOU, Kota	2012	Information technology (IT)	First
4.	M.Sc.	MLSU, Udaipur	2014	Botany	First
5.	PhD	MLSU, Udaipur	2022	Botany	Awarded

3. Publications

1. **Singh, H**., Raj, S., Kumar, D., Sharma, S., Bhatt, Kalaji H. U., Wróbel, J., & Soni, V. (2021). Tolerance and decolorization potential of duckweed (*Lemna gibba*) to CI Basic Green 4. **Scientific Reports**, 11(1), 1-12. (**Impact Factor: 4.3**)
2. **Singh, H**., Kumar, D., & Soni, V. (2020). Copper and mercury induced oxidative stresses and antioxidant responses of *Spirodela polyrhiza* (L.) Schleid. **Biochemistry and Biophysics Reports** (Elsevier), 23, 100781. (Cite Score: 4.6)
3. Kumar, D., **Singh, H**., Raj, S., & Soni, V. (2020). Chlorophyll a fluorescence kinetics of mung bean (*Vigna radiata* L.) grown under artificial continuous light. **Biochemistry and Biophysics Reports** (Elsevier), 24, 100813. (Cite Score: 4.6)
4. Soni, V., Keswani, K., Bhatt, U., Kumar, D., & **Singh, H**. (2021). In vitro propagation and analysis of mixotrophic potential to improve survival rate of *Dolichandra unguis-cati* under *ex vitro* conditions. **Heliyon** (Cell Press/Elsevier), 7(2), e06101. (Cite Score: 2.1)
5. Kumar, D., **Singh, H**., Bhatt, U & Soni, V. (2021). Effect of continuous light on antioxidant activity, lipid peroxidation, proline and chlorophyll content in *Vigna radiata* L. **Functional Plant Biology** (CSIRO), FP21226. (Impact Factor: 3.1)

6. Raj, S., **Singh, H**., Trivedi, R., & Soni, V. (2020). Biogenic synthesis of AgNPs employing *Terminalia arjuna* leaf extract and its efficacy towards catalytic degradation of organic dyes. **Scientific Reports**, 10(1), 1-10. (**Impact Factor**: 4.3)
7. Soni, V., **Singh, H**., Bhatt, U & Kumar, D. (2021). Severe leaf-vein infestation upregulates antioxidant and photosynthetic activities in the lamina of *Ficus religiosa*. **Acta Physiologiae Plantarum**. (Impact Factor: 2.4)
8. **Singh, H**., Kumar, D., & Soni, V. (2021). Biophysical Characterization of Heavy Metal Stress in *Spirodela polyrhiza* (L.) Schleid. Physical Science & Biophysics Journal, 5(1), 1-4.
9. Bhatt, U., **Singh, H**., Kumar, D., & Soni, V. (2020). Rehydration quickly assembles photosynthetic complexes in desiccation tolerant *Riccia gangetica*. Biomedical Journal of Scientific & Technical Research, 30(1), 23034-23037.
10. Bhatt, U., **Singh, H**., Kumar, D., & Soni, V. (2019). Rehydration Induces Quick Recovery of Photosynthesis in Desiccation Tolerant Moss *Semibarbula orientalis*. Journal of Plant Science Research, 35(2).
11. Soni, V., Kaur, P., Srivastava, S., Mewara, S., Sharma, S., & **Singh, H**. (2018). in vitro propagation and flowering in *Stellaria media* L. CIBTech Journal of Bio-Protocols, 7, 1-4.

4. Conference/Seminar

1. One day international conference on 'Advances in plant science' (2021), sponsored by RUSA 2.0 and organized by Department of Botany, MLS University, Udaipur. (**Oral presentation**).
2. Workshop on Research Methodology (2020) organized by MLS University, Udaipur.
3. Green Technologies, Circular Economy and Restoration of Cultural Heritage (GTCERCH 2019), sponsored by University Grant Commission (UGC), New Delhi and organized by RBS college Agra, (**Poster presentation**).
4. International Conference on Photobiology, phytochemistry and Plant Biotechnology (ICPPP 2019), organized by Department of Botany, MLS University, Udaipur, (**First Position in Poster Presentation**).
5. One day workshop on Proteomics in Life Science Research (2019), organized by Department of Botany, MLS University, Udaipur

6. Workshop on Research Methodology (2019), organized by MLS University, Udaipur
7. Application of Phyto & Bio-remediation technologies for Reclamation, Rehabilitation and Regeneration of Polluted Eco-System: Theory and Practices (2018), organized by Wolkem India Ltd, CSIR and NEERI.

5. Invited Lecture

1. R.N.T. P.G. College, Kapasan (10/01/2021) on "Transcription in prokaryotes: an overview".

6. Laboratory instrument skill

1. UV Spectrophotometer, HPLC
2. Gel electrophoresis, (SDS-PAGE, Agarose gel), Gel documentation
3. FT-IR, NanoDrop spectro
4. PCR
5. Qubit fluorometer, Spade meter
6. Microscopy
7. Laminar air flow batch, Centrifuge
8. (Handy PEA) efficiency analyzer
9. Lyophilizer, Rotary vacuum evaporator

7. Computer skill

1. MS Office (Word, Excel, Outlook, PowerPoint, OneNote, Access)
2. Graphics (Corel Draw, Photoshop, Acrobat, Adobe illustrator)
3. Google Drive (Docs, Sheets, Slides, Forms)
4. Software Skills (SPSS, Python, Jupyter notebook, XLSTAT, Origin, Mendeley)

8. Research Impact (Google Scholar)

Citation: 77; h-index: 03; i10-index: 03, (from 2019)

Cumulative impact factor: **14.1**

Last updated on: 19.04.2022

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