

## Dr. Mukesh Meena

### Assistant Professor

Ph.D. (BHU)

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### Academic Qualification

S. No.	Degree	University	Year
1.	B.Sc.	Rajasthan University, Jaipur	2008
2.	M.Sc.	Banaras Hindu University, Varanasi	2010
3.	Ph.D.	Banaras Hindu University, Varanasi	2016

### Area of specialization

Areas of research and work expertise are plant pathology, microbial technology, fungal biology, plant-microbial interactions, plant-pathogen interaction, toxic metabolites, and fungal bio-molecules and their applications for developing disease resistant plants. Current research interest emphasizes on plant growth promoting microbes, molecular basis of plant-microbe interaction, and induced systemic resistance. Other areas of interest's attention on heavy metal stress, and biotic and abiotic stresses on plants.

## Keywords

Plant growth promoting microbes, toxic metabolites, induced resistance, programmed cell death, biological control, rhizobacteria, environment, heavy metal stress, and molecular markers.

## Work experience

S. No.	Positions held	Name of the Institute	From	To	Pay Scale
1.	Teaching Assistant	Banaras Hindu University, Varanasi	2013	2015	Contract
2.	Post-doctoral Fellow	Department of Biotechnology, Faculty of Science, Jamia Hamdard, New Delhi - 110062, INDIA	21 Feb, 2018	29 May, 2018	60,000
3.	Assistant Professor	Mohanlal Sukhadia University, Udaipur	30 May, 2018	Till date	15600-39100 + 6000 (AGP)

## Professional Recognition/ Award/ Prize/ Certificate, Fellowship received

S. No.	Name of Award	Awarding Agency	Year
1.	Selected for the award of UGC Research Fellowship in Science for meritorious students under the RFSMS Scheme - 2011-2012	UGC, New Delhi	2012-2013
2.	Selected in Rajiv Gandhi National Fellowship (RGNF) - 2013	UGC, New Delhi	2013-2017
3.	Best Paper Presentation Award in The Fourth International Conference on Advances in Applied Science and Environmental Technology - ASET 2016, Bangkok, Thailand	The IRED, Institute of Research Engineers and Doctors	2016

## Membership

Society/Authority	Life membership No.
1. The Association of Microbiologists of India (AMI)	3375-2013
2. The Indian Science Congress Association	L23302
3. Mycological Society of India	LM-07-16

4. Asian PGPR Society of Sustainable Agriculture	1309/490
5. The IRED (Institute of Research Engineers and Doctors)	SM10100056286

## LIST OF PUBLICATIONS

### RESEARCH PAPERS

1. Arora, J., Kanthaliya, B., Joshi, A., **Meena, M.\***, Meena, S., Siddiqui, M.H., Alamri, S., and Devkota, H.P. (2023). Evaluation of total isoflavones in chickpea (*Cicer arietinum* L.) sprouts germinated under precursors (*p*-coumaric acid and L-phenylalanine) supplementation. *Plants MDPI*, 12: 2823. <https://doi.org/10.3390/plants12152823> (Impact Factor: **4.50**)
2. Jain, D., Meena, M., Singh, D., and Janmeda, P. (2023). Isolation, development and validation of HPTLC method for the estimation of  $\beta$ -carotene from *Gymnosporia senegalensis* (Lam.) Loes. *Plant Physiology and Biochemistry*, 201: 107843. <https://doi.org/10.1016/j.plaphy.2023.107843> (Impact Factor: **6.5**)
3. Kumar, M., Seth, K., Choudhary, S., Kumawat, G., Nigam, S., Joshi, G., Saharan, V., **Meena, M.**, Gupta, A.K., and Harish\* (2023). Toxicity evaluation of iron oxide nanoparticles to freshwater cyanobacteria *Nostoc ellipsosporum*. *Environmental Science and Pollution Research*, 2023. <https://doi.org/10.1007/s11356-023-26353-2> (Impact Factor: **5.190**)
4. Zehra, A., Aamir, M., Dubey, M.K., Ansari, W.A., **Meena, M.\***, Swapnil, P., Upadhyay, R.S., Ali, M.A., Al-Ghamdi, A.A., and Lee, J. (2023). Enhanced protection of tomato against fusarium wilt through biopriming with *Trichoderma harzianum*. *Journal of King Saud University – Science*, 35(2): 102466. <https://doi.org/10.1016/j.jksus.2022.102466> (Impact Factor: **3.829**)
5. Sangela, V., Kumar, M., Choudhary, S., Gour, V.S., **Meena, M.\***, Vinayak, V., and Harish\* (2022). Effect of nitrogen, phosphorus and sodium bicarbonate on lipid production and fatty acid profile in *Coelastrella terrestris*. *Biocatalysis and Agricultural Biotechnology*, 45: 102518. <https://doi.org/10.1016/j.bcab.2022.102518>

6. Barupal, T., Tak, P.K., **Meena, M.\***, Vishwakarma, P.K., and Swapnil, P. (2022). The impact of COVID-19 strict lockdown on the air quality of the smart cities of Rajasthan, India. *The Open COVID Journal*, 2: 1-7. doi: 10.2174/26669587-v2-e2203030
7. Kumar, S., Chandra, R., Keswani, C., Minkina, T., Mandzhieva, S., Voloshina, M., and **Meena, M.** (2022). *Trichoderma viride*—mediated modulation of oxidative stress network in potato challenged with *Alternaria solani*. *Journal of Plant Growth Regulation*, 42, 1919-1936. doi: <https://doi.org/10.1007/s00344-022-10669-3> (Impact Factor: **4.169**)
8. Barupal, T., Sompura, Y., Paul, S., **Meena, M.**, Swapnil, P., and Meena, S.S. (2022). The COVID-19 crisis: Impact on the education system and how to change the way of learning. *Coronaviruses*, 3(5): e030822207251. Doi: <https://dx.doi.org/10.2174/2666796703666220803145921>(Bentham Science Publishers)
9. Marwal, A., **Meena, M.**, and Gaur, R.K. (2021). Molecular docking studies of coronavirus proteins with medicinal plant-based phytochemicals. *Defence Life Science Journal*, 6(1): 57-63. doi : 10.14429/dlsj.6.15704
10. Swapnil, P., **Meena, M.**, and Rai, A.K. (2021). Molecular interaction of nitrate transporter proteins with recombinant glycinebetaine results in efficient nitrate uptake in the cyanobacterium *Anabaena* PCC 7120. *PLoS ONE*, 16(11), p.e0257870. doi: <https://doi.org/10.1371/journal.pone.0257870> (Impact Factor: **3.24**)
11. Barupal, T., **Meena, M.\***, Sharma, K. (2020). A study on preventive effects of *Lawsonia inermis* L. bioformulations against leaf spot disease of maize. *Biocatalysis and Agricultural Biotechnology*, 23: 101473. doi: <https://doi.org/10.1016/j.bcab.2019.101473> (Impact Factor: 2.14)
12. Barupal, T., **Meena, M.\***, and Sharma, K. (2020). Comparative analysis of bioformulations against *Curvularia lunata* (Wakker) Boedijn causing leaf spot disease of maize. *Archives of Phytopathology and Plant Protection*, 54(5-6), 261-272. doi: <https://doi.org/10.1080/03235408.2020.1827657>
13. Barupal, T., **Meena, M.\***, Sharma, K. (2019). Inhibitory effects of leaf extract of *Lawsonia inermis* on *Curvularia lunata* and characterization of novel inhibitory compounds by GC–MS analysis. *Biotechnology Reports*, 23: e00335. doi: 10.1016/j.btre.2019.e00335 (Impact Factor: 4.47)
14. Barupal, T., Meena, S.S., and Meena, M. (2019). Study of terrestrial migratory birds coming to Thar Desert of Jaisalmer, Rajasthan during monsoon and winter season. *International Journal of Scientific Development and Research (IJS DR)*, 4(4): 506-509.

15. **Meena, M.\***, Aamir, M., Vikas, K., Swapnil, P., and Upadhyay, R.S. (2018). Evaluation of morpho-physiological growth parameters of tomato in response to Cd induced toxicity and characterization of metal sensitive NRAMP3 transporter protein. *Environmental and Experimental Botany*, 148: 144-167. doi: 10.1016/j.envexpbot.2018.01.007 (Impact Factor: **4.01**).
16. Dubey, M.K., Zehra, A., **Meena, M.**, and Upadhyay, R.S. (2018). Taxonomic note on a rare fish infecting Indian water mould *Achlya ambisexualis* (Achlyaceae). *Indian Journal of Fisheries*, 65(1): 71-78. doi: 10.21077/ijf.2018.65.1.68489-12 (Impact Factor: **0.38**)
17. Kumari, P., **Meena, M.\***, Gupta, P., Dubey, M.K., Nath, G., and Upadhyay, R.S. (2018). Plant growth promoting rhizobacteria and their biopriming for growth promotion in mung bean (*Vigna radiata* (L.) R. Wilczek). *Biocatalysis and Agricultural Biotechnology*, 16: 163-171. doi: <https://doi.org/10.1016/j.bcab.2018.07.030> (Impact Factor: 2.14).
18. Kumari, P., **Meena, M.\***, and Upadhyay, R.S. (2018). Characterization of plant growth promoting rhizobacteria (PGPR) isolated from the rhizosphere of *Vigna radiata* (mung bean). *Biocatalysis and Agricultural Biotechnology*, 16: 155-162. doi: <https://doi.org/10.1016/j.bcab.2018.07.029> (Impact Factor: 2.14).
19. Aamir, M., Singh, V.K., Dubey, M.K., **Meena, M.**, Kashyap, S.P., Katari, S.K., Upadhyay, R.S., Gupta, V.K., and Singh, S. (2018). *In silico* prediction, characterization, molecular docking, and dynamic studies on fungal SDRs as novel targets for searching potential fungicides against Fusarium wilt in tomato. *Frontiers in Pharmacology*, 9: 1038. doi: 10.3389/fphar.2018.01038 (Impact Factor: **3.84**)
20. Aamir, M., Singh, V.K., **Meena, M.**, Upadhyay, R.S., Gupta, V.K. and Singh, S. (2017). Structural and functional insights into WRKY3 and WRKY4 transcription factors to unravel the WRKY–DNA (W-box) complex interaction in tomato (*Solanum lycopersicum*) (L.). A computational approach. *Frontiers in Plant Science*, 8: 819. doi: 10.3389/fpls.2017.00819 (Impact Factor: **4.11**)
21. Zehra, A., **Meena, M.**, Dubey, M.K., Aamir, M., and Upadhyay, R.S. (2017). Synergistic effects of plant defense elicitors and *Trichoderma harzianum* on enhanced induction of antioxidant defense system in tomato against Fusarium wilt disease. *Botanical Studies*, 58: 44. doi: 10.1186/s40529-017-0198-2 (Impact Factor: **1.79**)
22. Zehra, A., **Meena, M.**, Dubey, M.K., Aamir, M., and Upadhyay, R.S. (2017). Activation of defense response in tomato against Fusarium wilt disease triggered by *Trichoderma harzianum* supplemented

with exogenous chemical inducers (SA and MeJA). *Brazilian Journal of Botany*, 21: 1-14. doi: 10.1007/s40415-017-0382-3 (Impact Factor: **1.01**)

23. Zehra, A., Dubey, M.K., **Meena, M.**, and Upadhyay, R.S. (2017). Effect of different environmental conditions on growth and sporulation of some *Trichoderma* species. *Journal of Environmental Biology*, 38: 197-203. (Impact Factor: **0.64**)
24. **Meena, M.\***, Swapnil, P., and Upadhyay, R.S. (2017). Isolation, characterization and toxicological potential of tenuazonic acid, alternariol and alternariol monomethyl ether produced by *Alternaria* species phytopathogenic on plants. *Scientific Reports*, 7: 8777. doi: 10.1038/s41598-017-09138-9 (Impact Factor: **3.99**)
25. **Meena, M.\***, Zehra, A., Swapnil, P., Dubey, M.K., Patel, C.B., and Upadhyay, R.S. (2017). Effect on lycopene,  $\beta$ -carotene, ascorbic acid and phenolic content in tomato fruits infected by *Alternaria alternata* and its toxins (TeA, AOH and AME). *Archives of Phytopathology and Plant Protection*, 50(7-8): 317-329. doi: 10.1080/03235408.2017.1312769 (Impact Factor: **0.56**)
26. **Meena, M.\***, Prasad, V., and Upadhyay, R.S. (2017). Evaluation of biochemical changes in leaves of tomato infected with *Alternaria alternata* and its metabolites. *Vegetos*, 30: 2. doi: 10.5958/2229-4473.2017.00020.9 (Impact Factor: **0.04**)
27. **Meena, M.\***, Prasad, V., and Upadhyay, R.S. (2017). Evaluation of *Alternaria alternata* isolates for metabolite production isolated from different sites of Varanasi, India. *Journal of Agriculture Research*, 2(1): 00012.
28. **Meena, M.\***, Swapnil, P., Zehra, A., Dubey, M.K., and Upadhyay, R.S. (2017). Antagonistic assessment of *Trichoderma* spp. by producing volatile and non-volatile compounds against different fungal pathogens. *Archives of Phytopathology and Plant Protection*, 50(13-14): 629-648. doi: 10.1080/03235408.2017.1357360 (Impact Factor: **0.56**)
29. **Meena, M.\***, Zehra, A., Dubey, M.K., Aamir, M., Gupta, V.K., and Upadhyay, R.S. (2016). Comparative evaluation of biochemical changes in tomato (*Lycopersicon esculentum* Mill.) infected by *Alternaria alternata* and its toxic metabolites (TeA, AOH, and AME). *Frontiers in Plant Science*, 7: 1408. doi: 10.3389/fpls.2016.01408 (Impact Factor: **4.11**)
30. **Meena, M.\***, Prasad, V., and Upadhyay, R.S. (2016). Assessment of the bio-weedicidal effects of *Alternaria alternata* metabolites against *Parthenium* species. *Bulletin of Environmental and Scientific Research*, 5(1): 1-7.

31. **Meena, M.\***, Zehra, A., Dubey, M.K., and Upadhyay, R.S. (2016). Mannitol and proline accumulation in *Lycopersicum esculentum* during infection of *Alternaria alternata* and its toxins. *International Journal of Biomedical Science & Bioinformatics*, 3(2): 64-68.
32. Dubey, M.K., Zehra, A., **Meena, M.**, and Upadhyay, R.S. (2016). Taxonomic notes on *Allomyces neomoniliformis* (Blastocladiaceae) isolated from Nanital lake, Uttarakhand, India. *Vegetos*, 29: 2. doi: doi.org/10.5958/2229-4473.2016.00012.4 (Impact Factor: **0.04**)
33. Zehra, A., Dubey, M.K., **Meena, M.**, Aamir, M., Ahirwal, L., and Upadhyay, R.S. (2016). Improvement of lycopene, ascorbic acid and total phenol content of postharvest tomato fruits by exogenous application of salicylic acid and methyl jasmonate. *Food and Pharma International*, 1(1): 1-7.

#### **PROCEEDINGS PAPERS**

1. **Meena, M.\***, Tiwari, A., Zehra, A., Prasad, V., and Upadhyay, R.S. (2013). Morphological and Molecular Identification of *Alternaria Alternata* from Tomato. Proceeding in International Conference on Global Scenario of Traditional System of Medicine, Ayurveda, Agriculture and Education, RGSC, Barkachha, BHU 1: 506-509.
2. **Meena, M.\***, Zehra, A., Dubey, M.K., and Upadhyay, R.S. (2016). Mannitol and proline accumulation in *Lycopersicum esculentum* during infection of *Alternaria alternata* and its toxins. Proceeding of The Fourth International Conference On Advances in Applied Science and Environmental Technology - ASET 2016 Copyright © Institute of Research Engineers and Doctors, USA, 1: 36-40.
3. Zehra, A., **Meena, M.**, Dubey, M.K., Singh, A.K., and Upadhyay, R.S. (2016). Effect of Different Metals on the Growth and Sporulation of some *Trichoderma* species. Proceeding in National seminar on Impact of Organic Farming in Sustainable Rural Development through Agriculture, organized by BHU–KrishiVigyan Kendra (Institute of Agriculture Sciences), RGSC, Barkachha, Mirzapur, BHU, 1: 264-273.
4. Tiwari, A., **Meena, M.**, Zehra, A., and Upadhyay, R.S. (2013). Efficacy of *Alternaria alternata* as bioherbicide against weed species. Proceeding in International Conference on Global Scenario of Traditional System of Medicine, Ayurveda, Agriculture and Education, RGSC, Barkachha, BHU, 1: 498-502.

## REVIEW PAPERS

1. Chauhan, P., Sharma, N., Tapwal, A., Kumar, A., Verma, G.S., Meena, M., Seth, C.S., and Swapnil, P. (2023). Soil microbiome: Diversity, benefits and interactions with plants. *Sustainability*, 15: 14643. <https://doi.org/10.3390/su151914643> (Impact Factor: **3.889**)
2. Swapnil, P., Singh, L.A., Mandal, C., Sahoo, A., Batool, F., Anuradha, **Meena, M.\***, Kumari, P., Harish, and Zehra, A. (2023). Functional characterization of microbes and their association with unwanted substance for wastewater treatment processes. *Journal of Water Process Engineering*, 54: 103983. <https://doi.org/10.1016/j.jwpe.2023.103983> (Impact Factor: **7.3**)
3. Zehra, A., **Meena, M.\***, Jadhav, D.M., Swapnil, P., and Harish (2023). Regulatory mechanisms for the conservation of endangered plant species, *Chlorophytum tuberosum* – potential medicinal plant species. *Sustainability*, 15(8): 6406. <https://doi.org/10.3390/su15086406> (Impact Factor: **3.9**)
4. Kumar, S., Masurkar, P., Sravani, B., Bag, D., Sharma, K.R., Singh, P., Korra, T., **Meena, M.\***, Swapnil, P., Rajput, V.D., and Minkina, T. (2023). A review on phytotoxicity and defense mechanism of silver nanoparticles (AgNPs) on plants. *Journal of Nanoparticle Research*, 25: 54. <https://doi.org/10.1007/s11051-023-05708-3> (Impact Factor: **2.533**)
5. Chaudhary, P., Singh, D., Swapnil, P., **Meena, M.**, and Janmeda, P. (2023). *Euphorbia neriifolia* (Indian Spurge Tree): A plant of multiple biological and pharmacological activities. *Sustainability*, 15(2): 1225. <https://doi.org/10.3390/su15021225> (Impact Factor: **3.889**)
6. Kumar, M., Sabu, S., Sangela, V., **Meena, M.**, Rajput, V.D., Minkina, T., Vinayak, V., and Harish (2023). The mechanism of nanoparticle toxicity to cyanobacteria. *Archives of Microbiology*, 205: 30. <https://doi.org/10.1007/s00203-022-03370-2> (Impact Factor: **2.667**)
7. Meena, M., Yadav, G., Sonigra, P., Nagda, A., Mehta, T., Swapnil, P., Harish, Marwal, A., and Kumar, S. (2023). Multifarious responses of forest soil microbial community toward climate change. *Microbial Ecology*, 86: 49–74. doi: <https://doi.org/10.1007/s00248-022-02051-3> (Impact Factor: 4.552)
8. Mehta, T., **Meena, M.\***, and Nagda, A. (2022). Bioactive compounds of *Curvularia* species as a source of various biological activities and biotechnological applications. *Frontiers in Microbiology*, 13: 1069095. <https://doi.org/10.3389/fmicb.2022.1069095> (Impact Factor: **6.064**)



9. Kumar, R., Swapnil, P., **Meena, M.\***, Selpair, S., and Yadav, B.G. (2022). Plant growth-promoting rhizobacteria (PGPR): Approaches to alleviate abiotic stresses for enhancement of growth and development of medicinal plants. *Sustainability* (MDPI), 14(23): 15514. <https://doi.org/10.3390/su142315514> (Impact Factor: **3.889**)
10. **Meena, M.\***, Yadav, G., Sonigra, P., Nagda, A., Mehta, T., Swapnil, P., Harish, and Marwal, A. (2022). Role of elicitors to initiate the induction of systemic resistance in plants to biotic stress. *Plant Stress*, 5: 100103. <https://doi.org/10.1016/j.stress.2022.100103>
11. Yadav, G., Sonigra, P., and **Meena, M.** (2022). A Review on Pharmaceutical and Medicinal Importance of *Anethum graveolens* L. *Acta Scientific Nutritional Health*, 6(7): 23–28. (ISSN:2582-1423) (Impact Factor: 1.316)
12. Tailor, S., Jain, K., Marwal, A., **Meena, M.**, Anbarasu, K., and Gaur, R.K. (2022). Outlook of nanotechnology in organic farming management. *Defence Life Science Journal*, 7: 52–60. doi: <https://doi.org/10.14429/dlsj.7.16763>
13. Yashwant, S., Tansukh, B., Deepa, H., and **Mukesh, M.\*** (2021). Review on covid-19 (Corona Virus Disease - 19). *Virology & Mycology*, 10(2): 207.
14. Chandran, H., **Meena, M.\***, and Swapnil, P. (2021). Plant growth-promoting rhizobacteria as a green alternative for sustainable agriculture. *Sustainability*, 13(19): 10986. doi: <https://doi.org/10.3390/su131910986> (Impact Factor: **3.251**)
15. **Meena, M.\***, Yadav, G., Sonigra, P., and Shah, M.P. (2021). A comprehensive review on application of bioreactor for industrial wastewater treatment. *Letters in Applied Microbiology*, 74(2): 131–158. doi: <https://doi.org/10.1111/lam.13557> (Impact Factor: **2.858**)
16. Nagda, A., **Meena, M.\***, and Shah, M.P. (2021). Bioremediation of industrial effluents: A synergistic approach. *Journal of Basic Microbiology*, 61(9): 1–20. doi: <https://doi.org/10.1002/jobm.202100225> (Impact Factor: **2.281**)
17. Seth, K., Kumar, A., Rastogi, R.P., **Meena, M.**, Vinayak, V., and Harish (2021). Bioprospecting of fucoxanthin from diatoms - challenges and perspectives. *Algal Research*, 60: 102475. doi: <https://doi.org/10.1016/j.algal.2021.102475> (Impact Factor: **4.401**)

18. Zehra, A., Raytekar, N.A., **Meena\***, **M.**, and Swapnil, P. (2021). Efficiency of microbial bio-agents as elicitors in plant defense mechanism under biotic stress: A review. *Current Research in Microbial Sciences*, 2: 100054. doi: <https://doi.org/10.1016/j.crmicr.2021.100054>
19. Yadav, G., and **Meena\***, **M.** (2021). Bioprospecting of endophytes in medicinal plants of Thar Desert: An attractive resource for biopharmaceuticals. *Biotechnology Reports*, 30: e00629. doi: <https://doi.org/10.1016/j.btre.2021.e00629>
20. **Meena, M.\***, Zehra, A.\*, Swapnil, P.\*, Harish, Marwal, A., Yadav, G., and Sonigra, P. (2021). Endophytic nanotechnology: An approach to study scope and potential applications. *Frontiers in Chemistry - Nanoscience*, 9: 613343. doi: 10.3389/fchem.2021.613343 (Impact Factor: **5.221**)
21. Gupta, A.K., Seth, K., Maheshwari, K., Baroliya, P.K., **Meena, M.**, Kumar, A., Vinayak, V., and Harish (2021). Biosynthesis and extraction of high-value carotenoid pigments from algae. *Frontiers in Bioscience-Landmark*, 26(6): 171–190. doi: 10.52586/4932 (Impact Factor: **4.009**)
22. Swapnil, P., **Meena, M.\***, Singh, S.K., Dhuldhaj, U. P., Harish, and Marwal, A. (2021). Vital roles of carotenoids in plants and humans to deteriorate stress with its structure, biosynthesis, metabolic engineering and functional aspects. *Current Plant Biology*, 26: 100203. doi: <https://doi.org/10.1016/j.cpb.2021.100203> (Impact Factor: **0.978**)
23. Rajput, V.D., Harish, Singh, R.K., Verma, K.K., Sharma, L., Quiroz-Figueroa, F.R., **Meena, M.**, Gour, V.S., Minkina, T., Sushkova, S., and Mandzhieva, S. (2021). Recent developments in enzymatic antioxidant defence mechanism in plants with special reference to abiotic stress. *Biology*, 10: 267. doi: <https://doi.org/10.3390/biology10040267> (Impact Factor: **5.079**).
24. Sonigra, P., and **Meena, M.\*** (2021). Metabolic profile, bioactivities, and variations in the chemical constituents of essential oils of the *Ferula* genus (Apiaceae). *Frontiers in Pharmacology*, 11: 608649. doi: 10.3389/fphar.2020.608649 (Impact Factor: **5.810**).
25. Swapnil, P., and **Meena, M.\*** (2021). SARS-CoV-2 (COVID-19) Pandemic Outbreak: A worldwide challenge and contemporary situation. *Virology & Mycology*, 10: 201. (Impact Factor: **1.52**).
26. **Meena, M.\***, Sonigra, P., and Yadav, G. (2021). Biological-based methods for the removal of volatile organic compounds (VOCs) and heavy metals. *Environmental Science and Pollution Research*, 28(3): 2485-2508. doi: <https://doi.org/10.1007/s11356-020-11112-4> (Impact Factor: **4.223**).

27. **Meena, M.\***, and Swapnil, P.\* (2020). A review of contagious coronavirus (SARS-Cov-2) their clinical features, diagnosis, preventions and treatment. *Journal of Human Virology & Retrovirology*, 8(4): 99-105. doi: 10.15406/jhvr.2020.08.00227
28. Chandran, H., **Meena, M.\***, and Sharma, K. (2020). Microbial biodiversity and bioremediation assessment through omics approaches. *Frontiers in Environmental Chemistry*, 1: 570326. doi: 10.3389/fenvc.2020.570326 (Impact Factor: **0.98**).
29. **Meena, M.\***, Swapnil, P., Divyanshu, K., Kumar, S., Harish, Tripathi, Y.N., Zehra, A., Marwal, A., and Upadhyay, R.S. (2020). PGPR-mediated induction of systemic resistance and physiochemical alterations in plants against the pathogens: Current perspectives. *Journal of Basic Microbiology*, 60(10): 828–861. doi: 10.1002/jobm.202000370 (Impact Factor: **2.281**).
30. Sharma, S., Swapnil, P., and **Meena, M.\*** (2020). A novel 2019 severe acute respiratory syndrome coronavirus 2 (COVID-19) as global pandemic. *Cell & Cellular Life Sciences Journal*, 5(2): 000154. doi: 10.23880/cclsj-16000154
31. **Meena, M.\***, Gupta, S.K., Swapnil, P., Zehra, A., Dubey, M.K., and Upadhyay, R.S. (2017). *Alternaria* toxins: potential virulence factors and genes related to pathogenesis. *Frontiers in Microbiology*, 8: 1451. doi: 10.3389/fmicb.2017.01451 (Impact Factor: **5.64**).
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33. Dubey, M.K., Aamir, M., Kaushik, M.S., Khare, S., **Meena, M.**, Singh, S., and Upadhyay, R.S. (2018). PR Toxin – Biosynthesis, genetic regulation, toxicological potential, prevention and control measures: Overview and challenges. *Frontiers in Pharmacology*, 9: 288. doi: 10.3389/fphar.2018.00288 (Impact Factor: **5.81**).
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42. **Mukesh, M.\***, Swapnil, P., Barupal, T., and Sharma, K. (2019). A review on infectious pathogens and mode of transmission. *Journal of Plant Pathology Microbiology*, 10: 472. doi: [10.4172/2157-7471.1000472](https://doi.org/10.4172/2157-7471.1000472) (Impact Factor: **2.28**)

## BOOK CHAPTERS

1. Dubey, M.K., **Meena, M.**, Aamir, M., Zehra, A., and Upadhyay, R.S. (2019). Regulation and role of metal ions in secondary metabolites production by microorganisms. In: Singh, H.B., Gupta, V.K., Jogaiah, S. (eds), *New and Future Developments in Microbial Biotechnology and Bioengineering*. Elsevier. doi: <https://doi.org/10.1016/B978-0-444-63504-4.00019-0>
2. Meena, **M.\***, Swapnil, P., Zehra, A., Dubey, M.K., Aamir, M., Patel, C.B., and Upadhyay, R.S. (2019). Virulence factors and their associated genes in microbes. In: Singh, H.B., Gupta, V.K., Jogaiah, S. (eds), *New and Future Developments in Microbial Biotechnology and Bioengineering*. pp. 181-208, Elsevier. doi: 10.1016/B978-0-444-63503-7.00011-5
3. Patel, C.B., Singh, V.K., Singh, A.P., **Meena, M.**, and Upadhyay R.S. (2019). Microbial genes involved in interaction with plants. In: Singh, H.B., Gupta, V.K., Jogaiah, S. (eds), *New and Future Developments in Microbial Biotechnology and Bioengineering*. pp. 171-180, Elsevier. doi: 10.1016/B978-0-444-63503-7.00011-5
4. Goutam, J., Singh, R., Vijayaraman, R.S., and **Meena M.**, (2018). Endophytic Fungi: Carrier of Potential Antioxidants. In: Gehlot, P., Singh, J. (eds), *Fungi and their Role in Sustainable Development: Current Perspectives*. pp. 539-551, Springer, Singapore. doi: [https://doi.org/10.1007/978-981-13-0393-7\\_29](https://doi.org/10.1007/978-981-13-0393-7_29)
5. **Meena, M.\***, Swapnil, P., Zehra, A., Aamir, M., Dubey, M.K., and Upadhyay, R.S. (2017). Beneficial microbes for disease suppression and plant growth promotion. In: Singh, D., Singh, H., Prabha, R. (eds), *Plant-Microbe Interactions in Agro-Ecological Perspectives*. pp. 395-432, Springer, Singapore. doi: [https://doi.org/10.1007/978-981-10-6593-4\\_16](https://doi.org/10.1007/978-981-10-6593-4_16)
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7. **Meena, M.\***, Swapnil, P., Barupal, T., Sharma, K., and Jain, T. (2019). Phenotype. In: Vonk, J., Shackelford, T. (eds), *Encyclopedia of Animal Cognition and Behavior*. Springer Nature Switzerland AG 2019, Cham. doi: [https://doi.org/10.1007/978-3-319-47829-6\\_500-1](https://doi.org/10.1007/978-3-319-47829-6_500-1)

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10. **Meena, M.\***, Kumar, R., and Swapnil, P. (2019). Slime Molds. In: Vonk, J., Shackelford, T. (eds), Encyclopedia of Animal Cognition and Behavior. Springer Nature Switzerland AG 2019, Cham. doi: [https://doi.org/10.1007/978-3-319-47829-6\\_1334-1](https://doi.org/10.1007/978-3-319-47829-6_1334-1)
11. Kumar, R., **Meena, M.\***, and Swapnil, P. (2019). Anisogamy. In: Vonk, J., Shackelford, T. (eds), Encyclopedia of Animal Cognition and Behavior. Springer Nature Switzerland AG 2019, Cham. doi: [https://doi.org/10.1007/978-3-319-47829-6\\_340-1](https://doi.org/10.1007/978-3-319-47829-6_340-1)
12. Jain, T., **Meena, M.\***, Barupal, T., Sharma, K., Chittora, D., and Sharma, K. (2019). Adaptation. In: Vonk, J., Shackelford, T. (eds), Encyclopedia of Animal Cognition and Behavior. Springer Nature Switzerland AG 2019, Cham. doi: [https://doi.org/10.1007/978-3-319-47829-6\\_392-1](https://doi.org/10.1007/978-3-319-47829-6_392-1)
13. Samal, S., Swapnil, P., **Meena, M.\*** (2019). Phylum. In: Vonk, J., Shackelford, T. (eds), Encyclopedia of Animal Cognition and Behavior. Springer Nature Switzerland AG 2019, Cham. doi: [https://doi.org/10.1007/978-3-319-47829-6\\_1197-1](https://doi.org/10.1007/978-3-319-47829-6_1197-1)
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15. **Meena, M.\***, Zehra, A., Dubey, M.K., Aamir, M., and Upadhyay, R.S. (2017). *Penicillum* enzymes for the food industries. In: Gupta, V.K., Rodriguez-Couto, S. (eds), New and Future Developments in Microbial Biotechnology and Bioengineering. pp. 167-186, Elsevier. doi: <http://dx.doi.org/10.1016/B978-0-444-63501-3.00014-4>
16. Zehra, A., Dubey, M.K., **Meena, M.**, Aamir, M., Patel, C.B., and Upadhyay, R.S. (2017). Role of *Penicillum* species in bioremediation process. In: Gupta, V.K., Rodriguez-Couto,

- S. (eds), *New and Future Developments in Microbial Biotechnology and Bioengineering*. pp. 247-260, Elsevier, doi: <http://dx.doi.org/10.1016/B978-0-444-63501-3.00014-4>
17. **Meena, M.\***, Dubey, M.K., Swapnil, P., Zehra, A., Singh, S., Kumari, P., and Upadhyay, R.S. (2017). The Rhizosphere Microbial Community and Methods of its Analysis. In: Singh, H.B., Sarma, B.K., Keswani, C. (eds), *Advances in PGPR Research*. pp. 275-295, CAB International.
  18. Zehra, A., Dubey, M.K., Tiwari, A., **Meena, M.**, Kumari, P., Singh, V.K., Gupta, V.K., and Upadhyay, R.S. (2015). Fungal biomolecules and their implications. In: Gupta, V.K., Mach, R.L., Sreenivasaprasad, S. (eds), *Fungal Biomolecules: Source Applications and recent Developments*. pp. 363-375, Wiley Blackwell, John Wiley & Sons Ltd., USA.
  19. Singh, V.K., **Meena, M.**, Zehra, A., Tiwari, A., Dubey, M.K., and Upadhyay, R.S. (2014). Fungal Toxins and Their Impact on Living Systems. In: Kharwar, R.N., Upadhyay, R.S., Dubey, N.K., Raghuwanshi, R. (eds), *Microbial Diversity and Biotechnology in Food Security*. pp. 513-530, Springer New Delhi Dordrecht Heidelberg London New York. doi: 10.1007/978-81-322-1801-2\_47, Springer India 2014
  20. Prasad, V., Singh, V.K., **Meena, M.**, Tiwari, A., Zehra, A., Zehra, A., and Upadhyay, R.S. (2013). Production and Technological Applications of Enzymes from Microbial Sources. In: Gupta, V.K., Tuohy, M.G., Sharma, G.D., Gaur, S. (eds), *Applications of Microbial Genes in Enzyme Technology*. pp. 175-204, Nova Science Publisher.

## **OTHER INFORMATION**

### **WORKSHOPS**

1. Participated in the workshop on “SCIENTIFIC PAPER WRITING”, organized by The National Academy of Sciences, India (NASI), Lucknow in January 6th – 8th, 2012.
2. Participated in the workshop on “SCIENTIFIC MANAGEMENT OF RIVER GANGA ON SUSTAINABLE BASIS”, organized by The National Academy of Sciences, India (NASI), Allahabad in June 05th, 2012.
3. Participated in the workshop on “UNDERSTANDING STATISTICS BY MS–EXCEL AND SPSS”, organized by the Division of Biostatistics, Department of Community

Medicine, IMS and DST Centre for Interdisciplinary Mathematical Sciences (CIMS), BHU, Varanasi from June 01st – 10th, 2016.

4. Participated in the UGC-SAP sponsored workshop on “VERMICOMPOSTING BIOTECHNOLOGY: An Improved Technique for Institutional waste management”, organized by Laboratory of Medical Arthropodology, Department of Zoology, Mohanlal Sukhadia University, Udaipur, Rajasthan in September 08th, 2018.
5. Participated in the workshop on “WORKSHOP ON INSTRUMENTATION” organized by Department of Botany, Mohanlal Sukhadia University, Udaipur, Rajasthan in September 15th, 2018.
6. Participated in the workshop on “PROTEOMICS IN LIFE SCIENCE RESEARCH” organized by Department of Botany, Mohanlal Sukhadia University, Udaipur, Rajasthan in March 6th, 2019.
7. Participated in the workshop on “COMPUTATIONAL TECHNIQUES FOR EDUCATION AND RESEARCH” organized by Department of Mathematics and Statistics, Mohanlal Sukhadia University, Udaipur, Rajasthan in November 19<sup>th</sup> – 23<sup>rd</sup>, 2019.

## CONFERENCE PUBLICATIONS

1. Vishal Prasad, Vivek Kumar Singh, **Mukesh Meena** and R.S.Upadhyay. Topic, “Salt stressed induced H<sub>2</sub>O<sub>2</sub> production, lipid peroxidation and DNA degradation in tomato roots” in National Symposium on “Emerging Trends in Plant Sciences” (March 3<sup>rd</sup> – 4<sup>th</sup>, 2011), p. 81.
2. Vishal Prasad, Vivek Kumar Singh, **Mukesh Meena** and R. S. Upadhyay. Topic, “Effect of plant extracts on the fungal pathogens causing leaf spot and wilt disease in tomato” in 64<sup>th</sup> Indian Phytopathological Society Annual Meeting and National Symposium on “Biology of infection, immunity and disease control in pathogen–plant interactions” held at Department of Plant Sciences, School of Life Sciences, University of Hyderabad, Hyderabad, on December 2<sup>nd</sup> – 4<sup>th</sup>, 2011, p. 156.
3. **Mukesh Meena** and R. S. Upadhyay. Topic, “Comparative study of ascorbic acid content in tomato fruits of various cultivars” in National conference on “Biology and



Bioinformatics of Economically Important Plants and Microbes” held at DRS Department of Botany, Department of Botany and Bioinformatics Facility, University of North Bengal, on February 17<sup>nt</sup> – 19<sup>nt</sup>, 2012, p. 68.

4. Vishal Prasad, Vivek Kumar Singh, Andleeb Zehra, **Mukesh Meena**, Arti Tiwari and R. S. Upadhyay. Topic, “Evaluation of health promoting lycopene content in twelve different tomato cultivars” in National conference on “Biology and Bioinformatics of Economically Important Plants and Microbes” held at DRS Department of Botany, University of North Bengal, on February 17<sup>nt</sup> – 19<sup>nt</sup>, 2012, p. 73.
5. **Mukesh Meena**, Arti Tiwari, Andleeb Zehra and R. S. Upadhyay. Topic, “Antagonism of *Trichoderma* spp. against *Alternaria alternata* to control plant disease in tomato” in National Conference on “Impact of Global Warming and Climate Change on Diversity: The Challenge of Conservation of Flora and Fauna”, organized by Dept. of Zoology, R.H.S.PG. College Singramau, Jaunpur U.P. in February 21<sup>st</sup> – 22<sup>nd</sup>, 2012, p. 43.
6. **Mukesh Meena** and R. S. Upadhyay. Topic, “Isolation and identification of virulent strains of *Alternaria alternata* from different sites of Varanasi” in International Conference on “Mycology and Plant Pathology: Biotechnology Approaches (ICMPB – 2012) Emerging Trends in Plant Sciences”, organized by Centre of Advanced Study in Botany, Banaras Hindu University, Varanasi, in February 27<sup>th</sup> – 29<sup>th</sup>, 2012, p. 135.
7. **Mukesh Meena** and R. S. Upadhyay. Topic, “Antifungal activity of plant extracts and culture filtrate of *Trichoderma* spp. against *Alternaria alternata* causing leaf spot disease in tomato” in national Seminar on “Recent Advances and New Inclinations in Biological Sciences (NSRANIBS–2012)” organized by Department of Biological Sciences, Allahabad Agriculture Institute, Allahabad, April 18<sup>nt</sup>, 2012, p. 119.
8. **Mukesh Meena** and R. S. Upadhyay. Topic, “Morphological and Molecular Identification of *Alternaria alternata* From Tomato” in International Conference on “Global Scenario of Traditional System of Medicine, Ayurveda, Agriculture and Education” held at Rajiv Gandhi South Campus, Barkachha, Banaras Hindu University, on January 21<sup>st</sup> – 22<sup>th</sup>, 2013, p. 109.
9. Arti Tiwari, **Mukesh Meena**, Andleeb Zehra and R. S. Upadhyay. Topic, “Efficacy of *Alternaria alternata* as bioherbicide against weed species” in International Conference on “Global Scenario of Traditional System of Medicine, Ayurveda, Agriculture and

Education” held at Rajiv Gandhi South Campus, Barkachha, Banaras Hindu University, on January 21st – 22th, 2013, p. 95.

10. **Mukesh Meena** and R. S. Upadhyay. Topic, “*Alternaria* toxins and their effects on plants and animals” in National Conference on “Current Status and New Horizons of Ecological Sciences and Environmental Biotechnology” organized by Centre of Advanced Study in Botany, Banaras Hindu University, Varanasi, in March 1st – 3rd, 2013, p. 103–104.
11. **Mukesh Meena** and R. S. Upadhyay. Topic, “*Alternaria alternata* f. sp. *Lycopersici* and its toxins trigger production of H<sub>2</sub>O<sub>2</sub> in tomato plants” in international conference on “Environment, Health and Industrial Biotechnology” Organised by Department of Biotechnology, Motilal Nehru National Institute of Technology, Allahabad, Uttar Pradesh, on November 21st – 23rd, 2013, p. 77.
12. P. K. Singh, Prashant Swapnil, **Mukesh Meena**, Anand Vikram Singh, Akash Kedia, Dharmendra Kumar Singh, Rahul Bhadouria, Hema Singh and Shivam Singh. Topic, “Ethnomedicinally important tree species of district Sonbhadra, Uttar Pradesh, India” in the First International Congress on “Ecological Integrity and Environmental Ethics: Living for a Sustainable Future” organized by GB Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India, in November 8th – 10th, 2014, p. 66.
13. **Mukesh Meena** and R. S. Upadhyay. Topic, “Assessment of *Alternaria alternata* isolates for metabolite production and their toxicity in tomato plants” in 4th International Science Congress (ISC–2014), Pacific University, Udaipur, in December 8th – 9th, 2014, p. 73.
14. **Mukesh Meena** and R. S. Upadhyay. Topic, “Effect of *Alternaria alternata* phytotoxic metabolite (tenuazonic acid) on *Lycopersicon esculentum*” in the Second Graduate Seminar on “Environmental and Sustainable Development” organized by Institute of Environment and Sustainable Development, Banaras Hindu University, Varanasi, India, in February 27th – 28th, 2015, p. 20.
15. **Mukesh Meena**, Andleeb Zehra, Manish Kumar Dubey and R. S. Upadhyay. Topic, “Isolation and characterization of *Alternaria* toxins and their effects in tomato (*Lycopersicon esculentum* Mill.) during stress conditions” in National Symposium–cum–Mid Eastern Zone meeting of IPS and on “Impact of Climate Change on Plant–Microbe Interactions and Implications (ICCPMI – 2015)” organized by Centre of

Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi, India, in December 18<sup>nt</sup> – 19<sup>nt</sup>, 2015, p. 52.

16. Andleeb Zehra, **Mukesh Meena**, Manish Kumar Dubey and R. S. Upadhyay. Topic, “Role of salicylic and hydrogen peroxide in expression of resistance in tomato plants against Fusarium wilt disease” in National Symposium–cum–Mid Eastern Zone meeting of IPS and on “Impact of Climate Change on Plant–Microbe Interactions and Implications (ICCPMI – 2015)” organized by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi, India, in December 18<sup>nt</sup> – 19<sup>nt</sup>, 2015, p. 53.
17. Manish Kumar Dubey, Andleeb Zehra, **Mukesh Meena** and R. S. Upadhyay. Topic, “Toxic effect of heavy metals on Chytridiomycota” in National Symposium–cum–Mid Eastern Zone meeting of IPS and on “Impact of Climate Change on Plant–Microbe Interactions and Implications (ICCPMI – 2015)” organized by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi, India, in December 18<sup>nt</sup> – 19<sup>nt</sup>, 2015, p. 55.
18. Andleeb Zehra, **Mukesh Meena**, Manish Kumar Dubey, Anil Kumar Singh and R. S. Upadhyay. Topic, “Effect of different metals on the growth and sporulation of some *Trichoderma* species” in The Proceedings of The National Seminar on Impact of Organic Farming in Sustainable Rural Development Through Agriculture, organized by BHU–Krishi Vigyan Kendra (Institute of Agricultural Sciences) and Rajiv Gandhi South Campus, Barkachha, Mirzapur, Uttar Pradesh, India, in February 08<sup>th</sup> – 09<sup>nt</sup>, 2016, p. 264.
19. **Mukesh Meena**, Andleeb Zehra, Manish Kumar Dubey and R. S. Upadhyay. Topic, “*In vitro* study for antagonistic potential of *Trichoderma harzianum* against pathogenic fungi of *Alternaria* and *Fusarium* species” in National conference on “Emerging Trends in Fungal Biology and Plant Protection (ETFPP–2016) AND 42<sup>nd</sup> Annual Meeting of the Mycological Society of India (MSI)” organized by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi, India, in February 16<sup>nt</sup> – 18<sup>nt</sup>, 2016, p. 87.
20. Andleeb Zehra, **Mukesh Meena**, Manish Kumar Dubey and R. S. Upadhyay. Topic, “Role of salicylic acid in induction of plant defense associated molecules in tomato (*Lycopersicon esculentum* Mill.) against Fusarium wilt disease” in National conference on “Emerging Trends in Fungal Biology and Plant Protection (ETFPP–2016) AND 42<sup>nd</sup> Annual Meeting

of the Mycological Society of India (MSI)” organized by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi, India, in February 16<sup>nt</sup> – 18<sup>nt</sup>, 2016, p. 81–82.

21. Manish Kumar Dubey, Andleeb Zehra, **Mukesh Meena** and R. S. Upadhyay. Topic, “Toxic effect of heavy metals on *Saprolegnia parasitica*” in National conference on “Emerging Trends in Fungal Biology and Plant Protection (ETFPP–2016) AND 42<sup>nd</sup> Annual Meeting of the Mycological Society of India (MSI)” organized by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi, India, in February 16<sup>nt</sup> – 18<sup>nt</sup>, 2016, p. 96.
22. **Mukesh Meena**, Andleeb Zehra, Manish Kumar Dubey and R. S. Upadhyay. Topic, “Mannitol and proline accumulation in *Lycopersicon esculentum* during infection of *Alternaria alternata* and its toxins” in The Fourth International Conference on Advances in Applied Science and Environmental Technology – ASET 2016, Bangkok, Thailand, in May 07<sup>nt</sup> – 08<sup>th</sup>, 2016, p. 25.
23. Manish Kumar Dubey, Andleeb Zehra, **Mukesh Meena** and R. S. Upadhyay. Topic, “Occurrence and diversity of Chytridiomycota and Blastocladiomycota in Nainital, Uttarakhand, India” organized by the National Academy of Sciences, India, in December 2<sup>nd</sup> – 4<sup>th</sup>, 2016, p. 167.
24. **Mukesh Meena**, Andleeb Zehra, Manish Kumar Dubey and R. S. Upadhyay. Topic, “*In-vitro* study for antagonistic potential of *Trichoderma* species against pathogenic fungi *Alternaria* and *Fusarium* species” in National symposium on “Issues and Challenges in Ecological Sciences (ICES – 2017)” organized by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi, India, in February 23<sup>rd</sup> – 25<sup>th</sup>, 2017.
25. Andleeb Zehra, **Mukesh Meena**, Manish Kumar Dubey and R. S. Upadhyay. Topic, “Activation of defense response in tomato against Fusarium wilt disease triggered by *Trichoderma harzianum* supplemented with exogenous chemical inducers” in National symposium on “Issues and Challenges in Ecological Sciences (ICES – 2017)” organized by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi, India, in February 23<sup>rd</sup> – 25<sup>th</sup>, 2017.

26. Manish Kumar Dubey, Andleeb Zehra, **Mukesh Meena** and R. S. Upadhyay. Topic, “Diversity of zoosporic fungi in Nainital District, Uttarakhand, India” in National symposium on “Issues and Challenges in Ecological Sciences (ICES – 2017)” organized by Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi, India, in February 23rd – 25th, 2017.
27. Mohd Aamir, Dhiraj Mishra, **Mukesh Meena**, V. K. Singh, Shailesh Kumar Tiwari, B. Singh and Surendra Singh\*. Topic, “*In silico* identification and characterization of defense related Whirly transcription factor (WHY) in *Solanum melongena* L.” in National Conference on “Breaking Barriers through Bioinformatics & Computational Biology” organized by Supercomputing Facility for Bioinformatics & Computational Biology, IIT Delhi, under the auspices of Kusuma School of Biological Sciences, IIT Delhi, in July 31st and 1st Aug, 2017, p. 40.
28. **Mukesh Meena\***, Prashant Swapnil, Mohd Aamir, Manish Kumar Dubey and R. S. Upadhyay. Topic, “Effect on lycopene,  $\beta$ -carotene, ascorbic acid and phenolic content in tomato (*Solanum lycopersicum* L.) fruits infected by *Alternaria alternata* and its toxins (TeA, AOH and AME)” in National Seminar on "Water and Soil Management for Agriculture and Livelihood Security under Climate Change" organized by Sunbeam College for Women, Varanasi, in September, 8th – 9th, 2017.
29. **Mukesh Meena\*** and R. S. Upadhyay. Topic, “Comparative evaluation of biochemical changes in tomato (*Lycopersicon esculentum* Mill.) infected by *Alternaria alternata* and its toxins (TeA, AOH and AME)” in International conference on “Global Conference on Plant Science and Molecular Biology” organized by Magnus Group Conferences (GPMB-2017) at Valencia, Spain, in September 11th – 13th, 2017, p. 38.
30. **Mukesh Meena\***, Prashant Swapnil, M. Z. Abdin and R. S. Upadhyay. Topic, “Antioxidant defense response and lipid peroxidation profile of tomato (*Lycopersicon esculentum* mill.) challenged with toxic metabolites (TeA, AOH and AME) of *Alternaria alternata*” in International 1<sup>st</sup> Post-Doctoral Research Conclave (PDRC2018) organized by Jamia Hamdard, New Delhi in April 12th, 2018, p. 22.
31. Prashant Swapnil1, **Mukesh Meena** and A. K. Rai. Topic, “Biphasic ROS accumulation and programmed cell death in a cyanobacterium exposed to salinity (NaCl and Na<sub>2</sub>SO<sub>4</sub>)” in

International 1<sup>st</sup> Post-Doctoral Research Conclave (PDRC2018) organized by Jamia Hamdard, New Delhi in April 12th, 2018, p. 24.

32. Tansukh Barupal, **Mukesh Meena** and Kanika Sharma. Topic, “Isolation and characterization of active molecules of leaf extract of *Lawsonia inermis* by GC-MS analysis and its inhibitory activity against *Curvularia lunata*” in International Conference on “Photobiology, Phytochemistry & Plant Biotechnology (ICPPP-2019)” organized by Mohanlal Sukhadia University, Udaipur, Rajasthan in May 8th – 9th, 2019.

### **Detail of accession numbers and proteins models**

Submitted the sequences of 48 strain of *Alternaria* in the NCBI and obtained their accession numbers, also submitted the proteins models which play important role in heavy metal transporters in PDB.

### **Role as reviewer in the reputed journals**

1. Frontiers Plant Science (Since 2018)
2. PLOS One (Since 2016)
3. Archives of Phytopathology and Plant Protection (Since 2016)
4. Vegetos- An International Journal of Plant Research (Since 2016)
5. Biochemistry and Biophysics Reports (Since 2019)
6. Heliyon
7. Scientific Reports

### **Journal editorial board member**

1. Coronaviruses\_Bentham Science (Associate Editorial Board Members)  
online link: <https://benthamscience.com/journals/coronaviruses/editorial-board/>
2. Archives of Phytopathology and Plant Protection (2019-2022)  
online link:  
<https://www.tandfonline.com/action/journalInformation?show=editorialBoard&journalCode=gapp20>
3. Review Editor for Crop Biology and Sustainability (Frontiers in Sustainable Food System)  
<https://www.frontiersin.org/journals/sustainable-food-systems/sections/crop-biology-and-sustainability/editors>
4. Review Editor in Fungal Biotechnology (Frontiers in Fungal Biology)  
<https://www.frontiersin.org/journals/fungal-biology/sections/fungal-biotechnology/editors>
5. International Journal of Bioprocess & Biotechnological Advancements  
online link: <http://www.scitcentral.com/editorboardDetails.php?id=763&journal=41>
6. Trends in Horticulture  
online link: <http://systems.enpress-publisher.com/index.php/TH/about/editorialTeam>.
7. Food Science & Nutrition Technology

online link: <https://medwinpublishers.com/FSNT/editorial-board.php>

8. American Journal of Agricultural Science

online link: <http://www.aascit.org/journal/editorial?journalId=892>

9. Reaudito Mercury

Online link:

<https://mercury.reaudito.com/#/ebprofiledetails/UHJvZmlsZURldGFpbHNOB2RlOjUw>

10. Acta Scientific Nutritional Health

Online link: [https://actascientific.com/editorial\\_popup-asnh.php?editor\\_id=3141](https://actascientific.com/editorial_popup-asnh.php?editor_id=3141)

**Masters (M.Sc.) Dissertations: 20 (Completed)**

**Ph.D.: 05 (On going)**

### Any other Information

Total Impact Factor : **202.3**

Citations : **3934**

h-index : **34**

i<sub>10</sub>-index : **57**

Online link: <https://scholar.google.com/citations?user=b7qbi4EAAAJ>

### World's Top 2% Scientists List 2022

147922	Vadlamudi, Ratna	University of Texas Health usa	178	1992	2022	1,74,734	601	12	4.8346	0	0	31	66	92	212
147923	Meena, Mukesh	Mohanlal Sukhadia Univer ind	55	2013	2022	1,74,736	364	11	4.3143	0	0	19	183	23	192
147924	Augustin, Albert J.	Städtischen Klinikum Karlsr deu	208	1989	2022	1,74,737	364	8	3.9999	19	7	74	65	120	122

### World's Top 2% Scientists List 2023

84130	Bretag, Tracey	UniSA Business aus	40	2002	2022	84,129	251	8	4.5317	16	44	27	162	34
84131	Meena, Mukesh	Mohanlal Sukhadia Univer ind	89	2011	2023	84,130	702	15	6.5738	0	0	25	278	37
84132	Magnusson, Willi	Instituto Nacional de Pesq bra	279	1976	2023	84,131	999	15	4.8778	18	6	45	53	149

### Top 2% Most Influential Scientists (Single Year) in 2023

Author Name	Affiliation	Rank
Meena, Mukesh	Mohanlal Sukhadia University	174736

Showing 1 to 1 of 1 entries (filtered from 3,796 total entries) [Previous](#) [Next](#)

### References:

- <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw>
- <https://profiles.stanford.edu/john-ioannidis>

