

Name

Dr. Abhishek Sharma
Research Scientist cum Assistant Professor



Department

Amity Food & Agriculture Foundation
Amity University Uttar Pradesh, Noida - 201313

Qualifications

Ph.D., 2013, Indian Institute of Technology Delhi, India
M.Phil. (Biotechnology), 2008, Alagappa University, Karaikudi, India
M.Sc. (Microbiology), 2004, H.N.B. Garhwal University, India

Experience

08 years of teaching and research experience

Current Courses Taught

UG Courses: Integrated Pest Management, Diseases of Field Crops and their Management

PG Course: Microbiology for Horticulture Produce

Research Interests

Biological Control, Microbial and botanical formulations, Bioremediation, Biological waste management, Bioenergy

Teaching Interests

Basic and Applied Microbiology, Biological Control, Integrated diseases and Pest Management

Publications

A) ORCID ID: <https://orcid.org/0000-0003-0136-436X>

B) Scopus Author ID: 55871122370

Publications (Top 20)

1. Khan M.A. **Sharma A***, Yadav S, Celin S.M., Sharma S., Noureldeen A, Darwish H, 2021. Enhancing remediation of RDX-contaminated soil by introducing microbial formulation technology coupled with biostimulation. J. Environ. Chem. Eng. 9, 106019 10.1016/j.jece.2021.106019 **IF: 5.909**
2. Sharma A, Kaushik N, **Sharma A**, Bajaj A, Rasane M, Shouche YS, Marzouk T and Djéballi N (2021) Screening of Tomato Seed Bacterial Endophytes for Antifungal Activity Reveals Lipopeptide Producing *Bacillus siamensis* Strain

NKIT9 as a Potential Bio-Control Agent. *Front. Microbiol.* 12:609482. doi: 10.3389/fmicb.2021.609482 **IF: 5.640**

3. Arora, H.; **Sharma, A***; Sharma, S.; Haron, F.F.; Gafur, A.; Sayyed, R.Z.; Datta, R. Pythium Damping-Off and Root Rot of *Capsicum annuum* L.: Impacts, Diagnosis, and Management. *Microorganisms* 2021, 9, 823. doi.org/10.3390/microorganisms9040823 **IF: 4.128**
4. Choure K, Parsai S, Kotoky R, Srivastava A, Tiwari A, Rai PK, **Sharma A** and Pandey P (2021) Comparative Metagenomic Analysis of Two Alkaline Hot Springs of Madhya Pradesh, India and Deciphering the Extremophiles for Industrial Enzymes. *Front. Genet.* 12:643423. doi: 10.3389/fgene.2021.643423 **IF: 4.599**
5. Bhardwaj A, **Sharma A***, Goswami BK, Bhardwaj V. 2021. Interaction Effect of Soilless Media and Organic Amendments for Eco-Friendly Root-Knot Nematode Management in Brinjal and Tomato Nursery. *J Pure Appl Microbiol.* 2021;15(1):356-367. doi:10.22207/JPAM.15.1.30 **IF: 0.48**
6. **Sharma A***, Sharma S, Sabir N, El-Sheikh M.A, Alyemeni M. 2021. Impact assessment of Karanja deoiled cake and sundried biogas slurry as a mixed substrate on the nematicidal potential of *Purpureocillium lilacinum*. *Journal of King Saud University - Science*, Volume 33, Issue 3, 2021, 101399, ISSN 1018-3647, <https://doi.org/10.1016/j.jksus.2021.101399>. **IF: 4.011**
7. Achar, Premila N.; Quyen, Pham; Adukwu, Emmanuel C.; **Sharma, Abhishek**; Msimanga, Huggins Z.; Nagaraja, Hanumanthu; Sreenivasa, Marikunte Y. 2020. "Investigation of the Antifungal and Anti-Aflatoxigenic Potential of Plant-Based Essential Oils against *Aspergillus flavus* in Peanuts" *J. Fungi* 6, no. 4: 383. **IF: 5.816**
8. **Sharma, A***; Gupta, A.; Dalela, M.; Sharma, S.; Sayyed, R.Z.; Enshasy, H.A.E.; Elsayed, E.A. Linking Organic Metabolites as Produced by *Purpureocillium lilacinum* 6029 Cultured on Karanja Deoiled Cake Medium for the Sustainable Management of Root-Knot Nematodes. *Sustainability* 2020, 12, 8276. **IF: 3.251**
9. **Sharma A**, Kaushik N and Rathore H, 2020. Karanja (*Milletia pinnata* (L.) Panigrahi): a tropical tree with varied applications. *Phytochemistry Review*. <https://doi.org/10.1007/s11101-020-09670-z> **IF: 5.374**
10. Yadav S., **Sharma A.**, Khan M.A., Sharma R., Malik A., and Sharma S., 2020. Enhancing hexahydro-1, 3, 5-trinitro-1, 3, 5-triazine (RDX) remediation through water-dispersible *Microbacterium esteraromaticum* granules. *Journal of Environmental Management*, 264:110446. doi: 10.1016/j.jenvman.2020.110446 **IF: 6.789**
11. Khan, M. A., Yadav, S., Sharma, R., Dalela, M., Celin, S. M., **Sharma, A***, & Sharma, S. (2020). Augmentation of stimulated *Pelomonas aquatica* dispersible granules enhances remediation of hexahydro-1, 3, 5-trinitro-1, 3, 5-triazine (RDX) contaminated soil. *Environmental Technology & Innovation*, 17, 100594 ISSN: 2352-1864 **IF: 5.263**
12. **Sharma A**, Sharma, N.K., Srivastava A, Kataria A, Dubey S, Sharma S and Kundu B, 2018. Clove and lemongrass oil to fabricate non-ionic nanoemulsion for suppressing the growth of plant pathogenic *Fusarium oxysporum* f.sp. *lycopersici*.

Industrial Crops and Products, 123, 353-362. ISSN: 0926-6690 **IF: 5.645**

- 13.** Rathore H, **Sharma A**, Prasad S, and Sharma S, 2018. Selenium bioaccumulation and associated nutraceutical properties in *Calocybe indica* mushroom cultivated on Se-enriched wheat straw. Journal of Biosciences and Bioengineering, doi: 10.1016/j.jbiosc.2018.04.010. ISSN: 1389-1723 **IF: 2.894**
- 14.** Rathore H, **Sharma A**, Prasad S, Sharma S, and Kumar A. 2020. Yield, nutritional composition and antioxidant properties of *Calocybe indica* cultivated on Wheat straw basal substrate supplemented with nitrogenous tree leaves. doi.org/10.1007/s12649-018-0416-5. Waste and Biomass Valorization. ISSN: 1877-2641 **IF: 3.703**
- 15.** Tiwari G*, **Sharma A***, K Ashwini, and Sharma S, 2019. Assessment of microwave assisted alkali pretreatment for the production of sugars from banana fruit peel waste. Biofuels, 10, 3-10 doi: 10.1080/17597269.2018.1442665 ISSN: 1759-7269 **IF: 2.956 *Equal Contribution**
- 16.** **Sharma A**, Sasi V, Srivastava A, Sharma S and Kundu B, 2017. Antifungal activities of selected essential oils against *Fusarium oxysporum f. sp. lycopersici* 1322, with emphasis on *Syzygium aromaticum* essential oil. Journal of Biosciences and Bioengineering 123:308-313 doi: 10.1016/j.jbiosc.2016.09.011. ISSN: 1389-1723 **IF: 2.894**
- 17.** **Sharma A**, Sharma S, Mittal A and Naik S.N., 2016 Evidence for the involvement of nematocidal toxins of *Purpureocillium lilacinum* 6029 cultured on Karanja deoiled cake liquid medium. World Journal of Microbiology and Biotechnology, 32:82, DOI 10.1007/s11274-016-2038-z). ISSN: 0959-3993 **IF: 3.312**
- 18.** **Sharma A**, Sharma S and Dalela M., 2014. Nematicidal activity of *Paecilomyces lilacinus* 6029 cultured on Karanja cake medium, Microbial pathogenesis, 75:16-20, DOI: 10.1016/j.micpath.08.007, ISSN: 0882-4010 **NAAS Rating: 7.79; IF: 3.738**
- 19.** **Sharma A**, Sharma S, Yadav S and Naik S.N., 2014. Role of Karanja deoiled cake-based medium in production of protease and fatty acids by *P. lilacinus* 6029, Journal of Bioscience and Bioengineering, 118: 270-271. ISSN: 1389-1723. **IF: 2.894**
- 20.** **Sharma A**, Sharma S, Mittal A and Naik S.N., 2014. Statistical optimization of growth media for *Paecilomyces lilacinus* 6029 using non-edible oilcakes, Annals of Microbiology, 64:515-520. ISSN: 1590-4261 (print version) ISSN: 1869-2044 (electronic version). **IF: 2.112**

Professional Affiliations

Life member, BRSI

Life member, NESA

Life member, SES

Life member, IIT Delhi Alumni Association

Reviewer-3Biotech, International Journal of Biological Macromolecules, Environmental Sustainability, International Journal of Fruit Science, Ecological Chemistry and Engineering S, and many more

Research Coordinator, Outcome Coordinator, AQAR coordinator-AFAF

Professional Activities

Organizing member- Webinars, symposiums, and conferences

Talks and Contributed papers on International / National Platforms

Annual meetings-SES

Participation in FDPs

Other Achievements (Patents and Awards)

Patents

- An Indian Patent titled “A COMPOSITION FOR ENHANCEMENT OF PATHOGENICITY OF *PAECILOMYCES LILACINUS* AND USES THEREOF” (Patent No. 371871) has been transferred to Carepro Biosciences Pvt. Ltd. Greater Noida, U.P. in June 2017.
- Patent filed titled “NOVEL GREEN MICRO-EMULSION FOR CONTROLLING FUNGAL WILTS DISEASES” (Indian Patent no. 201711031634 and PCT International Application No. PCT/IB2018/056823) Commercialized on 10th January 2019 to Carepro Biosciences Pvt. Ltd. Greater Noida, U.P.
- Patent filed titled “A FORMULATION OF ENDOPHYTIC BACTERIA ISOLATED FROM THE TOMATO PLANT” Indian Patent Application No. 201911020090 on 21st May 2019.

Awards

- **Best Poster Presentation Award and ranked First** in National Conference on "Plant Health and Food Security: Challenges and Opportunities (March 25-27, 2021) organized by the Indian Phytopathological Society, ICAR, and IARI for the paper “Formulating Microbes for Sustainable Plant Disease Management”.
- **Green Technology Innovation Award 2020** by National Environmental Science Academy (NESAC), New Delhi, India.
- **Indo-US Research Professorship Award 2020** by American Society for

Microbiology and Indo-US Science and Technology Forum

- ***Summer Faculty Research Fellowship 2019*** by Indian Institute of Technology Delhi (IIT Delhi)
- ***Young Scientist Award 2019***
- ***Environmental Protection Research Award 2016***
- ***Best Young Scientist Award 2016***
- ***Best Paper Award 2015***
- ***International Travel Award 2011***

Contact Information

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