



- 
- 1. Name:** Dr. Geetha N.
- 2. Designation:** Professor  
[geetha@appbot.uni-mysore.ac.in](mailto:geetha@appbot.uni-mysore.ac.in);  
[geethabiotech.uom@gmail.com](mailto:geethabiotech.uom@gmail.com)
- 3. Qualification:** M.Sc., M.Phil., Ph.D, PDF (CSIR-RA; DANIDA-ENRECA)
- 4. Area of Specialization:** Nanobiotechnology, Host- Pathogen Interactions, Bioremediation, Bioprospecting Medicinal Plants and their Endophytes, Plant secondary metabolites, Cell Signalling & Communication.
- 

#### 5. Awards/Recognitions

- ✦ **[Prof. Kamal Merit Award for Young Researcher, October 2024.](#)** Priyanka, S.N, Sneha B, Geetha N, Sekhar, S, Kini, K.R. Genome mining, Anti SMASH analysis and cloning of secondary metabolite genes from fungal endophytes". International conference on role of Fungi in sustainable development: from exploration to application. At Savithri Bai Phule University, Pune, Oct 23-24<sup>th</sup> 2024.
- ✦ **[Best Oral Presentation Award. March, 2023.](#)** Dhanyatha M., Ravikant Shekhar, Akshatha, A.J. Deepthi Jain, Prakash, H.S., Geetha N. *In silico* study and nano-formulation of *Cissus quadrangularis* extract for anti-inflammatory potentials. International conference on Nano-Biotechnology, Satara, Maharashtra, March 17-18, 2023.
- ✦ **[Best Poster Award- March, 2023.](#)** Prapula Thejashwini P, Arpitha C.H. Gowda, Dhrishya V. Soman, Saronik Bose, Abhijith Padukana, Geetha N. Phytofabrication of Zinc oxide Nanoparticles from *Psidium guajava* and its Biological activity. International Conference on Nano-Biotechnology (ICNB' 23), Organised by Department of Nanoscience and Technology, Yashasvantrao Chavan Institute of Science, Satara, March 17-18, 2023.
- ✦ **[Best Oral presentation award-3<sup>rd</sup> March, 2023.](#)** Akshatha AJ, Ravikant Shekhar, Dhanyatha AM, HS Prakash, Geetha N. Anti-inflammatory potentials of ethyl acetate extract of *Lantana camara*: *In silico* study. International Conference on Smart and Sustainable Development in Multidisciplinary Research, Villupuram, Tamil Nadu.
- ✦ **[Prize of Excellent Speech, Nov 2022.](#)** Geetha N. The 19th Young Scientist Seminar for Establishment of International Research Network for Tropical Bioresources and Their Utilization. 26<sup>th</sup> -27<sup>th</sup> 2022. Yamaguchi University, Japan.
- ✦ **[Best Oral Presentation Award- September 2022.](#)** Bhavya G, Nuthan, Satish S, Geetha N. *Geotrichum candidum* strain UON GNBF04-A potent biotransformer of Pb<sup>2+</sup> via oxalic acid, a secondary metabolite. 62<sup>nd</sup> Annual International conference of AMI, 21-23<sup>rd</sup> Sept 2022, University of Mysore, Mysuru, Karnataka

- ✦ [Best Oral Presentation Award- Dec 2021](#). Ravikant S., Bhavya G., Prakash H.S., Geetha N. Betel Leaf – A Pan-Asiatic Medicinal Plant: Bioprospecting for Anti-inflammatory Potentials. National Conference on IPR on Bioprospecting & Biopiracy: Current Challenges. 22<sup>nd</sup> December 2021. Theivanai Ammal College for Women. Tamil Nadu
- ✦ [Best Oral Presentation Award- Dec, 2020](#). Bhavya G., Ravikant S., Niranjana S.R., Geetha N. Insights into mycomechanism adapted during heavy metal mycroremediation. International Conference on Fungal Biotechnology: Recent trends and future prospective. 11-12<sup>th</sup> Dec 2020. Bannariamman Institute of Technology, Tamil Nadu.
- ✦ [Best Young Researcher Award- Sept, 2020](#). Bhavya G., Ravikant S., Dayanand, K., Geetha N. Role of secretomes in heavy metal tolerance in the fungus- *Geotrichum candidum*. Global Biotechnology Conference, 2020, Hyderabad.
- ✦ [Best Poster Award-II - 2019](#). Nandini B., Bhavya G., Ravikanth, S., and Geetha N. Trichomalgamation enhances disease protection ability of the pearl millet against downy mildew pathogen. 40<sup>th</sup> ISMPP Annual conference, Karnatak University, Dharwad. 24<sup>th</sup> -26<sup>th</sup> Sept 2019.
- ✦ [Best Poster Award - 2019](#). Astha A., and Geetha N. Isolation, characterization and screening of heavy metal-resistant Actinobacteria from industrial effluents. The 3<sup>rd</sup> Life Sciences Research Symposium. DOS in Genetics and Genomics, Manasagangotri, University of Mysore, Mysuru-570006.
- ✦ [Best Poster Award - 2017](#). Swati K., Geetha N. Protective effect of *Ficus drupacea* Thunb.var. *pubescens* (Rotb) methanolic extracts on liver and kidney against CCl<sub>4</sub>-induced toxicity. UGC-sponsored National Conference on “Recent Trends in Plant Sciences. Dept. of Botany, St. Xavier’s College (Autonomous), Palayamkottai, Tirunelveli, Tamil nadu.
- ✦ [Best Poster Award- New Biology - ISCA 2017](#). Nandini B., H. S., Shetty, H. S., and Geetha, N. Novel membrane lipid nanoemulsion of *Trichoderma* spp. for the induction of systemic resistance in pearl millet against downy mildew disease. **Indian Science Congress**, Tirupathi, 7<sup>th</sup> Jan, 2017.
- ✦ [Best Poster Award- 2015](#). Nandini B., Prakash, H. S., Shetty, H. S., and Geetha, N. Genetic variability of *Trichoderma* spp. in monocot rhizospheric soils collected from different geographic regions of India. NABS-National Seminar on Biological Products for Crop, Animal and Human Health-Problems and Prospects, held at DOS in Biotechnology, University of Mysore at 21-22, Aug, 2015.
- ✦ [Best Poster Award- 2015](#). Nandini B., Shetty H.S., and Geetha N. Modulation of Octadecanoid pathway during induction of systemic resistance by *Trichoderma* elicitors in pearl millet against downy mildew pathogen. **Metabolomics-2015**. Department of Biochemistry, Indian Institute of Science, Bengaluru, India. 12<sup>th</sup> Jan 2015.
- ✦ [Best Poster Award- 2009](#). Akshatha J.V., Geetha N., Prakash H.S., and Shetty H.S. 2009. Elicitation of defense responses in tomato against *Fusarium solani* infection. **ISMPP 08- 10th November 2009**. University of Mysore, Karnataka, India.
- ✦ [Best Poster Prize-III- 2006](#). Roopa, K.S., Geetha, N., Prakash, H.S., and Shetty, H.S. Oligosaccharides from *Fusarium oxysporum* Cms1606 induce downy mildew disease resistance. Proceedings of the National conference on “National Seminar on New Frontiers in Plant Pathology”, held at Kuvempu University. Karnataka, India.
- ✦ [Prof. Biligrami Best Paper of the Global Conference- 2005-06](#) at Global Conference-II on Mycology and Plant Pathology, held at Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan, India.

- ✦ [Best Poster Award-2005](#) in the section-“Molecular host-pathogen interaction for the paper entitled “Chitinase activities and isoforms in pearl millet and its relevance to downy mildew resistance” at the Global Conference-II on Mycology and Plant Pathology, Udaipur, Rajasthan India.
- ✦ [Best Research Paper Award- 2005](#), “Isolation and characterization of a protein elicitor *S. graminicola* and elicitor-mediated induction of systemic resistance in cultured cells of *Pennisetum glaucum*” at “**Centenary Symposium on Plant Pathology**”, CPRI, Shimla, Himachal Pradesh, India.
- ✦ [Best Poster Award- 2004](#) for the paper entitled “Induction of HRGPs in pearl millet against *S. graminicola* by treatment with biotic and abiotic inducers” at National Conference on “Emerging Trends in Mycology, Plant Pathology and Microbial Biotechnology”, Osmania University, Hyderabad, India.
- ✦ [Sri. P.P. Singhal Memorial Pesticide India Award-2004](#) for the paper entitled “ Chitin Oligomers and polyunsaturated fatty acids act synergistically in inducing resistance to pearl millet against downy mildew disease” at National Seminar on Advances in Mycology and Host-pathogen interaction, University of Goa, Goa, India.
- ✦ [Smt. Guman Verma Memorial Best Woman Scientist Award-2002](#) for the paper entitled “Determination of Cellular Fatty Acid Components in Five Pathotypes of *Sclerospora graminicola*, the Downy Mildew Pathogen of Pearl Millet” at Asian Congress of Mycology and Plant Pathology, University of Mysore, Karnataka, India.
- ✦ [ISCA-Young Scientist Award- 2002](#) in the section- **Biochemistry, Biophysics and Molecular Biology (New Biology)** - for the paper entitled “Biochemical events triggered in pearl millet upon elicitation with free fatty acids” at **Indian Science Congress**, Lucknow, India.
- ✦ [Best Oral Presentation Award- 1999](#) for the paper entitled “Development and detection of downy mildew resistant somaclones in pearl millet” in National Symposium of Perspectives in Biotechnology, Kakatiya University, Warangal, Andhra Pradesh, India.

### 1. Number of Projects:

Sl. No.	Title of the project	Funding Agency	Amount In Lakhs	Year (From-To)
1.	Cell Culture System for the Production of Chemotherapeutics from <i>Tinospora cordifolia</i>	Minor Research project Grant by the University of Mysore	1	2009-2011
2	<i>In vitro</i> conservation, Molecular Phylogeny, Metabolic Profiling for Bioactive Potential of medicinal plants	MHRD-UGC	9.0	2010- 2014
3	Rhizoremediation of Heavy Metals and Health Hazard compounds from the Agricultural Lands of Karnataka	UGC	14.20	2012-2015
4	Elicitation of induced systemic resistance in pearl millet by the activation of oxylipin signaling intermediates using biogenic nanoparticles as elicitors against downy mildew disease”	SERB-DST-Fast Track for Young scientists	19.40	2013-2016
5	Mycogenic synthesis of nanocomposites for Chromium bioremediation	Minor Research project Grant by the University of Mysore	75,000	2017-2018

2. Number of Ph.D candidates successfully completed:	07
3. Number of Ph.D candidates currently working:	08
4. Number of M.Phil candidates successfully completed:	10
5. Number of M.Phil candidates currently working:	00

## 6. Book chapters

1. Abhijith P, Aditya, K.A., Bose, S., and **Geetha, N.\*** **Climate-Neutral Agriculture**. In *Climate Change and Food Security* (eds S. Mondal et al.). DOI: 10.1079/9781800625037.0005, September 2024, CABI.
2. Nandini, B, Sanjay C.J., **Geetha N**, 2024. **Enzyme-based bioreactors and their biotechnological applications**. DOI: [10.1016/B978-0-443-22072-2.00016-4](https://doi.org/10.1016/B978-0-443-22072-2.00016-4). In book: *Enzyme Biotechnology for Environmental Sustainability*.
3. Nandini, B, **Geetha N**, Sanjay C.J. 2024. **Multifunctional nanofertilizer for inducing systemic resistance in plants**. DOI: [10.1016/B978-0-443-13535-4.00011-0](https://doi.org/10.1016/B978-0-443-13535-4.00011-0). In book: *Nanofertilizer Synthesis*
4. Nandini, B, **Geetha N**, Sanjay C.J. 2023. Potential Prospects of *Trichoderma* Metabolites as Biopesticides in Managing Plant Health and Diseases. October 2023. DOI: [10.1201/9781003452577-7](https://doi.org/10.1201/9781003452577-7). In book: *Biofungicides: Eco-Safety and Future Trends*.
5. Abhijith P, Bhavya G, **Geetha N**. 2022. **Influence of Magnetic Nanoparticles on Plant Growth and Stress Adaptation in Natural Environments**. In: *The Life of Plants in a Changing Environment*. First edition. 208-228. Newcastle upon Tyne: Cambridge Scholars Publishing, United Kingdom. ISBN: 1527576760.
6. Nandini B., **Geetha N**. 2021. **Trichoderma: From gene to field**. In: *Biocontrol Agents and Secondary Metabolites*. Elsevier Publications. ISBN: 978-0-12-822919
7. **Geetha N**. 2021. **Trichogenic Membrane Nanoemulsion Formulations - Novel Biopesticides for Crop Disease Management**. In: *Biopesticides in Horticultural crops*. 2019. 3: 20-24. Jaya Publishing House, Delhi (India).
8. Nandini B., **Geetha N**. **Advances in Nano-Fertilizers and Nano-Pesticides in Agriculture. Smart delivery mechanisms of nanofertilizers and nanocides in crop biotechnology**. Elsevier Publications. 2020. ISBN: 978-0-12-820092-6
9. Ashok B., and **Geetha N**. **Actinobacteria: Diversity and Biotechnological applications**. In: *New and future developments in microbial biotechnology and bioengineering. Recent Trends in Biosorption of heavy metals by Actinobacteria*. Elsevier Publications. 18: 257-276. 2018. ISBN: 978-0-444-63994-3.
10. Madhu, D., Subasri and **Geetha N**. **Bacterial and Mycotic Infections in Immunocompromised Hosts**. In: *Clinical and Microbiological Aspects. Mycotic infections-Clinical and Microbiological aspects Yeasts: Candida and Cryptococcus. Yeasts: Candida and Cryptococcus*. In *Omics E-book group*. Ch. 11: 114-137. 2013. ISBN: 978-1-6327-005-8.

## 11. Publications (Last 5 years- 2019 onwards)

1. Prapula, T.P., Chandrika, R., Madhusudhan M. C., Joshi, S.M, Ali, D., Alarif, S., Jogaiah, S., **Geetha, N. 2024.** *Psidium guajava*-mediated zinc oxide nanoparticles as a multifunctional, microbicidal, antioxidant and anti-proliferative agent against destructive pathogens. **Bioprocess and Biosystems Engineering.** <https://doi.org/10.1007/s00449-024-03052-x>. Impact Factor: 3.5.
2. Abhijith P, Aditya, K.A., Bose, S., and **Geetha, N. 2024.** Climate-Neutral Agriculture. **In: Climate Change and Food Security** (eds S. Mondal et al.). DOI: 10.1079/9781800625037.0005, CABI.
3. Satapute, P., **Geetha N.,** Jogaiah, S. **2024.** Microbial-based metabolites associated with degradation of imidacloprid and its impact on stress-responsive proteins. **Environ Geochem Health** (2024) 46:114. Impact factor: 3.2.
4. Nandini, B, Sanjay C.J., **Geetha N,** 2024. Enzyme-based bioreactors and their biotechnological applications. DOI: [10.1016/B978-0-443-22072-2.00016-4](https://doi.org/10.1016/B978-0-443-22072-2.00016-4). In book: **Enzyme Biotechnology for Environmental Sustainability.**
5. Prapula, T.P., Madhusudhan MC., Sushma T., Gulnaz, AR., Arpitha C.H.G, Roopa G., Pushpalatha H.G., **Geetha N. 2024.** Evaluation of phytochemical composition and *in vitro* assessment of antioxidant and antimicrobial activities of various medicinal plant extracts. **Journal of Pharmacognosy and Phytochemistry.** 13(3): 37-45.
6. Nandini, B, **Geetha N,** Sanjay C.J. **2024.** Multifunctional nanofertilizer for inducing systemic resistance in plants. DOI: [10.1016/B978-0-443-13535-4.00011-0](https://doi.org/10.1016/B978-0-443-13535-4.00011-0). In book: Nanofertilizer Synthesis.
7. Priyanka S., Bhaskar, S., Manu, M, Likitha, M.P, **Geetha, N,** Sekhar, S, Kini, K.R. **2024.** Genome mining and AntiSMASH analysis of an endophytic *Talaromyces* sp. reveal biosynthetic pathway gene clusters for novel bioactive compounds. **Journal of Applied Biology & Biotechnology.** Vol. X(XX), pp. 1-7, 2024.
8. Hadimani, S., Joshi, S.M., **Geetha , N.,** Shetty, H.S., Jogaiah, S. **2023.** Elucidating the role of effector protein as biomarker for enhanced resistance against pearl millet downy mildew disease. **Physiological and Molecular Plant Pathology.**, 102076. Impact factor: 2.741.
9. Bhavya, G., De Britto, S., Satapute, P., **Geetha, N.,** Jogaiah, S. **2023.** Biofabricated yeast: super-soldier for detoxification of heavy metals. **World Journal of Microbiology and Biotechnology.** 39:148 <https://doi.org/10.1007/s11274-023-03596-2>. Impact factor: 4.29.
10. Rachitha, P., Krupashree, K., Kandikattu, H.K., **Geetha N.,** Alahmadi, T.A., Alharbi, S.A., Shanmuganathan, R., Brindhadevi, K., Raghavendra, V.B. **2023.** Nanofabrication of cobalt-tellurium using *Allium sativum* extract and its protective efficacy against H<sub>2</sub>O<sub>2</sub>-induced oxidative damage in HaCaT cells. **Environmental Research.** 226: 115659. Impact factor: 8.431.
11. Pushpalatha H.G., Naveen J., **Geetha N.,** Hithamani G., Shetty H.S. **2023.** Plant growth promotion and biological control of *Sclerospora graminicola* in pearl millet by endophytic *Streptomyces* spp. **Indian Phytopathology.** 76, 521-530.
12. Hadimani, S.; De Britto, S.; Udayashankar, A.C., **Geetha, N.;** Nayaka, C.S.; Ali, D.; Alarifi, S.; Ito, S.-i.; Jogaiah, S. **2023.** Genome-Wide Characterization of Effector Protein-Encoding Genes in *Sclerospora graminicola* and Its Validation in Response to Pearl Millet Downy Mildew Disease Stress. **J. Fungi** 2023, 9, 431. <https://doi.org/10.3390/jof9040431>. Impact factor: 5.724.

13. Nandini, B, **Geetha N**, Sanjay C.J **2023**. Potential Prospects of *Trichoderma* Metabolites as Biopesticides in Managing Plant Health and Diseases. DOI: [10.1201/9781003452577-7](https://doi.org/10.1201/9781003452577-7). In book: **Biofungicides: Eco-Safety and Future Trends**.
14. Bhavya, G., De Britto, S., Satapute, P., Geetha, N., Jogaiah, S. **2023**. Biofabricated yeast: super-soldier for detoxification of heavy metals. **World Journal of Microbiology and Biotechnology**. 39:148 <https://doi.org/10.1007/s11274-023-03596-2>. Impact factor: 4.29.
15. **Geetha N.**, Sunilkumar, C.R., Bhavya, G., Nandini, B., Abhijith, P., Satapute, P., Shetty, H.S., Govarthanam, M., Jogaiah, S. **2023**. Warhorses in soil bioremediation: Seed biopriming with PGPF secretome to phytostimulate crop health under heavy metal stress. **Environmental Research**. Volume 216, Part 1, 114498. Impact factor: 8.431.
16. Nandini, B., Krishna, L., Jogigowda, S.C. Geetha N., Hadimani, S., Ali, D, Sasaki, K., Jogaiah, S. **2023**. Significance of *Bryophyllum pinnatum* (Lam.) for green synthesis of anti-bacterial copper and selenium nanoparticles and their influence on soil microflora. **Applied Nanosciences**. <https://doi.org/10.1007/s13204-023-02798-2>. Impact factor: 3.869.
17. Ravikant, S., Madhusudhan M.C., Sanjay, C.J., Prakash H.S. and **Geetha N. 2022**. *In vitro* anti-lipid peroxidation and anti-candidal potentials of different Betel leaf varieties. **J. Med. Plants. Stud. JMPS. 10(4): 140-149**
18. Roopa G., Madhusudhan M.C., Nischita P. and **Geetha N. 2022**. *In vitro* studies on anti-diabetic, anti-bacterial and phytochemical activities of endophytic fungal extracts from *Salacia* species. **J. Med. Plants. Stud. JMPS. 10(4): 31-37**. ISSN (P): 2394-0530.
19. Bhavya G., Hiremath, K.Y., Jogaiah, S., **Geetha, N. 2022**. Heavy metal-induced oxidative stress and alteration in secretory proteins in yeast isolates. **Archives of Microbiology**. **Springer publications**. 204:172 <https://doi.org/10.1007/s00203-022-02756-6>, I.F: **2.95**.
20. Nandini B., Sanjay C J., Bhavya G., Sunilkumar C.R., **Geetha N.**, Shashikant S.U., Srinivas C., Govarthanam, M., Jogaiah. S. **2022**. Recent advances in nanoremediation: Carving sustainable solution to clean-up polluted agriculture soils. 297, 118728. **Environmental Pollution**. Springer publishers. IF: 9.988.
21. Abhijith P, Bhavya G, **Geetha N.** 2022. Influence of Magnetic Nanoparticles on Plant Growth and Stress Adaptation in Natural Environments. In: **The Life of Plants in a Changing Environment**. First edition. 208-228. Newcastle upon Tyne: Cambridge Scholars Publishing, United Kingdom.
22. Sudisha J., Paidi, M.K., Venugopal, K., Geetha N., Mujtaba, M., Udikeri, S.S., Govarthanam M. 2021. Phytotoxicological effects of engineered nanoparticles: An emerging nanotoxicology. *Science of total environment*. STOTEN. 801, 149809. IF: 10.753.
23. Sunilkumar C.R, Stephen-Victor, E., Naripogu, K.B., Kumar, J. S., Nuthan, B.R, Marulasiddaswamy, ., KM., Kini, K.R. Geetha N. 2021. Differential Multi-cellularity is required for the Adaptation for *Bacillus licheniformis* to Withstand Heavy Metals Toxicity. *Indian Journal of Microbiology*. 61: (4). 524-529. Springer India. IF: 3.73.
24. Kamble, M.V.; Shahapurkar, A.B.; Adhikari, S.; Geetha, N.; Syed, A.; Ahmed, B.; Jogaiah, S. 2021. Identification and Characterization of Downy Mildew-Responsive microRNAs in Indian *Vitis vinifera* by High-Throughput Sequencing. *J. Fungi*. 7,899. <https://doi.org/10.3390/jof7110899>. I.F: 5.724. MDPI.
25. Haider, M.S., De Britto, S., Geetha N., Bhavya G., Ravikant S., Ito, S-C., Sudisha J. 2021. Genome-Wide Identification, Diversification, and Expression Analysis of Lectin Receptor-Like Kinase (LecRLK) Gene Family in Cucumber under Biotic Stress. *Int. J. Mol. Sci.* 22(12), 6585. IF: 6.208. **MDPI, SCOPUS/SCI Indexed. ISSN: 1422-0067**.

26. Nandini B., **Geetha N.** 2021. *Trichoderma*: From gene to field. In: Biocontrol Agents and Secondary Metabolites. *Elsevier Publications*. ISBN: 978-0-12-822919.
27. Yu, J., Wang, D., **Geetha N.**, Khawar K.M. Jogaiah, S., Mujtaba, M. 2021. Current trends and challenges in the synthesis and applications of chitosan-based nanocomposites for plants: A review. **Carbohydrate Polymers**. 261: 117904. Elsevier's publications. **IF: 10.723**.
28. Nandini, B., Hariprasad P., Saini, R.K., Prakash, H.S., **Geetha, N.** 2021. Trichovariability in rhizosphere soil samples and their biocontrol potential against downy mildew pathogen in pearl millet. **Scientific Reports**. Nature publications. 11:9517. <https://doi.org/10.1038/s41598-021-89061-2>. Impact Factor: 4.996.
29. Bhavya G., Seema A.B., Raja M., **Geetha N.**, Shetty H.S., Udekeri S.S., Jogaiah S. 2021. Remediation of emerging environmental pollutants: a review based on advances in the uses of eco-friendly biofabricated nanomaterials. **Chemosphere**. 275:129975. **Elsevier publications. IF: 8.943**.
30. Nandini B., **Geetha N.**, Prakash H.S., Hariprasad, P. 2021. Natural uptake of anti-oomycetes *Trichoderma* produced secondary metabolites from pearl millet seedlings – A new mechanism of biological control of downy mildew disease. *Biological Control*. 156: 104550. Elsevier publications. Impact Factor: 3.857.
31. Geetha N. 2021. Trichogenic Membrane Nanoemulsion Formulations - Novel Biopesticides for Crop Disease Management. In: *Biopesticides in Horticultural crops*. 2019. 3: 20-24. Jaya Publishing House, Delhi (India).
32. Bankar, A., Sawant O., Mahale, S., Vaneetha, R., **Geetha N.** 2021. Fungal Citric acid production using waste materials: A mini-review. **Journal of Microbiology, Biotechnology and Food sciences**. Faculty of Biotechnology and Food Sciences. (Slovak University of Agriculture in Nitra. 8(2): 821-828. DOI: 10.15414/jmbfs.2018.8.2.821-828 SCOPUS Indexed.
33. **Geetha N.**, Bhavya G., Abhijith, P., Shekhar R., Dayanand B., Sudisha J. 2020. Insights into Nanomycoremediation: Secretomics and mycogenic biopolymer nanocomposites for heavy metal detoxification. *J. Hazardous Materials*. Elsevier publications., 124541. Impact Factor: 14.224.
34. Ahmad, H., Venugopal, K., Rajagopal, K., De Britto, S., Nandini, B., Pushpalatha, H.G., Konappa, N., Udayashankar, A.C., **Geetha, N.**, and Jogaiah, S. **March 2020**. Green synthesis and characterization of Zinc oxide Nanoparticles using *Eucalyptus globules* and their Fungicidal ability against Pathogenic fungi of Apple orchards. **Biomolecules**. 2020, 10, 425; doi:10.3390/biom10030425. MDPI publications **Impact Factor: 6.064**.
35. Nandini B., **Geetha N.** 2020. Advances in Nano-Fertilizers and Nano-Pesticides in Agriculture. Smart delivery mechanisms of nanofertilizers and nanocides in crop biotechnology. *Elsevier Publications*. ISBN: 978-0-12-820092-6
36. Nayak S., Bhat M.P., Udayashankar A.C., Lakshmeesha T.R., **Geetha N.**, Jogaiah S. 2020. Biosynthesis and characterization of *Dillenia indica*-mediated silver nanoparticles and their biological activity. **Appl Organometal Chem**. 34(4): e55-67. <https://doi.org/10.1002/aoc.5567>. Wiley publishers. Impact factor: 4.072.
37. Nandini, B., Hariprasad P., Prakash, H.S., Adhikari, S., Jogaiah, S., and **Geetha N.** 2020. Elicitation of Novel Trichogenic-Lipid Nanoemulsion Signaling Resistance against Pearl Millet Downy Mildew Disease. **Biomolecules**. 10(1), 25; <https://doi.org/10.3390/biom10010025>. MDPI publications. **Impact Factor: 6.064**.
38. Shekhar, R., Bhavya G., Prakash H.S., **Geetha N.** 2019. DNA barcoding-based authentication of *Musa acuminata* var. Nanjungud rasabale. *Journal of Emerging Technologies and Innovative Research*. 6 (3): 62-65.

39. Abhijith P., Bhavya G., Ashika P., **Geetha N.** 2019. Characterization of silver nanoparticles from the endangered medicinal plant *Salacia chinensis* and analysis of its bioactive potentials. *Life Science Edge*. 5 (1): 43- 50.
40. Kumar K.K.N., Mohana, N.C., Nuthan, B.R., Ramesha K.P., Rakshith, D., **Geetha N.**, Satish S. 2019. Phyto-mediated synthesis of zinc oxide nanoparticles using aqueous plant extract of *Ocimum americanum* and evaluation of its bioactivity. *SN Applied Sciences, Springer Nature*. 1: 651-8. **Impact Factor: 2.2.**
41. Bhavya G., Abhijeet P., Shekhar, R., **Geetha N.** 2019. A study on anti-oxidant activity and membrane integrity of *Candida* sp. Strain Y-01 upon Pb stress. *Journal of Emerging Technologies and Innovative Research*. 6 (3): 8-12.

### Patents

Title	Inventor (s)	Patent No.	Country
<b>Method for bioremediation of lead</b>	Sunil K.C.R, Emanuel S.V, Kishore B.N, <b>Geetha N.</b>	US 2021/0053096 A1  <b>Feb 25, 2021</b>	United States of America  <b>(US patent)</b>

### **12. Papers in Conference /Seminar/ Proceedings/FDPs (Last 5 years- 2019 onwards)**

1. **Phytofabricated Zinc oxide nanoparticles as a Multifunctional, Microbicidal, Antioxidant and Antiproliferative agent.** At "International Conference on Frontier Areas of Science & Technology-2024 (ICFAST-2024), Indo-Japanese Seminar, organized by Indian JSPS Alumni Association & Indian Institute of Technology (IIT)-Guwahati. September 6-7<sup>th</sup> 2024, Guwahati.
2. **Talking to the plants with AI: Big data and pattern recognition helping us understand agriculture like never.** In the 10 day training "Artificial intelligence solutions for plant disease and pest diagnosis and management" on 28<sup>th</sup> and 29<sup>th</sup> June, 2024 under ICAR-NAHEP, IDP, NAHEP, SKUAST, Jammu.
3. **Women in Science and Society**, March, 2024. NDRK First Grade College, Hassan
4. **Emerging applications of Nanobiotechnology in Agriculture and Healthcare.** At **Cutting Edge Research in Life Sciences, Methodology and Patent (CERI LAMP2024)**" on 17<sup>th</sup> Feb, 2024. V.G. Shivdare College of Arts, Commerce and Science, SOLAPUR, Maharashtra.
5. **Nanomedicine: Current applications.** International Conference on One Health: Biotechnology as a catalyst for sustainable development (Heal-Biotech-2023), 7<sup>th</sup> to 9<sup>th</sup> Dec 2023, School of Life sciences, JSS AHER, Mysuru.
6. **Current advances in Nanobioformulations in food system.** At "High End skilling workshop on modern analytical techniques in food biochemistry" sponsored by DST, SERB under Accelerate Vigyan scheme w.e.f 4<sup>th</sup> July to 13<sup>th</sup> July 2023 at FBSc, SKUAST-Jammu at 10 days Workshop. 10<sup>th</sup> July 2023
7. **Nanobiotechnology and Medicine: A steady walk together.** At: International Conference of Nanobiotechnology. 17<sup>th</sup> March 2023. Y.C. Institute of Science, Satara, Maharashtra.



8. **Emerging trends in Nanobiotechnology.** 8<sup>th</sup> Feb, 2023. Rotary Mysore-Mid town.Mysuru.
9. **Nanotechnology in Traditional medicine.** In: **"BIOPATH- The current approach of phytochemicals and nanomaterials in Traditional Medicine.** MMK & SDM Mahila Mahavidyalaya. District level Inter-collegiate Lecture series. 19<sup>th</sup> Jan, 2023.
10. **Nanobiotechnology: Concepts and Applications.** The Oxford College, Bengaluru, Karnataka. 27<sup>th</sup> Aug 2022.
11. **Biopriming with Mycogenic Nanoformulations for improving plant health. 8/08/2022.** In Ten Day High-End Workshop on **"Development of Novel Bioformulations for use in sustainable agrosystems"**. Webinar- based training programme organized by Division of Basic Sciences & Humanities, Faculty of Agriculture, SKUAST Kashmir and sponsored by National Higher Agriculture Education Project of ICAR. (1<sup>st</sup> to 10<sup>th</sup> August, 2022). SKUAST, Kashmir- **Aug 2022.**
12. **Bioprospecting of Medicinal plants and Endophytome: Creating a Value for Biodiversity.** Plant Club Valedictory function. JSS College for women, Chamaraja Nagar, Karnataka, 30<sup>th</sup> July 2022.
13. **Latest dimensions to comprehend the review of literature and use of scientific tools for citation management.** Faculty Development Programme (FDP). Promoting Research among Academicians. St Philomena's College, Mysuru. 22-28<sup>th</sup> June 2022.
14. **Nanobiotechnology: A new frontier in agriculture. Biotech day-2022.** Department of Biotechnology. St Philomena's College, Mysuru. 9<sup>th</sup> June, 2022.
15. **In search of the Treasure house for novel metabolites: Bioprospecting of medicinal plants and endophytome.** National conference on **"IPR ON BIOPROSPECTING AND BIOPIRACY: CURRENT CHALLENGES"** on 22<sup>nd</sup> December 2021 at Theivanai Ammal College for Women, Villupuram.
16. **Plant Bioprospecting - recent developments. 13.07.2021.** In: AICTE Training and Learning (ATAL) Academy Sponsored Faculty development Programme (FDP) On **"Drug Engineering through Bioprospecting" July 12 - 16, 2021.** Organized by Department of Biotechnology, Dr. N.G.P. College of Education & Dr. N.G.P. ARTS & Science College. Coimbatore-641048. Tamil Nadu, India.
17. **Mycogenic Nanoformulations as Smart Delivery Options to Manage Crop Diseases. In: International Online Conference on Nano Materials (ICN 2021). 9-11 April 2021.** Organized by Mahatma Gandhi University, Kottayam, Kerala, India & Wroclaw University of Technology, Wroclaw, Poland & Gdansk University of Technology, Poland, & Wuhan University, China. Mahatma Gandhi University, Kottayam, Kerala, India.
18. **Biopriming with Mycogenic Nano - formulations for improving plant health. 26/03/2021.** In One Week National Training Programme on **"Recent Advances in Development of Bioformulations for use in Sustainable Agro-ecosystems in India"**. Webinar- based training programme organized by Division of Basic Sciences & Humanities, Faculty of Agriculture, SKUAST Kashmir and sponsored by National Higher Agriculture Education Project of ICAR. (March 25<sup>th</sup>-31<sup>th</sup>, 2021). SKUAST, Kashmir- **March 2021.**
19. **"Current Status and Remedies on Covid-19: Biotechnological Perspective". In One day National seminar on 'Post Covid-19 Preventive Measures' Yashwantrao Chavan Institute of Science, Satara, Maharashtra- 7<sup>th</sup> November, 2020**

20. **Geetha N. Nov, 2020 "Post Covid-19 Preventive Measures"**. One Day National Webinar on **"Current Status and Remedies on Covid 19- Biotechnological Perspectives"**. 7<sup>th</sup> Nov 2020. Yashwantrao Chavan Institute of Science, Satara, Maharashtra.
21. **Geetha N. Sept, 2020. "Foreseen Applications of Bio-inspired Therapeutic Nanomaterials in Agriculture and Food"**. Session: **Nanobiotechnology**. Global Biotech-2020, - 2<sup>nd</sup> Sept, 2020, Hyderabad.
22. **Geetha N. July, 2020 "Biosynthesis of Nanoparticles-Variou Methods-Characterizations"**. Five Days Faculty Development Program on "Nanomaterials characterization techniques and results analysis methodology: Ideas, Innovations & Initiatives" organized by our College in collaboration with UGC-HRDC, SPPU, Pune, 29<sup>th</sup> July 2020.
23. **Geetha N. Feb, 2020. "Women in Science"**. National Science Day Celebrations-28<sup>th</sup> Feb 2020, SDM College, Mysuru.
24. **Geetha N. Feb, 2020. "Mindfulness: Need of the Hour for Psychosocial and Emotional Well-being of Women"**. National Symposium on Emotional Wellness: **The Need of the Hour. Feb 22<sup>nd</sup>, 2020**. Organized by Department of Zoology, Sri Sarada College for Women (Autonomous), Salem - 636 016, Tamil Nadu.
25. **Geetha N. Dec, 2019. "Biopriming: Novel technique for the management of seed-borne pathogens in horticultural crops"** at the ICAR sponsored - 21 days CAFT training programme on "Advances and developments of Seed Science and Technology in the era of genomics for management and utilization of horticultural plant genetic resources" from 25<sup>th</sup> Nov-15<sup>th</sup> Dec, 2019. Lecture delivered on 14<sup>th</sup> Dec 2019. Held at College of Horticulture, University of Horticultural Sciences, Yelwala, Mysuru.
26. **Geetha N. September, 2019. "Nanobiotechnology-enabled Smart Delivery Options: A New Window For Sustainable Agriculture"** at the Two-Day International Conference on "Biotechnological Advances in Medicinal Plants Research" held on September 19-20, 2019, Biorujivith-2019, organized by Department of Life Sciences, School of Sciences, GCU, Bengaluru.
27. **Geetha N. July, 2019. "Nanobiotechnology- Prospects and Applications"**. DBT Star College Scheme lecture. 27<sup>th</sup> July 2019 at Dr. N.G.P. College of Education & Dr. N.G.P. ARTS & Science College. Dr. N.G.P. Nagar, Kalapatti Road, Coimbatore-641048. Tamil Nadu, India.
28. **Geetha N. March, 2019. "Career opportunities after higher education"** at the "Brain Storming workshop on successfully facing competitive examinations" at PG centre, Hemangotri, Hassan on 25<sup>th</sup> March 2019.
29. **Geetha N. March, 2019. "Career opportunities after higher education"** at the "Brain Storming workshop on successfully facing competitive examinations" at Dr. B.R. Ambedkar PG centre, Chamarajanagar on 18<sup>th</sup> March 2019.
30. **Geetha N. 2019. "Biogenic Nanoformulations for Plant Health Management"**. ICAR-sponsored Experimental learning programme on **"Bioinputs: Biofertilizers and Biopesticides"** organized by College of Horticultural Sciences, Mysuru, 26-28<sup>th</sup> Feb, 2019.
31. **Geetha N. 2019. Applications of Nanotechnology in Plant Sciences**. International Conference on "Contemporary Panorama of Biosciences (ICCPOB '19)", Organized by Department of Botany in association with JETIR, Sri Sarada College for Women, Salem, Tamil nadu, 6 - 7<sup>th</sup> Feb, 2019.

### 13) Monographs/Reports

“Krishi Vignana Sanchike - 2016” a crop disease and insect management broacher brought by **Global Association of Scientific Young Minds - GASYM**; to educate farmers/agrochemical traders on judicious usage of agrochemicals and disease management strategies in an effective and economical manner in collaboration with University of Horticulture Sciences, Bagalkot, Karnataka.

### 14) Articles published in newsletter / bulletin

1. **Biotechnological Intervention in Agriculture and its impact on Food Technology.** Geetha N. Weekly bulletin, 37: 2007. Rotary Mysore.
2. **Emerging trends in Nanobiotechnology.** Geetha N. Weekly bulletin, 2023. Rotary Mysore-Mid town.

### 15. Conference /Seminar / workshops participated: (Last 5 years- 2019 onwards)

S l. No	Title	Organized by	Year/ Month	Participated and presented the paper
1	Phytofabricated Zinc oxide nanoparticles as a Multifunctional, Microbicidal, Antioxidant and Antiproliferative agent.	“International Conference on Frontier Areas of Science & Technology-2024 (ICFAST 2024), Indo-Japanese Seminar, organized by Indian JSPS Alumni Association & Indian Institute of Technology (IIT)-Guwahati. Guwahati.	September 6-7 <sup>th</sup> 2024,	Invited lecture
2	Talking to the plants with AI: Big data and pattern recognition helping us understand agriculture like never.	In the 10 day training “Artificial intelligence solutions for plant disease and pest diagnosis and management” under ICAR-NAHEP, IDP, NAHEP, SKUAST, Jammu.	28 <sup>th</sup> and 29 <sup>th</sup> June, 2024	Resource person
3	Women in Science and Society,	NDRK First Grade College, Hassan	8 <sup>th</sup> March, 2024.	Keynote address
4	Emerging applications of Nanobiotechnology in Agriculture and Healthcare.	At “Cutting Edge Research in Life Sciences, Methodology and Patent (CERI LAMP2024)” at V.G. Shivdare College of Arts, Commerce and Science, Sholapur.	17 <sup>th</sup> February 2024.	Keynote address
5	International Conference on One Health: Biotechnology as a catalyst for sustainable	(Heal-Biotech-2023), School of Life sciences, JSS AHER, Mysuru,	7to 9 <sup>th</sup> Dec 2023	Chairperson

	development.			
6	Current advances in Nanobioformulations in food system.	High End skilling workshop on modern analytical techniques in food biochemistry” sponsored by DST, SERB under Accelerate Vigyan scheme w.e.f 4th July to 13th July 2023 at FBSc, SKUAST-Jammu at 10 days Workshop.	10th July 2023	Resource person
7	Nanobiotechnology and Medicine: A steady walk together.	International Conference of Nanobiotechnology. Y.C. Institute of Science, Satara, Maharashtra	17 <sup>th</sup> March 2023.	Keynote address
8	Emerging trends in Nanobiotechnology.	Rotary Mysore-Mid town, Mysuru.	8 <sup>th</sup> Feb, 2023.	Keynote address
9	Nanotechnology in Traditional medicine.	In: “BIOPATH- The current approach of phytochemicals and nanomaterials in Traditional Medicine. MMK & SDM Mahila Mahavidyalaya. District level Inter-collegiate Lecture series.	19 <sup>th</sup> Jan, 2023.	Keynote address
10	Nanobiotechnology: Concepts and Applications.	The Oxford College, Bengaluru, Karnataka.	27 <sup>th</sup> Aug 2022.	Invited lecture
11	Biopriming with Mycogenic Nanoformulations for improving plant health.	Ten Day High-End Workshop on “Development of Novel Bio-formulations for use in sustainable agrosystems”. Webinar- based training programme organized by Division of Basic Sciences & Humanities, Faculty of Agriculture, SKUAST Kashmir and sponsored by National Higher Agriculture Education Project of ICAR. (1 <sup>st</sup> to 10 <sup>th</sup> August, 2022). SKUAST, Kashmir- Aug 2022.	8 <sup>th</sup> August 2022	Resource person
12	Bioprospecting of Medicinal plants and Endophytome: Creating a Value for Biodiversity.	Plant Club Valedictory function. JSS College for women, Chamaraja Nagar, Karnataka,	30 <sup>th</sup> July 2022.	Keynote address
13	Latest dimensions to comprehend the review of literature and use of scientific tools for citation management.	Faculty Development Programme (FDP). Promoting Research among Academicians. St Philomena’s College, Mysuru..	22-28 <sup>th</sup> June 2022	Resource person
14	Nanobiotechnology: A new frontier in agriculture.	Biotech day-2022. Department of Biotechnology. St Philomena’s College, Mysuru.	9 <sup>th</sup> June, 2022.	Keynote address

15	In search of the Treasure house for novel metabolites: Bioprospecting of medicinal plants and endophytoph.	National conference on “IPR ON BIOPROSPECTING AND BIOPIRACY: CURRENT CHALLENGES” on at Theivanai Ammal College for Women, Villupuram.	22 <sup>nd</sup> Decem ber, 2021	Keynote address
16	Plant Bioprospecting - recent developments.	AICTE Training and Learning (ATAL) Academy Sponsored Faculty development Programme (FDP) On “Drug Engineering through Bioprospecting” July 12 - 16, 2021. Organized by Department of Biotechnology, Dr. N.G.P. College of Education & Dr. N.G.P. ARTS & Science College. Coimbatore-641048. Tamil Nadu, India.	13 <sup>th</sup> July 2021.	Resource person
17	Mycogenic Nanoformulations as Smart Delivery Options to Manage Crop Diseases.	In: International Online Conference on Nano Materials (ICN 2021). Organized by Mahatma Gandhi University, Kottayam, Kerala, India & Wroclaw University of Technology, Wroclaw, Poland & Gdansk University of Technology, Poland, & Wuhan University, China. Mahatma Gandhi University, Kottayam, Kerala, India. 9-11 April 2021.	26 <sup>th</sup> March 2021	Resource person
182	Biopriming with Mycogenic Nano - formulations for improving plant health.	In One Week National Training Programme on “Recent Advances in Development of Bioformulations for use in Sustainable Agro-ecosystems in India”. Webinar- based training programme organized by Division of Basic Sciences & Humanities, Faculty of Agriculture, SKUAST Kashmir and sponsored by National Higher Agriculture Education Project of ICAR. (March 25th-31th, 2021). SKUAST, Kashmir-	26 <sup>th</sup> March 2021.	Resource person
19.	Current Status and Remedies on Covid-19: Biotechnological Perspective	In One day National seminar on 'Post Covid-19 Preventive Measures' Yashavantrao Chavan Institute of Science, Satara, Maharashtra	7 <sup>th</sup> November, 2020	Invited lecture

20	Biosynthesis of Nanoparticles-Variou Methods-Characterizations	In: Five Days Faculty Development Program, "Nanomaterials characterization techniques and results analysis methodology: Ideas, Innovations & Initiatives". Organized by UGC-HRDC, SPPU, Pune. S N Arts, D J M Commerce & B N S Science College, Sangamner, Maharashtra- to 31 <sup>st</sup> July, 2020	27 <sup>th</sup> July, 2020	Resource person
21	Foreseen Applications of Bio-inspired Therapeutic Nanomaterials in Agriculture and Food	Global Biotech, The Reignite, Hyderabad.	Aug 30-31 <sup>st</sup> 2020.	Invited lecture
22	Women in Science	National Science Day Celebrations SDM College, Mysuru.	28 <sup>th</sup> Feb 2020,	Keynote address
23	Mindfulness: Need of the Hour for Psychosocial and Emotional Well-being of Women".	National Symposium on Emotional Wellness: The Need of the Hour. Organized by Department of Zoology, Sri Sarada College for Women (Autonomous), Salem - 636 016, Tamil Nadu.	Feb 22 <sup>nd</sup> , 2020.	Keynote address
24	Biopriming: Novel technique for the management of seed-borne pathogens in horticultural crops	ICAR sponsored - 21 days CAFT training programme on "Advances and developments of Seed Science and Technology in the era of genomics for management and utilization of horticultural plant genetic resources". Lecture delivered on 14 <sup>th</sup> Dec 2019. Held at College of Horticulture, University of Horticultural Sciences, Yelwala, Mysuru.	25 <sup>th</sup> Nov-15 <sup>th</sup> Dec, 2019	Resource person
25	Nanobiotechnology-enabled Smart Delivery Options: A New Window For Sustainable Agriculture	Two-Day International Conference on "Biotechnological Advances in Medicinal Plants Research", Biorujivith-2019, organized by Department of Life Sciences, School of Sciences, GCU, Bengaluru	September 19-20, 2019	Invited Lecture
26.	Nanobiotechnology-Prospects and Applications	DBT Star College Scheme lecture. at Dr. N.G.P. College of Education & Dr. N.G.P. ARTS & Science College. Dr. N.G.P. Nagar, Kalapatti Road, Coimbatore-641048. Tamil Nadu, India.	27 <sup>th</sup> July 2019	Resource person

27	Career opportunities after Higher Education	Brain Storming workshop on- Successfully facing competitive examinations, PG centre, Hemangotri, Hassan	25 <sup>th</sup> March, 2019	Resource person
29.	Biogenic nanoformulations for Plant Health management	Bioinputs: Biofertilizers and Biopesticides, organized by College of Horticultural Sciences, Mysuru	26 <sup>th</sup> Feb, 2019	Resource person
30	International Conference on Contemporary Panorama of Biosciences (ICCPOB '19)	Department of Botany in association with JETIR, Sri Sarada College for Women, Salem, Tamil nadu, India	06 <sup>th</sup> Feb, 2019	Invited Lecture

### 16. Membership to professional Organization/Associations:

Sl. No.	Name of the Association/Organizations	Life member/ Ordinary member
1	Nuclear Magnetic Resonance Society (NMRS)	Life Member
2	Indian Science Congress Association (ISCA)	Life Member
3	Society of Mycology and Plant Pathology (ISMPP)	Life Member
4	Association of Women Scientists in India	Life Member
5	Global Association of Scientific Young Minds - GASYM	Life Member
6	Association of Microbiologists of India (AMI)	Ordinary Member
7	Society of Biotechnologists - Member Secretary	Ordinary Member
8	Indian Botanical Society (IBS)	Ordinary Member
9	Society of Biological Chemists (SBC)	Ordinary Member

### 17. Any other Information:

#### DNA Sequence Deposit

1. Pachbale Banana AAA group isolate ITS sequence, partial sequence; Accession No.: MT317115; April 2020
2. Nanjangud Rasabale Banana AAB group isolate ITS sequence, partial sequence; Accession No.: MT317116; April, 2020
3. Elakki Banana AB group isolate ITS sequence, partial sequence; Accession No.:MT317117; April, 2020
4. Nendran Banana AAB group isolate ITS sequence, partial sequence; Accession No.: MT317118; April, 2020
5. Kaadubale Banana AAB group isolate ITS sequence, partial sequence; Accession No.:MT317119; April, 2020
6. Boodhbale Banana ABB group isolate ITS sequence, partial sequence; Accession No.:MT317120; April, 2020

7. Cooking Banana ABB group isolate ITS sequence, partial sequence; Accession No.:MT317121; April, 2020
8. Chandra bale Banana AAA group isolate ITS sequence, partial sequence; Accession No.:MT317122; April, 2020
9. Coorg Banana AB group isolate ITS sequence, partial sequence; Accession No.: MT317123; April, 2020
10. Mysore Chigurele isolate ITS sequence, partial sequence; Accession No.: MT318588; April, 2020
11. Kolkata Paan isolate ITS sequence, partial sequence; Accession No.: MT318589; April, 2020
12. Banarsi Paan isolate ITS sequence, partial sequence; Accession No.: MT318590; April,2020
13. *Geotrichum candidum* strain UOMGNBF04; MH802507; 28th Aug 2018
14. *Ochroconis mirabilis* strain UOMGNBF05; MH802508; 28th Aug 2018
15. *Candida tropicalis* strain UOMGNBY01; MH802509; 28th Aug 2018
16. *Trichoderma asperellum* isolate MY-7; Accession: KM043489; July 2014
17. *Trichoderma asperellum* isolate MY-5; Accession: KM043487; July 2014
18. *Trichoderma asperellum* isolate MY-4; Accession: KM043486; July 2014
19. *Trichoderma asperellum* isolate MY-1; Accession: KM043483; July 2014
20. *Trichoderma asperellum* isolate DL-81; Accession: KM100835; July 2014
21. *Trichoderma asperellum* isolate RJ-69; Accession: KM100833; July 2014
22. *Trichoderma asperellum* isolate MH-54; Accession: KM100829; July 2014
23. *Trichoderma asperellum* isolate MH-53; Accession: KM100828; July 2014
24. *Trichoderma asperellum* isolate MH-52; Accession: KM100827; July 2014
25. *Trichoderma asperellum* isolate MH-51; Accession: KM100826; July 2014
26. *Trichoderma asperellum* isolate MH-49; Accession: KM100825; July 2014
27. *Trichoderma asperellum* isolate MH-48; Accession: KM100824; July 2014
28. *Trichoderma asperellum* isolate UP-87; Accession: KM100821; July 2014
29. *Trichoderma asperellum* isolate DL-86; Accession: KM100820; July 2014
30. *Trichoderma asperellum* isolate DL-83; Accession: KM100817; July 2014
31. *Trichoderma asperellum* isolate DL-82; Accession: KM100816; July 2014
32. *Trichoderma asperellum* isolate RJ-68; Accession: KM100805; July 2014
33. *Trichoderma asperellum* isolate GU-63; Accession: KM100800; July 2014
34. *Trichoderma asperellum* isolate MP-58; Accession: KM100797; July 2014
35. *Trichoderma asperellum* isolate MP-57; Accession: KM100796; July 2014
36. *Trichoderma asperellum* isolate MP-56; Accession: KM100795; July 2014
37. *Trichoderma asperellum* isolate MP-55; Accession: KM100794; July 2014
38. *Trichoderma asperellum* isolate TN-47; Accession: KM100786; July 2014
39. *Trichoderma asperellum* isolate TN-46; Accession: KM100785; July 2014
40. *Trichoderma asperellum* isolate AP-41; Accession: KM100780; July 2014
41. *Trichoderma asperellum* isolate AP-40; Accession: KM100779; July 2014
42. *Trichoderma asperellum* isolate AP-39; Accession: KM100778; July 2014
43. *Trichoderma asperellum* isolate AP-36; Accession: KM100775; July 2014
44. *Trichoderma asperellum* isolate GB-35; Accession: KM100774; July 2014
45. *Trichoderma asperellum* isolate GB-34; Accession: KM100773; July 2014
46. *Trichoderma asperellum* isolate GB-33; Accession: KM100772; July 2014
47. *Trichoderma asperellum* isolate GB-32; Accession: KM100771; July 2014
48. *Trichoderma asperellum* isolate GB-29; Accession: KM100768; July 2014
49. *Trichoderma asperellum* isolate MD-19; Accession: KM100765; July 2014
50. *Trichoderma asperellum* isolate MD-18; Accession: KM100764; July 2014
51. *Trichoderma asperellum* isolate MD-17; Accession: KM100763; July 2014
52. *Trichoderma harzianum* isolate MY-8; Accession: KM043490; July 2014
53. *Trichoderma harzianum* isolate MY-3; Accession: KM043485; July 2014
54. *Trichoderma harzianum* isolate MY-2; Accession: KM043484; July 2014
55. *Trichoderma harzianum* isolate HR-73; Accession: KM100834; July 2014
56. *Trichoderma harzianum* isolate DL-85; Accession: KM100819; July 2014



57. *Trichoderma harzianum* isolate DL-84; Accession: KM100818; July 2014
58. *Trichoderma harzianum* isolate DL-80; Accession: KM100815; July 2014
59. *Trichoderma harzianum* isolate DL-79; Accession: KM100814; July 2014
60. *Trichoderma harzianum* isolate DL-78; Accession: KM100813; July 2014
61. *Trichoderma harzianum* isolate HR-77; Accession: KM100812; July 2014
62. *Trichoderma harzianum* isolate HR-76; Accession: KM100811; July 2014
63. *Trichoderma harzianum* isolate HR-75; Accession: KM100810; July 2014
64. *Trichoderma harzianum* isolate HR-74; Accession: KM100809; July 2014
65. *Trichoderma harzianum* isolate RJ-72; Accession: KM100808; July 2014
66. *Trichoderma harzianum* isolate RJ-71; Accession: KM100807; July 2014
67. *Trichoderma harzianum* isolate RJ-67; Accession: KM100804; July 2014
68. *Trichoderma harzianum* isolate GU-66; Accession: KM100803; July 2014
69. *Trichoderma harzianum* isolate GU-65; Accession: KM100802; July 2014
70. *Trichoderma harzianum* isolate GU-62; Accession: KM100799; July 2014
71. *Trichoderma harzianum* isolate BG-25; Accession: KM100792; July 2014
72. *Trichoderma harzianum* isolate BG-23; Accession: KM100790; July 2014
73. *Trichoderma harzianum* isolate BG-22; Accession: KM100789; July 2014
74. *Trichoderma harzianum* isolate AP-42; Accession: KM100781; July 2014
75. *Trichoderma harzianum* isolate AP-38; Accession: KM100777; July 2014
76. *Trichoderma harzianum* isolate AP-37; Accession: KM100776; July 2014
77. *Trichoderma harzianum* isolate GB-30; Accession: KM100769; July 2014
78. *Trichoderma harzianum* isolate GB-28; Accession: KM100767; July 2014
79. *Trichoderma harzianum* isolate GB-27; Accession: KM100766; July 2014
80. *Trichoderma harzianum* isolate MD-15; Accession: KM100761; July 2014
81. *Trichoderma harzianum* isolate MD-12; Accession: KM100758; July 2014
82. *Trichoderma harzianum* isolate MD-11; Accession: KM100757; July 2014
83. *Trichoderma harzianum* isolate MD-10; Accession: KM100756; July 2014
84. *Trichoderma virens* isolate MY-6; Accession: KM043488; July 2014
85. *Trichoderma virens* isolate UP; Accession: KM100837; July 2014
86. *Trichoderma virens* isolate MP-60; Accession: KM100832; July 2014
87. *Trichoderma virens* isolate UP-89; Accession: KM100823; July 2014
88. *Trichoderma virens* isolate UP-88; Accession: KM100822; July 2014
89. *Trichoderma virens* isolate RJ-70; Accession: KM100806; July 2014
90. *Trichoderma virens* isolate GU-64; Accession: KM100801; July 2014
91. *Trichoderma virens* isolate GU-61; Accession: KM100798; July 2014
92. *Trichoderma virens* isolate TN-45; Accession: KM100784; July 2014
93. *Trichoderma virens* isolate TN-44; Accession: KM100783; July 2014
94. *Trichoderma virens* isolate TN-43; Accession: KM100782; July 2014
95. *Trichoderma virens* isolate GB-31; Accession: KM100770; July 2014
96. *Trichoderma virens* isolate MD-16; Accession: KM100762; July 2014
97. *Trichoderma virens* isolate MD-14; Accession: KM100760; July 2014
98. *Trichoderma virens* isolate MD-13; Accession: KM100759; July 2014
99. *Trichoderma longibrachiatum* isolate MY-9; Accession: KM043491; July 2014
100. *Trichoderma longibrachiatum* isolate MP-59; Accession: KM100831; July 2014
101. *Trichoderma longibrachiatum* isolate BG-24; Accession: KM100791; July 2014
102. *Trichoderma longibrachiatum* isolate BG-21; Accession: KM100788; July 2014
103. *Trichoderma longibrachiatum* isolate BG-20; Accession: KM100787; July 2014
104. *Trichoderma atroviride* isolate MH-50; Accession: KM100830; July 2014
105. *Trichoderma atroviride* isolate BG-26; Accession: KM100867; July 2014
106. *Fusarium verticillioides* isolate AP-118; Accession: KM100858; July 2014
107. Uncultured fungus isolate GB-111; Accession: KM100857; July 2014
108. *Aspergillus nidulans* isolate GB-109; Accession: KM100855; July 2014

109. *Aspergillus quadrilineatus* isolate GB-108; Accession: KM100854; July 2014
110. *Aspergillus nidulans* isolate GB-107; Accession: KM100853; July 2014
111. *Aspergillus nidulans* isolate GB-106; Accession: KM100852; July 2014
112. *Penicillium* sp. MD-101; Accession: KM100847; July 2014
113. *Aspergillus fumigatus* isolate MD-100; Accession: KM100846; July 2014
114. *Penicillium commune* isolate MD-98; Accession: KM100844; July 2014
115. *Clonostachys pseudochroleuca* isolate MY-97; Accession: KM100843; July 2014
116. *Clonostachys pseudochroleuca* isolate MY-96; Accession: KM100842; July 2014
117. *Clonostachys rosea* isolate MY-95; Accession: KM100841; July 2014.
118. *Clonostachys pseudochroleuca* isolate MY-94; Accession: KM100840; July 2014
119. *Penicillium chrysogenum* isolate MY-93; Accession: KM100839; July 2014
120. *Citrobacter freundii* strain ECOBIO\_1; Accession: KP877533; Feb 2015
121. *Bacillus licheniformis* strain ECOBIO\_2; Accession: KP877534; Feb 2015
122. *Pseudomonas stutzeri* strain ECOBIO\_3; Accession: KP877535; Feb 2015
123. *Alcaligenes* sp. ECOBIO\_4; Accession: KP877536; Feb 2015
124. *Geotrichum candidum* strain UOMGNBF04; Accession: MH802507; Aug 2018.
125. *Ochroconis mirabilis* strain UOMGNBF05; Accession: MH802508; Aug 2018.
126. *Candida tropicalis* strain UOMGNBY01, Accession: MH802509 Aug 2018.
127. SUB10220328 G2 MZ841637
128. SUB10220328 G3 MZ841638
129. SUB10220328 G4 MZ841639