



Biodata

- **Name:** Dr. Sumanth B.
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- **Email ID:** simplesumanth007@gmail.com
- **Higher Education:** Ph.D. in Microbiology
- **Exams qualified:**
 - Cleared the KSET examination in the year 2014.
 - Cleared ICAR- ASRB NET examination in the year 2018.

Experience

- **Research:** 07 years
- **Teaching:** 03 years
- **Industry:** NA

Achievements

- **Recognitions and awards**
- **Best Paper Presentation:**
 - National conference on “Phytochemicals and Microbial bioactive compounds – role in agriculture and human welfare” organized by Dept. of Microbiology and Biotechnology, Bangalore University and UGC.
 - Presented a paper in the National Conference ‘Bioactive compounds and therapeutics’ organized by P.G. Department of life sciences, Oxford College of Science, and **won first prize for the poster.**
 - Presented a paper in National Conference ‘Emerging trends in chemistry with emphasis on Environment’ organized by the Department of Chemistry and Biochemistry, Vijaya College, and **won first prize for the poster** entitled “Dimethyl Sulfoxide- a wonder drug”.

- Presented a paper in the International conference “Nanobio, Biomimetic materials, and its applications” organized by Hindusthan College of arts and science, Coimbatore, and **won second prize in oral presentation** for the paper entitled “Green synthesis of ZnO nanoparticles using *C. roseus* and its applications”.

Young achiever award	Institute of Scholars awarded the Young achiever award for the year 2020 for one of the publications in the year 2020
Young researcher award	RSquarel awarded the Young researcher category of RSquarel for the year 2021
Research excellence award	RSquarel awarded Research excellence category of RSquarel for the year 2021

- Project procured: NA**
- Grants received: NA**

Teaching

Subject handled

- General Microbiology
- Microbial diversity
- Biochemical and microbial techniques
- Eukaryotic microbiology
- Microbial Biotechnology
- Fermentation and Bioprocessing

Publications

- Papers**

Author(s)	Title of Article	Name of Journal	Vol. No Year and Page Number	ISSN	Impact Factor
Sumanth, B. , Lakshmeesha, T. R., Ansari, M. A., Alzohairy, M. A., Udayashankar, A. C., Shobha, B., & Almatroudi, A.	Mycogenic synthesis of extracellular zinc oxide nanoparticles from <i>Xylaria acuta</i> and its nanoantibiotic potential	<i>International Journal of Nanomedicine</i>	15, 8519.	1178-2013	(I.F.-6.4)
Shobha, B., Lakshmeesha, T. R., Ansari, M. A., Almatroudi, A., Alzohairy, M. A., Sumanth B. & Chowdappa, S.	Mycosynthesis of ZnO nanoparticles using <i>Trichoderma</i> spp. isolated from rhizosphere soils and its	<i>Journal of Fungi</i>	6(3), 181.	2309-608X	(I.F.-5.27)

	synergistic antibacterial effect against <i>Xanthomonas oryzae</i> PV. <i>oryzae</i> .				
Narasimhamurthy Konappa, Shreya M. Joshi, Nirmaladevi Dhamodaran, Soumya Krishnamurthy, Sumanth Basavaraju , Srinivas Chowdappa & Sudisha Jogaiah	Green synthesis of <i>Callicarpa tomentosa</i> routed zinc oxide nanoparticles and their bactericidal action against diverse phytopathogens	<i>Biomass Conversion and Biorefinery</i>	1-12	2190-6823	(I.F.-4.13)
Basavaraju Sumanth , Balagangadharaswamy Shobha, Krishnappa Rahul, Marappa Rajganes, Chowdappa Srinivas.	Diversity analysis and seasonal variation of endophytic fungi from <i>Santalum album</i> .	International Journal of Botany Studies	6(2): 299-305.	2455-541X	
Balagangadharaswamy Shobha, Basavaraju Sumanth , and Chowdappa Srinivas.	Isolation and Identification of <i>Xanthomonas oryzae</i> PV. <i>oryzae</i> a Causative Organism for Bacterial Leaf Blight of Rice.	International Journal of Agricultural sciences.	12(1): 27–31.	0976-5670	
Balagangadharaswamy Shobha, Harish Bodaguru Maregowda, Sumanth Basavaraju , Thimappa Ramachandrappa Lakshmeesha, Srinivas Chowdappa.	Biological control and plant growth promotion using co-culture of <i>Trichoderma</i> spp. and its molecular docking studies against bacterial leaf blight of rice	International Journal of Botany Studies	6(1): 267-271	2455-541X	

- **Book chapter**

Title	Status of Authorship*	Publisher	Place	Year of Publication	ISBN
Fungal Biogenesis of NPs and Their Limitations. In <i>Microbial Nanotechnology: Green Synthesis and Applications</i>	First Author	Springer	Singapore	2021	978-981-16-1922-9

Research:

Research area of Interest: Microbiology (Fungal metabolites and Nanotechnology)

Project guided

Title	UG/PG	Important Contribution/Research Achieved
Diversity and antimicrobial potential of endophytic fungi from medicinal plants of Western Ghats of Karnataka	PG 2016	The endophytic load of each season in the western Ghats of Karnataka (Bisle region) was known and effective isolates were screened for antimicrobial potential.
Fabrication and Characterization of Zinc oxide nanoparticles isolated from endophytic fungi (<i>Xylaria acuta</i> and <i>Nigrospora oryzae</i>) and their bioactive potential	PG 2017	An eco-friendly and low-cost protocol for the biosynthesis of ZnO NPs using culture filtrate of <i>Xylaria acuta</i> and <i>Nigrospora oryzae</i> has been demonstrated in this study. The formation of ZnO NPs in extracellular secretion at room temperature can be easily handled during downstream processing.
Extraction, Characterization, and Purification of Bioactive compound from <i>Xylaria acuta</i> (<i>Millingtonia hortensis</i> L.)	PG 2018	A large number of bioactive metabolites of endophytic fungi have been extracted and characterized and these belong to diverse structural groups i.e. alkaloids, steroids, terpenoids, peptides, flavonoids, quinones, phenols, etc. ellagic acid was the compound purified.
Fungal synthesis of Zinc Oxide Nanoparticles using <i>Xylaria acuta</i> & its bioactive potential	PG 2019	The nanoparticle formed outside (extracellular) the cell is devoid of unnecessary cellular components, they can be used directly in various biomedical applications.