## **CURRICULUM VITAE**

Name	: Dr. M. Murali	
Fathers Name	: T.S. Mahadevamurthy	
Date of birth	: 12 <sup>th</sup> April 1985	
Marital status	: Married	
Address for	: S/o T.S. Mahadevamurthy	
Communication	#5057, Ground Floor, 8 <sup>th</sup> C Main Cross Dattagalli 3 <sup>rd</sup> Stage, Mysuru- 570 022	
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### **OBJECTIVE**

To work in a challenging and creative environment which will be useful to improve my talents with the highlighted and intellectual people and be the asset of such Institutions.

# EDUCATIONAL STATISTICS

Name of course	Institution	Year	Percentage	
M.Sc. (Botany)	Department of Studies in Botany, University of Mysore, Mysuru2005 - 200764.5			
Ph.D. (Botany)	Department of Studies in Botany, University of Mysore, Mysuru 2007- 2013		Awarded on 5 <sup>th</sup> December 2013	
	<b>Title:</b> Elicitors from plant growth promoting fungi (PGPF) for the induction of resistance in pearl millet against downy mildew disease			
PDF (Botany)	Department of Studies in Botany, University of Mysore, Mysuru 2016 - 2021		Total of Five (05) Years	
	<b>Title:</b> Studies on multiple defense signaling pathways involved during induction of resistance in pearl millet against downy mildew disease by Plant Growth Promoting Fungal (PGPF) metabolites			
KSET (Life Science)	University of Mysore Mysore (Nodal Agency)	2021	-	

## **RESEARCH STATISTICS**

Publications		Total No.	56		
	Journals	Cumulative Impact	Cumulative Impact Factor		
		Impact Factor Per F	1.806		
	Book Cha	pters	5		
	Books			1	
Indexed in Major Databases		Google Scholar	<b>Research Gate</b>	Scopus	
	Total Citations	636	504	298	
	H-Index	13	12	9	
	i10 Index	21	-	-	

### **TEACHING EXPERIENCE**

- 1. Presently working as Guest Faculty at the Department.
- 2. Worked as **Guest Faculty** at **Department of Studies in Botany**, Manasagangorti, University of Mysore, Mysuru-570 006 from 9<sup>th</sup> September 2014 to 17<sup>th</sup> April 2016 and presently working as Guest Faculty at the Department.

Major Papers Taught: Mycology & Plant Pathology, Plant Pathology, Seed Technology, Plant Breeding; Angiosperm Taxonomy; Plant Anatomy and Histochemistry, Tissue Culture. Theory Papers: Mycology & Plant Pathology, Seed Technology & Plant Breeding

### **EXPERIENCE WITH SCIENTIFIC METHODS**

Specialized	:	Molecular	Plant	Pathology	and	Microbiology,	Seed
		Technology, Nano-biotechnology, Tissue Culture					
Scientific Methods	:	Molecular Techniques like DNA and RNA isolation, qRT-PCR,					
		Protein purification, Molecular Markers, Isolation of Biological					
		Active Comp	ounds fr	om Biotic sou	rces, N	antotechnology	

### MEMBERSHIPS TO ACADEMIC BODIES

• Member of ISCA, ISMPP and AMI

### **RESEARCH PUBLICATIONS**

### **RESEARCH ARTICLES:**

- <u>Murali, M.</u>, Puneetha, G.K., Thriveni, M.C., Niranjan, M.H., Shivamurthy, G.R., Niranjana, S.R., Prakash, H.S. and Amruthesh, K.N. 2011. Phytochemical screening and antioxidant activity of hemi-parasitic Indian mistletoe *Viscum nepalense* Sprengel. Journal of Pharmacy Research. 4(10): 3348-3350.
- <u>Murali, M.</u>, Amruthesh, K.N., Sudisha, J., Niranjana, S.R. and Shetty, H.S. 2012. Screening for plant growth promoting fungi and their ability for growth promotion and induction of resistance in pearl millet against downy mildew disease. Journal of Phytology. 4(5): 30-36.
- Nagaraju, A., <u>Murali, M.</u>, Sudisha, J., Amruthesh, K.N. and Mahadeva Murthy, S. 2012. Beneficial microbes promote plant growth and induce systemic resistance in sunflower against downy mildew disease caused by *Plasmopara halstedii*. Current Botany. 3(5): 12-18.
- Murali, M., Sudisha, J., Amruthesh, K.N. and Shetty, H.S. 2013. Rhizosphere fungus *Penicillium chrysogenum* promotes growth and induces defence-related genes and downy mildew disease resistance in pearl millet. Plant Biology. 15:111-118 (IF: 2.167)
- Mythrashree, S.R., Geetha, N.P., Pushpalatha, H.G., <u>Murali, M.</u>, Shetty, H.S. and Amruthesh, K.N. 2013. *Lactuca sativa* mediated chitinase activity and resistance in pearl millet against *Sclerospora graminicola*. African Journal of Plant Science. 7(10): 492-503.
- 6. Puneetha, G.K., Thriveni, M.C., <u>Murali, M.</u>, Shivamurthy, G.R., Niranjana, S.R., Prakash, H.S., Sadashiva, M.P. and Amruthesh, K.N. 2013. Evaluation of a parasitic

flowering plant *Dendrophthoe trigona* (Wt. & Arn.) Danser for its phytochemical and antioxidant activities. Journal of Pharmacy Research. 7: 20-23.

- Anupama, N., <u>Murali, M.</u>, Sudisha, J. and Amruthesh, K.N. 2014. Crude oligosaccharides from *Alternaria solani* with *Bacillus subtilis* enhance defense activity and induce resistance against early blight disease of tomato. Asian Journal of Science and Technology. 5(7): 412-416.
- Mahesh, B., Belagali, S.L., <u>Murali, M.</u> and Amruthesh, K.N. 2014. Synthesis, characterization and biological activities of Hydrazide Schiff's Bases. International Journal of Chemical and Physical Sciences. 3(6): 82-90.
- Puneetha, G.K., <u>Murali, M.,</u> Thriveni, M.C. and Amruthesh, K.N. 2014. Phytochemical screening, antioxidant and antibacterial properties of *Taxillus cuneatus* (Roth.) Danser- A hemi-parasitic angiosperm. International Journal Current Microbiology Applied Science. 3(5): 702-711.
- Manjula, S., <u>Murali, M.,</u> Thriveni, M.C. and Amruthesh, K.N. 2014. Enhanced defense enzyme activity by seed treatment with partially purified ns-LTPs in pearl millet against downy mildew disease. Journal of Biological and Chemical Research. 31(2): 929-942.
- Jayalakshmi, B., Raveesha, K.A., <u>Murali, M.</u> and Amruthesh, K.N. 2015. Phytochemical, antibacterial and antioxidant studies on leaf extracts of *Piper betle* L. International Journal of Pharmacy and Pharmaceutical Sciences. 7(10): 23-29.
- 12. <u>Murali, M.</u> and Amruthesh, K.N. 2015. Plant growth promoting fungus *Penicillium oxalicum* enhances plant growth and induce resistance in pearl millet against downy mildew disease. Journal of Phytopathology. 163: 743-754 (IF: 1.179)
- Manjula, S., <u>Murali, M.</u>, Shivamurthy, G.R. and Amruthesh, K.N. 2015. Non-specific Lipid Transfer Proteins (ns-LTPs) from maize induce resistance in pearl millet against downy mildew disease. Phytoparasitica. 43: 437-447 (IF: 1.137)
- Hema, P., <u>Murali, M.</u>, Thriveni, M.C., Prathibha, M., Jayaramu, S.C. and Amruthesh, K.N. 2015. Phytochemical analysis and antibacterial activity of endophytic fungi isolated from *Basella rubra* L.- A medicinal plant. Journal of Pure and Applied Microbiology. 9(4): 2971-2978
- Puneetha, G.K., Mythrashree, S.R., Thriveni, M.C., <u>Murali, M.</u>, Jayaramu, S.C. and Amruthesh, K.N. 2016. Analysis of phytochemicals and evaluation of phenolic contents and antioxidant activities of *Macrosolen parasiticus* L. (Dans.) leaves. Journal of Medicinal Plants Studies. 4(2): 119-124.
- Abhayashrre, M.S., Murali, M. and Amruthesh, K.N. 2016. Abiotic elicitors mediated resistance and enhanced defense related enzymes in *Capsicum annuum* L. against anthracnose disease. Scientia Horticulturae. 204: 172-178 (IF: 2.769)
- 17. Mahendra, C., Manasa, G., Murali, M., Amruthesh, K.N., Sudarshana, M.S. and Lingaraju, D.P. 2016. Antibacterial and antioxidant properties of *Argyreia osyrensis* Roth. Annals of Phytomedicine. 5(1): 110-115.
- Murali, M., Hema, P., Thriveni, M.C. Manjula, S., Prathibha, M., Jayaramu S.C. and Amruthesh K.N. 2016. Antibacterial potential of fungal endophytes isolated from *Boerhaavia diffusa* L. Journal of Applied Pharmaceutical Science. 6(10): 216-221.
- 19. <u>Murali, M.,</u> Thriveni, M.C. Manjula, S., Mythrashree, S.R. and Amruthesh K.N. 2016. isolation of phosphate solubilizing fungi from rhizosphere soil and its effect on seed

growth parameters of different crop plants. Journal of Applied Biology & Biotechnology 4(6): 022-026.

- 20. Manasa, G., Mahendra, C., <u>Murali, M.</u>, Mahesh, H.M. and Sudarshana, M.S. 2016. Evaluation of phytochemicals and antibacterial activity of leaf and leaf derived callus extracts of *Artemisia annua* L. and *Sauropus androgynus* (L.) Merr. Journal of Applied and Natural Science. 8(4): 2189-2195.
- Pooja, P., Manasa, G., Sudarshana, M.S., <u>Murali, M.</u> and Mahendra, C. 2017. *In vitro* antioxidant, antibacterial and phytochemical screening of *Cochlospermum religiosum* (L.) Alston A potent medicinal plant. Tropical Plant Research. 4(1): 13-19.
- Abhayashree, M.S., <u>Murali, M.</u>, Thriveni, M.C., Sindhu, G.M. and Amruthesh, K.N. 2017. Crude oligosaccharides mediated resistance and histo-chemical changes in *Capsicum annuum* against anthracnose disease caused by *Colletotrichum capsici*. Plant Biosystems. 151(2): 221-233 (IF: 1.787)
- 23. <u>Murali, M.</u>, Mahendra, C., Rajashekar, N., Sudarshana, M.S., Raveesha, K.A. and Amruthesh, K.N. 2017. Antibacterial and antioxidant properties of biosynthesized zinc oxide nanoparticles from *Ceropegia candelabrum* L.–An endemic species. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy. 179: 104-109 (IF: 3.232)
- Mahendra, C., Manasa, G., Kiran, B.L., <u>Murali, M.,</u> Girish, H.V. and M. S. Sudarshana.
  2017. Phytochemical, Histochemical, and Antibacterial Screening of *Chenopodium anthelminticum* L. Journal of Herbs, Spices & Medicinal Plants. 23(03): 183-192.
- 25. <u>Murali, M.,</u> C. Mahendra, P. Hema, N. Rajashekar, A. Nataraju, M.S. Sudarshana and K.N. Amruthesh. 2017. Molecular profiling and bioactive potential of an endophytic fungus *Aspergillus sulphureus* isolated from *Sida acuta*: A medicinal plant. Pharmaceutical Biology. 55(1): 1623-1630. (IF: 2.971)
- 26. Mahesh, H.M., <u>Murali, M.</u>, Pal, M.A.C., Melvin, P., and Sharada, M.S. 2017. Salicylic acid seed priming instigates defense mechanism by inducing PR-Proteins in *Solanum melongena* L. upon infection with *Verticillium dahliae* Kleb. Plant Physiology and Biochemistry. 117: 12-23. (IF: 3.72)
- 27. Mahendra, C., <u>Murali, M.</u>, G. Manasa, Pooja Ponnamma, M.R. Abhilash, T.R. Lakshmeesha, A. Satish, K.N. Amruthesh, and M.S. Sudarshana. 2017. Antibacterial and antimitotic potential of bio-fabricated zinc oxide nanoparticles of *Cochlospermum religiosum* (L.). Microbial Pathogenesis. 110 (2017): 620-629 (IF: 2.914)
- 28. Lakshmeesha, T.R., Sreelatha, G.L., Ashwini, B.S., Gowtham, H.G., Brijesh Singh., <u>Murali, M.,</u> Sateesh, M.K., Chandra Nayaka, S. and Niranjana, S.R. 2018. Antifungal and phytochemical properties of *Syzygium aromaticum* essential oil against soybean seedborne fungi. International Journal of Current Advanced Research. 7(3): 10815-10820.
- Nazia Banu, <u>Murali, M.</u>, Thriveni, M.C. and Amruthesh, K.N. 2018. Seed priming effect of Aspergillus sp. (NBP-53) on plant growth and protection against anthracnose disease of chilli. International Journal of Current Advanced Research. 7(4): 12039-12042.
- 30. Gowtham, H.G., <u>Murali, M.,</u> Singh, S.B., Lakshmeesha, T.R., Murthy, K.N., Amruthesh, K.N. and Niranjana, S.R. 2018. Plant growth promoting rhizobacteria-*Bacillus amyloliquefaciens* improves plant growth and induces resistance in chilli against anthracnose disease. Biological Control. 126: 209-217 (IF: 2.754)

- 31. Sindhu, G.M., <u>Murali, M.,</u> Thriveni, M.C., Anupama, N. and Amruthesh, K.N. 2018. Growth promotion and disease resistance in muskmelon induced by crude proteins of *Penicillium verruculosum* against gummy stem blight disease. Asian Journal of Crop Science. 10(4): 160-167.
- 32. Anandan, S., <u>Murali, M.</u>, Chandra, A.U. and Urooj, A. 2019. *Ex vivo* and *in silico* molecular docking studies of aldose reductase inhibitory activity of apigenin from *Morus indica* L. Journal of Young Pharmacists. 11(1): 101-104.
- 33. Hemanth Kumar, N., Andia, J.D., Manjunatha, S., Murali, M., Amruthesh, K.N. and Jagannath, S. 2019. Antimitotic and DNA-binding potential of biosynthesized ZnO-NPs from leaf extract of *Justicia wynaadensis* (Nees) Heyne-A medicinal herb. Biocatalysis and Agricultural Biotechnology. 18: 101024.
- 34. Brijesh Singh, S., Gowtham, H.G., <u>Murali, M.,</u> Hariprasad, P., Lakshmeesha, T.R., Murthy, K.N., Amruthesh, K.N. and Niranjana, S.R. 2019. Plant growth promoting ability of ACC deaminase producing rhizobacteria native to sunflower (*Helianthus annuus* L.). Biocatalysis and Agricultural Biotechnology. 18: 101089.
- 35. Manasa, G., Mahendra, C., <u>Murali, M.</u>, Vinaya and Sudarshana, M.S. 2019. Assessment of phytochemicals and antioxidant activities of leaf and leaf derived callus extracts of *Lepianthes umbellata* (L.) Raf. A rare medicinal plant of Western Ghats. International Journal of Pure and Applied Bioscience. 7(2): 198-208.
- 36. Basavaraj, G.L., <u>Murali, M.</u>, Lavanya, S.N. and Amruthesh, K.N. 2019. Seed priming with biotic agents invokes defense response and enhances plant growth in pearl millet upon infection with *Magnaporthe grisea*. Biocatalysis and Agricultural Biotechnology. 21: 101279.
- 37. Anandan, S., <u>Mahadevamurthy, M.,</u> Ansari, M.A., Alzohairy, M.A., Alomary, M.N., Farha Siraj, S., Sarjan, H.N., Mahendra, C., Lakshmeesha, T.R., Hemanth Kumar, N.K., Ana E. Ledesma, Amruthesh, K.N. and Urooj, A. 2019. Biosynthesized ZnO-NPs from *Morus indica* attenuates methylglyoxal-induced protein glycation and RBC damage: *Invitro*, *in-vivo* and molecular docking study. Biomolecules. 9(12): 882 (IF: 4.082)
- 38. Hemanth Kumar, N.K., <u>Murali, M.</u>, Satish, A., Singh, S. B., Gowtham, H. G., Mahesh, H. M., Lakshmeesha, T.R. Amruthesh, K.N. and Jagannath, S. (2020). Bioactive and biocompatible nature of green synthesized zinc oxide nanoparticles from *Simarouba glauca* DC.: An endemic plant to Western Ghats, India. Journal of Cluster Science. 31(2): 523-534 (IF: 1.731)
- Mahendra, C., <u>Murali, M.,</u> Manasa, G. and Sudarshana, M.S. 2020. Biopotentiality of leaf and leaf derived callus extracts of *Salacia macrosperma* Wight.- An endangered medicinal plant of Western Ghats. Industrial Crops and Products. 143: 111921 (IF: 4.244)
- 40. Naziya, B., <u>Murali, M.</u> and Amruthesh, K.N. 2020. Plant Growth-Promoting Fungi (PGPF) instigate plant growth and induce disease resistance in *Capsicum annuum* L. upon infection with *Colletotrichum capsici* (Syd.) Butler & Bisby. Biomolecules. 10(1): 41. (IF: 4.082)
- 41. Gowtham, H.G., Singh, B., <u>Murali, M.,</u> Prasad, M., Aiyaz, M., Amruthesh, K.N. and Niranjana, S.R. 2020. Induction of drought tolerance in tomato upon the application of

ACC deaminase producing plant growth promoting rhizobacterium *Bacillus subtilis* Rhizo SF 48. Microbiological Research. 234: 126422. (**IF: 3.97**)

- Mahendra, C., Chandra, M.N., <u>Murali, M.,</u> Abhilash, M.R., Brijesh, S.S., Satish, S. and Sudarshana, M.S. 2020. Phyto-fabricated ZnO nanoparticles from *Canthium dicoccum* (L.) for antimicrobial, anti-tuberculosis and antioxidant activity. Process Biochemistry. 89: 220-226. (IF: 2.952)
- 43. Ansari, M.A., <u>Murali, M.</u>, Prasad, D., Alzohairy, M.A., Almatroudi, A., Alomary, M.N., Udayashankar, A.C., Brijesh Singh, S., Asiri, S.M.M., Ashwini, B.S., Gowtham, H.G., Nataraj, K., Amruthesh, K.N., Lakshmeesha, T.R. and Niranjana, S.R. 2020. *Cinnamomum verum* bark extract mediated green synthesis of ZnO nanoparticles and their antibacterial potentiality. Biomolecules. 10(2): 336. (IF: 4.082)
- 44. Lakshmeesha, T.R., \*<u>Murali, M.,</u> Ansari, M.A., Udayashankar, A.C., Alzohairy, M.A., Almatroudi, A., Alomary, M.N., Ashwini, B.S., Naveen Kumar, K., Chandra Nayak, S. and Niranjana, S.R. 2020. Biofabrication of zinc oxide nanoparticles from *Melia azedarach* and its potential in controlling soybean seed-borne phytopathogenic fungi. Saudi Journal of Biological Sciences. 27(8): 1923-1930. (IF: 2.802)
- 45. Prasad, K.S., Prasad, S.K., Ansari, M.A., Alzohairy, M.A., Alomary, M.N., AlYahya, S., Chandrashekar, S., <u>Murali, M.,</u> Veena, M.A. and Shivamallu, C. 2020. Tumoricidal and bactericidal properties of ZnONPs synthesized using *Cassia auriculata* leaf extract. Biomolecules. 10(7): 982. (IF: 4.082)
- 46. Kavya, J.B., \*<u>Murali, M.,</u> Manjula, S., Basavaraj, G.L., Prathibha, M., Jayaramu, S.C. and Amruthesh, K.N. 2020. Genotoxic and antibacterial nature of biofabricated zinc oxide nanoparticles from *Sida rhombifolia* Linn. Journal of Drug Delivery Science and Technology. 60: 101982. (IF: 2.734)
- Naziya, B., <u>Murali, M.</u> and Amruthesh, K.N. 2020. Agronomic survey and screening of genotypes for anthracnose infection in *Capsicum annuum* L. Asian Journal of Plant Sciences. 19(4): 354-360.
- 48. Udayashankar, A.C., Shivaram, A.B., <u>Murali, M.</u>, Lakshmeesha, T.R., Lalitha, S.G., Hemanth Kumar, N.K., Satish, A., Brijesh Singh, S., Chanappa, E.G. and Niranjana, S.R. 2020. Biosynthesis of zinc oxide nanoparticles using leaf extract of *Passiflora subpeltata*: characterization and antibacterial activity against *Escherichia coli* isolated from poultry faeces. Journal of Cluster Science. 1-10. (IF: 1.731)
- 49. Ali, S. G., Ansari, M. A., Jamal, Q. M. S., Almatroudi, A., Alzohairy, M. A., Alomary, M. N., Rehman, S., <u>Murali, M.</u>, Jalal, M., Khan, M.H., Adil, S.F., Khan, M. and Al-Warthan, A. (2021). *Butea monosperma* seed extract mediated biosynthesis of ZnO NPs and their antibacterial, antibiofilm and anti-Quorum sensing potentialities. Arabian Journal of Chemistry, 103044. (IF: 4.762)
- 50. <u>Murali, M.,</u> Anandan, S., Ansari, M.A., Alzohairy, M.A., Alomary, M.N., Asiri, S.M.M., Almatroudi, A., Thrivveni, M.C., Brijesh Singh, S., Gowtham, H.G., Aiyaz, M., Chandrashekar, S., Urooj, A. and Amruthesh, K. N. (2021). Genotoxic and Cytotoxic Properties of Zinc Oxide Nanoparticles Phyto-Fabricated from the Obscure Morning Glory Plant *Ipomoea obscura* (L.) Ker Gawl. Molecules, 26(4), 891. (**IF: 3.267**)
- 51. <u>Murali, M.,</u> Naziya, B., Ansari, M. A., Alomary, M. N., AlYahya, S., Almatroudi, A., Thriveni, M.C., Gowtham, H.G., Brijesh Singh, S., Aiyaz, M., Natraj, K. Lakshmidevi, N.

and Amruthesh, K. N. (2021). Bioprospecting of Rhizosphere-Resident Fungi: Their Role and Importance in Sustainable Agriculture. Journal of Fungi, 7(4), 314. (IF: 4.621)

- 52. Sujatha, H.S., <u>Murali, M.</u> and Amruthesh, K.N. (2021). Fungal Endophytes as Growth Promoters and Inducers of Resistance in Tomato (*Lycopersicon esculentum* Mill.) against *Alternaria solani*. International Journal of Life Science and Pharma Research, 11(2), L227-235.
- 53. Sujatha, H.S., <u>Murali, M.</u> and Amruthesh, K.N. (2021). Induction of resistance by elicitors of endophytic fungi against early blight disease caused by *Alternaria solani* in tomato (*Lycopersicon esculentum* Mill.). Plant Cell Biotechnology and Molecular Biology, 22(27&28):110-125.
- 54. Poornachandra Roa, K., Heamnth Kumar, N.K., Somashekaraiah, R., <u>Murali, M.</u>, Shobha, J. and Sreenivas, M.Y. (2021). Probiotic attributes and inhibitory effects of *Lactobacillus plantarum* MYS84 against the growth and biofilm formation of *Pseudomonas aeruginosa*. Microbiology, 90(3): 361-369. (IF: 0.945)
- 55. <u>Murali, M.</u>, Gowtham, H.G., Singh, S.B., Aiyaz, M., Niranjana, S.R. and Amruthesh, K.N. (2021). Bio-prospecting of ACC deaminase producing Rhizobacteria towards sustainable agriculture: A special emphasis on abiotic stress in plants. Applied Soil Ecology, 168, 104142. (IF: 4.046)
- 56. Jayalakshmi, B., Kavya Yadav, P.G., <u>Murali, M.</u> and Amruthesh, K.N. (2021) Antioxidant and Phytochemical Studies of the Rhizome Extracts of *Curcuma amada* Roxb and *Zingiber officinale* Rosc. Advances in Pharmacology and Pharmacy, 9(3): 65-74.

## **BOOK CHAPTER(S)**

- Girish, H.V., <u>Murali, M.</u>, Hemanth Kumar, N.K., Brijesh Singh, S., Shobha, J. and Sudarshana, M.S. 2021. GM crops as a food security solution. In: Policy Issues in Genetically Modified Crops: A Global Perspective. Ed. Pardeep, S., Borthakur, A., Abha Singh, A., Ajay Kumar and Kshitij K. Singh. Academic Press, Elsevier. Inc. pp.189-199. https://doi.org/10.1016/B978-0-12-820780-2.00009-1
- Hemanth Kumar, N.K., <u>Murali, M.</u>, Girish, H.V., Chandrashekar, S., Amruthesh, K.N., Sreenivasa, M.Y. and Shobha, J. 2021. Impact of climate change on biodiversity and shift in major biomes. In: Global Climate Change. Ed. Suruchi, S., Pradeep, S., Rangabhashiyam, S. and Srivastava, K.K. Elsevier Inc. https://doi.org/10.1016/B978-0-12-822928-6.00007-1
- Murali, M., Naziya, B. Brijesh Singh, S., Chandrashekar, S., Udayshankar, A.C. and Amruthesh, K.N., 2021. Management of Plant Fungal disease by Microbial Nanotechnology. In: Microbial Nanotechnology: Green synthesis and Applications. Ed. Ansari, M.A. and Rehman, S. Springer Nature, Singapore. https://doi.org/10.1007/978-981-16-1923-6\_14
- Chandrashekar, S., Kavitha, G.C., Pallavi, M., Chandan, S., Sushma P., Shiva Prasad, K., Aiyaz, M., Arun Kumar, S., <u>Murali, M.</u> and Ansari, M.A. 2021. Role of Viruses in Nanoparticle Synthesis. In: Microbial Nanotechnology: Green synthesis and Applications.

Ed. Ansari, M.A. and Rehman, S. Springer Nature, Singapore. https://doi.org/10.1007/978-981-16-1923-6\_6

 Hemanth Kumar, N.K., <u>Murali, M.</u>, Gowtham H.G., Sreenivasa, M.Y., Amruthesh, K.N., and Shobha, J. 2021. Application of Microbial Nanotechnology in Agriculture. In: Microbial Nanotechnology: Green synthesis and Applications. Ed. Ansari, M.A. and Rehman, S. Springer Nature, Singapore. https://doi.org/10.1007/978-981-16-1923-6\_13

### BOOK(S)

 Hemanth Kumar, N.K. and <u>Murali, M.</u> 2018. Toxicological Effects of Butachlor on Wheat - A Holistic Approach. Ed. Shobha Jagannath. LAP LAMBERT Academic Publishing, Maurioitius ISBN: 978-3-330-00744-4

### International & National Workshops/ Conference/ Seminars/ Symposia/ Short Term Course Participated

### **CONFERENCE:**

- National conference on "Advances in Biotechnology for Plant Protection" held at Department of Studies in Applied Botany and Biotechnology, University of Mysore, Mysore, India from 17<sup>th</sup> to 19<sup>th</sup> November 2008. Title: "Plant Growth Promoting Fungi (PGPF) induce systemic resistance in pearl millet against downy mildew disease"
- National conference on "Plant Biodiversity and Bioprospecting" held at Department of Studies in Botany, University of Mysore, Mysore, India on 16<sup>th</sup> and 17<sup>th</sup> March 2009. Title: "Plant Growth Promoting Fungi (PGPF) from pearl millet rhizosphere induce resistance in pearl millet against downy mildew disease"
- 3. 5<sup>th</sup> International Conference on "Plant Pathology in the Globalized Era" held at Indian Agricultural Research Institute, New Delhi, India from 10<sup>th</sup> to 13<sup>th</sup> November 2009. Title: "Plant Growth Promoting Fungi (PGPF) for increased plant growth and resistance against downy mildew disease in pearl millet".
- 4. Dr. Norman E. Borlaug Commemoration National Conference on "Plant Diversity and Plant Health" held at Department of Studies in Botany, University of Mysore, Mysore, India on 11<sup>th</sup> and 12<sup>th</sup> March 2010. Title: "Bioprospecting of Plant Growth Promoting Fungi (PGPF) for induction of resistance in pearl millet against downy mildew disease".
- 5. National conference on "Advance Trends and Perspectives in Biotechnology-Implications in Agriculture and Industry" held at Pooja Bhagavat Memorial Mahajana Post Graduate Centre, Mysore, India on 29<sup>th</sup> and 30<sup>th</sup> April 2010. Title: "Biochemical Screening and Antioxidant activity of semi-parasitic mistletoe *V. nepalense* Speng."
- 6. International Conference on "Microbial Biotechnology for Sustainable Development" held at Panjab University, Chandigarh, India from 3<sup>rd</sup> to 6<sup>th</sup> November 2011. Title: "Plant Growth Promoting fungi induce resistance in pearl millet against downy mildew disease and improve the mineral uptake from soil".
- 7. 3<sup>rd</sup> Global Conference on "Plant Pathology for Food Security" held at Rajasthan College of Agriculture, Udaipur, India from 10<sup>th</sup> to 13<sup>th</sup> January 2012. Title: "Accumulation of systemic resistance and defense related gene expression mediated by rhizosphere fungus *Penicillium chrysogenum* in pearl millet".

- 8. 103<sup>rd</sup> Indian Science Congress held at University of Mysore, India from 03<sup>rd</sup> to 07<sup>th</sup> January 2016. Title: Screening for phosphate solubilizing fungi and its effect on seed growth parameters of different crop plants".
- National Conference on "Science and Technology for Sustainable Society" held at AVK College for Women, Hassan, India on 29<sup>th</sup> March 2016.
- 10. International Conference on "Science & Technology: Future Challenges & Solutions" held at Vijnana Bhavan, University of Mysore, Mysuru, India on 8<sup>th</sup> and 9<sup>th</sup> August 2016. Title: "Eco-friendly Synthesis of ZnO Nanoparticles from *Ceropegia candelabrum* L. and its Antibacterial effect"
- 11. National Conference on "Scientific Advancements for Sustainable Development" held at Shri Dharmasthala Manjunatheshwara Mahila Maha Vidhyalaya, Mysuru on 22<sup>nd</sup> and 23<sup>rd</sup> February 2018.
- 12. International Conference on "Nanomaterials and their Applications" held at University of Mysore, Mysuru, India on 1<sup>st</sup> and 2<sup>nd</sup> March 2018.
- National Conference on "Science and Technology: Rural Development" held at Center for Materials Science and Technology, Vijnana Bhavan, University of Mysore, Mysuru, India on 17<sup>th</sup> and 18<sup>th</sup> October 2019
- 14. 7<sup>th</sup> International Conference on "Phytopathology in Achieving UN Sustainable Development Goals" held at ICAR-IARI, New Delhi, India from 16<sup>th</sup> to 20<sup>th</sup> January 2020.
- 15. National Conference on "Climate Change and Its impact on Biosphere" held at Bharathi College, Mandya, India on 20<sup>th</sup> February 2020.

## **SEMINARS/ SYMPOSIA:**

- 1. State Level Seminar on "Genetic Engineering and its impact" held at Bharathi College, Bharathinagar, Mandya, India on 24<sup>th</sup> January 2009.
- National Level Seminar on "Advanced Trends & Perspectives in Biotechnology" held at S.B.R.R. Mahajana First Grade College, Mysore, India on 8<sup>th</sup> and 9<sup>th</sup> March 2009.
- 3. One day Symposium on "Microbial Diversity" held at Dept. of Studies in Microbiology, University of Mysore, Mysore, India on 15<sup>th</sup> September 2010.
- National Level Seminar on "Boon and Curse of Biotechnology" held at Bharathi College, Bharathinagar, Mandya, India on 27<sup>th</sup> February 2015.
- 40<sup>th</sup> Indian Social Science Congress Symposium on "Perspective on Life Science Society and Emerging Technologies" held at University of Mysore, Mysuru, India during 19<sup>th</sup> to 23<sup>rd</sup> December 2016
- National Symposium on "Trends in Microbiology" held at Department of Studies in Microbiology, University of Mysore, Mysuru, India on 12<sup>th</sup> May 2017.
- National Symposium on "Current Developments in Plant Science" held at Department of Studies in Botany, University of Mysore, Mysuru, India on 2<sup>nd</sup> March 2018
- 8. National Seminar on "Biofarming for Sustainable Agriculture" held at Maharani's Science College for Women, Mysuru, India on 13<sup>th</sup> and 14<sup>th</sup> March 2018.
- 9. Symposium on "Life-Sciences for Future Sustainability" held at Government College for Women, Mandya, India on 30<sup>th</sup> January 2019.

- National Seminar on "New Frontiers in Biodiversity and its Conservation" held at Department of Botany and Zoology, Teresian College, Mysuru, India on 6<sup>th</sup> and 7<sup>th</sup> March 2019.
- 11. National Seminar on "Plants and Ayurveda: Opportunities and Challenges" held at Department of Studies in Botany, University of Mysore, Mysuru on 14<sup>th</sup> March 2019.
- National Seminar on "Innovations in Science and Technology for Sustainable Environment" held at AVK College for Women, Hassan, India on 21<sup>st</sup> and 22<sup>nd</sup> March 2019.
- 13. National Seminar on "Research and Publishing" held at Yuvraja's College, Mysuru, India on 23<sup>rd</sup> March 2019.
- 14. State Level Seminar on "Emerging Trends in Plant Science" held at JSS College of Arts, Commerce and Science, Mysiru, India on 9<sup>th</sup> March 2020

## **WORKSHOPS:**

- 1. Attended Two day National Workshop on "Solid Waste Management" held at Dept. of Studies in Geography, University of Mysore, Mysore, India on 10<sup>th</sup> and 11<sup>th</sup> March 2006.
- Attended Two day National Workshop on "Bio-fertilizers" held at Department of Botany, Sri Venkateshwara University, Tirupathi, India on 30<sup>th</sup> and 31<sup>st</sup> August 2009.
- Attended Three day National Workshop on "Advance Training in Proteomics and Genomics" held at Pooja Bhagavat Memorial Mahajana Post Graduate Centre, Mysore, India from 14<sup>th</sup> to 16<sup>th</sup> September 2011.
- 4. Attended One day National Workshop on "Modern Trends in Research Methodology" held at S.B.R.R. Mahajana First Grade College, Mysore, India on 20<sup>th</sup> December 2011.
- Attended a Two day Workshop on "Sustainable Management of Urban Water Bodies" held at Sri Chamarajendra Zoological Gardens, Mysore, India on 17<sup>th</sup> and 18<sup>th</sup> December 2012.
- 6. Attended One day Technical Workshop on "Exploring SciFinder (Chemical Abstracts) for Scientific Research in Academia" held at Department of Studies in Chemistry, University of Mysore, Manasagangotri, Mysore, India on 4<sup>th</sup> January 2014.
- Attended Science Academy Lecture Workshop on "Current Trends in Biological Sciences" held at Institution of Excellance, Vijnana Bhavana, University of Mysore, Mysuru, India during 27<sup>th</sup> and 28<sup>th</sup> April 2017.
- Attended Workshop on "Strengthening Forward- Backward Linkages for Sustained Supply of Quality Medicinal Plants to Industry through Profitable Cultivation" held at Vijnana Bhavana, University of Mysore, India on 1<sup>st</sup> October 2018.
- Attended Two Days National Workshop on "Application of DIGITAL PCR and SE3 CELL SORTER in Life Sciences" held at Institution of Excellence, Vijnana Bhavan, University of Mysore, Mysuru, India on 21<sup>st</sup> and 22<sup>nd</sup> November 2019.
- Attended State Level Workshop on "Career Opportunities in Earth and Environmental Sciences and Required background" held at Yuvraja's College, Mysuru, India on 29<sup>th</sup> February 2020.

### SHORT TERM COURSE:

UGC sponsored One Week Short Term Course on "Statistical Package" held at UGC-Human Resource Development Centre, University of Mysore, Mysuru, India during 21<sup>st</sup> to 27<sup>th</sup> March 2017.

### **AWARDS/ RECOGNITIONS/ FELLOWSHIPS**

- 1. Awarded UGC- Research Fellowship in Sciences (UGC- RFSMS) for undertaking Ph.D. Research Programme.
- 2. Awarded UGC- Rajiv Gandhi national Fellowship (UGC- RGNF) for undertaking Ph.D. Research Programme.
- 3. Awarded UGC- Post-Doctoral Fellowship for SC/ ST candidates for undertaking Post-Doctoral Research.
- 4. Commendation Award for Oral Paper presentation at 3<sup>rd</sup> Global Conference held at Udaipur.
- 5. Served as a Co-ordinator for Peoples Biodiversity Register (PBR) programme of Forest Department, Govt. of Karnataka.
- 6. A Letter of Appreciation from the Forest Department, Govt. of Karnataka for Enumerating Medicinal Plants and Peoples Biodiversity Register (PBR).

### **COMPUTER SKILLS**

- **Programming Languages** : MS DOS, WINDOWS
  - : MS OFFICE 2007, OFFICE, XP, SPSS

### REFERENCE

### Dr. K.N. Amruthesh

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**Operating Systems** 

#### Dr. S.R. Niranjana

Former Vice-Chancellor- Gulbarga University Professor & Chairman Department of Studies in Biotechnology University of Mysore Manasagangotri, Mysore- 570 006 Ph. No. +91 8197077637 Email: niranjanasr@rediffmail.com

### **DECLARATION**

I hereby declare that the above information is true to the best of my knowledge and belief.

H. H.

(Dr. M. Murali)