

## Curriculum Vitae

### **Dr. Rajkumar H. Garampalli**

Professor  
Department of Studies in Botany  
Vijayanagara Sri Krishnadevaraya University  
Jnana Sagara Campus, Vinayakanagara, Cantonment  
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### **Education**

**Post Doc - Plant Pathology, University of Georgia, Athens, Georgia, USA, 2014-2015**

**Ph.D. Botany, Gulbarga University, Kalaburagi, Karnataka, India – 2003**

**M. Phil. Botany, Gulbarga University, Kalaburagi, Karnataka, India – 1999**

**M.Sc. Botany, Gulbarga University, Kalaburagi, Karnataka, India - 1998**

**B.Sc. Botany, Chemistry, Zoology, Gulbarga University, Kalaburagi, Karnataka, India -1996**

### **Professional Experience**

**Professor**, Department of Studies in Botany, VSK University, Ballari 6/2019 – till date

**Associate Professor**, Department of Studies in Botany, University of Mysore, 8/2016 – 6/2019

**Assistant Professor**, Department of Studies in Botany, University of Mysore, 8/2004 – 8/2016

**Post-Doctoral Research** at Department of Plant Pathology, College of Agricultural and Environmental Sciences, University of Georgia, Athens, Georgia, USA - 10/2014 - 09/2015

### **Awards/Honors**

**Raman Post Doctoral Research Fellowship** award by **University Grants Commission, MHRD, Government of India, New Delhi**, for the year 2014-15

**Best Paper presentation** award at UGC Sponsored Two Day National Seminar on 'Recent Advances in Traditional Uses of Medicinal Plants' Organized by Dept. of Botany, LVD College, Raichur, Karnataka, India on 30 & 31 March, 2018.

### **Professional Activities**

**Organizing Committee Member**, National Conference on Plant Biodiversity and Bioprospecting - 16<sup>th</sup> & 17<sup>th</sup> March 2009

**Organizing Committee Member**, National Conference on Plant Diversity and Plant Health - 11<sup>th</sup> & 12<sup>th</sup> March 2010

**Organizing Committee Member**, ISMPP-South Zone Conference on Fungal Diversity and Emerging Crop Diseases - 12<sup>th</sup> & 13<sup>th</sup> May 2011

**Course Coordinator**, Workshop on Fungal Biology and Taxonomy - 25<sup>th</sup> to 30<sup>th</sup> March, 2013

**Organizing Committee Member**, 103<sup>rd</sup> Indian Science Congress, held at UOM

**Co-convenor**, 40<sup>th</sup> Indian Social Science Congress held at UOM

**Chairman**, Board of Examiners in Botany, University of Mysore, Mysore, Karnataka

**Member**, Board of Studies in Botany, Tumkur University, Tumkur, Karnataka

**Member**, Board of Examiners in Botany, Rani Chennama University, Belagavi, Karnataka

**Member**, Board of Examiners in Botany, Gulbarga University, Kalaburagi, Karnataka

**Member**, Board of Examiners in Botany, P.G. Department of Botany, Yuvaraja's College (Autonomous), Mysore, Karnataka

**Member**, Board of Examiners in Botany, Tumkur University, Tumkur, Karnataka

**Chairman**, Doctoral Committee, Department of Studies in Botany, University of Mysore, Manasagangotri, Mysore – 570 006, Karnataka (for 8 students)

**Convenor**, Doctoral Committee, Department of Studies in Botany, University of Mysore, Manasagangotri, Mysore – 570 006, Karnataka (for 3 students)

**Course Coordinator**, M. Sc. Botany (CBCS)

**Course Coordinator**, Ph.D. Course Work in Botany (CBCS)

**Mentor**, UGC-MOOCs SWAYAM courses, Department of Studies in Botany, University of Mysore, Manasagangotri, Mysore – 570 006, Karnataka

**Delivered Special Lectures** at 'Capacity Building Programme for KRP's in Biology and ICT in Teaching of Science at Senior Secondary Level at all India' held from 06-03-2017 to 10-03-2017 at Central Institute of Educational Research, (NCERT), Sri Aurobindo Marg, New Delhi.

**Local Convenor**, Regional Workshop on 'Strengthening forward - backward linkages for Sustained Supply of Quality Medicinal Plants to Industry through Profitable Cultivation' held at Vijnana bhavan, University of Mysore, Karnataka on October 1, 2018 organized by Department of Studies in Botany, University of Mysore, Mysuru, Karnataka; Karnataka Medicinal Plants Authority (KaMPA), Bengaluru; **NMPB- RCFC Southern Region, Kerala Forest Research Institute**, Peechi, Kerala and Sponsored by **National Medicinal Plants Board**, New Delhi

### **Research:**

The research work aimed at developing sustainable technologies that will aid growers in effectively managing both soil borne and air borne vegetable crop and ornamental plant diseases. Four areas of considerable research efforts and outputs are: development and demonstrating organic management as an effective tool for fungal diseases, development of advanced nanomaterials for plant disease management (Ag based nanomaterials against fungal diseases), detection and characterization of plant pathogens (*Perenosclerospora sorghi* affecting sorghum; *Didymella bryoniae* affecting cucurbits; *Alternaria solani* and *Fusarium*

*oxysporum* affecting tomato, and other phytopathogens) and bioprospecting lichens managing human ailments like hyperglycemia and obesity and screening the efficacy of lichen extracts against human pathogenic bacteria. Research in the past 14 years since joining as a faculty at the University of Mysore has led to 52 Peer-reviewed journal publications and 2 book chapters. Review the list of research publications for additional information.

**Professional training:**

Workshop-cum-Training Course on Molecular tagging of inoculants strains for ecological studies, Division of Microbiology, Indian Agricultural Research Institute, New Delhi, August, 2000

Training Course Biofertilizer Technology, Division of Microbiology, Indian Agricultural Research Institute, New Delhi, October-November, 2002

DBT sponsored Hands on Training cum Workshop on Application of Biotechnology in Agriculture, The Energy and Resources Institute, New Delhi, June 2006

Intellectual Property Training and Awareness held on 10-04-2014 at Institute of Excellence, University of Mysore, Manasagangotri, Mysore, Karnataka.

Workshop on Analysis of Population Genetic Data in R, American Phytopathological Society Annual Meeting, Pasadena, CA, USA, August, 2015

Brainstorming workshop on Adoption of UGC-MOOCs SWAYAM Course, 28-04-2018, Vijnana Bhavan, University of Mysore, Manasagangotri, Mysore

**Current Ph. D. students** (Country of birth and mentoring role in the dissertation/thesis research committee):

1. Thejesh Kumar M. P., India, Ph.D. Botany – Chair
2. Savitha R. S., India, Ph.D. Botany – Chair
3. Smitha N., India, Ph.D. Botany – Chair
4. Siddharth, A., India, Ph.D. Botany – Chair
5. Amara K. V., India, Ph.D. Botany – Chair

**Ph.D. Students graduated/awarded** (Country of birth and mentoring role in the dissertation/thesis research committee):

1. Veerabhadraswamy A. L., India, Ph.D. Botany – Chair
2. Sunil Kumar C. P., India, Ph.D. Botany – Chair
3. Heminder Singh, India, Ph.D. Botany – Chair
4. Rashmi S., India, Ph.D. Botany – Chair
5. Seema H. S., India, Ph.D. Botany – Chair
6. Ravikumar M. C., India, Ph.D. Botany – Chair
7. Anil Kumar R., India, Ph.D. Botany – Chair
8. Hengameh Parizadeh, Iran, Ph.D. Microbiology – Chair
9. Mangala K. G., India, Ph.D. Botany – Chair
10. Smitha K. C., India, Ph.D. Botany – Chair (Thesis submitted to University of Mysore for evaluation).

**M. Phil. Students graduated/awarded** (Country of birth and mentoring role in the dissertation/thesis research committee):

1. Vidyabahrathi B. P., India, M. Phil. Botany – Chair
2. Rashmi S., India, M. Phil. Botany – Chair
3. Smitha K. C., India, M. Phil. Botany – Chair
4. Megha G., India, M. Phil. Botany – Chair
5. Savitha R. S., India, M. Phil. Botany – Chair
6. Uma A., India, M. Phil. Botany – Chair
7. Bahnu Priya, India, M. Phil. Botany – Chair

**Grant Funding Generated** (From External and Internal Sources: UOM, UGC, DST, IOE-MHRD) through the projects/programs from 08/2004 to present: **Rs. 5,402,000.00**

## List of publications

### Refereed journal publications (52)

Thejesh Kumar M. P. and **Rajkumar H. Garampalli (2019)**. Characterization and fungistatic activity of *Eucalyptus globulus* leaf extract mediated phytosynthesized silver nanoparticles, *International Journal of Scientific Research in Biological Sciences*, 6(1): 105-111.

Rashmi S. and **Rajkumar H. G. (2019)**. Diversity of Lichens along Elevational Gradients in Forest Ranges of Chamarajanagar District, Karnataka State, *International Journal of Scientific Research in Biological Sciences*, 6(1): 97-104

Le Thi Thanh, Thejesh Kumar M. P. and **Rajkumar H. Garampalli (2018)**. Green synthesis of gold nanoparticles using *cassia alata* leaf extract and evaluation of antimicrobial activities, *World Journal of Pharmaceutical Research*, 7 (07): 1106-1116

Mangala, K. Gopalkrishna and **Rajkumar, H. Garampalli (2018)**. Efficacy of fungicides and culture filtrate of native bioagents against *Didymella bryoniae* causing gummy stem blight disease in gherkin, *Int. J. Pure App. Biosci.* 6 (1): 1122-1132

Smitha K. C. and **Rajkumar H. Garampalli (2018)**. *In vitro* antimicrobial activity of *Ramalina pacifica* and *Rocella montagnei* lichens, *Asian Journal of Research in Chemistry and Pharmaceutical Sciences*. 6(3): 118-127.

Hengameh Parizadeh and **Rajkumar H. Garampalli (2017)**. Physiological and chemical analysis for identification of some lichen extracts, *Journal of Pharmacognosy and Phytochemistry*, 6(5): 2611-2621

Rashmi Shivanna, Hengameh Parizadeh and **Rajkumar H. Garampalli (2017)**. *In vitro* anti-obesity effect of macrolichens *Heterodermia leucomelos* and *Ramalina celastri* by pancreatic lipase inhibitory assay, *International Journal of Pharmacy and Pharmaceutical Sciences*, 9 (5): 137-140

Hengameh Parizadeh and **Rajkumar H. G. (2017)**. Assessment of Bactericidal Activity of Some Lichen Extracts by Disc Diffusion Assay, *International Journal of Drug Development and Research*, 9(1): 09-19

**Garampalli R. H.**, Mangala K. G., Li H., and Brewer M. T. (2016). Two *Stagonosporopsis* species identified as causal agents of gummy stem blight epidemics of gherkin cucumber (*Cucumis sativus*) in Karnataka, India. *European Journal of Plant Pathology*, 145:507–512

- Smitha K. C. and **Rajkumar H. Garampalli (2016)**. Evaluation of phytochemicals and *in vitro* antioxidant activity of *Ramalina pacifica* and *Roccella montagnei*, *Journal of Pharmacognosy and Phytochemistry*, 5(2): 270-274
- Rashmi S. and **Rajkumar H. G. (2016)**. Lichens of Mysore District in Karnataka State – A Contribution to Indian Lichen Inventory, *Journal of Mycology and Plant Pathology*, 46(3): 250 – 258
- Ravikumar, Heminder Singh, and **R.H. Garampalli, (2016)**. Comparative evaluation of long-term storage techniques on viability and virulence of *Alternaria solani*, *Journal of Taibah University for Science*, 10: 607–613
- Seema H. Siddur and **Rajkumar H. Garampalli, (2016)**. Efficacy of three arbuscular mycorrhizal fungi on growth of *Centella asiatica* L. (Urban), *Asian Journal of Plant Science and Research*, 6(3):11-16
- Hengameh P., Rashmi S. and **Rajkumar H. G. (2016)**. *In vitro* inhibitory activity of some lichen extracts against  $\alpha$ -amylase enzyme, *European Journal of Biomedical and Pharmaceutical Sciences*, 3(5): 315-318
- Rashmi Shivanna and **Rajkumar H. Garampalli (2016)**. Investigation of macrolichens for antifungal potentiality against phytopathogens, *Indo American Journal of Pharmaceutical Research*, 6(04): 5290-5296
- Hengameh Parizadeh and **Rajkumar H. Garampalli (2016)**. Evaluation of Some Lichen Extracts for  $\beta$ -Glucosidase Inhibitory as a Possible Source of Herbal Anti-diabetic Drugs, *American Journal of Biochemistry*, 6(2): 46-50
- Heminder Singh, Farhan Zameer, Shaukath Ara Khanum and **Rajkumar H. Garampalli (2016)**. Durantol - a phytosterol antifungal contributor from *Duranta repens* Linn. For organic Management of Sorghum Downy Mildew, *European Journal of Plant Pathology*, 146:671–682
- Anil Kumar Ramaiah and **Rajkumar H. Garampalli (2015)**. *In vitro* antifungal activity of some plant extracts against *Fusarium oxysporum* f. sp. *lycopersici*, *Asian Journal of Plant Science and Research*, 5(1):22-27
- Rashmi S. and **Rajkumar H. G. (2015)**. First Report of Follicolous Lichen Biota in South Karnataka-India, *International Journal of Current Microbiology and Applied Sciences*, 4(6): 250-256
- Rashmi Shivanna, Hengameh Parizadeh and **Rajkumar H. Garampalli (2015)**. Screening of lichen extracts for *in vitro* antidiabetic activity using alpha amylase inhibitory assay, *International Journal of Biological & Pharmaceutical Research*, 6(5): 364-367
- Rashmi S. and **Rajkumar H. G. (2015)**. Evaluation of antifungal activity of lichen extracts against phytopathogenic fungi *Macrophomina phaseolina* (Tassi) Goid, *International Journal of Current Research*, 7(7): 17718-17721
- Rashmi S. and **Rajkumar H.G. (2015)**. Enumeration and New records of Lichens in Kodagu district- A Micro Hotspot in Western Ghats of Karnataka, India *International Research Journal of Environment Sciences*, 4(12): 17-25
- Rashmi S. and **Garampalli R. H. (2015)**. Evaluation of fungistatic potential of lichen extracts against *Fusarium solani* (Mart.) Sacc. causing Rhizome rot disease in Ginger. *Journal of Applied Pharmaceutical Science*, 5(10): 67-72

- Seema H. S. and **Garampalli R. H. (2015)**. Effect of Arbuscular Mycorrhizal fungi on growth and biomass enhancement in *Piper longum* L. (Piperaceae). *Int. J. Curr. Microbiol. App. Sci* 4(1): 11-18
- Smitha, K.C., Sunilkumar C.P. and **Garampalli R. H. (2014)**. Infectivity and Efficacy of *Glomus fasciculatum* and *Acaulospora leavis* on the growth and nutritional factors of *Vigna radiata* (L.) R. Wilczek. *World Journal of Agricultural Sciences*, 10 (5): 247-252
- Rashmi S. and **Rajkumar H. G. (2014)**. Preliminary phytochemical screening of different solvent extracts of lichens from Kodagu district, Karnataka. *Journal of Pharmacognosy and Phytochemistry*, 3(4): 209-212
- Rashmi S. and **Garampalli R. H. (2014)**. Efficacy of lichen extracts as biocontrol agents against *Fusarium oxysporum* F. Sp. Capsici. *Advances in Applied Science Research*, 2014, 5(5):273-277
- AnilKumar R. and **Garampalli R. H. (2014)**. Antagonistic effect of rhizospheric *Aspergillus* species against *Fusarium oxysporum* f. sp. *lycopersici*. *International Journal of Chemical and Analytical Science*, 5(1):39-42
- Veerabhadraswamy A. L. and **R.H. Garampalli. (2014)**. Evaluation of four *Trichoderma* spp. for the biological control of Black bundle disease (*Cephalosporium acremonium*) in maize. *Elixir Appl. Botany*, 66:20759-20763
- AnilKumar R. and **Garampalli R. H. (2013)**. Screening of indigenous potential antagonistic *Trichoderma* species from tomato rhizospheric soil against *Fusarium oxysporum* f. sp. *lycopersici*. *Journal of Agriculture and Veterinary Science*, 4(3):42-47
- Manjunatha H.P., Singh H., Chauhan J. B., Zameer F. and **Garampalli R. H. (2013)**. Induction of resistance against sorghum downy mildew by seed treatment with *Duranta repens* extracts. *Journal of Agriculture and Veterinary Science*, 3(6): 37-44
- Ravikumar M.C. and **Garampalli R. H. (2013)**. Antifungal activity of plants extracts against *Alternaria solani*, the causal agent of early blight of tomato. *Archives of Phytopathology and Plant Protection*, 46(16):1897-1903
- Singh H and **Garampalli R. H. (2013)**. A novel technique for greenhouse evaluation of plant extracts for management of downy mildew of sorghum. *Archives of Phytopathology and Plant Protection*, 46(16):1984-1992
- Singh H., Ravikumar M.C . and **Garampalli R. H. (2013)**. Enhancement of downy mildew of sorghum by some organic soil amendments: a caution to organic farmers. *Archives of Phytopathology and Plant Protection*, 46(9):1030-1035
- Singh H and **Garampalli R. H. (2013)**. An efficient technique to obtain conidial inoculum of *Peronosclerospora sorghi* causing downy mildew of sorghum. *Archives of Phytopathology and Plant Protection*, 46(6):656-662
- Singh H and **Garampalli R. H. (2013)**. Evaluation of uncomposted botanical-based soil amendments for organic management of downy mildew of Sorghum. *Archives of Phytopathology and Plant Protection*, 46(5):599-606
- Sunilkumar C. P. and **Garampalli R. H. (2013)**. Diversity of arbuscular mycorrhizal fungi in irrigated and non-irrigated fields of southern Karnataka, India. *Journal of Environmental Biology*, 34:159-164
- Veerabhadraswamy A. L. and **Rajkumar H. G. (2013)**. Isolation and molecular detection of *Cephalosporium acremonium*: The Causative agent of black bundle disease in maize *International Journal of Current Research*, 5(2):47-52

Singh H. and **Garampalli R. G. (2012)**. Comparative evaluation of composts and dried powdered biomass of botanicals for organic management of downy mildew of sorghum. *Archives of Phytopathology and Plant Protection*, 45(20): 2454-2464

Singh H. and **Garampalli R. H. (2012)**. Screening of plant extracts for organic management of downy mildew of sorghum. *Archives of Phytopathology and Plant Protection*, 45(14): 1732-1740

Singh H. and **Garampalli R. H. (2012)**. A special method to confirm non-feasibility of secondary spread of downy mildew systemic infection between sorghum seedlings of similar age. *International Journal of Plant Research*. 2(3): 90-93

Sunilkumar C. P., Seema H. S. and **Garampalli R. H. (2012)**. Occurrence and distribution of arbuscular mycorrhizal fungi in agricultural fields of Mysore. *World Journal of Science and Technology*, 2 (2): 1-7

**Rajkumar H. G.,** Seema H. S. and Sunilkumar C. P. (2012). Diversity of arbuscular mycorrhizal fungi associated with some medicinal plants in Western Ghats of Karnataka region, India. *World Journal of Science and Technology*, 2 (1): 13-20

**Rajkumar H. G.** and Sunilkumar C. P. (2011). Status of AM fungi associated with some medicinal plants of Mysore. *Mycorrhizal News*. 23(3): 5-8

Rashmi S. and **Rajkumar H. G. (2011)**. Preliminary phytochemical analysis and in vitro evaluation of antifungal activity of five invasive plant species against *Macrophomina phaseolina* (Tassi) Goid. *International Journal of Plant Research*. 1(1): 11-15

Veerabhadraswamy A. L. and **Rajkumar H. G. (2011)**. Host-pathogen interaction between *Cephalosporium acremonium* Corda and maize (*Zea mays*) seedling *Journal of Mycology and Plant Pathology*. 41(3): 445-450

Veerabhadraswamy A L and **Garampalli H. G. (2011)**. Effect of arbuscular mycorrhizal fungi in the management of black bundle disease of maize caused by *Cephalosporium acremonium*. *Science Research Reporter*, 1(2): 96 – 100

Sunilkumar C. P. and **Garampalli R. H. (2010)**. Diversity of arbuscular mycorrhizal fungi in agricultural fields of Hassan district. *World Journal of Agricultural Science*, 6 (6): 728-734

**Garampalli R. H.,** Deene S. and Reddy C. N. (2005). Infectivity and efficacy of *Glomus aggregatum* and growth response of *Cajanus cajan* (L.) Millsp. in flyash amended sterile soil. *Journal of Environmental Biology*, 26(4): 705-708

Reddy C. N., Bharati B. K., **Rajkumar H. G.** and Sunanda D. N. (2004). Infectivity and efficacy of four native vesicular-arbuscular mycorrhiza fungi on sugar cane (cv. CO 419). *Mycorrhiza News*, 16(2): 9-12.

Deene S., **Garampalli R.** and Reddy C. N. (2004). Influence of dual inoculation with vesicular arbuscular mycorrhizal fungus (*Glomus aggregatum*) and *Fusarium udum* on plant vigour and wilt disease incidence of pigeon pea. *Phytomorphology*, 54(1&2): 1-7

**Garampalli R. H.** and Reddy C. N. (2002). A simple technique for clearing adherent debris of VAM fungal spores for identification. *Mycorrhiza News*, 14(3): 14-15

## Book chapters (2)

Reddy C. N. and **Garampalli R. H. (2002)**. Effect of flyash on VAM formation and growth response of pulse crops infested with *Glomus aggregatum* in sterile soil. *In: Frontiers in*

Microbial Biotechnology and Plant Pathology, Ed. Manoharachary C., Purohit D. K., Charya M.A.S., Girisham S. and Reddy R. S., Scientific Publishers, Jodhpur. 2002 . pp. 205-212

**Garampalli R. H.**, Singh H. and Ravikumar M. C. (2015). Role of Organic Amendments in Plant Disease Management: An Overview. *In: Major Constrains and Verdict of Crop Productivity*, Ed. Bhale U. N. Astral International (P) Limited, New Delhi. 2015. pp. 64-74

#### **Invited presentations (03)**

**Garampalli R. H.** (2008). Diversity of AM fungi. UGC Sponsored- Networking Resource Centre in Biological Sciences – Biodiversity and Conservation, School of Biological Sciences, Madurai Kamaraj University, Palkalainagar, Madurai, Tamil Nadu, India.

**Garampalli R. H.** and Singh H. (2012). Comparative evaluation of composts and dried powdered biomass of botanicals for organic management of downy mildew of sorghum, UGC Sponsored Seminar on Medicinal Plants: Current status and Future Prospects, The Islamia College of Science & Commerce, Srinagar, Jammu and Kashmir, India.

**Rajkumar H. Garampalli** (2017). Medicinal Values of lichens: *In vitro* anti-hyperglycemic properties of two lichen extracts. National Interaction Meeting of Practitioners and Researchers of Traditional Systems of Medicine to be held on October 12-13, 2017 at Kerala Forest Research Institute, Peechi, Thrissur, Kerala.

#### **Membership to professional Organization/Associations:**

1. Indian Science Congress Association - Life Member
2. Indian Society of Mycology and Plant Pathology - Life Member

#### **Other information:**

1. Recognized Guide in Botany of the University of Mysore.
2. Recognized Guide in Microbiology of the University of Mysore.
3. Recognized Guide in Botany of the VSK University, Ballari.

**(Rajkumar H. Garampalli)**