

Dr. R. Ravikumar

Associate Professor,
PG and Research Department of Botany,
Jamal Mohamed College,
Tiruchirappalli- 620 020.
Mobile No: +91-9787486255
Phone No : 0431-2331235
Email ID: dr.ravi_1968@yahoo.com , drravijmc@gmail.com

**Educational Qualification:**

Degree	Subject	Institution/University	Year of passing
UG	Botany	Jamal Mohamed college, Bharathidasan University	1985-88
PG	Botany	Jamal Mohamed college, Bharathidasan University	1989-91
B.Ed	Botany	Annamalai University	1991-92
Ph.D	Botany	Bharathidasan University	1998

Positions held:

- Associate Professor of Botany, Jamal Mohamed College (*Autonomous*) from 20-08-2019 to till date
- Assistant Professor of Botany, Jamal Mohamed College (*Autonomous*) from 01-07-2003 to 19-08-2019
- Deputy Controller of Examinations, Jamal Mohamed College (*Autonomous*) from 2019-2022
- Chief Superintendent – Autonomous Examinations, Jamal Mohamed College (*Autonomous*) from 2019 – 2022.

Honors and Awards: College first rank in M.Sc., Botany (1989-1991)

Area of Research: Plant Tissue Culture and Microbiology

Research Projects Completed:

Major research Project funded by UGC in 2011 to work on the Microbial and molecular investigation of decolorization and degradation of textile dye effluent through field application studies for solving the problems of textile industry belt of Tamil Nadu.

Positions held:

S. No	Position	Institution/ University	From	To
1.	Lecturer	Jamal Mohamed College	01-07-2003	19-08-2007
2.	Assistant Professor	Jamal Mohamed College	20-08-2007	19-08-2019
3.	Associate Professor	Jamal Mohamed College	20-08-2019	Till Date

Number of M.Phil / Ph.D Guided:

M.Phil		Ph.D	
Awarded	Pursuing	Awarded	Pursuing
27	-	09	02

Submissions to GenBank database:

S.No	Accession No	Nucleotide	source
1	FJ966212		<i>Bacillus sp. SK03</i>
2	FJ974057	16s rRNA partial	<i>Bacillus firmus SK20</i>
3	FJ974058	16s rRNA partial	<i>Paenibacillus lautus SK21</i>
4	FJ974059	16s rRNA partial	<i>Pseudomonas stutzeri JMC 01</i>
5	GQ120620	16s rRNA partial	<i>Bacillus subtilis JMC02</i>
6	HM451426	16s rRNA partial	<i>Comamonas species strain JMC-UBL-27</i>
7	HM451427	16s rRNA partial	<i>Enterococcus faecalis strain JMC-UBL-31</i>
8	HM451428	16s rRNA partial	<i>Enterococcus Fecalis strain JMC-UBL-02</i>
9	HM451429	16s rRNA partial	<i>Bacillus flexus strain JMC-UBL-24</i>
10	HM451430	16s rRNA partial	<i>Acinetobacter species strain JMC-UBL 15</i>
11	HM451431	16s rRNA partial	<i>Bacillus species strain JMC-UBL 15</i>
12	HM451432	16s rRNA partial	<i>Acinetobacter species strain JMC-UBL 17</i>
13	HM451433	16s rRNA partial	<i>Comamonas species strain JMC-UBL 19</i>

14	HM451434	16s rRNA partial	Bacillus species strain <i>JMC-UBL 10</i>
15	HM451435	16s rRNA partial	Paenibacillus species strain <i>JMC-UBL 34</i>
16	HM451436	16s rRNA partial	partial Bacillus endophyticus strain <i>JMC-UBL 13</i>
17	HM451437	16s rRNA partial	Bacillus anthracis strain <i>JMC-UBL 06</i>
18	HM451438	16s rRNA partial	Pseudomonas species strain <i>JMC-UBL 26</i>
19	HM451439	16s rRNA partial	Bacillus thuringiensis strain <i>JMC-UBL 03</i>
20	HM451440	16s rRNA partial	Bacillus cereus strain <i>JMC-UBL 09</i>
21	HM451441	16s rRNA partial	Bacillus pumilus strain <i>JMC-UBL 20</i>
22	HM451442	16s rRNA partial	Lysinibacillus species strain <i>JMC-UBL 45</i>
23	HM451443	16s rRNA partial	Bacillus megaterium strain <i>JMC-UBL 23</i>
24	HM451444	16s rRNA partial	Pseudomonas species strain <i>JMC-UBL 01</i>
25	HM451445	16s rRNA partial	Azoarcus species strain <i>JMC-UBL 43</i>

Conference / Seminar Attended:

1. National conference on Mycorrhizal Technology, March 17-18, 1995. University of Madras, Guindy Campus, Chennai.
2. Callus induction and high frequency plant regeneration in Bamboo (*Dendrocalamus strictus* Nees.) World Congress on In Vitro Biology, June 22-27, 1996. San Francisco Marriott San Francisco, CA
3. National level seminar on “Global Strategies in Biological Sciences”, January 10-11, 2003. Muthayammal College of Arts and Science, Rasipuram, Namakkal.
4. National Conference on Chemical, Biological and Medical Sciences (NCCBMS-23), 7th March 2023, Organized by Thanthai Periyar Government Arts and Science College (*Autonomous*), Tiruchirappalli – 620023.

Papers Presented in Seminars:

1. Recent Trends in Biotechnological Research, December 9-10, 1994. Dept. of Biotechnology, School of Life Sciences, Bharathidasan University, Trichy-24. **Bamboo seed biology and its propagation.**
2. National Symposium on “Current Scenario in Microbial Technology”, September 28-29, 2004. Dept. of Botany and Microbiology, Jamal Mohamed College, Trichy-20. **Effect of endomycorrhizae on in vitro raised plantlets of Bamboo.**
3. National Symposium on “Current Scenario in Microbial Technology”, September 28-29, 2004. Dept. of Botany and Microbiology, Jamal Mohamed College, Trichy-20. **Selection of efficient endomycorrhizae in the rhizosphere of bamboo and their application in the bamboo nursery.**
4. One day State Level Seminar on Emerging Trends in Microbial Biotechnology 10th February 2007. Department of Microbial Biotechnology, PSGR Krishnammal College for women, Coimbatore-04. **Studies on the ground water quality of a few chosen hill stations in Nilgiris**
5. Recent trends in Biotechnology and its Role in Utilization in Biodiversity March 5th and 6th, 2007. Dept. of Botany, Jamal Mohamed College, Trichy-20. **Effect of vermicompost on paddy seedling growth and biomass productivity**
6. Recent trends in Biotechnology and its Role in Utilization in Biodiversity March 5th and 6th, 2007. Dept. of Botany, Jamal Mohamed College, Trichy-20. **Effect of NaCl stress on paddy (Oryza sativa L.)**
7. Recent trends in Biotechnology and its Role in Utilization in Biodiversity March 5th and 6th, 2007. Dept. of Botany, Jamal Mohamed College, Trichy-20. **Effect of Polyethylene Glycol 600 (PEG) on Cucumis anguria L.**
8. National Seminar on Past, Present and Future Scenario in Medicinal Plants and Phytochemistry 22-23 March 2007. Department of Plant Science, Bharathidasan University, Trichy-24. **Effect of NaCl Stress on Finger Millet Eleusine coracana Gareth.**

9. The proceedings of 6th International symposium on Ecosystem Behavior (BIOGEOMON 2009) held at Helsinki, Finland. **Study on the Decolorization and Degradation of Textile Dyes commonly used in the Textile Industry District of Tamil Nadu,**
10. National conference on Evolutionary Trends in Biological and Pharmaceutical chemistry (NCETB- 2014), 30 and 31 January 2014. P.G and Research Department of Chemistry, Holly Cross College, Trichy. **Effect of Biological Treated textile effluent on the growth parameters of crop plant.**
11. National Conference on Transgenic Plant and Food Security of Nation (TPFSN - 2015). 27th February, 2015. Dept of Botany, Jamal Mohamed College, Trichy-20. Effect of textile dyes effluent on growth and germination of Indian beans (*Dolichos lablab*).
12. National Conference on Transgenic Plant and Food Security of Nation (TPFSN - 2015). 27th February, 2015. Dept of Botany, Jamal Mohamed College, Trichy-20. **Floristic analysis of *Moringa concanensis* in Tamil Nadu.**
13. National Conference on Transgenic Plant and Food Security of Nation (TPFSN - 2015). 27th February, 2015. Dept of Botany, Jamal Mohamed College, Trichy-20. **Studies on the impact of organic farming on heavy metal analysis of vegetables.**
14. National Conference on Transgenic Plant and Food Security of Nation (TPFSN - 2015). 27th February, 2015. Dept of Botany, Jamal Mohamed College, Trichy-20. **Bio-Remediation of curde oil by *Micrococcus speices*.**
15. National Conference on Transgenic Plant and Food Security of Nation (TPFSN - 2015). 27th February, 2015. Dept of Botany, Jamal Mohamed College, Trichy-20. **Ethno botanical survey in the ammachathiram village, Pudukkottai district, Tamil Nadu.**
16. National Conference on Transgenic Plant and Food Security of Nation (TPFSN - 2015). 27th February, 2015. Dept of Botany, Jamal Mohamed College, Trichy-20. **Ethnobotanical study an nallamathi, pachamalai- A part of eastern ghats, Tamil Nadu, India**
17. National Conference on Transgenic Plant and Food Security of Nation (TPFSN - 2015). 27th February, 2015. Dept of Botany, Jamal Mohamed College, Trichy-20. **Microbial bioremediation of heavy metals from textile industry dye effluents using isolated bacterial strains.**

18. National Conference on Transgenic Plant and Food Security of Nation (TPFSN - 2015). 27th February, 2015. Dept of Botany, Jamal Mohamed College, Trichy-20. **Floristic study of Vettangudi Bird Sanctuary, Sivagangi District.**
19. National Conference on Transgenic Plant and Food Security of Nation (TPFSN - 2015). 27th February, 2015. Dept of Botany, Jamal Mohamed College, Trichy-20. **Bacterial decolorization and degradation of textile dye Remazol Black B.**
20. International Conference on Life and Environment: Issues and Concern, 9th March 2023, Organized by Department of Botany, Vivekananda Mahavidyalaya, Sripally, Purba Bardhaman – 713103. **Bacterial consortia for bioremediation produced from textile effluent on Indian bean plant.**
21. International Conference on Life and Environment: Issues and Concern, 9th March 2023, Organized by Department of Botany, Vivekananda Mahavidyalaya, Sripally, Purba Bardhaman – 713103. **Impact of heavy metals on phytochemical characteristics in *Senna auriculata* of the polluted and unpolluted sources.**

List of publications:

1. Prabhu T, Sisubalan N, Sheik Mohamed S, Velmurugan S and **Ravikumar R.** 2019, Lofty frequency and reproducible plant regeneration from mature nodal explants of “Egusi” melon (*Citrullus colocynthis* L.). *BioTechnologia*. Vol: 100(3), pp. 263-272.
2. Prabhu Thangavel and Ravikumar Ramasamy., 2019. Phytochemical screening and antibacterial and antifungal activity of the stem, leaf and fruit extracts using different solvent of *Citrullus colocynthis* (L.) Schrad. *Journal of Pharmacognosy and Phytochemistr* 8(3): 189-192
3. Ezhil Vani, M. Velmurugan, S. and Ravikumar, R. 2018. Traditional Medicinal Plants of Selected Sacred Groves, Pachamalai Against Potential Diseases. *Journal of Emerging Technologies and Innovative Research*. V (5), 7, 339-353.
4. Vinothini C and Ravikumar R. 2016, Assessment of physiochemical, heavy metal and indicator bacterial groups in water and soil samples of different oil contaminated regions, Tiruchirappalli city. *International Journal of Advances in Scientific Research*; 2(07): 146-151.
5. Vinothini C and Ravikumar R 2016, Frequency of bacterial chromium resistance in different oil contaminated water and soil samples, Tiruchirappalli city. *International*

- journal of recent research and applied studies. 3, 8 (26) 112-115.
6. Ezhil Vani M., Velmurugan S. and Ravikumar R., 2016 Efficacy and Ethnomedicinal studies on important medicinal plants in two sacred groves at Pudukottai District Tamil Nadu. *Advances in Applied Science Research*, 7(2):123-127.
 7. Velmurugan.S., Kumar.P and Ravikumar. R., 2015. Decolorization and Degradation of Blue HELEN And Black B Dyes By *Bacillus Cereus* Isolated From The Textile Dye Contaminated Soil. *Journal of Advanced Applied Scientific Research*.Vol-1-2-108-120.
 8. Vinothini. C, Sudhakaran.S and Ravikumar.R. 2015. Isolation and Degrading of Engine Oil by *Pseudomonas Aeruginosa*. *Journal of Environmental and Applied Bioresearch*.Vol. 03, No. 03, pp. 170- 174.
 9. Vinothini.C, Sudhakar.S and Ravikumar.R.,2015. Biodegradation of petroleum and crude oil by *Pseudomonas putida* and *Bacillus cereus*.*Int.J.Curr.Microbiol.App.Sci* (2015) 4(1): 318-329
 10. Jothimani.T.M, Saravanakumar.A,Ravikumar.R. 2014. Studies on the impact of organic farming on physico-chemical and microbial properties of soil. *Int. J. Biol. Technology*. 0946 – 4313
 11. Jothimani.T, Saravanakumar.A, Ravikumar.R. 2014.Impact of organic farming on yield and quality of selected Solanaceousvegetables.*Int. J. Applied Bioresearch*. 22:1-9.
 12. Velmurugan. S and Ravikumar.R., 2014. Biodegradation and decolorization of Reactive dye Red ME4BL by *Bacillus subtilis*. *International journal of environmental bioremediation and biodegradation*.
 13. Natarajan Sisubalan., ShanmugamVelmurugan., Vadivel Malayaman., SubramaniThirupathy., Mohamed Hussain GhouseBasha., RamasamyRavikumar. 2014. Ethnomedicinal studies among villages of ThenpuranaduPachamalai Eastern Ghats , Tamil Nadu India. *Spatula DD- Peer Reviewed Journal on Complementary Medicine and Drug Discovery*.
 14. Senthilkumar.S.,Muruganadham, T., Kathiravan, V., Ravikumar, R., and Mohamed jabbir M.S., 2013. Rapid decolorization of Disperse Red F3B by *Enterococcus faecalis* and its Phytotoxic Evaluation. *International Journal of Current Microbiology and Applied Sciences*,
 15. Annaduari.A.,Elangovan.V.,Velmurugan .S., and Ravikumar.R.,2013 Preliminary Phytochemical Screening and antibacterial of *Cardiospermumhalicacabum* L. *Advance in Applied Science Research*,2013,4(5):302-308
 16. Mani. P., Ravikumar. R., 2012. Floristic analysis of thalamalai, A part of eastern ghats

vol.12,no.2 pp-52-53.

17. Mani. P., Ravikumar. R.,2012. Survey and Distribution of “*Hemidesmusindicus*L.R.Br.”intamilnadu vol.12.,pp 47-49.
18. Veeramani. A., Senthilkumar.S., Mohamed jabbir. M.S., Sivagandhi. C., Marimuthu. R., Ravikumar. R., 2010.Eudriluseugeniae as a putative candidate for textile industry effluent polluted soil bioremediation.Current World Environment vol. 5(1), 131-136.
19. Senthilkumar.S., Mohamed Jabbir. M.S., Veeramani. A., and Ravikumar. R., 2010. Decolorization of textile dyes Reactive Black HFGR Using a Novel Isolate *Paenibacillus latus* SK21. Journal of Theroretical and Experimental Biology. Vol (3): 195-202.
20. Veeramani. A., Senthilkumar. S., Sivagandhi.C.,Marimuthu.R and Ravikumar.R. 2009. Biochemical and antimicrobial analysis of the coelomic fluid of *Eudriluseuginae*. Journal of theortical and experimental biology. ISSN: 0972-9720, 6 (1): 79-84.
21. Senthilkumar. S., Mohamed jaabir. M.S., Krishna moorthy.S.,Manikandan. R and Ravikumar.R. 2007. Decolorization of textile dyes by soil isolates from a textile industry. IARJ, Vol 4, No 2
22. Ravikumar.R., Kamaraj.M and Sathiskumar.V. 2007. Effect of vermicompost on in vivo raised of paddy. JARJ: vol 4 No. 1
23. AnanthakrishnanG.,RavikumarR., Girija S. and GanapathiA. 2004. Selection of efficient arbuscular mycorrhizal fungi in the rhizosphere of cashew and their application in the cashew nursery. Sci.Horti.100:369-375
24. AnanthakrishnanG., RavikumarR., Girija S. and GanapathiA. 2002. In vitro adventitious shoot formation from cotyledon explants of cashew (*Anacardiumoccidentale* L.) Sci.Horti.93:343-355.
25. RavikumarR., Ananthakrishnan G., GirijaS. and GanapathiA. 2002. Seed viability and biochemical changes associated with accelerated ageing in *Dendrocalamusstrictus* seeds. Biol.Planta.45:153-156.
26. RavikumarR., Ananthakrishnan G., Girija S. and GanapathiA. 2001. Am associations of bamboo rhizosphere in different study sites of Tamil Nadu. The Indian Forester.Vol. 127.No.7.
27. AnanthakrishnanG., RavikumarR., PremAnand R., VengadesanG. and Ganapathi,A.1999. Induction of somatic embryogenesis from nucellus derived callus of *Anacardiumoccidentale*L.Sci.Horti. 79:91-99.
28. RavikumarR., Ananthakrishnan G., Ganapathi A. andAppasamy,T.1998. Biochemical change induced by accelerated ageing in *Bambusabambos* seeds. Biol.Planta. 40:459-

464.

29. RavikumarR., Ananthakrishnan G., Kathiravan K. and GanapathiA. 1998. In vitro shoot propagation of *Dendrocalamusstrictus* Nees. *Plant Cell Tiss.Org.Cult.*, 52:189-192.
30. RavikumarR.,Ananthakrishnan G., Appasamy T. andGanapathiA. 1997. Effect of endomycorrhizae (VAM) on bamboo seedling growth and biomass productivity.*Forest Eco.Manage.* 98:205-208.
31. RavikumarR., Ananthakrishnan G. and GanapathiA. 1998. Biochemical analysis of *Dendrocalamusstrictus* and *Bambusabambos* seeds. *Physiol.Mol.Plants.* 4:93-94.
32. RavikumarR., Ananthakrishnan G. and Ganapathi A.1998. Viability of seeds of *Dendrocalamusstrictus* under four different storage conditions.*Seed Res.* 26:43-46.
33. AnanthakrishnanG.,RavikumarR., Vengadesan G., PremAnandR. and Ganapathi,A.1999. In vitro plant regeneration from embryo axis of cashewnut.In:P.B.kaviKishor (ed.), *Plant Tissue Culture and Biotechnology*. University Press, Hyderabad,India,pp.123-128. III. a. Research Guidance.