# **Curriculam Vitae**

# Dr. R. RADHAKRISHNAN, M.Sc., Ph.D

Assistant Professor, P.G and Research Department of Botany Jamal Mohamed College (Autonomous) Affiliated to Bharathidasan University Tiruchirappalli, Tamil Nadu- 620020, India Mobile no: +918778367211 Email: rkbot@jmc.edu; ramradhakrish@gmail.com



#### **Educational Qualification**

2005-	2010	: Doctoral (Ph.D. Plant Science) Degree, Bharathidasan University, Tiruchirappalli, TN
2002-	2004	: Post Graduate (M.Sc. Botany) Degree, Ayya Nadar Janaki Ammal College (Autonomous),
		Sivakasi (Affiliated to Madurai Kamaraj University, Madurai), TN
1999-	2002	: Under Graduate (B.Sc. Botany) Degree, Ayya Nadar Janaki Ammal College (Autonomous),
		Sivakasi (Affiliated to Madurai Kamaraj University, Madurai), TN

#### Academic (Teaching and Research) Experiences

Assistant Professor (Jan 2020 – Till date)	: P.G and Research Department of Botany, Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamil Nadu, India
Assistant Professor (Jun 2018-Jan 2020)	: Department of Microbiology, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India.
Assistant Professor (International faculty) (Mar 2016 – Feb 2018)	: Department of Biotechnology, Yeungnam University, Gyeongsan, South Korea
Contract Professor (Apr 2015 – Feb 2016)	: School of Applied Biosciences, Kyungpook National University, Daegu, South Korea
Post-Doctoral Researcher (Feb 2014 – Mar 2015)	: School of Applied Biosciences, Kyungpook National University, Daegu, South Korea
Post-Doctoral Researcher (Feb 2012- Jan 2014)	: National Institute of Crop Science, RDA, Miryang, South Korea
Post-Doctoral Researcher (Feb 2011 – Jan 2012)	: School of Applied Biosciences, Kyungpook National University, Daegu, South Korea

# Academic Activities/ Responsibilities

- 1. **Board of Studies Member** for B.Sc., M.Sc. and M.Phil. (Botany) courses in Jamal Mohamed College, Tiruchirappalli from 2020 to till date (*Role: Revise/add the syllabus of allotted course papers*).
- 2. **Deputy Departmental Coordinator, DBT Star College Scheme**, Jamal Mohamed College, Tiruchirappalli from 2020 to 2022 (*Role: 1. Purchase and account maintenance of all DBT sanctioned instruments, glasswares and chemicals; 2. Flyer & agenda preparation, Participants attendance, Programme moderator and Report preparation of 50 number of Programmes along with claim form submission and their financial account maintenance*).
- 3. **Department Annual Report preparation** for College day, Jamal Mohamed College, Tiruchirappalli from 2019 to 2020. (*Role:* Collection and compilation of faculty participated programmes, Papers published in proceeding, books and journal publications with evidences from individual staff members).

- 4. **Member, Intellectual Property Rights Cell,** Jamal Mohamed College, Tiruchirappalli from 2021 to till date. (*Role:* 1. *Flyer & agenda preparation, Participants attendance and Report preparation of all programmes;* 2. *Annual report submission*).
- 5. Vice President of Botany Association, Jamal Mohamed College, Tiruchirappalli from 2021 to 2022. (*Role: Flyer* & agenda preparation, Participants attendance, Programme moderator and Report preparation of all programmes).
- 6. **Member, Student Monitoring Committee,** Jamal Mohamed College, Tiruchirappalli from 2021 to till date (*Role:* Student Monitoring duty from 1.30 pm to 2.15 pm and 6.20pm to 7.05pm).
- 7. **Department Test In-charge,** Jamal Mohamed College, Tiruchirappalli from 2022 to till date (*Role: 1. Collection and printout of CIA questions and distribution of answers scripts to individual staff members; 2. Preparation of question papers in-charge, schedule the exam duty and exam halls).*
- 8. **Moral Education Instructor,** Jamal Mohamed College, Tiruchirappalli from 2022 to till date (*Role: Teach the allotted lessons to students*).

#### **Programmes Organized**

- 1. **Radhakrishnan R** (ORGANIZING COMMITTEE MEMBER). National Webinar on Molecular Evolution, Taxonomy and Ecology. Jamal Mohamed College (Autonomous), Tiruchirappalli on 16-01-2022. (*Role: Flyer & agenda preparation, Participants attendance, Programme moderator and Report preparation*).
- Radhakrishnan R (ORGANIZING SECRETARY). Faculty Development Program (FDP): International Webinar on Biological Innovations for Resource Management and Sustainable Development on 24<sup>th</sup> to 26<sup>th</sup> August 2021. (*Role: Flyer & agenda preparation, Participants attendance, registration fee collection and certificates preparation and distribution, Co-Programme moderator and Report preparation*)
- 3. **Radhakrishnan R** (ORGANIZING SECRETARY). Botany Association Inauguration Function 2021-2022 on 14<sup>th</sup> September 2021. (*Role: Flyer & agenda preparation, Resource person communication, Participants attendance, Programme moderator and Report preparation*)
- 4. Bukhari S and **Radhakrishnan R** (ORGANIZING SECRETARY). An Entrepreneurial Development Program(EDP): Opportunities in Maricultureon 28<sup>th</sup> to 29<sup>th</sup> September 2021 (*Role:* Flyer & agenda preparation, *Participants attendance, and Report preparation*)
- 5. **Radhakrishnan R** (ORGANIZING COMMITTEE MEMBER). National Seminar on Frontiers in Biological Innovations for Resource Management, Patents and Entrepreneur Development organized by Department of Botany, Jamal Mohamed College, Tiruchirappalli on 10 - 11<sup>th</sup> March 2020. (Role: Abstract collection, Proceeding book preparation, Participants attendance, registration fee collection and certificates writing and distribution).

#### **Resource person in Workshop/ Training Programmes**

- 1. **Radhakrishnan R**. Resource person for Young Student Scientist Programme 2022 conducted by Tamilnadu state council for science and technology at Jamal Mohamed College, Tiruchirappalli during 19<sup>th</sup> May 2022.
- Radhakrishnan R. Resource person for Hands on Training: Micropropagation, Somatic Embryogenesis, Synthetic Seeds and Hairy Root Culture. National Workshop on Woody Plant Tissue Culture. Department of Biology, The Gandhigram Rural Institute, Gandhigram, Dindigul, Tamil Nadu on 4<sup>th</sup> March 2022
- Radhakrishnan R. Resource person for Young Student Scientist Programme 2019 conducted by Tamilnadu state council for science and technology at Karpagam Academy of Higher Education, Coimbatore during 2<sup>nd</sup>-16<sup>th</sup> May 2019.

#### **Research Area**

Plant-microbes Interactions, Stress Physiology, Weed Science, Plant Tissue Culture, Food Chemistry and Water Pollution

#### **Awards and Recognitions**

World's top 2% scientists by Stanford University

- Best Paper award First International Conference on Sustainable Development in Energy & Environment (P. 77) held at Kamaraj College of Engineering and Technology, Tamil Nadu, India on 18-20<sup>th</sup> July 2019
- 2. Best poster presentation award (First prize) International conference on technological advances in super foods for health care (P.48) held at Puducherry, India on 3-4<sup>th</sup> May 2013
- 3. **Best oral presentation award (Third prize)** International conference on technological advances in super foods for health care (P.48) held at Puducherry, India on 3-4<sup>th</sup> May 2013
- 4. Best poster presentation award the Korean Society of Crop Science held at Gyoungu, South Korea on 19-20<sup>th</sup> April 2012
- 5. Awarded as Senior Research Fellow Department of Biotechnology, New Delhi, India (Aug 2008- Jul 2009).
- 6. **Awarded as University Research Studentship** Bharathidasan University, Tamil Nadu, India (Feb 2005- Jan 2008)

#### **Principal Investigator of the Projects**

Major Project	Core Grant Research Project
Funding Agency	: DST-SERB, New Delhi, India
Amount	: Rs. 25.5 Lakhs
Title of the Project	: Soybean crop improvement against drought by using Endophytes
Duration	: Dec 2021 – Dec 2024 (On going)
Duration	. Dec 2021 Dec 2024 (On Bonis)
	Major Project Funding Agency Amount Title of the Project Duration

2.	Minor Project	: Seed Money Project
	Funding Agency	: Jamal Mohamed College (Autonomous), Tiruchirappalli, India
	Amount	: Rs. 0.1 Lakh
	Title of the Project	:Isolation and Identification of plant growth promoting endophytes for cucumber plant growth
	Duration	: May 2021 – April 2022 (Completed)

# **Editorial Member of Journal**

1. Editorial Member, Journal of Pure and Applied Microbiology : <u>https://microbiologyjournal.org/</u>

#### **Reviewer of Journals**

- 1. Scientific Report (Nature)
- 2. Bioelectromagnetics (Wiley)
- 3. Plant Physiology and Biochemistry (Elsevier)
- 4. PhysiologiaPlantarum (Wiley)
- 5. Plant Growth Regulation (Springer)
- 6. Journal of Photochemistry & Photobiology, B: Biology (Elsevier)
- 7. Journal of Agriculture and Food Chemistry (ACS)
- 8. ACS Omega (ACS)
- 9. 3Biotech (Springer)
- 10. Indian Journal of Plant Physiology (Springer)
- 11. Proceedings of the National Academy of Sciences, Biological Sciences India (Springer)
- 12. Environmental Science and Pollution Research (Springer)

- 13. Indian Journal of Experimental Biology (NISCAIR)
- 14. Chiang Mai Journal of Science (Scopus)
- 15. Journal of Phytology (Scopus/ ESCI)
- 16. Plant Science Today (Scopus/ ESCI)
- 17. Chemosphere (Elsevier)
- 18. Biomass Conversion and Biorefinery (Springer)

### **Abroad visits**

Malaysia	3 <sup>rd</sup> International Conference on Applied Life Sciences held at University Kebangsaan Malaysia, Malaysia on September 2014
Malaysia	Fundamental Science Congress held at University Putra Malaysia, Malaysia on August 2014
Japan	Research discussion and lab visit to Yamaguchi University, Japan on February 2012
South Korea	Post-Doctoral Research Programme, South Korea (February 2011- February 2018)
China	2 <sup>nd</sup> International Symposium on Sustainable Agriculture for Subtropical Regions (ISSASR-2) held at Institute of Subtropical Agriculture, Changsha, China on September 2010 (Financial support from CAS, China)

#### **Membership in Professional Research Bodies**

- 1. International Society for Applied Life Sciences
- 2. Society for Biocontrol Advancement
- 3. National Academy of Biological Sciences
- 4. Society for Plant Biochemistry and Biotechnology
- 5. The Indian Botanical Society

# **Research Profile in Websites**

- 1. Researcher ID: A-2295-2019 https://publons.com/researcher/1804792/ramalingam-radhakrishnan/
- 2. Scopus ID: 36852283800 https://www.scopus.com/authid/detail.uri?authorId=36852283800
- 3. Orcid ID: 0000-0003-4972-7967 https://orcid.org/0000-0003-4972-7967
- 4. Google Scholar ID: uJE17EQAAAAJ <u>https://scholar.google.co.kr/citations?user=uJE17EQAAAAJ&hl=en</u>
- 5. Research Gate ID: <u>https://www.researchgate.net/profile/Ramalingam\_Radhakrishnan3</u>
- 6. Vidwan ID: 231193 <u>https://vidwan.inflibnet.ac.in/myprofile</u>

# Main author publications: 64/80

Cumulative impact factor: 177.4, Google Scholar citations: 4731; h-index: 36, i10-index: 53

Total no. of publications	First/ Corresponding author	Co- author	No. of Articles in JournScopusWOSPeer		n Journals Peer reviewed	ials No. reviewed Book Chapters	of s	of No. of Books		No. of Article in Proceedings	
80	64	16	1	63	5	6		3		2	

#### No. of Publications with Jamal Mohamed College Affiliations = 8 (from 2020 to 2023)

# **Publications in Journals, Books & Proceedings**

\* - Corresponding author; #- Equal first author

Single Author (4)

- 1. Radhakrishnan R.\* 2019. Magnetic field regulates plant functions, growth and enhances tolerance against environmental stresses. Physiology and Molecular Biology of Plants.25 (5), 1107-119. (IF: 3.5).
- Radhakrishnan R.\* 2019. Exposure of magnetic waves stimulates rapid germination of soybean seeds by enzymatic regulation in cotyledons and embryonic axis. Biocatalysis and Agricultural Biotechnology. 20, 101273. (IF: 0; ESCI).
- 3. Radhakrishnan R.\* 2018. Seed pretreatment with magnetic field alters the storage proteins and lipid profiles in harvested soybean seeds. Physiology and Molecular Biology of Plants. 24 (2), 343-347(IF: 3.5).
- Radhakrishnan R.\*2018. Introductory chapter: Need of bioherbicide for weed control. R. Radhakrishnan (ed.). *In: Biological Approaches for Controlling Weeds*, IntechOpen publisher, London, United Kingdom. pp 1-3.

Two Authors (22=21 first author+ 1 co-author)

- Radhakrishnan R\* and K.H. Baek.2017. Physiological and biochemical perspectives of non-salt tolerant plants during bacterial interaction against soil salinity. Plant Physiology and Biochemistry 116, 116-126 (IF: 6.5).
- Radhakrishnan R and I.J. Lee. 2017. Foliar treatment of *Bacillus Methylotrophicus* KE2 reprograms endogenous functional chemicals in sesame to improve plant health. Indian Journal of Microbiology. 57 (4), 409-415. (IF: 3.0).
- 7. Radhakrishnan R and I.J. Lee. 2016. Gibberellins producing *Bacillus methylotrophicus* KE2 supports plant growth and enhances nutritional metabolites and food values of lettuce. Plant Physiology and Biochemistry 109, 181-189 (IF: 6.5).
- 8. Radhakrishnan R and I.J. Lee. 2015. *Penicillium*-sesame interactions: A remedy for mitigating high salinity stress effects on primary and defense metabolites in plants. Environmental and Experimental Botany 116, 47-60.(IF: 5.7).
- 9. Radhakrishnan R and I.J. Lee. 2014. Endogenous antioxidants and phytohormonal regulation induced by spermidine improve cucumber plant growth. Pakistan Journal of Botany 46(6), 2151-2156.(IF: 1.2).
- 10. Radhakrishnan R\* and I.J. Lee. 2014. Effect of low dose of spermidineon physiological changes in salt stressed cucumber plants. Russian Journal of Plant Physiology 61(1), 90-96. (IF: 1.4).
- 11. Radhakrishnan Rand I.J. Lee. 2013. Regulation of salicylic acid, jasmonic acid and fatty acids in cucumber (*Cucumissativus*L.) by spermidine promotes plant growth against salt stress. Acta Physiologiae Plantarum35, 3315–3322.(IF: 2.6).
- 12. Radhakrishnan R\* and B.D. Ranjitha-Kumari. 2013. Protective role of pulsed magnetic field against salt stress effects in soybean organ culture. Plant Biosystems 147 (1), 135-140.(IF: 2.0).
- 13. Radhakrishnan R and I.J. Lee. 2013. Spermine promotes acclimation to osmotic stress by modifying antioxidant, abscisic acid, and jasmonic acid signals in soybean. Journal of Plant Growth Regulation 32 (1), 22-30. (IF: 4.8).
- 14. Radhakrishnan R and I.J. Lee. 2013. Ameliorative effects of spermine against osmotic stress through

antioxidants and abscisic acid changes in soybean pods and seeds. Acta Physiologiae Plantarum 35, 263-269. (IF: 2.6).

- 15. Radhakrishnan R\* and B.D. Ranjitha-Kumari. 2013. Influence of pulsed magnetic field on soybean seed germination, seedling growth and soil microbial population. Indian Journal of Biochemistry and Biophysics 50, 312-317.(IF: 1.4).
- RadhakrishnanR\* and B.D. Ranjitha-Kumari. 2012. Pulsed magnetic field: a contemporary approach offers to enhance plant growth and yield of soybean. Plant Physiology and Biochemistry 51, 139-144. (IF: 6.5).
- 17. Radhakrishnan R\*and B.D. Ranjitha-Kumari. 2009. Variations in morphology, photosynthetic pigments and protein content of micropropagated soybean. Journal of Scientific Transactions in Environment and Technovation 3(2), 79-82.
- 18. Radhakrishnan Rand B.D. Ranjitha-Kumari. 2009. Changes in protein content in micropropagated and conventional soybean plants (*Glycine max* (L.) Merr.). World Journal of Agricultural Science 5 (2), 186-189.
- 19. Radhakrishnan Rand B.D. Ranjitha-Kumari. 2008. Morphological and agronomic evaluation of tissue culture derived Indian soybean plants. Acta Agriculturae Slovenica 91 (2), 391-396. Scopus (IF: 0).
- 20. Radhakrishnan Rand B.D. Ranjitha-Kumari. 2008. Effect of N-triacontanol alleviates the toxic effects of soil salinity in soybean. Journal of Bioscience (currently Tropical Life Sciences Research) 19 (2), 53–62.
- Ranjitha-Kumari B.D and R. Radhakrishnan. 2008. Plant with biotic and abiotic factors interaction proteomics. B.D. Ranjitha-Kumari (ed.). *In: Plant Proteomics*, A.P.H.Publisher, New Delhi, India (ISBN: 978-8-13130-409-9), pp 119-155.
- 22. Radhakrishnan Rand B.D. Ranjitha-Kumari. 2008. Sucellular proteomics. B.D. Ranjitha-Kumari (ed.). In: *Plant Proteomics*, A.P.H.Publisher, New Delhi, India (ISBN: 978-8-13130-409-9), pp 55-118.
- RadhakrishnanRand B.D. Ranjitha-Kumari. 2007. Oxidative stress and reactive oxygen species (ROS) in plants. P.C. Trivedi (ed.). *In: Plant physiology- Current trends*, Pointer Publisher, Jaipur, India (ISBN-13: 978-8171325221), pp. 84-110.
- 24. Radhakrishnan Rand B.D. Ranjitha-Kumari. 2007. Ameliorative effects of plant growth regulators in textile effluent treated ground nut (*Arachishypogaea* L.). Bionotes, 9 (4), 127-128.
- 25. Radhakrishnan R and B.D. Ranjitha-Kumari. 2007. Callus induction and plant regeneration of Indian soybean (*Glycine max* (L.) Merr. cv. CO3) via half seed explant culture. Journal of Agricultural technology3 (2), 287-297.

# Three authors (10=8 first author + 1 corresponding author + 1 co-author)

- 26. Pugazhendhi A,**Radhakrishnan R\***andDuc P.A. 2019. *Curtobacterium sp.* MA01 generates oxidative stress to inhibit the plant growth. **Biocatalysis and Agricultural Biotechnology**. 20, 101274. **(IF: 0; ESCI)**.
- 27. Radhakrishnan R\*, Alqarawi A.A and E.F. Abd\_Allah. 2018. Bioherbicides: Current knowledge on weed control mechanism. Ecotoxicology and Environmental Safety 158, 131-138 (IF: 6.8).
- 28. Radhakrishnan R\*, Hashem A, and E.F. Abd\_Allah2017.Bacillus: A biological tool for crop Improvement through bio-molecular changes in adverse environments. Frontiers in Physiology 8, 667 (IF: 4.0).
- 29. Radhakrishnan R<sup>#</sup>, Park J.M<sup>#</sup> and I.J. Lee. 2016. *Enterobacter* sp. I-3, a bio-herbicide inhibits gibberellins biosynthetic pathway and regulates abscisic acid and amino acids synthesis to control plant growth.

Microbiological Research 193, 132-139 (IF: 6.7).

- 30. Kang S.M, Radhakrishnan Rand I.J. Lee. 2015. *Bacillus amyloliquefaciens* subsp. *plantarum* GR53, a potent biocontrol agent resists *Rhizoctonia* disease on Chinese cabbage through hormonal and antioxidants regulation. World Journal of Microbiology and Biotechnology 31 (10) 1517-1527. (IF: 4.1).
- 31. Radhakrishnan R, Khan A.L and I.J. Lee. 2013. Endophytic fungal pre-treatments to seeds alleviate salinity stress effects in soybean plants. Journal of Microbiology 51 (6), 850-857 (IF: 3.0).
- 32. Radhakrishnan R, Leelapriya T and B.D. Ranjitha-Kumari. 2012. Effects of pulsed magnetic field treatment of soybean seeds on calli growth, cell damage, and biochemical changes under salt stress. Bioelectromagnetics 33, 670-681. (IF: 1.9).
- 33. Radhakrishnan R, Ramachandran A and B.D. Ranjitha-Kumari. 2009. Rooting and shooting: dual function of thidazuron in *in vitro* regeneration of soybean (*Glycine max*. L). Acta Physiologiae Plantarum 31, 1213-1217. (IF: 2.6).
- 34. Radhakrishnan R, Varman P.A and B.D. Ranjitha-Kumari. 2008. Analytical tools in proteomics. B.D. Ranjitha-Kumari (ed.). *In: Plant Proteomics*, A.P.H. Publisher, New Delhi, India (ISBN: 978-8-13130-409-9), pp. 11-54.
- 35. Radhakrishnan R, Dharmaraj K and B.D. Ranjitha-Kumari. 2007. A comparative study on the physico chemical and bacterial analysis of drinking, borewell and sewage water in the three different places of Sivakasi. Journal of Environmental Biology28 (1), 105-108. (IF:0; ESCI).

Multiple authors (40= 26 first/ corresponding/co-first author+ 14 co-author)

- 36. Perumal S, Radhakrishnan R\*, Sathasivam R, Arun M, Song J.S and S.U Park. 2023. Endophytes: A vital source of medicine A review. Tropical Journal of Pharmaceutical Research 22 (5), 1133-1142 (IF: 0.6).
- 37. Sathasivam R, Radhakrishnan R, Kim J.K and S.U. Park. 2021. An update on biosynthesis and regulation of carotenoids in plants. South African Journal of Botany 140, 290-302. (IF: 3.1).
- 38. Vidya N, Saravanan K, Halka J, Kowsalya K, PreethaJ.S.Y, Gurusaravanan P, Radhakrishnan R, Nanthini U.A.R and M. Arun. 2021. An insight into *in vitro* strategies for bioproduction of isoflavones. Plant Biotechnology Reports 15, 717-740. (IF: 2.496)
- 39. Radhakrishnan R, Ajithkumar P, Arun M, Sathasivam R,Sandhya S, Choi J.Y, Pradeep B.V and S.U. Park. 2021. An endophyte*Paenibacillusdendritiformis* strain APL3, promotes *Amaranthuspolygonoides*L. sprout growth and their extract inhibits food-borne pathogens. Plant Science Today. 8 (4), 941-947. (IF: 0)(ESCI).
- 40. Sandhya S, Radhakrishnan R\*, Sathasivam R, Arun M, Packiaraj G and Park SU. 2021. Influence of endophytic bacterium, *Cellulosimicrobiumsp.* FRR2 on plant growth of *AmaranthuscampestrisL.* and bacterial survival at adverse environmental conditions. Journal of Pure and Applied Microbiology. 15(4), 2288-2294. (IF: 0) (ESCI).
- 41. Nallal VUM, Padmini R, RavindranB, Chang SW, **Radhakrishnan R**, Almoallim H.S.M, Alharbi S.A and M.Razia. 2021. Combined *in vitro* and *in silico* approach to evaluate the inhibitory potential of an underutilized allium vegetable and its pharmacologically active compounds on multidrug resistant Candida species. **Saudi Journal of Biological Sciences** 28, 1246-1256. **(IF: 4.4).**
- 42. Venkatachalam R, Kalimuthu K, Chinnadurai V, Saravanan M, Radhakrishnan R, Shanmuganathan R and A. Pugazhendhi. 2020. Various solvent effects on phytochemical constituent profiles, analysis of antioxidant and anti-diabetic activities of *Hopeaparviflora*. Process Biochemistry 89, 227-232. (IF: 4.4).
- 43. Anand V, Velayuthaprabhu S, RengarajanR.L, Kumar P and **R. Radhakrishnan**. 2019. Bioactive Compounds of Guava (*PsidiumGuajava* L.). In:*Reference Series in Phytochemistry. Bioactive Compounds in*

Underutilized Fruits and Nuts, Springer publisher, Cham (ISBN: 978-3-030-30182-8). pp. 503-527.

- 44. Sathasivam R, Radhakrishnan R\*, Hashem A and E.F.Abd\_Allah.2019. Microalgae metabolites: A rich source for food and medicine. Saudi Journal of Biological Sciences. 26, 709-722. (IF: 4.4).
- 45. Vijayakumar K, Rengarajan R.L, **Radhakrishnan R**, Mathew S, Qadri I and A.V. Anand.2019. *Psidiumguajava* leaf extracts and their quercetin protect HepG2 cell lines against CCL<sub>4</sub> induced cytotoxicity. **Indian Journal of Clinical Biochemistry**. 34 (3), 324-329 (IF: 0; ESCI).
- 46. Divya N, Rengarajan R.L, Radhakrishnan R, Abd\_Allah E.F, Alqarawi A.A, Hashem A, Manikandan R and A.V. Anand. 2018. Phytotherapeutic efficacy of the medicinal plant *Teminaliacatappa* L. Saudi Journal of Biological Sciences 26, 985-988. (IF: 4.4).
- 47. Vijayakumar K,RengarajanR.L,**Radhakrishnan R**and A.V. Anand. 2018. Hypolipidemiceffect of *Psidiumguajava* leaf extract against hepatotoxicity in rats. **Pharmacognosy magazine** 14(53), 4-8 (IF: 0.7).
- 48. Hashem A, Alqarawi A.A, Radhakrishnan R, Al-Arjani A.F, Aldehaish H.A, Egamberdieva D and E.F. Abd\_Allah. 2018. Arbuscularmycorrhizal fungi regulate the oxidative system, hormones and ionic equilibrium to trigger salt stress tolerance in *Cucumissativus* L. Saudi Journal of Biological Sciences. 25(6), 1102-1114(IF: 4.4).
- Bharathi V, Rengarajan R.L, Radhakrishnan R, Hashem A, Abd\_Allah E.F, Alqarawi A.A and A.V. Anand. 2018. Effects of a medicinal plant *Macrotylomauniflorum* (Lam.) Verdc. formulation (MUF) on obesityassociated oxidative stress-induced liver injury. Saudi Journal of Biological Sciences. 25(6), 1115-1121 (IF: 4.4).
- 50. Abd\_Allah E.F, Alqarawi A.A, Hashem A, Radhakrishnan R, Al-Huqail A.A, Al-Otibi F.O.S, Malik J.A, Alharbi R.I and D. Egamberdieva. 2018. Endophytic bacterium *Bacillus subtilis*(BERA 71) improves salt tolerance in chickpea plants by regulating the plant defense mechanisms. Journal of Plant Interactions. 13(1), 37-44(IF: 3.2).
- 51. Kim M.J<sup>#</sup>, Radhakrishnan R<sup>#</sup>, Kang S.M,You Y.H, Jeong E.J, KimJ.Gand I.J. Lee. 2017. Plant growth promoting effect of *Bacillus amyloliquefaciens* H-2-5 in crop plants and their influence on physiological changes in soybean under soil salinity. Physiology and Molecular Biology of Plants 23(3),571-580(IF: 3.5).
- Hashem A, Abd\_Allah E.F,AlqarawiA.A, RadhakrishnanRand A. Kumar. 2017. Plant defense approach of Bacillus subtilis(BERA 71) against Macrophominaphaseolina(Tassi) Goid in mung bean. Journal of Plant Interaction.12 (1), 390-401(IF: 3.2).
- 53. Radhakrishnan R<sup>#</sup>, ParkJ.M<sup>#</sup>, LeeI.J, Abd\_AllahE.Fand A. Hashem. 2017. Bio-herbicide effect of *Enterobacter* sp. I-3 on weed seed germination and seedling growth. Pakistan Journal of Botany. 49(5), 1959-1963 (IF: 1.2).
- 54. Radhakrishnan R, Sathasivam R, Rengarajan R and E.F. Abd\_Allah.2017. Isolation and identification of charcoal rot disease causing agent in sesame and their growth inhibition by *Bacillus methylotrophicus* KE2. Pakistan Journal of Botany. 46(6), 2495-2497 (IF: 1.2).
- 55. Arun M<sup>#</sup>, Radhakrishnan R<sup>#</sup>, Ai T.N, Naing A.H, Lee I.J and C.K. Kim. 2016. Nitrogenous compounds enhance the growth of petunia and reprogram biochemical changes against the adverse effect of salinity. Journal of Horticultural Science and Biotechnology 91(6), 562-572 (IF: 1.9).
- 56. Kang S.M<sup>#</sup>, Radhakrishnan R<sup>#</sup>, You Y.H, Lee K.E, Kim J.H, Joo G.J, Kim J.G and I.J. Lee. 2016. Mustard and Chinese cabbage plant growth promotion by optimal-medium-cultured *Acinetobactercalcoaceticus* SE370. Journal of Pure and Applied Microbiology 10(3), 1693-1699. (IF: 0; ESCI).
- 57. Lee S.M<sup>#</sup>, Radhakrishnan R<sup>#</sup>, Kang S.M, Kim J.H, Moon B.K, Yoon B.W and I.J. Lee. 2015. Phytotoxic

mechanisms of bur cucumber seed extracts on lettuce with special reference to analysis of chloroplast proteins, phytohormones and nutritional elements. **Ecotoxicology and Environmental Safety** 112, 230-237. (IF: 6.8).

- 58. Kang S.M<sup>#</sup>, Radhakrishnan R<sup>#</sup>, Lee S.M, Park Y.G, Kim A.Y, Seo C.W and I.J. Lee. 2015. *Enterobacter sp.* SE992-induced regulation of amino acids, sugars, and hormones in cucumber plants improves salt tolerance. Acta Physiologiae Plantarum 37, 149. (IF: 2.6).
- 59. Lee K.E<sup>#</sup>, **Radhakrishnan R**<sup>#</sup>, Kang S.M, You Y.H, Joo G.J, Lee I.J, Ko J.H and J.H. Kim.2015. *Enterococcus faecium* LKE12 cell-free-extract accelerates host plant growth via gibberellins and indole-3-acetic acid secretion. **Journal of Microbiology and Biotechnology** 25 (9), 1467-1475 (IF: 2.8).
- 60. Kang S.M<sup>#</sup>, Radhakrishnan R<sup>#</sup>, You Y.H, Khan A.L, Park J.M, Lee S.M and I.J. Lee. 2015. Cucumber performance is improved by inoculation with plant growth promoting microbes. ActaAgriculturaeScandinavica, Section B-Soil & Plant Science 65 (1), 36-44. (IF: 1.6).
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# Paper Presentation in National Conferences/ Seminars (15= 11 First author; 4 Co-author)

- 1. Sathish S, Perumal S, Hariharan M and R. **Radhakrishnan R**. Formulation and assessment of organic fertilizer for fenugreek seedling growth. *National Conference on Chemical, Biological and medical sciences organized by Department of Biochemistry, Thanthai Periyar Goverenment Arts & Science College, Tiruchirappalli on 7<sup>th</sup> March 2023. P.33.*
- 2. Perumal S, **Radhakrishnan R** and Hariharan M. Endophytes: Suitable Resource for Biomedical Industry and Agriculture. National Conference on Advances in Microbial Biotechnology: Current Trends and Future Prospects organized by Department of Microbiology, Biotechnology and Food Technology, Bangalore University on 28-29<sup>th</sup> April 2022. P. 21.
- 3. **Radhakrishnan R**, Menaga J and Ajithkumar P. Isolation and Identification of Endophytic Bacterium, *Bacillus Amyloliquefaciens* MR3 FromMentha Plants against Foodborne Pathogens. *National Seminar on Frontiers in Biological Innovations for Resource Management, Patents and Entrepreneur Development organized by Department of Botany, Jamal Mohamed College, Tiruchirappalli on 10 11<sup>th</sup> March 2020. P. 16.*
- 4. Megala M, Naveena Sri ST, Saraswathi J, Srilekha PR, Radhakrishnan R, Thirunavukaras u P.S. Identification and the application of endophytic bacteria's to enhance the plant growth. National Conference on Espials of Biomolecules, Department of Microbiology, Karpagam Academy of Higher Education, Coimbatore. 26<sup>th</sup> February 2020.
- Sandhya S., Madhumithra S., Susmitha B and Radhakrishnan R. Influence of *Ficus religiosa* L. endophytes on plant growth and their survival at adverse environmental conditions. *One day National conference On Ecological impacts* of Microbiome held at Bharathiar University, Coimbatore, Tamil Nadu, India on 24<sup>th</sup> Jan 2020.
- Radhakrishnan R, Vasanth. M., Nirmal Evangelin. J., Prasanth. R., Saranya. R., and Sandhya. S. Formulation and antimicrobial activity of herbal hand sanitizer. National Level Seminar on the Novel Microbial Technologies for Sustainable Development (P. 87). Dr. G.R. Damodaran College of Science, Coimbatore, Tamil Nadu, India on 11-12<sup>th</sup> Oct 2019.
- Radhakrishnan R, Susmitha. B., Dharchana. T and Sandhya. S. Effect of microbial interaction on medicinally valuable compounds in plants. National Seminar on Bioprospecting of Biodiversity for Agriculture and Medicine: Current Status and Future Prospectives (P. 71) held at Bharathiar University, Coimbatore, Tamil Nadu, India on 3<sup>-</sup>4<sup>th</sup> Oct 2019.
- 8. **Radhakrishnan R**, Kang S.M, Park J.M, Lee S.M and I.J. Lee.*Bacillus methylotropicus* KE2, a potent agent to improve the crop plants and food values. *National Conference on Advances in Food, Chemical and Biotechnology (P.1) held at Kongu Engineering College, Tamil Nadu, India on 12<sup>th</sup>Sep 2014.*
- 9. **Radhakrishnan R**. Participated in *One day seminar onRecent Trends in Chemical Signaling atBharathidasan University, Trichy on 2<sup>nd</sup> February 2009.*

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- 11. **Radhakrishnan R** and B.D. Ranjitha-Kumari. Influence of pulsed magnetic field on soybean (*Glycine max* L.) seed germination and physic-chemical properties of seed leachates.*National conference on Modern trends in plant in vitro biology at Bharathidasan University, Trichy on 5-6*<sup>th</sup> January, 2009.
- 12. **Radhakrishnan R,** Abdullah S.A, Raja G. and B.D. Ranjitha-Kumari. Modulatory changes of enzyme activity in salt stressed and saltalleviated *Glycine max* L. (Merr.) by growth regulator (n-triacontanol).*National seminar on Advances in Enzymology at Bharathidasan University, Trichy on 9-10<sup>th</sup> March, 2006.*
- 13. **Radhakrishnan R** and B.D. Ranjitha-Kumari. Toxic effects of soil salinity alleviated by growth regulator ntriacontanol under salt stressed Soybean.*National seminar on Advances in Plant Sciences atBharathidasan* University, Trichy on 24 - 25<sup>th</sup> February, 2006.
- 14. **Radhakrishnan R** and B.D. Ranjitha-Kumari. Assessment of polluted water in Sivakasi.*National Conference on Environment and Sustainable Development atBharathidasan University, Trichy on 16-17<sup>th</sup> February2006.*
- 15. **Radhakrishnan R**. Participated in National level Seminar on Special Lectures in Biosciences at Bharathidasan University, Trichy on 31<sup>st</sup> March to 1<sup>st</sup> April 2004.

# **Participation in Faculty Development Programmes**

- 1. **Radhakrishnan R**. "A One Day Orientation Programme on Gender and Socialisation" organized by *Bharathidasan* University in association with Jamal Mohamed College (Autonomous), Trichy, Tamilnadu on 21-12-2022.
- 2. Radhakrishnan R. "Online Two-week Interdisciplinary Refresher Course on Advanced Research Methodology" organized by *Ramanujan College, University of Delhi on* 22-01-2022 to 05-02-2022.
- 3. **Radhakrishnan R.** Three Day Faculty Development Programme on "Lab to Land Transformation Focus on Entrepreneurial Skill Development" organized by *Department of Zoology, Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu on 20-09-2021 to 22-09-2021.*
- 4. **Radhakrishnan R.** Three Day Faculty Development Programme on "Challenges in Microbiological Invention and Intellectual Property Rights" organized by *Department of Microbiology in association with IQAC, AyyaNadarJanakiAmmal College, Sivakasi, Tamilnadu on 22-09-2021 to 25-09-2021.*
- 5. Radhakrishnan R. Plastic Waste Management. NPTEL/SWAYAM course. Score 67 % (8 weeks course), 02-01-2021 to 31-03-2021.
- 6. Radhakrishnan R. FDP on "E-Content Development" organized byInternal Quality Assurance Cell (IQAC), Jamal Mohamed College (Autonomous), Tiruchirappalli on 30-06-2020 to04-07-2020.
- 7. **Radhakrishnan R.** "National Level Online 7 Day Faculty Development Programme on Revised Accreditation Framework (RAF) of NAAC A Paradigm Shift for Strategic Enhancement of Higher Education in India organized byInternal Quality Assurance Cell (IQAC), RajapalayamRajus' College, Rajapalayam on 08-06-2020 to 15-06-2020.
- 8. **Radhakrishnan R**. International Webinar Series Faculty Development Programme on Contemporary and Advanced Research in Life Science organized by *Department of Microbiology, Karpagam Academy of Higher Education, Coimbatore on 04-06-2020 to05-06-2020*.
- 9. Radhakrishnan R. Online Induction Training/Orientation Programme. Organized by *Ramanujan College, University* of Delhi on 0<u>4-06-2020 to01-07-2020</u>.
- 10. Radhakrishnan R. FDP on Outcome-Based Education. Inpods on 03-06- 2020.
- 11. Radhakrishnan R. Biopython-Faculty Development Programme organized by Department of Botany, Jamal Mohamed College, Tiruchirappalli and Spoken Tutorial IIT Bombay on 29-05-2020 to 30-05-2020.
- 12. Radhakrishnan R. Uncovering PIAZZA for Effective Teaching. Virtual Faculty Development Programme organized by Department of Plant Biology and Biotechnology, Presidency College, Chennai on 27-05-2020.
- 13. **Radhakrishnan R**. Institution's Innovation Council (IIC) Online Sessions to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs organized by *IIC, MHRD's Innovation Cell, New Delhi on* <u>28-04-2020 to</u> <u>22-05-2020</u>.

- 14. Radhakrishnan R. Orientation programme on MOOC's and e-Learning organized by *Library, Jamal Mohamed College (Autonomous), Tiruchirappalli on 29-01-2020*
- 15. Radhakrishnan R. Organic Farming for Sustainable Agriculture Production. NPTEL Course. Score 76 % (8 weeks course).

# Participation in Webinars

- 1. **Radhakrishnan R**. National Webinar on Industrial Spirulina Production Technology. Department of Microbiology, AyyaNadarJanakiAmmal College, Sivakasi on 2<sup>nd</sup> June 2021.
- 2. **Radhakrishnan R**. Live webinar on Marine Microbes A Wonder of the World. Department of Microbiology in association with NSS and KAHE-IIC, Karpagam Academy of Higher Education, Coimbatore on 11<sup>th</sup> December 2020.
- 3. **Radhakrishnan R**. Live Webinar on Impact of Probiotics in combating COVID-19- A Potential Preventive Strategy. Department of Microbiology, Karpagam Academy of Higher Education, Coimbatore on 12<sup>th</sup> October 2020.
- 4. **Radhakrishnan R**. Webinar on Best Practices in Acquiring Scholarly Knowledge. Jamal Mohamed College (Autonomous), Tiruchirappalli on 16<sup>th</sup> August 2020.
- 5. **Radhakrishnan R**. Webinar on National Education Policy- 2020. Jamal Mohamed College (Autonomous), Tiruchirappalli on 8<sup>th</sup> August 2020.
- 6. **Radhakrishnan R**. National Webinar Lecture Series on "Biosciences". Department of Botany, Jamal Mohamed College (Autonomous), Tiruchirappalli on 13- 15<sup>th</sup> July 2020
- Radhakrishnan R. International Webinar Lecture Series on "Biological Sciences". Department of Botany, Jamal Mohamed College (Autonomous), Tiruchirappalli on 6-8<sup>th</sup> July 2020
- 8. **Radhakrishnan R**. International Webinar on Life Sciences. PG and Research Department of Botany, Government Arts College (Autonomous), Karur, Tamilnadu on 22 24<sup>th</sup> June 2020
- 9. **Radhakrishnan R**. Webinar on "Tools for Designing E-Content". IQAC and General Library, quaid-E-Millath Government College for Women (Autonomous), Chennai on 17<sup>th</sup> June 2020.
- 10. **Radhakrishnan R**. Webinar Lecutre Series on Knowledge Access and Sharing: Challenges and Opportunities. Department of Library and Information Science, Bharathidasan University, Tiruchirappalli on 8 14<sup>th</sup> June 2020.
- 11. **Radhakrishnan R**. Webinar on Think Globally, Act Locally: Applicability to Educational Perspectives. Bharathiar University Arts and Science College, Modakurichi on 5<sup>th</sup> June 2020.
- 12. **Radhakrishnan R**. Webinar on Microbiologist in Every day. Biocon Academy and Biotecnika Info Labs Pvt Ltd, Bangalore on 3<sup>rd</sup> May 2020.
- 13. **Radhakrishnan R**. Indo-UK Virtual Conference on Current Innovations and the Future of Therapeutic Developments. Vellore Institute of Technology, Vellore, Tamilnadu on 1-3<sup>rd</sup> June 2020.
- 14. **Radhakrishnan R**. Webinar on Traditional Medicine. Department of Botany, SadakathullahAppa College, Tirunelveli, Tamil Nadu on 30<sup>th</sup> May 2020.
- 15. **Radhakrishnan R**. Webinar on The Crux of Online Teaching for Low Internet Bandwidth. Human Resource Development Centre and Internal Quality Assurance Cell, Academy of Maritime Education and Training (AMET), Chennai on 24<sup>th</sup> May 2020.
- 16. **Radhakrishnan R**. Webinar on Novel Insight into Plant Space Biology. Department of Botany, A.V.C. College (Autonomous), Mayiladuthurai on 21<sup>st</sup> May 2020.
- 17. **Radhakrishnan R**. Webinar on Human Origin, Health and Diseases. CAS Botany, University of Madras, Chennai on 23<sup>rd</sup> May 2020.
- 18. **Radhakrishnan R**. Webinar on Ecosystem Services and Management. Department of Botany, Alagappa University, Karikudi on 24 26<sup>th</sup> May 2020.
- 19. **Radhakrishnan R**. Webinar on Application of Molecular Markers in Plant systematics. Department of Botany, V.O. Chidambaram College, Thoothukudi on 23<sup>rd</sup> May 2020.
- Radhakrishnan R. Two day national level webinar on Recent Trends in Biological Science. Department of Biochemistry, SreeNarayana Guru College, Coimbatore on 21 – 22<sup>nd</sup> May 2020.

#### **Participation in Other Programmes**

1. **Radhakrishnan R**. Intellectual Property Rights and Prior Art Search for Research Development. IPR Cell, Jamal Mohamed College (Autonomous), Tiruchirappalli 5<sup>th</sup> February 2020.

#### **Participation in Workshops**

- 1. **Radhakrishnan R**. Attended a workshop on "*Training programme on Bio fertilizers and Bio control agents in Forestry*" held at "*Institute of Forest Genetics and Tree Breeding*" Coimbatore, Tamilnadu, India on 18 to 20<sup>th</sup> December 2019.
- 2. **Radhakrishnan R**. Attended a workshop on "One day Workshop on Professional Ethics and Plagiarism" held at "Sankara College of Science and Commerce" Coimbatore, Tamilnadu, India on 31<sup>st</sup> August 2019.
- 3. **Radhakrishnan R**. Attended a workshop on *"National Seminar cum Workshop on Genomics and Proteomics 2019" held at Alagappa University,"* Karaikudi, Tamilnadu, India on 06-08<sup>th</sup> February 2019.
- 4. **Radhakrishnan R**. Attended a workshop on *"Routine laboratory Safety Training Course" held at Envrionmental Science and Technology Institute"* at Kyungpook National University, Daegu, South Korea on 23<sup>th</sup> August 2011.
- 5. **Radhakrishnan R**. Attended a National workshop on *"Scholarly Information Access"* held at Bharathidasan University, Tiruchirappalli, India on 23 24<sup>th</sup> October 2009.
- 6. **Radhakrishnan R**. Attended a workshop on "Access to e- Resources and Digital Library Consortium" held at Bharathidasan University, Tiruchirappalli, India on 1 2<sup>th</sup> August, 2008.
- 7. **Radhakrishnan R**. Attended a workshop on "*Patent Awareness*" held at St. Joseph's College, Tiruchirappalli, on 7 <sup>th</sup> April, 2006.
- 8. **Radhakrishnan R**. Attended a workshop on "*Modern techniques in studies of abiotic stress response and stress inducible genes in plants*" held at Institute of Life Science, Nalco Squar, Bhubaneswar, India on 21-24 <sup>th</sup> March, 2006.

S.No	Reg. No	Name	Title of Dissertation	Year of Award
1.	21PBO007	M. Sathish	Survey of Medicinal Plants in Oruvandur Pudur Village of Namakkal Region	2023
2.	20PBO016	R. Ramakrishnan	Characterization of <i>Phyla nodiflora</i> .L Endophytic Bacteria for Plant Growth Promotion and Abiotic Stress Tolerance	2022
3.	20PBO015	S. Aravinthan	Isolation and Characterization of Endophytic Bacteria Residing <i>Aloe vera</i> (L.) For Green Gram Plant Growth and Abiotic Stress Tolerence	2022
4.	19PBO022	Vijayakumar	Antibacterial activity of <i>Cassia fistula</i> L.:an important ethnomedicinal plant	2021
5.	19PBO021	C. Vigneshwaran	Antimicrobial activity of Amaranthus gangeticus	2021
6.	19PBO020	J. Veera Ragavan	Antibacterial Activity of Crude Leaf Extract of Solanum nigrum	2021

# UG and PG Botany Student's Project Guided

PG Student's Project

**UG Student's Project** 

S.No	Reg. No	Name	Title of Dissertation	Year of Award
1.	20UBO027 20UBO028 20UBO029 20UBO030	M. Aakash R. K. Arjun S. Sivakumar M. Christian Roshan	Nutraceutical Properties of Soybean Sprouts under Salt and Vinegar	2023
2.	19UBO030 19UBO031 19UBO032 19UBO033 19UBO034	A. Mohamed Nowfil M. Mohammed Majith R. Mukilan A. Najubudeen M. Prabakaran	Applications of Table Salt and Vinegar on Green gram and Cowpea Sprouts Growth	2022
3.	18UA4631 18UA4632 18UA4633 18UA4635 18UA4636	S. Sarveswaran M. Satham Hussain M. Sathish R. Sriram K. Sugumaran	Formulation and Assessment of Organic Fertilizer for Fenugreek Seedling Growth	2021

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