Dr. M.C. Harish

Assistant Professor
Department of Biotechnology
Thiruvalluvar University
Serkkadu, Vellore -632115. India

M.C. Harish has received his doctoral degree from Bharathiar University, Coimbatore, India. He had worked in Defence Research and Developmental Organization (DRDO) from 2006 to 2011 as research fellow during his Ph.D for development of transgenic tomato with increased a-tocopherol content. With his research interest in molecular biology he took Plants as platform to work initially with biofortification of staple crops and Plant genetic engineering using transgenic and non-transgenic approaches. At present he is working on Plant molecular farming for the development of plant made vaccines for *Mycoplasma gallisepticum* (for chickens), *Mycoplasma capricolum* subsp. *Capripneumoniae* (for goats) and white spot syndrome virus, and he is also interested to exploit multigene engineering of crops with enhanced key nutrients. Recently he has been awarded with UGC Start-Up Grant to take up his research in Thiruvalluvar University.

Name **: Dr. M.C. HARISH**

Designation **:** Assistant Professor

Specialization **:** Plant Molecular Farming,Plant Genetic and Metabolic Engineering

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Academic Qualifications:

- Ph.D (Biotechnology), Bharathiar University, Coimbatore, India, 2011
- M.Phil(Biotechnology), BharathidasanUniversity,Tiruchirapalli, India, 2005
- M.Sc (Biochemistry), Periyar University, Salem, India, 2002
- B.Sc (Microbiology), Madras University, India, 2000.

Awards

- **Junior Research Fellow (JRF),** Defence Research & Development Organization**,** India(2006)
- **Senior Research Fellow (SRF)** Defence Research & Development Organization**,** India(2009)

Membership

- Life time member in"Society of Biological Chemits (India)

Professional Experience : Research: 18 Years & Teaching: 14 years

Professional Carrier Details :

Positions held	Name of the Institutions	Duration	
		From	To
Assistant Professor	Department of Biotechnology, Thiruvalluvar University, Serkkadu, Vellore -632115, India	28-02-2013	Till date
Guest Lecturer	Department of Nanoscience, Bharathiar University, Coimbatore, India	01-06-2011	31-03-2012
SRF	DRDO-CLS, Bharathiar University Campus, Coimbatore, India.	01–06-2009	31-03-2011
JRF	DRDO-CLS, Bharathiar University Campus, Coimbatore, India.	01-06-2006	31-03-2009
Lecturer	Merit- International Institute of Technology, Ooty, Tamilnadu	06-06-2005	25-05-2006
Lecturer	Muthayammal College of Arts & Science, Rasipuram, Tamilnadu.	21-05-2004	02-05-2005

Research Interest

- Molecular biochemistry
- Plant Genetic and Metabolic Engineering
- Molecular Farming and DNA Barcoding
- Biofortification of staple crops

Research Guidance/ Supervision:

Programmes of Study	Completed	Ongoing
Ph.D.	2	3
M.Phil.	7	-

Research projects

Project Sanctioned:

Title: Plant cell culture approach to synthesize natural form of α- tocopherol

Duration: 2013-2015

Funding Agency: UGC, Govt. of India

Amount Sanctioned: 6 lakhs

PATENT

Title of the Invention: **Novel Method for The Detection of Adulteration in Expensive Aromatic Rice By Cheaper Non-Aromatic Rice**
Application No.201741012732 A, Publication Date : 21/04/2017, Date of Grant : 22/03/2022 **Patent No. 392785**. Name of Inventor : 1) Dr. S.Balamurugan, 2) Dr. S. BalaMurugan, 3) Dr. Inchakalody P Varghese, 4) **Dr. M. C. Harish** & 5) Dr.R.Sathishkumar

PUBLICATIONS

1. **M. C. Harish**, S. Rajeev Kumar, R. Sathishkumar (2010) Efficient in vitro Callus induction and regeneration of different tomato cultivars of India. **Asian Journal of Biotechnology**. 2 (3): 178-184.
2. **Harish Mani Chandra** and Sathishkumar Ramalingam (2011) Antioxidant potentials of skin, pulp and seed fractions of commercially important tomato cultivars. **The Food Science and Biotechnology.** 20 (1): 15-21. Impact factor : 3.23
3. **Harish, M.C**, Bala Murugan, S. Sathishkumar. R (2012) Influence of genotypic variations on antioxidant properties in different fractions of Tomato. **Journal of Food Science**. 77:1174 -1178. Impact factor : 3.6
4. **M.C.Harish**, P. Dachinamoorty, S. Balamurghan, S.Bala Murghan and R. Sathishkumar (2013). Overexpressionof Homogentisate Phytyltransferase (HPT) and Tocopherol cyclase

Enhances a-Tocopherol content in Double Transgenics Tobacco. **Biologia Plantarum** 57 (2): 395-400. Impact factor : 1.747

5. S. Bala Murugan, **M.C. Harish**, R. Sathishkumar (2013). Cadmium induced Physio-Biochemical and Molecular response in *Brassica juncea*. **International Journal of phytoremediation**. 15:3, 206-218. Impact factor : 3.6
6. **Mani Chandra Harish**, Palanisamy Dachinamoorty, Srinivasan Balamurghan and Ramalingam Sathishkumar (2013). Enhancement of α-Tocopherol content through Transgenic and Cell Suspension Culture systems in Tobacco. **Acta Physiologiae Plantarum**. 35: 1121-1130. Impact factor: 2.7
7. S Balamurugan, JS Ann, IP Varghese, SB Murugan, **MC Harish**, SR Kumar and R Sathishkumar (2017) Heterologous expression of *Lolium perenne* antifreeze protein confers chilling tolerance in tomato. **Journal of Integrative Agriculture**. 17(5): 1128–1136. Impact factor: 4.48
8. **Harish MC**, Susitra Priyadarshini M, Prakash C (2019). Molecular mechanism of dengue infection and plant made vaccine treatment strategy: a review. J Bacteriol Mycol Open Access. 2019;7(5):128–133. DOI: 10.15406/jbmoa.2019.07.00257
9. Pradeepraj.R, D.Jayarajan and **M.C.Harish** (2019). Efficacy of pyocyanin, extendedspectrum beta-lactamase and HCN production in pseudomonas aeruginosa in clinical settings – an emerging threat. Journal of Emerging Technologies and Innovative Research. , Volume 6, Issue 6 :494- 508
10. R. Pradeepraj, D. Jayarajan and **M. C. Harish** (2020). Biofilm and Metallo Beta-Lactamase Production In Association With Serum Resistant Activity Among Clinical Strains of *Pseudomonas Aeruginosa*. International Journal of Pharmaceutical Sciences and Research, 2020; Vol. 11(2): 1000-11.
11. Sundararajan, S., Rajendran, V., Sivakumar, H. P., Nayeem, S., **Mani Chandra, H**., Sharma, A. and Ramalingam, S. (2021) Enhanced vitamin E content in an Indica rice cultivar harbouring two transgenes from Arabidopsis thaliana involved in tocopherol biosynthesis pathway. **Plant Biotechnology Journal**. Vol.19(6) Pp-1083-1085. Impact factor: 13.26.
12. Susithra Priyadarshni Mugunthan and **Mani Chandra Harish** (2021). Multi-epitope-Based Vaccine Designed by Targeting Cytoadherence Proteins of *Mycoplasma gallisepticum.* **ACS Omega.** Vol 6 (21), 13742-13755. Impact factor: 4.13.
13. Susithra Priyadarshni M, Isaac Kirubakaran S, **Harish M C** (2021). *In silico* approach to design a multi-epitopic vaccine candidate targeting the non mutational immunogenic regions in envelope protein and surface glycoprotein of SARS-CoV-2. Journal of Biomolecular Structure & Dynamics. Vol 16:1-16 (**Published online:** doi.org/10.1080/07391102.2021.1977702) Impact factor: 5.2
14. Susithra Priyadarshni M and **Harish M C** (2021). Reverse vaccinology approach for design and development of multi-epitopic vaccine against avian pathogen *Mycoplasma* gallisepticum. Frontiers in Veterinary Science. 26;8:721061 (doi: 10.3389/fvets.2021.721061) Impact factor: 3.4
15. Susithra Priyadarshni Mugunthan and **Mani Chandra Harish** (2022) In silico structural homology modeling and functional characterization of Mycoplasma gallisepticum variable lipoprotein hemagglutin proteins. Frontiers in Veterinary Science 2022 Aug 4;9:943831. Impact factor: 3.4.
16. Susithra Priyadarshni, Ganapathy Kannan, **Harish Mani Chandra**, and Biswaranjan Paital (2023). Infection, Transmission, Pathogenesis and Vaccine

Development Against *Mycoplasma gallisepticum*. Vaccines, 2023, 11, 469. https://doi.org/10.3390/vaccines11020469. Impact factor: 7.8.

17. Dhivya Selvaraj, Susithra Priyadarhni Mugunthan, **Harish Mani Chandra**, Chandramohan Govindasamy, Khalid S Al-Numair3 & Raviendran Balasubramani (2023). In silico identification of novel and conserved microRNAs and targets in peppermint (*Mentha piperita*) using expressed sequence tags (ESTs). Journal of King Saud University – Science, 2023, 35 ,4:102604 Impact factor: 3.8
18. Susithra Priyadarhni Mugunthan, Divyadharshini Venkatesan, Chandramohan Govindasamy, Dhivya Selvaraj and **Harish Mani Chandra** (2024). A preliminary study of the immunogenic response of plant-derived multi-epitopic peptide vaccine candidate of Mycoplasma gallisepticum in chickens. Frontiers in Plant Science 14:1298880, 2024. doi:10.3389/fpls.2023.1298880. Impact factor: 5.6
19. Diana David, Madhusmita Das, **Harish Mani Chandra** (2024). A comparative study on the detection of Mycobacterium leprae DNA in urine samples of leprosy patients using Rlep-PCR with other conventional samples. Molecular Biology Reports, 51, 504. https://doi.org/10.1007/s11033-024-09470-0. Impact factor: 2.8

PRESENTATIONS (International)

1. Diana David, Madhusmita Das and **M C Harish**. Study on the qPCR detection of *M. leprae* DNA in urine samples of untreated and treated leprosy cases using *Rlep* gene target", at 32nd Biennial Indian Association of Leprologists (IAL) National Conference of leprosy, held on 6th -7th January 2024.
2. Divyadharshini.V, M. Susithra priyadarshni and **M.C. Harish**, In silico identification of vaccine targets against fowl adenovirus for Gallus gallus domesticus. International Conference on Biotechnological Interventions in Food, Agriculture, Nutrition and Health Sciences for the Sustainable Management of Bioresources organized by Sri Ramakrishna College of Arts & Science Coimbatore on 4 and 5 th October 2023.
3. Diana David, Madhusmita Das and **M C Harish**. A study on the qPCR detection of M. leprae DNA in urine samples of leprosy cases using Rlep gene target. International Conference on Biotechnological Interventions in Food, Agriculture, Nutrition and Health Sciences for the Sustainable Management of Bioresources organized by Sri Ramakrishna College of Arts & Science Coimbatore on 4 and 5 th October 2023
4. D. Daina, Madhusmita Das and **M.C.Harish** (2023). A Comparative study on the detection of M.leprae DNA in urine samples of paucibacillary leprosy cases using Rlep PCR with other conventional clinical samples in treated and untreated groups of Leprosy". Genomics India 2023, 2nd and 3rd February 2023, NIMHANS, Bengaluru.
5. D. Daina, Madhusmita Das and **M.C.Harish** (2023). A Comparative study on the detection of M.leprae in urine samples of paucibacillary leprosy cases using Rlep PCR with other conventional clinical samples. South Zone ACBI conference-27th and 28th January 2023, Department of Clinical Biochemistry CMC,Vellore. (Received Best poster and oral award, Rs 1000 cash)
6. **M.C. Harish**, M. Susithra priyadarshni (2022). Structural insights to Mycoplasma gallisepticum phase variation proteins: A Computational approach. 3rd International Conference on Genome Biology (ICGB-3) (Virtual) and 53rd Annual Aquaterr Day from 28.02.2022 to 02.03.2022, at Madurai Kamaraj University.

7. **M.C. Harish**, M. Susithra priyadarshni (2021). COPD associated gene expression supporting entry of SARS-CoV-2 and design of potential epitopic vaccine. International conference on Biotechnology for Environment and Health (ICBEH) that was held from the 25th to 27th November, 2021 at Vellore Institute of Technology, Vellore.
8. **M.C. Harish**, M. Susithra priyadarshni (2021). In Silico Structural insights to Mycoplasma gallisepticum phase variation proteins. International Conference on Novel Paradigms in Biotechnology - Bioengineering Interface from Concepts to Reality (NPBBI-2021) that was held from the 10th to 12th November, 2021 at Sathyabama University, Chennai.
9. **M.C. Harish**, M. Susithra priyadarshni (2021). Development of multi-epitope driven vaccine from S1 domain of SARS-CoV-2: An in silico approach. Recent Advances in Biotechnology and Environmental Health Research (RABEHR-2021)" organized by the Department of Biotechnology, CSH, SRMIST, Ramapuram Campus. In association with Faculty of Medicine & Faculty of Bioresources and Food Industry, UniSZA, Malaysia. 28th and 29th October, 2021.
10. **M.C. Harish**, M. Susithra priyadarshni (2021). Novel Multi-Epitope Vaccine Prediction From Envelope And Surface Glycoprotein Of SARS-Cov-2: An Immunoinformatics Approach. International Conference on Curren Trends in Experimental and Computational Biology, held at, Department of Biotechnology, Bishop Heber college, Trichy, during March 18th and 19th 2021.
11. **M.C. Harish**, M. Susithra priyadarshni (2020). Exploring potential peptide vaccine candidate from envelope and surface glycoproteins of sars-cov-2: an insilico approach. Indo-UK Virtual Conference 'Current Innovations and the Future of Therapeutic Developments' CIFTD-2020, organized by Centre for Biomaterials Cellular & Molecular Theranostics (CBCMT) at Vellore Institute of Technology (VIT), Vellore, India and Swansea University, United Kingdom during 1st-3rd June, 2020.
12. **M.C. Harish**, M. Susithra priyadarshni (2020). In silico design of epitopic vaccine for chronic respiratory disease caused by Mycoplasma gallisepticum. International Conference on Synergy of Sciences (ICSS-2020), organized by School of Chemical and Biotechnology at SASTRA Deemed University, Thanjavur, India during 27th -29th Feburary, 2020.
13. **M.C. Harish**, C. Prakash. Expression and characterization of Botulinum neurotoxin serotype A1 (BoNT/A1) of receptor binding domain (Rbd) protein in planta. International conference on PHARM-BIOTECH 2K19, held at Department of Pharmacology, Saveetha Dental college& Hospital, Chennai on 8th January 2019.
14. **M.C. Harish**, S. Kokilaramani, M. Susithra priyadarshni. Development of Oral Vaccine Against Aquatic Disease - White Spot Syndrome Virus (Wssv) In Planta. International conference on PHARM-BIOTECH 2K19, Department of Pharmacology, Saveetha Dental college& Hospital, Chennai on 8th January 2019 **(Best Poster Award)**.
15. **M.C. Harish**, C. Prakash, M. Susithra Priyadarshni and S. Kokilaramani. International Workshop on Marine Biodiversity, held at Department of biotechnology, Thiruvalluvar University, Vellore, during 29th & 30 th January 2019.
16. **M.C. Harish**, C. Prakash, S. Kokilaramani. Expression of white spot syndrome virus (WSSV) envelope viral protein (VP28) in plant. International conference on recent advanced in biomedical technology (RABT-2018), held at Thiruvalluvar University, Vellore, during August 2018.

17. Bala Murugan Shanmugaraj, **Mani Chandra Harish**, Balamurugan Srinivasan, Ashwini Malla and SathishKumar Ramalingam. Physiological and Molecular alterations in *Brassica Juncea* cadmium stress. 2nd International conference on Environment and Ecology, held at Bharathiar University, Coimbatore, during 7th to 9th March 2016.
18. Jayarajan,D., Pradeepraj,R. and **Harish,M.C.** Novel study of slime producing serum resistance virulent pseudomonas aeruginosa in human environment. International Conference on "Food, Energy and Water Microbiology" Department of Microbiology, Periyar University December 21 – 23th , 2016
19. **M.C. Harish** (2015). Controlled Glycosylation of plant produced recombinant proteins. International conference on Biosciences- Boon to Humankind (ICBBH 2015) held at Shri Sakthikailassh Womens College, Salem Tamilnadu, during 24th and 25th August 2015.
20. **M.C. Harish** and C.Prakash (2015).Expression and characterization of Botiulinum neurotoxins (BoNT/A) in plants for the production of antibody and vaccine development. International symposium on Bioscience research for present and future held at Vivekanandha College, Tiruchengode, Tamilnadu. India on 14th December, 2015 **(Best Poster Award).**
21. Rajeev Kumar Sarma, Anandhan Sivalingam, **Mani Chandra Harish**, Dhivya Selvaraj, Varghese Philipose Inchakalody, Zakwan Ahmed and Ramalingam Sathishkumar (2010). Isolation of cold responsive genes in carrot by Supression Subtractive Hybridisation. In 34th International Carrot Conference held during 26-28 July 2010 in Washington, USA
22. S.Balamurugan, P. Varghese, S. Rajeev Kumar, **M. C. Harish**, Sarika Mathure, K.V. Wakte, A. B. Nadaf and R. Sathishkumar (2009). Extraction and quantification of food flavouring compound 2-Acetyl-1-pyrroline from traditional land rice varieties of Kerala. In: "**International conference on Food Technology 2009"** held at Indian Institute of Crop Processing Technology, Thanjavur during August 28-29
23. **M. C. Harish**, N. Sowmiya Devi and R. Sathishkumar (2008). Enhancing the α-tocopherol (Vitamin E) content in high altitude tomato cell suspension culture. In first Congress of **Asia-Pacific Society for Mountain Medicine** at New Delhi from November 28- 30
24. **M. C. Harish** and Ramalingam Sathishkumar (2007). Tissue culture studies and quantification of the α-tocopherol in the high altitude tomato cultivars. In**: International Conference on New Horizons in Biotechnology**, held at National Institute for Interdisciplinary Science and Technology**, Trivandrum**, during November 26-29

National

1. V. Divyadharshini, R. Nanda gopal, M. Susithra Priyadarshni, **M. C. Harish** (2022). Computational approach to determine the antigenic epitope in fowl adenovirus Integrated approach in science and Technology for a sustainable future, organized by Department of Biotechnology, Thiruvalluvar Univerity, Vellore, on 9th March 2022.
2. **M.C. Harish**, M. Susithra priyadarshni (2020). Novel multiepitope vaccine prediction from envelope and surface glycoprotein of SARS-CoV-2. NATIONAL ONLINE CONFERENCE Organized by Environment and Social Development Association (ESDA), on 5th and 6th June 2020.
3. **M.C. Harish**, M. Susithra Priyadarshni, C. Prakash and S. Kokilaramani (2019). Oral /edible plant made insulin for diabetes management. National Conference on Biochemistry and Therapeutics of Diabetes and cancer treatment and challenges, held at,

Department of Plant Biology and Biotechnology, Loyola college, Chennai, during 28th Feb and March 1st 2019.

4. C. Prakash and **M.C. Harish.** Expression & characterization of RBD (receptor binding domain) of BoNT/A in plant for production of vaccine development. National conference on Futuristic trends in biotechnology and computational biology. VIT university 13th and 14th October, 2016.
5. **M.C. Harish.** Nanobiotechnology: Cell membrane-based delivery systems. National conference of Emerging Biomaterials Department of Nanoscience and Technology, Bharathiar University 19th – 21th October, 2016.
6. **M.C. Harish.** Enhancement of tocopherol content through precursor/ Elicitor supplementation in cell suspension cultures of Tobacco & Tomato "Advances in bioprocess Engineering- Practical Approach for Today's Bioprocess Challenges" (ePoster) Department of Biotechnology and Microbiology, Kasturba Gandhi Degree and PG College for Women, Hyderabad 24th – 25th November, 2016
7. C. Prakash and **M.C. Harish** (2015). Antibody mediated resistance against plant pathogens. Recent Advances in Biomedical technology, Thiruvalluvar University 26-27th Febuary,2015
8. C. Prakash and **M.C. Harish** (2015). Diphtheria toxin preparation and detoxification by formaldehyde and glutaraldehyde. Recent Advances in Biomedical technology Thiruvalluvar University 26-27th Febuary,2015
9. C. Prakash and **M.C. Harish** (2015). Development of plant based recombinant vaccine BoNT/B. Biogalaxia, Bharathiar University 18th December, 2015
10. **M.C. Harish.** A preliminary study to create DNA barcode library for medicinal plants. Recent Advances in Biomedical technology, Thiruvalluvar University 26-27th Febuary,2015
11. **M. C. Harish,** P. Dachinamoorty, S. Balamurghan, S. Rajeev, R. Sathishkumar. Manipulation of Vitamin E Biosynthetic Pathway- Double Transgenic and Cell Culture Approach in Tobacco. **80th Annual Meeting of the Society of Biological Chemists (SBC)** to be held during 12th to 15th November, 2011 in Lucknow, India
12. A. Sangilimuthu, L. Hakkim, S. Rajeev Kumar, **M. C. Harish** and R. Sathishkumar. Studies on *in vitro* Plant regeneration and Anti-Oxidant activity of *Withania somnifera* (L) In: "National Seminar on Frontiers in Biotechnology" at Bharathiar University, Coimbatore during July 22th -24th, 2009
13. Narmada J, Rajeev Kumar S, Varghese P. Inchakalody, **Harish M. C**, Dhivya S and Sathishkumar R. Biochemical and Physiological Studies on High Altitude and Temperate Tomato Varieties during Cold Stress. In: "National Seminar on Frontiers in Biotechnology**"** at Bharathiar University, Coimbatore during July 22th -24th, 2009
14. Saravanan R, **Harish M.C.** and Sathishkumar R . Analysis of genes up regulated in *Brassica juncea* during exposure to cadmium. In: Seminar on "Frontiers in Biotechnology" held at Bharathiar University, Coimbatore during February 8th -9th, 2007
15. M. Chitra Devi, **M.C. Harish** and R. Sathishkumar. Amelioration of salt stress using precursors in *in vitro* systems of tomato. In: Seminar on "Frontiers in Biotechnology" held at Bharathiar University, Coimbatore during February 8th -9th, 2007
16. N. R. Natarajasivam, **M.C. Harish,** R. Sathishkumar and B. Nagarajan. Red Tamarind-the magnificence of India. In: Seminar on "Frontiers in Biotechnology" held at Bharathiar University, Coimbatore during February 8th -9th, 2007

17. Silpi Banerjee, **M.C. Harish** and R. Sathishkumar. Effect of precursors on tocopherol production in *in vitro* systems of tomato. In: Seminar on "Frontiers in Biotechnology" held at Bharathiar University, Coimbatore during February 8^{th} -9^{th}, 2007
18. **M.C. Harish**. Cutting edge: Depletion of $CD25^{+}$ regulatory cells results in the suppression of melanoma growth and induction of autoreactivity. In: "National Seminar on Advances in immune diagnosis and therapy" at Dr.GRD college of science, Coimbatore during 3^{rd} -4^{th} March, 2006
19. Eldo Jacob and **Harish M.C.** Anti-ulcer and antioxidant activity of *solanum nigrum* and *Aegle marmalous*. In: "National level biological congress on Biotechnology-A global perspective" at Muthayammal college of arts and science, Rasipuram during January 6^{th} and 7^{th} , 2006
20. **Harish M.C.** Study on the inhibitory effects if zinc in different varieties of paddy. In: "International symposium on Recent advances in biological sciences" at KSR college of arts and science, Tiruchengode during October 11-12, 2001

BOOK CHAPTER

1. S. Dhivya, S. Dhivya, S. Rajeev Kumar, **M.C. Harish**, S. Balamurugan and R. Sathishkumar (2012): Authentication of Herbal Products by DNA Barcoding Based PCR-RFLP Technique. In Parimelazhagan Thangaraj (Eds.) " Herbal Drug Research-Recent Trends and Progress" Lambert Academic Publishing (LAP), Germany.
2. Susithra Priyadarshni M and **Harish MC** (2021):Current Research in Biotechnology and Biological Sciences, Volume – 1, Bright Sky Publications, Delhi, India

JOURNAL REVIEWER

- **International Journal of Plant Physiology and Biochemistry from 2011 onwards.**
- **International Journal of Biosensors & Bioelectronics from 2016 onwards.**
- **Research Journal of Biology from 2016 onwards.**
- **Frontiers in Bioscience from 2019 onwards**
- **Asian Pacific Journal of Tropical Medicine from 2019 onwards**
- **Advances in Animal and Veterinary Sciences from 2021 onwards**
- **Journal Medical Virology**
- **Biotech Reports**
- **International Journal of Peptide Research and Therapeutics**
- **Scientific Reports, nature**

MEMBERSHIP

- Life time member in Society of Biological Chemist (India)

OFFICIAL BODIES

- Doctoral committee member Bharathiar University, Coimbatore, TN
- Doctoral committee member Periyar University, Salem, TN

- Member in M.Phil and Ph.D selection at Thiruvalluvar university
- Member in Board of Studies at Thiruvalluvar University, Bharathiar University and DKM women's college vellore.
- M.Phil Question paper setter for Bharathiar University & Periyar University.
- M.Sc Question paper setter for Periyar University, Bharathiar University
- Deputy Coordinator, IQAC, Thiruvalluvar University (2019-2021)
- Member, IQAC, Thiruvalluvar University (2022- till date)
- Member, Central Instrumentation Committee, Thiruvalluvar University (2022- till date)
- Faculty In-Charge, Affiliation and Board of Studies, Thiruvalluvar University (2020-2021).
- Academic Council Member, Thiruvalluvar University. (2022- till date)

GENBANK (NCBI, USA) SUBMISSIONS

1. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C.** and Varghese,I.P. (2009) *Adenium obesum* maturase K-like (matK) gene, partial sequence; plastid. Accession No.GQ220742.1
2. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C.** and Varghese,I.P. (2009). *Carissa carandas* maturase K-like (matK) gene, partial sequence; plastid. Accession No. GQ220743.1
3. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C** and Varghese,I.P. (2009). *Plumeria alba* maturase K-like (matK) gene, partial sequence; plastid. Accession No. FJ754255.1
4. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C** and Varghese,I.P. (2009). *Rauvolfia tetraphylla* maturase K-like (matK) gene, partial sequence; plastid. Accession No. GQ220744.1
5. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C** and Varghese,I.P. (2009). *Wrightia tinctoria maturase* K-like (matK) gene, partial sequence; plastid. Accession No.GQ220745.1
6. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C,** Varghese,I.P. and Megala S. (2009). *Allamanda cathartica* RNA polymerase C-like (rpoC1) gene, partial sequence; plastid. Accession No. GQ220740.1
7. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C,** Varghese,I.P. and Megala S. (2009). *Plumeria rubra* RNA polymerase C (rpoC1) gene, partial cds; plastid. Accession No. GQ220746.1
8. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C,** Varghese,I.P. and Megala S. 2009. *Alstonia scholaris* RNA polymerase C-like (rpoC1) gene, partial sequence; plastid. Accession No. GQ220739.1
9. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C,** Varghese,I.P. and Megala S. (2009). *Rauvolfia tetraphylla* RNA polymerase C-like (rpoC1) gene, partial sequence; plastid. Accession No. GQ220738.1
10. Sathishkumar, R., Dhivya, S., Rajeevkumar,S., **Harish,M.C,**Varghese,I.P. and Megala S. (2009). *Thevetia peruviana* RNA polymerase C-like (rpoC1) gene, partial sequence; plastid.Accession No. GQ220741.1
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Research Interest

- Plant Genetic and Metabolic Engineering
- Plant Molecular Farming
- Biofortification of staple crops

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