# Faculty Profile of Dr. R. Sathishkumar



Dr. R. Sathishkumar Professor & Head Department of Biotechnology

Email:rsathish@buc.edu.in

Phone No:0422-2428299

Mobile No:9360151669

#### **Research Area**

# PLANT GENETIC ENGINEERING LABORATORY

► Plant Metabolic Engineering ► Plant Molecular Farming ► Plant DNA Barcoding

**Education & Career** 

Education

# Doctor of Philosophy (Ph.D.)

Subject: Plant Sciences Institution: Madurai Kamaraj University Affiliated University: Madurai Kamaraj University, Madurai, India Year of Award: 1998

# Master of Philosophy (M.Phil.)

Subject: Botany Institution: Pondicherry University, Pondicherry, India Affiliated University: Pondicherry University, Pondicherry, India Year of Award: 1991

# Master of Science (M.Sc.)

Subject: Botany Institution: Madras Christian College, Chennai, India Affiliated University: Madras University Year of Award: 1990

# **Bachelor of Science (B.Sc.)**

Subject: Botany Institution: Loyola College, Chennai, India Affiliated University: Madras University Year of Award: 1988

# Career

# At Bharathiar University (Reverse Order)

Professor: 21.04.2018 to Till Date Associate Professor: 21.04.2015 to 20.04.2018 Assistant Professor: 20.04.2005 to 20.04.2015

# Past Experience

Post-Doctoral Researcher: 01.02.1999 to 15.04.2005 at the Department of Botany, The University of Hong Kong, Hong Kong

#### Awards

# **Travel Awards**

Funding agency : Centre for International Cooperation in Science. Name of conference : 3rd International Barcode of Life Conference. Paper presented(Oral/Poster) : Oral presentation.

Title of paper : Conventional and novel DNA barcoding for Apocyanaceae. Country : Mexico.

Date of Award : Nov. 7-13, 2009.

Funding agency : Centre for International Cooperation in Science. Name of conference : 5th International Barcode of Life Conference. Paper presented(Oral/Poster) : Oral presentation. Title of paper :Development of a Standard Reference Material (SRM) DNA Barcode Library for Herbal Product Authentication. Country : China.

Date of Award : Nov. 7-13, 2013.

Funding agency : The Chinese University of Hong Kong.

Name of conference : 2nd International conference on DNA technology for authentication, quality control and conservation of herbal material.

Paper presented(Oral/Poster) : Oral presentation.

Title of paper : Biological authentication of natural Indian honey samples.. Country : Hong Kong.

Date of Award : Dec. 2-5, 2018.

# **Academic Awards**

- INTERNATIONAL
- NATIONAL

Awarding agency : St. George's University of London. Purpose of award : Academic Visitor. Country : United Kingdom. Date of Award : 18.06.2008.

Awarding agency : St. George's University of London. Purpose of award : Academic Visitor. Country : United Kingdom. Date of Award : 28.06.2010. Awarding agency : King's College.

Purpose of award : Animals (Scientific Procedures) course for experimental animal handling procedure.

Country : United Kingdom.

Date of Award : 03.03.2008.

Awarding agency : International biographical centre.

Purpose of award : Top 100 Scientists 2015 - Nominated for recognition by the International Biographical Centre.

Country : England.

Date of Award : 09.10.2015.

Awarding agency : Technologico de Monterrey, Queretaro, Mexico. Purpose of award : Academic Leader program - as an expert in Plant Biotechnology. Country : Mexico. Date of Award : 21.09.2018 - 30.09.2018.

Awarding agency : Elsevier. Purpose of award : The Netherlands. Country : Awarded the Outstanding Contribution in reviewing the editors of Journal of Ayurveda and Integrative Medicine. Date of Award : Sept., 2017.

Awarding agency : Central Pollution Control Board.

Purpose of award : Best Report on Heavy metal pollution and its effects on human health and remedial measures.

Country : India.

Date of Award : 04.03.1991.

Awarding agency : Madurai Kamaraj University.

Purpose of award : Awarded the best poster at National level, during the annual meeting of the "Society of Biological Chemists". Country : India.

Date of Award : 19.12.1994 - 22.12.1994.

Awarding agency : Central Food Technological Research Institute. Purpose of award : Awarded the best poster at National Symposium on "Recent Advances in Biotechnological Applications of Plant tissue culture and Cell culture". Country : India. Date of Award : 22.06.1995 - 24.06.1995.

Awarding agency : Madurai Kamaraj University. Purpose of award : Awarded third prize in poster competition in "National Science Day Celebrations". Country : India. Date of Award : 28.02.1995.

### Academic fellowships for training

Name of faculty : Dr. R. Sathishkumar. Awarding agency : Deutsche Academic Exchange Service (DAAD). Purpose : Short-term Research Fellowship. Country : Germany. Duration : Aug. 1996 – Jan. 1997. Name of faculty : Dr. R.Sathishkumar.

Awarding agency : Department of Science and Technology Government of India.

Purpose : Junior Research Fellowship.

Country : India.

Duration : 1992- 1994.

Name of faculty : Dr. R.Sathishkumar.

Awarding agency : Council of Scientific and Industrial Research, Government of India.

Purpose : Senior Research Fellowship.

Country : India.

Duration : 1994 - 1997.

Name of faculty : Dr. R.Sathishkumar.

Awarding agency : Council of Scientific and Industrial Research, Government of India.

Purpose : Research Associate.

Country : India.

Duration : 1998.

Name of faculty : Dr. R.Sathishkumar. Awarding agency : Academy of Sciences, Chennai, TN. Purpose : Elected as Fellow for Appreciation of the scientific contributions in the field. Country : India.

Duration : 2015.

### Membership

### **Professional Bodies**

Organization : Society of Biochemists, Life Member, India. Type of Membership :Life Member Period : Since 2008

Organization :New York Academy of Sciences, USA. Type of Membership :Member Period :Since 1998

Organization : International Association of Plant Biotechnology, USA. Type of Membership :Member Period : Since 2008

Organization : Barcode of Life Community Network, USA. Type of Membership :Member Period : Since 2009

Organization : Centre for Plant Health, Australia. Type of Membership :Member Period : Since 2009

Organization :Asian Council of Science Editors, UAE. Type of Membership :Member Period : Since 2015

Organization : NHP Research Alliance, University of Guelph, Canada. Type of Membership :Strategic member Period : Since 2018

Organization : Academy of Sciences, Chennai, India. Type of Membership :Nominated member Period : Since 2015

Organization : International Society for Plant Molecular Farming. Type of Membership :Member Period : Since 2019

### **Academic Bodies**

Organization : Sri Krishna Arts and Science College, Coimbatore. Type of Membership :Academic council Member Period : 2017-18

Organization : S.R.M.V college of Arts and Science, Coimbatore. Type of Membership :Academic council Member Period : 2017

Organization : Kovai Kalaimagal College of Arts and Science, Coimbatore. Type of Membership :Academic council Member Period : 2017-18

Organization : Erode Arts and Science, Erode. Type of Membership :Academic council Member Period : 2016-18

Organization : NGM College, Pollachi. Type of Membership :University nominee for result passing board Period : 2018

Organization : BU University Departments. Type of Membership :Chairperson of BOS Period : 2018-20

Organization : Research, Bharathiar University. Type of Membership :Member of BOS Period : 2017-19

Organization : Biotechnology Department, Bharathiar University. Type of Membership :Member of BOS Period : 2017-18

Organization : Erode Arts and Science College. Type of Membership :Member of BOS Period : 2018-19

Organization : Kongu Arts and Science College, Erode. Type of Membership :Member of BOS Period : 2018-19

Organization : Madurai Kamaraj University, Madurai. Type of Membership :Member of BOS Period : 2019-20

Organization : PSG College of Arts and Science, Coimbatore. Type of Membership :Member of BOS Period : 2017-19

Organization : Kongu Nadu Arts and Science College, Coimbatore. Type of Membership : Member of BOS Period : 2016-20

Organization : Standard Fireworks Rajarathinam College for Women, Sivakasi. Type of Membership :Member of BOS Period : 2018-19

Organization : CMS College, Coimbatore. Type of Membership :Member of BOS Period : 2016-20

Organization : R.V.S college, Coimbatore. Type of Membership :Member of BOS Period : 2016-20

Organization : Karpagam University, Coimbatore. Type of Membership :Member of BOS Period : 2016-20

Organization : Kovai Kalaimagal College of Arts and Sciences, Coimbatore. Type of Membership :Member of BOS Period : 2018-19

Organization : Alagappa University, Karaikudi. Type of Membership :Member of BOS Period : 2016-20

Organization : GRD College of Arts and Science, Coimbatore. Type of Membership :Member of BOS Period : 2018-20 Organization : Hindusthan College of Arts and Science, Coimbatore. Type of Membership :Member of BOS Period : 2016-20

Organization : Nehru Arts and Science College, Coimbatore. Type of Membership :University Nominee in BOS Period : 2017-19

Organization : S.N.R Sons College, Coimbatore. Type of Membership :Member of BOS Period : 2017-19

Organization : Nehru Memorial College, Puthanampatti, Tiruchirappalli District. Type of Membership :Member of BOS Period : 2018-20

Organization : Periyar University, Selam. Type of Membership :External Member for BOS Period : 2019-22

Organization : Rathinavel Subramaniam College of Arts and Science, Coimbatore. Type of Membership :Member of BOS Period : 2019-22

Organization : Thiruvalluvar University, Serkkadu, Vellore. Type of Membership :Chairman of BOS Period : 2020-23

Organization : JSS Academy of Higher Education and Research, Mysuru, Karnataka.

Type of Membership :Member of BOS Period : 2020-22

Organization : Karunya University, Department of Biotechnology, Coimbatore, Tamil Nadu. Type of Membership :Academic Audit Member Period : 2Since 2015 Organization : P.S.G College of Arts and Science, Coimbatore, Tamil Nadu. Type of Membership :Academic Audit Member Period : Since 2015

Organization : Jamal Mohammed College, Trichy, TN. Type of Membership :Academic Audit Member Period : Since 2015

#### Visits

Country Visited : Hong Kong Duration of Visit : 6 years Month and Year : Feb. 1999 – Apr. 2005 Purpose of Visit : Post-Doctoral Researcher.

Country Visited : UK Duration of Visit : 1 year Month and Year : Jun 27, 2007 – Jun 20, 2008 Purpose of Visit : Staff Exchange programme under UGC-UKIERI Project.

Country Visited : UK Duration of Visit : 1 month Month and Year : Mar. 2008 Purpose of Visit : Course conducted by King's College, London, UK for experimental animal handling procedure .

Country Visited : Mexico Duration of Visit : 1 week Month and Year : Nov. 7–13, 2009 Purpose of Visit : Oral presentation in the 3rd International Barcode of Life Conference.

Country Visited : UK Duration of Visit : 1 month Month and Year : Jun 1 – Jun 29, 2010 Purpose of Visit : Indo-US Science & Technology Fellowship.

Country Visited : China Duration of Visit : 1 week Month and Year : Nov. 7-13,2013 Purpose of Visit : Oral presentation in the 5th International Barcode of Life Conference.

Country Visited : Portugal Duration of Visit : 1 day Month and Year : Jun. 30, 2015 Purpose of Visit : "Indo-Portugal Workshop at ICAAM" held at University of Evora.

Country Visited : Hong Kong Duration of Visit : 1 week Month and Year : Feb 27 – Mar 1, 2016 Purpose of Visit :Oral presentation in International conference on DNA technology for authentication, quality control and conservation of herbal material.

Country Visited : Mexico Duration of Visit : 10 days Month and Year : Sept 21st to 30th, 2018 Purpose of Visit : Academic Leader program, invited by Technologico de Monterrey, Queretaro, Mexico, as an expert in Plant Biotechnology.

Country Visited : Hong Kong Duration of Visit : 4 days Month and Year :Dec. 2-5, 2018 Purpose of Visit : Oral presentation in 2nd International conference on DNA technology for authentication, quality control and conservation of herbal material.

Country Visited : UK Duration of Visit : 10 days Month and Year : Jun 1-10, 2019 Purpose of Visit : To visit St. Georges University of London and discuss with Prof. Julian Ma regarding on-going UGC-UKIERI – III Project.

Country Visited : Latvia Duration of Visit : 3 days Month and Year : Jun 10- 12, 2019 Purpose of Visit : Oral presentation in Plant Based Vaccines, Antibodies and Biologics at University of Latvia, Riga, Latvia. Country Visited : Norway Duration of Visit : 4 days Month and Year : Jun 17-20, 2019 Purpose of Visit : Oral presentation in 8th International Barcode of Life Conference at Clarion Hotel and Congress, Trondheim, Norway.

### Collaborations

- International
- National

 Professor Julian K-C. Ma
 PhD, BDS FDSRCS(Ed) Director, Institute for Infection and Immunity Hotung Chair of Molecular Immunology
 George's Hospital Medical School
 Cranmer Terrace
 London SW17 ORE, UK

 Professor. habil. Birgit Arnholdt-Schmitt Coordinating Investigator
 EU Marie Curie Chair
 University of Évora
 Apart. 94
 7002-554 Évora, Portugal

3. Dr. HeliaCardosa
Laboratory of Molecular Biology
University of Évora, ICAAM
Polo da Mitra, Apartado 94
7002-554 Évora, Portugal

4. Professor. Steven G. Newmaster
Botanical Director
Biodiversity Institute of Ontario (BIO)
Department of Integrative Biology
Centre for Biodiversity Genomics
University of Guelph
Guelph, Ontario, Canada N1G 2W1

5. Dr. S. Ragupathy Chief Curator, BIO-Herbarium Department of Integrative Biology Center for Biodiversity Genomics University of Guelph Guelph, Ontario, Canada N1G 2W1

Prof. N. Senthilkumar
 Head
 Department of Biotechnology
 Mizoram University
 Aizawl, Mizoram - 796004

Dr. S. Sudhakar
 Professor and Head
 Department of Botany
 Manonmaniam Sundaranar University
 Tirunelveli 627 012

3. Dr. M. Ramesh
Associate Professor
Department of Biotechnology
Alagappa University
Karaikudi -630 003 Tamil Nadu

4. Dr. Modhumita Dasgupta
Scientist E
Institute of Forest Genetics and Tree Breeding
B-33, Forest Campus, R.S. Puram, Coimbatore-641002

#### Others

# Invited and Guest Lectures Delivered in Various Capacities

1.Refresher Course in Bioinformatics and Biotechnology Human Genome Project and its Implications Academic Staff College, Bharathiar University, Coimbatore Nov 1-21, 2006 Invited Lecturer

2.Refresher Course in Biological Sciences Green Factories Academic Staff College, Bharathiar University, Coimbatore Nov 10- 30, 2006 Invited Lecturer

3.M.Phil. Distance Education Plant Biotechnology Alagappa University, Karaikudi Nov 26, 2006 Invited Lecturer 4.National Seminar on New Frontiers in Biological Sciences DNA Barcoding Department of Botany, Holy Cross College, Tiruchirappalli Jan 19-20, 2007 Invited Lecturer

5.One day in-house Seminar Series in Microbial Technology, Department of Microbiology Development of a Recombinant Vaccine in Transgenic Plants Dr. G. R. Damodaran College of Science, Coimbatore Sept 16, 2008 Invited Lecturer

6.National Symposium on Herbal Drug Research Vaccine Producing Plant Factories Department of Botany, Bharathiar University, Coimbatore Sept 26-28, 2008 Invited Lecturer

7.National Conference on Advance Trends in Biotechnology Plant DNA Barcoding - Problems and Prospects Department of Biotechnology, Dr. NGP Arts and Sciences College, Coimbatore Dec 19-20, 2008 Invited Lecturer

9.Staff Development Programme on Role of Biomarker in Environment and Biodiversity Maintenance Plant DNA Barcoding: A Case Study Department of Biotechnology, Periyar Maniammai University, Thanjavur Jun 9-23, 2009 Invited Lecturer

10.National Conference on Advancement in Transgenic Technology Genetic Engineering for Cold Tolerance Vivekananda College of Arts and Sciences for Women, Tiruchengode Sept 23-25, 2009 Invited Lecturer

11.Refresher Course in Zoology DNA Barcoding- International Effort Academic Staff College, Bharathiar University, Coimbatore Nov 8 – 29, 2010 Invited Lecturer

12.Refresher Course in Botany Plant DNA Barcoding Academic Staff College, Bharathiar University, Coimbatore Nov 8 – 29, 2010 Invited Lecturer

13.Alumni Meet and Seminar Plant Molecular Farming: Advantages and challenges Loyola College, Chennai Feb. 14th 2011 Invited Lecturer

14.Seminar Plant Molecular Farming Dr. NGP College, Coimbatore Mar 4, 2011 Invited Lecturer

15.M.Sc. Refresher Course Plant DNA Barcodes Avinashilingam University, Coimbatore May 18th 2011 Invited Lecturer 16.DBT sponsored short term training course Agrobacterium-mediated Gene Transfer Saraswathi Narayanan College, Madurai Nov 30th 2011 Invited Lecturer

17.National Seminar of Enzymes and Biocatalysis, The Versatile Actors: Current Trends and Future Perspectives Metabolic engineering of vitamin E Biosynthetic Pathway: Transgenic and Non- transgenic approach Periyar University, Salem Jan 5 – 6, 2012 Invited Lecturer

18.Two day National conference on "Recent Advances in Plant
Biotechnology: Towards Next Green Revolution" Genetic Engineering of
Plants for Cold Tolerance Bharathidasan University, Trichirappalli Feb 9-10,
2012 Invited Lecturer

19.Seminar Plant Biotechnology VHNSN College, Virudhunagar Feb 21st, 2012 Invited Lecturer

20.One Day Seminar on Structural and Functional Genomics Plant Molecular Farming: A Production Platform for High Value Proteins School of Biotechnology, Madurai Kamaraj University, Madurai Mar 27, 2012 Invited Lecturer

21.Winter School on Plant Genetic Engineering Plant Genetic Engineering Madurai Kamaraj University, Madurai Sept 3, 2012 Invited Lecturer

22.Indo-South Africa workshop on Traditional Medicine System: Sharing Knowledge and Experience DNA Barcoding of Indigenous Medicinal Plants JSS College of Pharmacy, Udhagamandalam Oct 29-31, 2012 Invited Lecturer

23.DBT sponsored short-term training course Plant Made Pharmaceuticals Department of Plant Biology and Biotechnology, Loyola College, Chennai July 26, 2013 Invited Lecturer

24.National Seminar on Frontiers in Biotechnology Recent Advances in Plant Molecular Pharming Nehru Memorial College, Puthanampatti, Tiruchiappalli Aug 8-9, 2013 Invited Lecturer

25.5th International Barcode of Life Conference Development of a Standard Reference Material (SRM) DNA Barcode Library for Herbal Product Authentication Kunming, China Nov 7-13, 2013 Invited Lecturer 26.Training Programme in Research Methodology Gene Transfer Methods in Plants Department of Zoology, Bharathiar University, Coimbatore Jan 21-24, 2014 Invited Lecturer

27.One day Symposium on "Biotechnological Innovations Towards Global Development" GM Crops for Future Vellalar College for Women, Erode Feb 27, 2014 Invited Lecturer

28.National Seminar on Biodiversity – Status, Conservation and Management DNA Barcoding: A Tool for the Conservation of Biodiversity Kongu Nadu Arts and Science College, Coimbatore Mar 7-8, 2014 Invited Lecturer

29.Seminar Principles, Techniques and Application of Gene Modifications PSG college of Technology, Coimbatore July 12, 2014 Invited Lecturer

30.Seminar Plant Metabolic Engineering Department of Biochemistry, PSG College of Arts and Science, Coimbatore Sept 15, 2014 Invited Lecturer

31.Science Academies Lecture Workshop on Biological Sciences; Research Prospects and Application DNA Barcoding and its Application Department of Biotechnology, Karpagam University, Coimbatore Sept 25, 2014 Invited Lecturer

32.Science Academies Lecture Workshop Science Academies Lecture Workshop on Recent Trends in Biological Sciences Department of Biochemistry, Dr.NGP College of Arts and Sciences. Coimbatore Oct 6, 2014 Invited Lecturer

33.Seminar Metabolic Engineering of Vitamin E pathway in Plants PSGR Krishnammal College for Women Dec 31, 2014 Invited Lecturer

34.Seminar Plant Molecular Farming TNAU, Coimbatore Feb 26, 2015 Invited Lecturer

35.Science Academies Lecture Workshop on Emerging Trends in Bioprospecting Plant Molecular Farming: A Case Study Department of Microbiology, Hindustan College of Arts and Science, Coimbatore Mar 19th 2015 Invited Lecturer

36.8th Medical Arthropodology National Conference Vector – borne Diseases: Burden, Surveillance and Control Department of Biotechnology, Manomaniam Sundaranar University, Tirunelveli Mar 26th 2015 Invited

## Lecturer

37.National Seminar on "Insight to Futuristic Bioscience What is Systems Biology? Hindusthan College of Arts and Science, Coimbatore Jan 29th 2016 Invited Lecturer

38.National Seminar on Paradigms of Plant Microbe Interactions Paradigms of Plant Microbe Interactions Department of Biotechnology, Mepco Schlenk Engineering College, Sivakasi Feb 26th 2016 Invited Lecturer

39.Science Academies Lecture Workshop on New Frontiers in Plant Sciences and Biotechnology Plant Metabolic Engineering Nehru Memorial College, Puthanampatti, Coimbatore Mar 4, 2016 Invited Lecturer

40.PG Botany Club Herbal Product Authentication by DNA Barcodes Madras Christian College, Chennai Apr 2nd 2016 Invited Lecturer

41.International conference on Recent Trend in Biosciences Plant Expression System for the Production of Recombinant Pharmaceutical Proteins Alagappa University, Karaikudi Apr 7 – 9, 2016 Invited Lecturer

42.DBT & ICMR Sponsored National Conference on Transitional and Translational Scenarios in Biological Sciences Transitional and Translational Scenarios in Biological Sciences Department of Microbiology, Dr.N.G.P. Arts and Science College, Coimbatore Sept 9-10, 2016 Invited Lecturer

43.Plants Club –Palmyra by UGC-XII Plan Plant Metabolic Engineering Dept. of Plant Science, Manonmaniam Sundaranar University, Tirunelveli Feb 18, 2017 Resource Person

44.UGC-HRDC, Refresher Course Life Sciences Molecular Pharming & DNA Barcoding Department of Botany, Bharathiar University, Coimbatore July 6, 2017 Resource Person

45.Science Academic Lecture Workshop on DNA Technologies in Revisiting Biology DNA Technologies in Revisiting Biology Dr.N.G.P Arts and Science College, Coimbatore July 28, 2017 Invited Lecturer

46.Symposium on "Cross-talk in Omics" Rapid Production of Therapeutic Proteins from Plant System Dept. of Bioinformatics, Pondicherry University Aug 9, 2017 Invited Lecturer 47.National Conference on Plant-based Drug – Biotechnological Implications Manipulation of Vitamin E Biosynthetic Pathway – Use of Transgenic and Cell Cultures Dept. of Biotech, Karpagam University, Coimbatore Aug 10, 2017 Invited Lecturer

48.DBT sponsored Workshop Crop Genome Editing using CRISPR/Cas9 Department of Plant Biology and Biotechnology, Loyola College, Chennai Sept 8, 2017 Resource Person

49.Refresher Course in Bio-Sciences DNA Barcoding in Plants UGC-HMRD, Bharathidasan University, Trichy Oct 30, 2017 Resource Person

50.DBT Sponsored short-term training course on Basic Techniques in Plant and Animal Tissue culture for Mid-career Scientists and Teaching Faculty Agrobacterium mediated gene transfer methods Dept. of Biotechnology, Hindusthan College Arts and Science, Coimbatore Nov 11, 2017 Resource Person

51.DBT –short term training course on Analytical Techniques in Bioprospecting of Medicinal Plants Analytical Techniques in Bio-prospecting of Medicinal Plants Dept. of Botany, Bharathiar University Oct 23 – Nov 08, 2017 Resource Person

52.UGC-HRDC, Refresher Course in Biotechnology DNA Barcoding-a technology revolution Bharathiar University Nov 17, 2017 Resource Person

53.National Skill Enhancement Workshop on 'DNA to Phylogeny' 'DNA to Phylogeny' Department of Biosciences & Technology, Karunya Institute of Technology and Sciences, Coimbatore Jan 8-10, 2018 Resource Person

54.UGC sponsored refresher course in Biosciences DNA barcoding Bharathiar University, Coimbatore Jan 29, 2018 Resource Person

55.National Seminar on Recent Innovations in Plant Science for Sustainable Agricultural Development Plant Metabolic Engineering Kongu Nadu Arts and Science College, Coimbatore Feb 21, 2018 Invited Lecturer

56.Two days' workshop cum hands-on training in 'Immuno techniques' Immunotechniques Department of Human Genetics and Molecular Biology, Bharathiar University, Coimbatore Mar 5-6, 2018 Resource Person 57.Indian Science Academy Refresher course on 'Biotechnology techniques in Biodiversity conservation' Plant DNA Barcoding Department of Botany, Bharathiar University, Coimbatore Sept 17, 2018 Invited Lecturer

58.Science academies' Refresher course on "Known to unknown techniques in biology" DNA Barcoding for authentication of herbal plants and products PG & Research Department of Botany, St. Joseph's college, Tiruchirappalli Nov 14, 2018 Invited Lecturer

59.2nd Residential course on "Phytopharmaceutical and herbal drugs monograph drafting, verification and validation" Plant molecular Farming Indian Pharmacopoeia Commission, Ministry of Health & Family Welfare, Government of India, Ghaziabad April 22-26, 2019 Invited Lecturer

60."FIRST CONCLAVE OF DBT-TWAS FELLOWS: Achievement of Capacity Building in Developing Nations" - Hotel Turyaa, Chennai Aug 8-9, 2018 Invited Lecturer

61.Refresher course in Botany Plant DNA barcoding UGC-Human Resource development Center, Bharathiar University, Coimbatore Sept 16, 2019 Invited Lecturer

62.Five days workshop entitled "National Workshop on Advanced trends in Marine Macro Algal Taxonomy, Cultivation & Utilization" Molecular tools in Algal Taxanomy BSI, SRC, TNAU campus, Coimbatore Oct 21-25, 2019 Invited Lecturer

63.DST CURIE sponsored "Research Convention on Fundamentals for Scholor Friendly Quality Research" The art of writing good project proposals Avinashilingam institute for home science and higher education for women, Coimbatore Nov 15-16, 2019 Invited Lecturer

64. "International conference on innovative and emerging trends in botany-2019" sponsered by RUSA phase II & DST PURSE phase II Plant DNA Barcoding – a versatile tool Department of botany, Alagappa university, Karaikudi Nov 6th – 7th , 2019 Invited Lecturer

65.Structure, Function and Design of Biomolecules - Structural Biology Lab, Department of Bioinformatics, School of Life Sciences, Bharathiar University, Coimbatore Jan 28-29, 2010 Session Chair Person 66.National Conference on Herbal Medicine - Department of Botany, School of Life Sciences, Bharathiar University, Coimbatore Sept 8-9, 2010 Session Chair Person

67.National seminar on Frontiers in Biotechnology - Department of Biotechnology, Bharathiar University, Coimbatore Feb 18-19, 2016 Session Chair Person

68.2nd International Conference on Environment and Ecology - Department of Environmental Science, Bharathiar University, Coimbatore Mar 7-9, 2016 Session Chair Person

69.One day National Level Symposium, Biogalaxia - Department of Microbial Biotechnology, Bharathiar University, Coimbatore Oct 6, 2016 Session Chair Person

70.One day National Symposium - Dept. of Microbial Biotechnology, Bharathiar University Oct 6, 2016 Judge for Oral Presentation

71.8th Annual Research Congress (KUARC) - Karpagam University, Coimbatore Dec 3, 2016 Session Chair Person

72.Scientific Session in the International Conference on Phytomedicine -Department of Botany, Bharathiar University, Coimbatore Aug 29-31, 2018 Session Chair Person

73.National Seminar on "Computer Genomica Tools for Next Generation Sequencing And Biomedical Data Analysis" - DBT Bioinformatics Centre and Department of Bioinformatics, Bharathiar University, Coimbatore Feb 8, 2019 Judge for Poster Presentation

74.Phrastafest – 2019 Plant DNA Barcoding Department of Botany, St. Joseph's College,

75. Tiruchirappalli Feb 12, 2019 Guest lecturer

76.2nd National Conference on "Current Trends in Biological Sciences" -Department of Botany, St. Xavier's College (Autonomous), Palayamkottai Feb 6-7, 2020 Resource Person

77.State level Seminar on Trends in Plant Bioprocessing Metabolic Engineering in Plants for Commercial Applications Department of Botany, Vivekananda College, Tiruvedakam West, Madurai Feb 25, 2020 Invited Lecture

78.Refresher course in Botany Plant DNA Barcoding: An overview Bharathiar University, Coimbatore May 20th 2011 Invited Lecturer

## Projects

Funded Projects(National Level)

- <u>Ongoing 03</u>
- Completed 15

### 1. RUSA 2.0 - BEICH

Title of the Project: Development of Superior Wheat with High Resistance Starch and Low-Gluten by Allele Mining. Agency: RUSA 2.0 – BEICH Period: 2019-2020 Amount: Rs.6.50 Lakh Investigator: Principle Investigator

# 2. UGC

Title of the Project: Centre for Potential for Excellence in a Particular Area (UGC-CPEPA) on Solar Energy for the Development of Bio-nano Hybrid Protein-Sensitized Solar Cells. Agency: UGC- CPEPA. (GOI) Period: 2017-2020 Amount: Rs.354 Lakh Investigator: Principaal Investigator

### 3. UGC

**Title of the Project:** Cost-effective Production of Engineered Antibodies for Early Differential Diagnosis of Dengue and Chikungunya Infection.

Agency: UGC-UKIERI Joint Research Programme Period: 2018-2020 Amount: Rs.30 Lakh Investigator: Principal Investigator

### 4. DST

Title of the Project: Cell Death Induced by Combination of Photodynamic Therapy with Phytochemicals Isolated from *Vaccinium nilgiriensis* on Breast Cancer Therapy - an *in vitro* Approach. Agency: DST, Indo-South Africa Period: 2016-2019 Amount: Rs.30.84 Lakh Investigator: Principal Investigator

### 5. DST

Title of the Project: Study of DcAOX Gene Functionality Associated with Cell Reprogramming Under Abiotic Stress. Agency: DST, Indo-Portugal Period: 2014-2017 Amount: Rs. 5.5 Lakh Investigator: Principal Investigator

#### 6. UGC

Title of the Project: In vivo and in vitro Studies of Plant-expressed Recombinant Antigens and Antibodies against Chikungunya Virus. Agency: UGC-UKIERI Joint Research Programme Period: 2015-2016 Amount: Rs. 30 Lakh Investigator: Principal Investigator

#### **7. DBT**

Title of the Project: DNA Barcoding to Study the Honey Biodiversity in Mizoram funded by the Department of Biotechnology. Agency: DBT-NER Twinning Programme Period: 2015-2018 Amount: Rs. 70 Lakh Investigator: Principal Investigator

### 8. DRDO-BU

Title of the Project: Development of Plant-Based Recombinant Vaccine for Staphylococcus Super Antigens. Agency: DRDO-BU Centre for Life Sciences Period: 2014-2017 Amount: Rs. 22 Lakh Investigator: Principal Investigator

#### 9. Department of Biotechnology (DBT)

Title of the Project: Development of Vitamin-E Biofortified Indica rice. Agency: Department of Biotechnology (DBT), India Period:2012-2016 Amount: Rs. 42.86 Lakh Investigator: Principal Investigator

#### 10. UGC

Title of the Project: Purification of the Plant-Based Chikungunya Antigens and Evaluation of its Vaccine Potential. Agency: UGC-UKIERI Joint Research Programme Period: 2011-2014 Amount: Rs.34 Lakh Investigator: Principal Investigator

#### 11. UGC

Title of the Project: Development of a Recombinant Vaccine in Transgenic Plants for Chikungunya Viral Infection. Agency: UGC-UKIERI Joint Research Programme Period: 2009-2012 Amount: Rs.34 Lakh Investigator: Principal Investigator

### 12. UGC

Title of the Project: DNA Barcoding of Indian Medicinal Plants (

Apocyanaceae). Agency: UGC-MRP, Government of India. Period: 2008-2010 Amount: 9.35 Lakh Investigator: Principal Investigator

#### 13. DRDO-BU-CLS

Title of the Project: Enrichment of Vitamin-E in Tomato through Metabolic Engineering Agency: DRDO-BU-CLS, Government of India Period: 2008-2011 Amount: 17.5 Lakh Investigator: Principal Investigator

#### 14. DARL and DRDO

Title of the Project: Genetic Engineering of Tomato for Cold Tolerance by Expressing Carrot Antifreeze Protein (AFP). Agency: DARL and DRDO, Government of India Period: 2006-2009 Amount: Rs.9.92 Lakh Investigator: Principal Investigator

#### 15. DRDO

Title of the Project: Production of Frost-Resistant Transgenic Tomato using LT16/RC12A Gene from *A. thaliana*. Agency: DRDO, Government of India Period: 2006-2009 Amount: Rs.9.98 Lakh Investigator: Principal Investigator

### 1. RUSA 2.0 - BCTRC.

Title of the Project: Large-Scale Production of Cancer Biomarkers (antigens) Using Plant Molecular Pharming Approach Funding Agency: RUSA 2.0 – BCTRC. Period: 2020-2022 Amount: Rs.12.88 Lakh Investigator: Principal Investigator

### 2. Department of Biotechnology, (GOI)

Title of the Project: Systems Approach to Dissect the Novel O-Acyltransferase Role in TAG Biogenesis Towards the Promising Fourth-Generation Bioenergy Feedstock Funding Agency: Department of Biotechnology, (GOI) Period: 2020-2023 Amount: Rs.26.40 Lakh Investigator: Principle Investigator

# **3. TANSCHE**

Title of the Project: Large-Scale Production of Lignin Peroxidase (LiP) by Molecular Farming for Rapid and Low-Cost Degradation of Coir Waste - a green technology for tackling agro-waste pollution in western Tamil Nadu Funding Agency: TANSCHE Period: 2021-2024 Amount: Rs.19.53 Lakh Investigator: Principle Investigator

### **Consultancy Projects**

- Ongoing-02
- <u>Completed-15</u>

### 1. Arjuna Natural Extracts, Kerala (Phase-II).

Title of the Project: DNA Barcoding of Medicinal Plants Funding Agency: Arjuna Natural Extracts, Kerala (Phase-II). Period: 2019-2021 Amount: Rs.4.43 Lakh Investigator: Principle Investigator

#### 2. Indus Biotech Pvt. Ltd., Maharashtra (Phase-V).

Title of the Project: DNA Barcoding of Plants Funding Agency: Indus Biotech Pvt. Ltd., Maharashtra (Phase-V). Period: 2021-2022 Amount: Rs.3.90 Lakh Investigator: Principle Investigator

#### 1. Indus Biotech Pvt. Ltd., Maharashtra (Phase-IV).

Title of the Project: DNA Barcoding of Plants. Principle Investigator: R. Sathishkumar (as PI)(Co. PI) Funding Agency: Indus Biotech Pvt. Ltd., Maharashtra (Phase-IV). Amount: Rs. 7.91 Lakh Duration: 2018-2020

#### 2. Texcity Biosciences, Tamil Nadu & DBT-BIRAC-BIPP.

**Title of the Project:** Allele Mining for Development of Rice with Slow and Sustained Energy Release.

Principle Investigator: R. Sathishkumar (as PI)(Co. PI)
Funding Agency: Texcity Biosciences, Tamil Nadu & DBT-BIRAC-BIPP.
Amount: Rs. 200 Lakh
Duration: 2019-2020

### 3. Green Chem Herbal Extract and Formulations, Karnataka (Phase-II).

Title of the Project: DNA Barcoding of Medicinal Plants. Principle Investigator: R. Sathishkumar (as PI)(Co. PI) Funding Agency: Green Chem Herbal Extract and Formulations, Karnataka (Phase-II). Amount: Rs. 3.98 Lakh Duration: 2018-2019

#### 4. T. Stanes& Company Limited, Coimbatore.

Title of the Project: DNA Barcoding of Inter-Laboratory Consultative Project. Principle Investigator: R. Sathishkumar (as PI)(Co. PI) Funding Agency: T. Stanes& Company Limited, Coimbatore. Amount: Rs. 0.06 Lakh Duration: 2019

#### 5.T. Stanes& Company Limited, Coimbatore.

Title of the Project: DNA Barcoding of Inter-Laboratory Consultative Project. Principle Investigator: R. Sathishkumar (as PI)(Co. PI) Funding Agency: T. Stanes& Company Limited, Coimbatore. Amount: Rs. 0.01 Lakh Duration: 2018

#### 6. Laila Pharmaceuticals, Pune.

Title of the Project: DNA Barcoding of Medicinal Plants. Principle Investigator:R. Sathishkumar (as PI)(Co. PI) Funding Agency: Laila Pharmaceuticals, Pune. Amount: Rs. 1.88 Lakh Duration: 2018-2019

### 7. Indus Biotech Pvt. Ltd., Maharashtra (Phase-III).

Title of the Project: DNA Barcoding of Plants. Principle Investigator:R. Sathishkumar (as PI)(Co. PI) Funding Agency: Indus Biotech Pvt. Ltd., Maharashtra (Phase-III). Amount: Rs. 4.73 Lakh Duration: 2018-2019

### 8. Indus Biotech Pvt. Ltd., Maharashtra (Phase-II).

Title of the Project: DNA Barcoding of Plants. Principle Investigator:R. Sathishkumar (as PI)(Co. PI) Funding Agency: Indus Biotech Pvt. Ltd., Maharashtra (Phase-II). Amount: Rs. 3.86 Lakh Duration: 2017-2018

#### 9. Indus Biotech Pvt. Ltd., Maharashtra (Phase-I).

Title of the Project: DNA Barcoding of 25 Plants. Principle Investigator:R. Sathishkumar (as PI)(Co. PI) Funding Agency: Indus Biotech Pvt. Ltd., Maharashtra (Phase-I). Amount: Rs. 3.86 Lakh Duration: 2016-2017

#### 10. Arjuna Natural Extracts, Kerala (Phase-I).

Title of the Project: DNA Barcoding of 25 Medicinal Plants. Principle Investigator:R. Sathishkumar (as PI)(Co. PI) Funding Agency: Arjuna Natural Extracts, Kerala (Phase-II). Amount: Rs. 1.26 Lakh Duration: 2015-2016

# **11. Greenchem Herbal Extract and Formulations, Karnataka (Phase-**I).

Title of the Project: DNA Barcoding of Medicinal Plants. Principle Investigator:R. Sathishkumar (as PI)(Co. PI) Funding Agency: Greenchem Herbal Extract and Formulations, Karnataka (Phase-I). Amount: Rs. 3.73 Lakh Duration: 2014-2016

### 12. The Himalaya Drug Company, Karnataka.

Title of the Project: DNA Barcoding of 50 Medicinal Plants. Principle Investigator:R. Sathishkumar (as PI)(Co. PI) Funding Agency: The Himalaya Drug Company, Karnataka. Amount: Rs. 5.31 Lakh Duration: 2014-2015

### **Research Guidance**

- Post Doc.
- <u>Ph.D.</u>
- <u>M.Phil.</u>
- <u>M.Sc.</u>

Ongoing (-) Nil Completed (5)

# Name of the Candidate: Dr. S. Dhivya

**Title of the Dissertation:** Next Generation DNA Barcode Chip to Enhance and to Accelerate the Detection of the Contaminants and Substitution in Indian Herbal Products and Traded Spices. **Year of Award:** 2015-2020

Name of the Candidate: Dr. S. Ramkumar Title of the Dissertation: Identification of Novel Mechanisms Involved in Polyphenol Oxidase (PPO) to Improve the Quality of Tea (*Camellia sinensis* (L.) O. Kuntze).

Year of Award: 2017-2020

Name of the Candidate: Dr. V. Baskar Title of the Dissertation: Enhancement of Biodiesel Production in *Jatropha curcas* through Genetic Transformation of *Arabidopsis thaliana* Purple Acid Phosphatase-2 gene.

Year of Award: 2016-2018

Name of the Candidate: Dr. S. Sivakumar Title of the Dissertation: Invitro Culture and Enhanced Production of Xanthones from *Canscora decussate*, a Critically Endangered Anti-Cancer Herb.

Year of Award: 2016-2019

Name of the Candidate: Dr. B. Karpaga Raja Sundari
Title of the Dissertation: Next Generation DNA Barcoding for Herbal
Product Authentication.
Year of Award: 2015-2016

### Ongoing (8)

### **Full-time Doctoral Candidates**

Name of the Candidate: S. Hari Priya (Senior Research Fellow: DST Inspire Fellowship)

**Title of the Dissertation:** Single Step Metabolic Engineering Strategy to Reduce Nicotine Content and to Enhance the Pharmaceutically Important Anatabine in *Nicotiana tabacum* Using CRISPR/Cas9 Genome Editing.

**Name of the Candidate:** S. Parthiban (Project Associate-II: DST-SERB-CRG) **Title of the Dissertation:** Development of Rapid, Cost-Effective and Early Diagnosis Kit for Detection of Serotype-Specific Dengue Infection.

**Name of the Candidate:** T. V. Vijeesh (University Research Fellow: Bharathiar University Fellowship)

Title of the Dissertation: Targeted Metabolic Pathway Engineering to

Enhance the Production of Anti-cancer Drug, Camptothecin in *Ophiorrhiza mungos* L.

Name of the Candidate: T. Gayatri (Junior Research Fellow: DBT-BET) Title of the Dissertation: Reconstitution of Carnosol and Carnosic Acid Biosynthesis Pathway in *Nicotiana tabacum*.

Name of the Candidate: V. A. Sree Lekshmi (Project Fellow: TANSCHE-RGP)

**Title of the Dissertation:** Heterologous Expression of *Arabidopsis thaliana* Isopentenyl Phosphate Kinase (AtIPK) in *Salvia officinalis* to Modulate the Biosynthesis of High-Value Diterpenoids.

Name of the Candidate: A. Abdul Basith (Project Fellow: TANSCHE-RGP) Title of the Dissertation: Large Scale Production of Lignin Peroxidase (LiP) through Plant Molecular Farming for Delignification of Agro-Waste.

Name of the Candidate: P. Mouliraj Title of the Dissertation: Yet to be finalized

**Part-time Doctoral Candidates** 

Name of the Candidate: Kiruba Devi Title of the Dissertation: -

Completed (21)

Name of the Candidate: K. Sree Preethy Title of the Dissertation: Large Scale Production of Recombinant Manganese Peroxidase (rMnP1) through Plant Molecular Farming for Delignification of Coir Waste.

Year of Award: 2024

Name of the Candidate: R.K.B. Bharadwaj Title of the Dissertation: Metabolic Engineering of *Salvia officinalis* for Enhanced Production of High-Value Diterpenes, Carnosol and Carnosic Acid. Year of Award: 2023

Name of the Candidate: G. MohanapriyaTitle of the Dissertation: Study of Alternative Oxidase (AOX) GenesFunctionality Associated with Cell Reprogramming.Year of Award: 2021

### Name of the Candidate: K. Mahima

**Title of the Dissertation:** Character Evolution and Phylogeny of Genus *Ficus* L. (*Moraceae*) from Southern India. **Year of Award:** 2020

Name of the Candidate: S. SathishTitle of the Dissertation: Biofortification of Rice with α-tocopherol(Vitamin - E) by Expressing AtTC and AtHPT Genes.Year of Award: 2020

Name of the Candidate: Safia Nayeem Title of the Dissertation: Biofortification of Isoflavonoids in Tobacco ( *Nicotiana tabacum*) and Rice (*Oryza sativa*) through Metabolic Engineering. Year of Award: 2020

Name of the Candidate: M. Saravanan Title of the Dissertation: DNA Barcoding and Chemometric-Based Authentication of Natural Honey samples. Year of Award: 2019

Name of the Candidate: R. Venkatesh Title of the Dissertation: Adaptive Response of Contrasting Indica Rice Cultivars under Drought Stress.

Year of Award: 2019

### Name of the Candidate: P. Anunanthini

**Title of the Dissertation:** Identification and Functional analysis of *Daucus carota* Antifreeze Protein (DcAFP) Promoter Region in Response to Abiotic Stress.

Year of Award: 2019

Name of the Candidate: I.Gowtham Title of the Dissertation: Plant-made Biologics – *Staphylococcal* Superantigens for Immunoprotection and Immunodiagnosis. Year of Award: 2018

Name of the Candidate: M. Saravanamurali Title of the Dissertation: Epidemiology, Culture, Characterization and Pathophysiology of Chikungunya virus. Year of Award: 2017

### Name of the Candidate: M. Ashwini

**Title of the Dissertation:** Genetic and Metabolic Engineering of Onion with Isoflavone Synthase-1 for Isoflavonoid Production.

Year of Award: 2016

Name of the Candidate: K. Jothibasu

**Title of the Dissertation:** Construction of High Throughput ihpRNA TC and TMT Constructs for Metabolic Engineering of Vitamin-E Pathway in *Nicotiana tobacum.* 

Year of Awarded: 2016

Name of the Candidate: M. P. Ayyappa Title of the Dissertation: Das Nutraceuticals and Pharmacological Investigations on *Muntingia calabura* L. Fruit. Year of Award: 2015

Name of the Candidate: S. DhivyaTitle of the Dissertation: Application of DNA Barcoding Technique for Authentication of Herbal Plants and their Products.Year of Award: 2015

Name of the Candidate: S. Balamurugan Title of the Dissertation: Plant Expression System as a Platform for the Production of Chikungunya vaccine Candidates. Year of Award: 2014

Name of the Candidate: S. Balamurugan Title of the Dissertation: Isolation, Characterization and Cloning of *Lolium perenne* Anti-freeze Protein and Genetic Transformation of Tobacco and Tomato for Cold Tolerance.

Year of Award: 2014

Name of the Candidate: Varghese P. Inchakalody Title of the Dissertation: Plant and Bacterial-Based Gene Expression System for the Production of Recombinant Chikungunya Viral Antigen E1 And E2.

Year of Award: 20

Name of the Candidate: S. Rajeev Kumar Title of the Dissertation: Isolation of Cold-Induced Genes from Carrot and Enhancement of Cold Tolerance in Transgenic Tobacco and Tomato using Carrot Antifreeze Protein (AFP).

Year of Award: 2012

Name of the Candidate: S. Dhivya

**Title of the Dissertation:** Studies on DNA barcodes to Identify the Indian Medicinal plant species of *Apocyanaceae* and *Zingiberaceae*. **Year of Award:** 2012

Name of the Candidate: M.C. Harish

**Title of the Dissertation:** Enhancement of a-Tocopherol content by Over-Expressing HPT and TC genes through Precursor/Elicitor Supplementation in Cell Suspension Cultures of Tobacco and Tomato.

Year of Award: 2011

Ongoing (-)

Nil

Completed (22)

Name of the Candidate: Parthiban S

**Title of the Dissertation:** Exploring Non-Structural Proteins for Serotype-Specific Differential Diagnosis of Dengue Infection Using *In-Silico* Approach **Year of Award:** 2018

Name of the Candidate: Hari Priya S

**Title of the Dissertation:** Genome-wide Association and Expression Profiling of Plant ODC (Ornithine decarboxylase)-A Multifaceted Candidate Gene.

Year of Award: 2017

Name of the Candidate: Baala Harini Title of the Dissertation: A Studies of Genetic Diversity of Small Cardamom (*Elettaria cardamomum* M.) Varieties using DNA Barcode-Based Techniques.

Year of Award: 2015

Name of the Candidate: Sree Preethy K

**Title of the Dissertation:** DNA Barcoding and Nutritional Qualities of Commercially Important Pomegranate Varieties. **Year of Award:** 2015

Name of the Candidate: Saranya. S Title of the Dissertation: *In-planta* Genetic Transformation of Rice Seeds with Tocopherol Cyclase-A Vitamin-E Pathway Gene. Year of Award: 2014

Name of the Candidate: Mahima. K Title of the Dissertation: DNA Barcoding to Analyse *Ficus* L. – A Taxonomically Complex Group. Year of Award: 2014

Name of the Candidate: Saravanan. M Title of the Dissertation: DNA Barcodes for Authentication of Commercially Important Indian Species. Year of Award: 2013

Name of the candidate: Safia Title of the Dissertation: Quantification of Flavonoids by HPLC and Cloning of Bacterial TAL Gene for Metabolic Engineering in Rice. Year of Award: 2013

Name of the Candidate: Mohanapriya. G Title of the Dissertation: Expression Analysis of Tobacco Alternative Oxidase (AOX1a) during Transient Activation/Inhibition and Abiotic Stress. Year of Award: 2013

Name of the Candidate: Anunanthini. P Title of the Dissertation: Transformation of Tobacco and Sugarcane using Carrot Antifreeze Protein with Specific Promoter to Enhance Cold Tolerance. Year of Award: 2012

Name of the Candidate: Jijo C Joseph Title of the Dissertation: Phylogenetic Analysis of Millet using its Gene and Estimation of Nuclear DNA Content by Flow cytometry. Year of Award: 2011

### Name of the Candidate: Rajalakshmi. S

**Title of the Dissertation:** Evaluation of Gene Delivery Systems for *Loliumperenne*-A Cold Tolerant Forage and Lawn Grass. **Year of Award:** 2011

Name of the Candidate: Dachinamoorthy. P

**Title of the Dissertation:** Single and Double Transgenic Tobacco Line with Homogentisate Phytyl Transferase (HPT) and Tocopherol Cyclase (TC) for Vitamin-E Enrichment.

Year of Award: 2010

Name of the Candidate: Dhivya. S Title of the Dissertation: DNA Barcodes for Evaluating the Taxonomic Status and Discrimination of the Closely Related Invasive Plant Species. Year of Award: 2010

### Name of the Candidate: Kiruba. R

**Title of the Dissertation:** Production and Characterization of Transgenic Tobacco and Tomato using AtFAD7 for Cold Tolerance. **Year of Award:** 2010

Name of the Candidate: Ashwini. M

**Title of the Dissertation:** Biochemical, Tissue Culture and DNA Delivery Studies in Onion Varieties of Bellary and CO3. **Year of Award:** 2010

Name of the Candidate: Suresh Bahu. K

**Title of the Dissertation:** Isolation and Characterization of Stress Tolerant Antagonistic and Plant Growth Promoting Bacteria from the Active Volcano of Barren Island Soil.

Year of Award: 2009

Name of the Candidate: Kayalvizhi. M Title of the Dissertation: Agroinfiltration – A Versatile. Year of Award: 2009

Name of the Candidate: Balamurugan. S Title of the Dissertation: Assessment of *In vitro* Responses, DNA Delivery Systems and Aroma Compound in Traditional Rice Varieties. Year of Award: 2008

#### Name of the Candidate: Varghese P. Inchakaody

**Title of the Dissertation:** Rapid High-Frequency Plant Regeneration, Genetic Transformation and Antimicrobial Activity of Wild Medicinal Rice Njavara.

Year of Award: 2006

Name of the Candidate: Sri Lakshmi

**Title of the Dissertation:** *Gymnema sylvestre* – Studies on the Abiotic Stress-Induced Changes, Antioxidant Properties and Protein Profile in Callus Cultures.

Year of Award: 2006

Name of the Candidate: Rejani. J Title of the Dissertation: In vitro Regeneration and Agrobacterium tumefaciens mediated Transformation of Mungbean (Vigna radiate L. Wilczek) Year of Award: 2006

Ongoing

Accordion content 1.

### Completed

Name of the candidate :Parvathy R. Kumar Title of the Dissertation : In vitro propagation of Momordica charantia and Genetic Transformation of Chitinase and Glucanase genes for Pathogenic resistance

Year of Award :2006

Name of the candidate :Smitha Ravindranathan Title of the Dissertation :Standardization of reverse Transcriptase polymerase chain reaction of Gamma Tocopherol Methyl Transferase gene from Arabidopsis thaliana Year of Award :2006

Name of the candidate :Rajeev Kumar S. Title of the Dissertation :Genetic Transformation of Chitinase and Glucanase to Dianthus caryophyllus L (Carnation) for Pathogen resistance Year of Award :2006

Name of the candidate :R. Saravanan Title of the Dissertation :Biochemical and Molecular Analysis of Brassica juncea during Cadmium stress Year of Award :2007

Name of the candidate :N. R. Natarajasivam Title of the Dissertation :Studies on variation in Biochemical and Molecular characters and in vitro studies in Red and Green Tamarind Year of Award : 2007

Name of the candidate :Chitra Devi Title of the Dissertation :Studies on Biochemical and Molecular responses in High Altitude Tomato variety Shalimar during salt stress Year of Award :2007

Name of the candidate :M. Sathyabhama Title of the Dissertation :Chloroplast gene matK- A barcode for the species of Apocynaceae Year of Award :2008

Name of the candidate :Safia Title of the Dissertation :Production of Transgenic tomato using COR15A-FAD7 for cold tolerance Year of Award :2008

Name of the candidate :Sowmiya DeviTitle of the Dissertation :Enhancement of α-Tocopherol inLycopersicumesculentum using elicitorsYear of Award : 2008

Name of the candidate :D. Pridiviraj Title of the Dissertation :Over expression of carrot Anti freeze protein (AFP) gene Year of Award :2008

**Name of the candidate :**J. Narmada **Title of the Dissertation :**Production of cold tolerant tomato using FAD7 and to study the biochemical and physiological changes in different cultivars of tomato Year of Award : 2009

Name of the candidate :Hima Nandini Title of the Dissertation :To increase α-tocopherol content in Spinach (Spinaciaoleracea) through overexpression of HPT gene by Agrobacterium mediated Transformation Year of Award : 2009

fear of Award : 2009

Name of the candidate :S. Balakrishnan
 Title of the Dissertation :Optimization of Agrobacterium-mediated
 transformation parameters for Tomato var. PKM1 using β-glucuronidase as a
 reporter gene
 Year of Award : 2009

Name of the candidate :M. Kayalvizhi Title of the Dissertation :Taxonomical dispute in the genus (Tribulus) – solution through DNA barcode Year of Award : 2009

Name of the candidate :Rajasekaran. S Title of the Dissertation :Screening of salinity fitness ability and in vitro studies of wild Indian economically valuable rice varieties Year of Award :2009

Name of the candidate :S. Priyadharshini Enhancement of vitamin E by overexpressing tocopherol cyclase (VITE1) in tomato plant (Lycopersicon Esculentum)

Year of Award : 2009

Name of the candidate :C. Rajkumar Title of the Dissertation :Profile of immune regulatory cytokines expression in skin lesions of the patients suffering from Leprosy and cutaneous Tuberculosis Year of Award :2010

Name of the candidate :M. Giriram Kumar Title of the Dissertation :Molecular tools to identify adulteration in aromatic rice varieties with other non-aromatic rice varieties Year of Award : 2010 Name of the candidate :R. Kiruba

Title of the Dissertation : Production of Transgenic Tobacco and Tomato using COR 15 FAD7 for cold tolerance Year of Award : 2010

Name of the candidate : J. Balaganesh Title of the Dissertation : Nutritional and Antioxidant Profiling of Indian Tomato Varieties Year of Award : 2011

Name of the candidate :C.V. Suganya Devi Title of the Dissertation :Screening of Salinity fitness ability of the Indian Tomato varieties Year of Award : 2011

Name of the candidate :Dixon Davis Title of the Dissertation :Expression of Gus gene in Bacterial Host system using Gateway Recombination Technology Year of Award :2012

Name of the candidate : I. Gowtham Title of the Dissertation : Molecular, Biochemical, In Silico Modeling and Simulation Studies on LoliumperenneAnti Freeze Protein Year of Award : 2012

Name of the candidate :Maria Philip Title of the Dissertation :Molecular Analysis Of T1 Transgenic Tobacco Lines Expressing Chik Glycoprotein E2 Year of Award : 2012

Name of the candidate :Reshma Aziz Title of the Dissertation : Gene Expression of GUS and GFP in Amaranthus tristis – A green leafy vegetable Year of Award : 2013

Name of the candidate :R. Deepika Title of the Dissertation :Appraisal of Green Leafy vegetables as functional food Year of Award :2013

#### Name of the candidate :Susan Ann Jayan

**Title of the Dissertation :**Lolium perenne Antifreeze protein enhances cold tolerance in Transgenic Tobacco **Year of Award :**2013

Name of the candidate :S. Muthulakshmi Title of the Dissertation : To study the beneficial role of Riboflavin producing bacteria on Nicotiana tobacum Year of Award :2014

Name of the candidate :P. Kanjana Title of the Dissertation :Optimization of the Plant growth conditions and Transient Gene expression parameters for the Plant species of N.benthamiana, A.caudatus and P. quadrifida Year of Award :2014

Name of the candidate :R. Saranya Title of the Dissertation :High-Throughput construction of Intron containing hairpin RNA to study the tocopherol cyclase function Year of Award :2014

Name of the candidate :B. Atchaya Title of the Dissertation :Authentication of Raw and market samples of spices using DNA barcodes Year of Award :2014

Name of the candidate :32.Pisharody Karthika Muraleedharan Title of the Dissertation :Simple and rapid generation of stable Transgenic Nicotiana tabacum by agroinfiltration Year of Award :2015

Name of the candidate :M. Yedukrishnan Title of the Dissertation : Validation of coffee species by means of DNA Barcode based PCR-RFLP method Year of Award :2015

Name of the candidate :R. Sivasankari Title of the Dissertation :Generation of Transgenic rice callus using pRNAi-GG-TC vector Year of Award :2015

#### Name of the candidate :N.Rani Riboflavin

**Title of the Dissertation :**producing Bacteria improve the plant growth and seed germination

Year of Award :2015

Name of the candidate :L. Kalaivani Title of the Dissertation :Analysis of Ice Recrystallisation Inhibition protein from cold tolerant plants Year of Award :2015

Name of the candidate :K. Sathishkumar Title of the Dissertation :Studies on selecting suitable Indian plant for molecular farming Year of Award :2016

Name of the candidate :M. Meena Title of the Dissertation :Effect of Salt stress CuO Nanoparticle on Transcript leves of the Alternative Oxidase (DcAOX1a and DcAOX2a) in Daucus carota Year of Award : 2016

Name of the candidate :C. Krishnaveni Title of the Dissertation :Authentication Of Herbal Tea Using Dna Barcodes Year of Award :2016

Name of the candidate :M. Iswarya Title of the Dissertation :Screening of Popular South Indian Rice Varieties for Vitamin E Content Year of Award :2016

Name of the candidate :S. Hari Priya Title of the Dissertation :Enhancement of rTE fusion protein production in plants using P19silencing suppressor protein Year of Award :2017

Name of the candidate :A.llakkanadevi Title of the Dissertation :Enhancement of Flavonoid and Isoflavonoids in plant using transient gene expression Year of Award :2017

#### Name of the candidate :N.Kiruthiga

**Title of the Dissertation :**Screening and Selection of Regional Model Plants for Molecular Farming **Year of Award :**2017

Name of the candidate :S. NasreenBanu Title of the Dissertation :Cloning and Expression of GFP gene in bacterial host system for commercial use Year of Award :2017

Name of the candidate :P. Periyasamy Title of the Dissertation :In-silico characterization and biochemical estimation of ROS scavenging genes during drought and salt stress in sugarcane Year of Award :2018

Name of the candidate :Abuyaseer Title of the Dissertation :A DNA barcoding and tissue culture studies in Aegle marmelos L (Vilvam) Year of Award :2018

Name of the candidate :Arun Kumar Title of the Dissertation :A Phytochemical anlysis and antioxidant activity of raw and cooked rice Year of Award :2018

Name of the candidate :Sabitha Title of the Dissertation :A DNA barcode based loop-mediated isothermal amplification (LAMP) for the authentication of high value Cinnamomum species

Year of Award :2019

Name of the candidate :M. Hajistha Parveen Title of the Dissertation :Differential expression of AOX gene family play a role during development and low-temperature stress in four Daucus carota L. subsp. sativus Year of Award :2019

Name of the candidate :M. Kowsalya Title of the Dissertation :Phytochemical screening, antioxidant and free radical scavenging activity of Putranjiva roxburghii seeds and seed coat **Year of Award :**2019.

Name of the candidate :Naman Gupta Title of the Dissertation :External- NCCS Year of Award :2020

Name of the candidate :D. Praveena Title of the Dissertation :Studies on phenyl proponoid biosynthesis pathway in tea (Camellia sinensis (L.) O. kuntze) Year of Award :2020

Name of the candidate :R. Sinduja Title of the Dissertation :Effect of NaCl and PEG induced stress on seed germination of carrot (*Daucus carota* L.) Year of Award : 2020

Name of the candicate:R.Soundriya Title of the Dissertation : DNA Barcoding coupled with high resolution melting curve (BAR-HRM) analysis for the detection of *Myrstica fragrans* Houtt. And *Cinnamomum verum* L. adulterants Year of Award :2020

Name of the candidate :N. Nivetha Title of the Dissertation :Functional analysis of Alternative oxidase genes during somatic embryogenesis and by transient gene silencing Year of Award : 2021

Name of the candidate :M. Moulitharan Title of the Dissertation :Transient Expression and Partial Purification of recombinant Manganese Peroxidase (rPcMnP1) in Nicotiana tabacum and its delignification potential in degradation of Coir waste Year of Award :2021

#### **Research Publication**

- International
- National
- Patents

- <u>Conferences</u>
- Books / Chapters
- Database

## 2021

109.<u>Identification of morphologically similar species of Tribulus</u> (Zygophyllaceae) by employing DNA barcodes and rRNA secondary structures. *Ecological Genetics and Genomics*. 18, 100072. Dhivya S and **Sathishkumar R** (2021). Accepted on 22.10.2020. ISSN: 2405-9854,

**108.** <u>Comprehensive in silico and gene expression profiles of MnP family</u> <u>genes in Phanerochaetechrysosporium towards lignin biodegradation.</u> *International Biodeterioration& Biodegradation.* 

SreePreethy K, Baskar V, Dhivya S and **Sathishkumar R** (2021). <u>157</u>,

105143.. Accepted on 25.11.2020. Publishing on: February 2021. **IF: 4.320 (SCIE)** ISSN: 0964-8305

107.Differential expression of flavonoid biosynthesis genes and biochemical composition in different tissues of pigmented and non-pigmented rice. Journal of Food Science and Technology

SafiaNayeem, BaskarVenkidasamy, Sathish Sundararajan,

SreePreethyKuppuraj and SathishkumarRamalingam (2021).

D. 58, 884-893. (Accepted : 13.06.2020 ; Published : 30.06.2020) IF: 2.701 (SCI)

106.Effects of cooking on phytochemical and antioxidant properties of pigmented and non-pigmented rare Indian rice landraces. Biocatalysis and Agricultural Biotechnology, 32, 101928.

Nayeem, S., Sundararajan, S., Ashok, A. K., Abusaliya, A., &**Ramalingam, S.** (2021).

(SCI) ISSN: 1878-8181

105.<u>Characterization of microRNAs from neem (Azadirachtaindica) and their</u> <u>tissue-specific expression study in leaves and stem. 3 Biotech, 11(6), 1-12</u> Paul, S., Reyes-Pérez, P., Angulo-Bejarano, P. I., Srivastava, A., **Ramalingam, S.,**& Sharma, A. (2021).

# IF: 2.406 (SCI)

104.<u>Overexpression of Glyoxalase III gene in transgenic sugarcane confers</u> <u>enhanced performance under salinity stress</u>. *Journal of Plant Research*, 1-12 Mohanan, ManojVadakkenchery, AnunanthiniPushpanathan,

SarathPadmanabhan, ThelakatSasikumar, Ashwin Narayan Jayanarayanan, DharshiniSelvarajan, **SathishkumarRamalingam**, Bakshi Ram, and AppunuChinnaswamy (2021).

## IF: 2.629 (SCI)

103.<u>Enhanced vitamin E content in an Indica rice cultivar harbouring two</u> <u>transgenes from Arabidopsis thaliana involved in tocopherol biosynthesis</u> <u>pathway. Plant Biotechnology Journal, 1-3.</u>

Sundararajan, S., Rajendran, V., Sivakumar, H. P., Nayeem, S., Chandra, H. M., Sharma, A., & **Ramalingam, S.** (2021).

### IF: 9.803 (SCI)

102.<u>Comparison of Cytokine Expression Profile in Chikungunya and Dengue</u> <u>Co-Infected and Mono-Infected Patients' Samples</u>. *Pathogens*, 10(2), 166 Krishnan, S.M., Mahalingam, J., Sabarimurugan, S., Muthu, T., Venkidasamy, B., Krishnasamy, K., Sharma, A. and **Ramalingam, S.,** (2021).

#### IF: 3.492 (SCIE)

101.From plant survival under severe stress to anti-viral human defense-a perspective that calls for common efforts. Frontiers in Immunology, 12, 2066.

Arnholdt-Schmitt, B., Gunasekaran, M., Bharadwaj, R., Noceda, C., Macedo, E.S., Ramalingam, S., Gupta, K.J., Sircar, D., Kumar, S.R., Srivastava, S. and Adholeya, A., (2021).

### IF: 7.561 (SCOPUS)

100.Metabolic Engineering of Isoflavonoid Biosynthesis by Expressing Glycine max Isoflavone Synthase in Allium cepa L. for Genistein Production. Plants, 10(1), p.52

Malla, A., Shanmugaraj, B., Srinivasan, B., Sharma, A. and **Ramalingam, S.,** (2021)

### IF: 3.935 (SCIE)

99.Cloning of a Rift Valley Fever fusion gene in a plant virus derived replicon vector. World Scientific News, 158, 159-172.

Omosimua, Rebecca Oziohu, Gowthamlyappan, OlawoleObembe, Adebayo Ogunkanmi, and **RamalingamSathishkumar**. (2021).

98. <u>ROS/RNS Balancing, Aerobic Fermentation Regulation and Cell Cycle</u> <u>Control – a Complex Early Trait ('CoV-MAC-TED') for Combating SARS-CoV-2-</u> <u>Induced Cell Reprogramming. Frontiers in Immunology. 12, 673692</u> Costa JH, Mohanapriya G, Bharadwaj R, Noceda C, Thiers KLL, Aziz S, Srivastava S, Oliveira M, Gupta KJ, Kumari A, Sircar D, Kumar SR, Achra A, **Sathishkumar R**, Adholeya A and Arnholdt-Schmitt B (2021). **IF: 7.561 (SCOPUS)** 

97.<u>Adaptive reprogramming during early seed germination requires</u> <u>temporarily enhanced fermentation-a critical role for alternative oxidase</u> (AOX) regulation that concerns also microbiota effectiveness. BioRxiv.
Revuru, B., Noceda, C., Gunasekaran, M., **Kumar, S.R.,** Thiers, K.L.L., Costa, J.H., Macedo, E.S., Kumari, A., Gupta, K.J., Srivastava, S. and Adholeya, A., (2021).

96.<u>Contributions of the international plant science community to the fight</u> against human infectious diseases - part 1: epidemic and pandemic diseases Lobato Gómez M, Huang X, Alvarez D, He W, Baysal C, Zhu C, Armario-Najera V, Blanco Perera A, Cerda Bennasser P, Saba-Mayoral A, Sobrino-Mengual G, Vargheese A, Abranches R, Abreu IA, Balamurugan S, Bock R, Buyel JF, da Cunha NB, Daniell H, Faller R, Folgado A, Gowtham I, Häkkinen S, Shashi K, Kumar **Ramalingam S,**Lacorte C, Lomonossoff GP, Luís IM, Ma JK, McDonald KA, Murad A, Nandi S, O'Keef B, Oksman-Caldentey KM, Parthiban S, Paul M, Ponndorf D, Rech E, Rodrigues JCM, Ruf S, Schillberg S, Schwestka J, Shah PS, Singh R, Stoger E, Twyman RM, Varghese IP, Vianna GR, Webster G, Wilbers RHP, Capell T, Christou P. (2021). .

Plant Biotechnology Journal. Jun 28. . Epub ahead of print. PMID: 34182608. IF: 9.803 (SCI)

95. <u>Contributions of the international plant science community to the fight</u> <u>against infectious diseases in humans - part 2: affordable drugs in edible</u> <u>plants for endemic and re-emerging diseases</u>

He W, Baysal C, Lobato Gómez M, Huang X, Alvarez D, Zhu C, Armario-Najera V, Blanco Perera A, Cerda Bennaser P, Saba-Mayoral A, Sobrino-Mengual G, Vargheese A, Abranches R, Abreu IA, Balamurugan S, Bock R, Buyel JF, Cunha NBD, Daniell H, Faller R, Folgado A, Gowtham I, Häkkinen ST, Shashi

K, **Ramalingam SK**, Lacorte C, Lomonossoff GP, Luís IM, K-C Ma J, McDonald KA, Murad A, Nandi S, O'Keef B, Parthiban S, Paul MJ, Ponndorf D, Rech E, Rodrigues JCM, Ruf S, Schillberg S, Schwestka J, Shah PS, Singh R, Stoger E, Twyman RM, Varghese IP, Vianna GR, Webster G, Wilbers RHP, Christou P, Oksman-Caldentey KM, Capell T. (2021).

Plant Biotechnology Journal Jun 28.Epub ahead of print. PMID: 34181810. IF: 9.803 (SCI)

94.<u>Plant Metabolic Gene Clusters: Evolution, Organization and their</u> Applications in Synthetic Biology

RevuruBharadwaj, Sarma Rajeev Kumar, Ashutosh Sharma and SathishkumarRamalingam (2021). . Frontiers in Plant Science. 12:697318.

IF: 5.753 (SCIE) (Accepted on 5th July 2021).

93.Enhanced vitamin E content in an indica rice cultivar harbouring two transgenes from *Arabidopsis thaliana* involved in tocopherol biosynthesis pathway,

S. Sathish, V. Rajendran, S. Hari Priya, S. Nayeem, H. M. Chandra, A. Sharma, and **R. Sathishkumar**,

Plant Biotechnology Journal, 1-3 (2021).

92. Effects of cooking on phytochemical and antioxidant properties of pigmented and non-pigmented rare indian rice landraces,

S. Nayeem, S. Sundararajan, A. K. Ashok, A. Abusaliya, and R.

### Sathishkumar,

Biocatalysis and Agricultural Biotechnology, 32, 101928 (2021).

91.<u>Comprehensive in silico and gene expression profiles of MnP family genes</u> in *Phanerochaetechrysosporium* towards lignin biodegradation,

K. S. Preethy, V. Baskar, S. Dhivya, and **R. Sathishkumar**.

International Biodeterioration & Biodegradation, 157, 105143 (2021).

90.Identification of morphologically similar species of Tribulus (Zygophyllaceae) by employing DNA barcodes and rRNA secondary structures,

S. Dhivya, and R. Sathishkuma.

Ecological Genetics and Genomics, 18, 100072 (2021).

2020 - 1996

89.Biotechnological perspectives to augment the synthesis of valuable biomolecules from microalgae by employing waste water,

S. Balamurugan, R. Sathishkumar, and H. Li,

Journal of Water Process Engineering, 39, 101713 (2020).

88.<u>Functional motif prediction of non-structural proteins for serotype-specific</u> <u>differential diagnosis of dengue infection, (Abstract)</u>,

S. Parthiban, and R. Sathishkumar,

Journal of Infectious Diseases, 101(S1), 180–203 (2020).

87.<u>Influence of exogenous polyamines on somatic embryogenesis and</u> regeneration of fresh and long-term cultures of three elite indica rice <u>cultivars</u>,S. Sathish, H. P. Sivakumar, S. Nayeem, V. Rajendran, S. Subiramani, and **R. Sathishkumar**, Cereal Research Communications, 1-9 (2020).

86.<u>Molecular identification and evolutionary relationships between the</u> <u>subspecies of Musa by DNA barcodes</u>,

S. Dhivya, S. Ashutosh, I. Gowtham, V. Baskar, A. B. Harini, S. Mukunthakumar, and **R. Sathishkumar**, BMC Genomics, 21(1), 1-11 (2020).

85. Molecular Phylogeny of the Ficusvirens complex (Moraceae),

K. Mahima, S. J. Venkata, and **R. Sathishkumar**,Genome Ja, 63(12), 597-606 (2020).

84.Effects of sodium nitroprusside and growth regulators on callus, multiple shoot induction and tissue browning in commercially important Valerianajatamansi Jones,

S. Pandey, S. Sundararajan, **R. Sathishkumar**, and B. Pant, Plant Cell,Tissue and Organ Culture (PCTOC), 142(3), 653-660 (2020).

83. Differential expression of flavonoid biosynthesis genes and biochemical composition in different tissues of pigmented and non-pigmented rice,

S. Nayeem, B. Venkidasamy, S. Sundararajan, S. P. Kuppuraj, and R.

## Sathishkumar,

Journal of Food Science and Technology, 58, 884–893 (2020).

82.<u>Molecular mechanisms in grass-Epichloë interactions: towards endophyte</u> driven farming to improve plant fitness and immunity, R. Bharadwaj, H.Jagadeesan, S. R. Kumar, and **R. Sathishkumar**, World Journal of Microbiology and Biotechnology, 36(7), 1-28 (2020).

81.<u>A comparative study of phytotoxic effects of metal oxide (CuO, ZnO and NiO) nanoparticles on the in vitro grown Abelmoschusesculentus,</u>

V. Baskar, N. Safia, K. S. Preethy, S. Dhivya, T. Muthu, and **R. Sathishkumar**,

Plant Biosystems, 155(2), 374-383(2020).

80.<u>Taxanomic delimitation of endemic *Ficusamplocarpa* and *Ficusdalhousiae* complexes (Moraceae) by DNA Barcoding,</u>

K. Mahima, J. V. Sudhakar, and **R. Sathishkumar**, Phytotaxa. 436(1), 21-35 (2020).

79. Physiological factors modulate regeneration and agrobacterium mediated genetic transformation and recalcitrantindica rice cultivars ASD16 and IR64,
S. Sundararajan, V. Rajendran, S. Nayeem, and **R. Sathishkumar**,
Biocatalysisand Agricultural Biotechnology, 24, 101519 (2020).

78.Emerging mosquito-borne arboviral infection Zika - An epidemiological review,

A. Malla, B. Shanmugaraj, and R. Sathishkumar,

Asian Pacific Journal of Tropical Biomedicine, 10(5), 193-200(2020).

77.<u>Phytochemical analysis in economically important *Ficusbenghalensis* L. and *Ficuskrishnae* C. DC. using GC-MS,K. Mahima, S. Parthiban, and **R.** Sathishkumar,</u>

International Journal of Pharma and Bio sciences. 10(4), 5-13 (2019).

76.Optimized in vitro micro-tuber production for colchicine biosynthesis in *Gloriosa superba* L. and its anti-microbial activity against *Candida albicans*,
S. Sivakumar, S. Sundararajan, S. Govindarajan, V. Sadasivam, P. K.
Ganesan, G. Packiaraj, V. Manickam, S. K. Thiruppathi, **R. Sathishkumar**, and J. Narayanasamy,

Plant Cell, Tissue and Organ Culture (PCTOC), 139(1), 177-190 (2019).

75.<u>Alternative oxidase (AOX) senses stress levels to coordinate auxin-</u> induced reprogramming from seed germination to somatic embryogenesis-A role relevant for seed vigor prediction and plant robustness,

G. Mohanapriya, R. Bharadwaj, C. Noceda, J. H. Costa, S. R. Kumar, R.

**Sathishkumar**, K. L. Lima Thiers, E. S. Macedo, S. Silvia, P. Annicchiarico, S. P. C. Groot, J. Kodde, A. Kumar, K. J. Gupta and B. A. Schmitt, Frontiers in Plant Science, 10, 1134 (2019).

74.<u>Sodium nitroprusside enhances callus induction and shoot regeneration in</u> high value medicinal plant *Canscoradiffusa*,

S. Subiramani, S. Sundararajan, H. P. Sivakumar, V. Rajendran and **R.** Sathishkumar,

Plant Cell, Tissue and Organ Culture (PCTOC), 139(1), 65-75 (2019).

73.<u>Indian pulses: A review on nutritional, functional and biochemical</u> properties with future perspectives,

V. Baskar, S. Dhivya, S. Arti, **R. Sathishkumar**, G. Kai, and N. Shivraj, Trends in Food Science & Technology, 88, 228-242 (2019).

72. Epidemiology, clinical features and transmission of re-emerging arboviral infection chikungunya,

S. Balamurugan, M. Ashwini and **R. Sathishkumar**, Asian Pacific Journal of Tropical Biomedicine, 9(4), 135-139 (2019).

71. Exploring DNA quantity and quality from raw materials to botanical extracts,

S. Ragupathy, A. C. Fallar, S. Dhivya, P. Kesanakurti, R. Uma Shaanker, G. Ravikanth, **R. Sathishkumar**, N. Mathivanan, J. Song, J. Han and S. Newmaster, Heliyon. 5(6), e01935 (2019).

70. <u>Comparative analysis of glyoxalase pathway genes in</u> <u>Erianthusarundinaceus and commercial sugarcane hybrid under salinity and</u> <u>drought conditions</u>,

V. M. Manoj, P. Anunanthini, P. C. Swathik, S. Dharshini, J. A. Narayan, M. Manickavasagam, **R. Sathishkumar**, G. S. Suresha, G. Hemaprabha, B. Ram, and C. Appunu, BMC Genomics, 19(9), 986 (2019).

69. <u>Corrigendum to: In silico characterisation and functional validation of</u> <u>chilling tolerant divergence 1 (COLD1) gene in monocots during abiotic</u> stress,

P. Anunanthini, V. M. Manoj, T. S. Padmanabhan, S. Dhivya, J. A. Narayan, C. Appunu, and **R. Sathishkumar**,

Functional Plant Biology, 46(6), 596-596 (2019).

68. Optimizing culture conditions for high frequency somatic embryogenesis and plantlet conversion in *Daucus carota* L.,

S. Sundararajan, S. Nayeem, S. Subiramani, V. Rajendran, and **R.** Sathishkumar, Biologia, 74(6), 695-707(2019).

67. <u>DNA barcoding detects floral origin of Indian honey samples</u>,
M. Saravanan, G. Mohanapriya, R. Laha, and **R. Sathishkumar**,
Genome, 62(5), 341-348 (2019).

66. Influence of exogenous polyamines and plant growth regulators on high frequency *in vitro* mass propagation of *Gloriosa superba* L. and its colchicine content,

S. Sivakumar, G. Siva, S. Sathish, G. Prem Kumar, M. Vigneswaran, S. Vinoth, T. Senthil Kumar, **R. Sathishkumar**, and N. Jayabalan,

Biocatalysis and Agricultural Biotechnology, 18, 101030 (2019).

65. <u>Genome-wide analysis of purple acid phosphatase (PAP) family proteins</u> in Jatropha curcas L.,

B. Venkidasamy, D. Selvaraj, and R. Sathishkumar,

International Journal of Biological Macromolecules, 123, 648-656 (2019).

64. <u>Rapid enhancement of α-tocopherol content in *Nicotiana benthamiana* by transient expression of *Arabidopsis thaliana* tocopherol cyclase and homogentisatephytyl transferase genes,</u>

S. Sathish, K. S. Preethy, R. Venkatesh, and **R. Sathishkumar**, 3 Biotech, 8(12), 485 (2018).

63. <u>Potential of plant biologics to tackle the epidemic like situations - Case</u> <u>studies involving viral and bacterial candidates</u>,

G. Iyappan, B.Shanmugaraj, V. Inchakalody, J. C. Ma, and **R. Sathishkumar**, International Journal of Infectious Diseases, 73, 363 (2018).

62. Assessment of the effects of metal oxide nanoparticles on the growth, physiology and metabolic responses in in vitro grown eggplant (*Solanum melongena*),

V. Baskar, S. Nayeem, S. P. Kuppuraj, T. Muthu, and **R. Sathishkumar**, 3 Biotech, 8(8), 362 (2018).

61. <u>Construction of dose response curves up to 6 Gy for micronucleus and</u> <u>dicentric chromosome aberration assay with 6 MV X-ray beam,</u> K. Mayakannan, C. S. Sureka, R. Venkatesh, **R. Sathishkumar**, and R. K. Jeevanram,

Radiation Measurements, 115, 60-68 (2018).

60. <u>Phytonutrients analysis in ten popular traditional Indian rice landraces (</u> <u>Oryza sativa L.),</u>

V. Rajendran, H. P. Sivakumar, I. Marichamy, S. Sundararajan, and **R.** Sathishkumar,

Journal of Food Measurement and Characterization, 12(4), 2598-2606 (2018).

59. <u>Studies on growth dynamics of embryogenic cell suspension cultures of</u> commercially important Indica rice cultivars ASD16 and Pusa basmati,

S. Sathish, R. Venkatesh, N. Safia, and **R. Sathishkumar**, 3 Biotech, 8(4), 194 (2018).

58. <u>An immune-informatics approach to define T cell epitopes from</u> polyketide and non-ribosomal peptide synthesis proteins of *Mycobacterium tuberculosis* as potential vaccine candidates,

S. Dhivya, V. Baskar, S. R. Kumar, and **R. Sathishkumar**, Journal of Molecular Recognition, 31(2), e2685 (2018).

**57**. <u>Nematicidal potential and specific enzyme activity enhancement</u> potential of neem (*Azadirachtaindica* A. Juss.) aerial parts,

S. H. Nile, A. S. Nile, Y. S. Keum, V. Baskar, and **R. Sathishkumar**, Environmental Science and Pollution Research, 25(5), 4204–4213 (2018).

56. In vitro and in planta nematicidal activity of black pepper (Piper nigrum L.) leaf extracts,

S. H. Nile, A. S. Nile, Y. S. Keum, V. Baskar, and **R. Sathishkumar**, Crop Protection, 100, 1-7 (2017).

55. <u>Heterologous expression of Loliumperenne antifreeze protein confers</u> chilling tolerance in tomato,

S. Balamurugan, J. S. Ann, I. P. Varghese, S. B. Murugan, M. C. Harish, S. R. Kumar, and **R. Sathishkumar,** 

Journal of Integrative Agriculture, 17(5), 1128-1136 (2017).

54. <u>Tissue culture and Agrobacterium-mediated genetic transformation</u> <u>studies in four commercially important Indica rice cultivars,</u>

S. Sundararajan, B. Sivaraman, V. Rajendran, and R. Sathishkumar,

Journal of Crop Science and Biotechnology, 20(3), 175-183 (2017).

53. <u>Meta-barcoding in combination with palynological inference is a potent</u> <u>diagnostic marker for honey floral composition</u>,

R. C. Laha, S. De Mandal, L. Ralte, L. Ralte, N. S. Kumar, G. Gurusubramanian, **R. Sathishkumar**,R. Mugasimangalam, and N. A. Kuravadi,

AMB Express, 7(1), 132 (2017).

52. Rapid production of therapeutic proteins using plant system

G. Iyappan, S. Hari Priya, K.Kadirvelu, J. Kingston, N. Gopalan, R. K. Sharma and **R Sathishkumar**,

Defence Life Science Journal, 2(2), 95-102 (2017).

51. Confirmation of black nightshade species through DNA barcoding,

L. Nalina, K. Rajamani, A. J. Joel, S. Dhivya, C. J. Jijo, S. Ramachandran, and **R.** Sathishkumar,

Medicinal Plants-International Journal of Phytomedicines and Related Industries, 9(1), 41-47 (2017).

50. Estimating herbal product authentication and adulteration in India using a vouchered, DNA-based biological reference material library,
D. Shanmughanandhan, S. Ragupathy, S. G. Newmaster, S.
Mohanasundaram, and **R. Sathishkumar**,
Drug Safety, 39(12), 1211-1227 (2016).

49. <u>Biochemical fingerprint and pharmacological applications of</u> <u>BarlerianoctifloraLf leaves</u>, S. A. Yadav, **S. Ramalingam**,

A. Jebamalairaj, R. Subban, and K. M. Sundaram,

Journal of Complementary and Integrative Medicine, 13(4), 365-376 (2016).

48. Chikungunya infection: A potential re-emerging global threat,

S. B. Murugan, and **R. Sathishkumar**, Asian Pacific Journal of Tropical Medicine, 9(10), 933-937 (2016).

47. DNA record of some traditional small millet landraces in India and Nepal,

S. Ragupathy, S. Dhivya, K. Patel, A. Sritharan, K. Sambandan, H. Gartaula,

R. Sathishkumar, K. Khadka, B. C. Nirmal, A. N. Kumari, and S. G.

Newmaster,

3 Biotech, 6(2), 133 (2016).

46. <u>Stress-induced accumulation of DcAOX1 and DcAOX2a transcripts</u> <u>coincides with critical time point for structural biomass prediction in carrot</u> <u>primary cultures (*Daucus carota* L.),</u>

M. D. Campos, A. Nogales, H. G. Cardoso, S. R. Kumar, T. Nobre, **R. Sathishkumar**, and B. Arnholdt-Schmitt. Frontiers in Genetics, 7, 1 (2016).

45. Advances in Molecular Cloning,

M. S. Ashwini, S. B. Murugan, S. Balamurugan, and **R. Sathishkumar**, Molecular Biology, 50(1), 1-6 (2016).

44. <u>DNA barcoding: a genomic-based tool for authentication of</u> phytomedicinals and its products,

K. R. S. Balachandran, S. Mohanasundaram, and **R. Sathishkumar**, Botanics: Targets and Therapy, 2015(5), 77-84 (2015).

43. Epigenetic silencing in transgenic plants,

S. R. Kumar, P. Anunanthini, and **R. Sathishkumar,** Frontiers in Plant Science, 6, 693 (2015).

42. Antihistamine from TragiainvolucrataL. leaves,

S. A. Yadav, **S. Ramalingam**, A. J. Raj, and R. Subban, Journal of Complementary and Integrative Medicine, 12(3), 217-226 (2015).

41. <u>Anti-chikungunya activity of luteolin and apigenin rich fraction from</u> <u>Cynodondactylon</u>,

K. S. Murali, S. Sivasubramanian, S. Vincent, S. B. Murugan, B. Giridaran, S. Dinesh, P. Gunasekaran, K. Krishnasamy, and **R. Sathishkumar**, Asian Pacific Journal of Tropical Medicine, 8(5), 352-358 (2015).

40. <u>Micropropagation and DNA delivery studies in onion cultivars of Bellary,</u> <u>CO3</u>,

A. Malla, B. Srinivasan, B. M. Shanmugaraj, and **S. Ramalingam**, Journal of Crop Science and Biotechnology, 18(1), 37-43 (2015).

**39**. Evaluation of DNA barcode candidates for the discrimination of the large plant family Apocynaceae,

D. selvaraj.S. Ramalingam,

Plant Systematics and Evolution, 301(4), 1263-1273 (2015).

38. <u>Assessment of free radical scavenging activities of leaves and stem</u> <u>fractions of green leafy vegetables</u>.

S. B. Murugan, R. Deepika, A. Reshma, M. Ashwini, and **R. Sathishkumar**, African Journal of Pharmacy and Pharmacology, 8(45), 1138-1145 (2014).

37. Plant expression platform for the production of recombinant pharmaceutical proteins,

B. M. Shanmugaraj, and **R. Sathishkumar**,

Austin Journal of Biotechnology and Bioengineering, 1(6), 4-7 (2014).

36. <u>Plants as an alternate system for the large scale production of</u> recombinant therapeutic proteins,

B. M. Shanmugaraj, and **R. Sathishkumar,** Biochemistry and Analytical Biochemistry, 3(2), 1000i101 (2014).

35. Construction of novel chloroplast expression vector and development of

an efficient transformation system for the diatom

Phaeodactylumtricornutum,

W. H. Xie, C. C. Zhu, N. S. Zhang, D. W. Li, W. D. Yang, J. S. Liu, **R.** Sathishkumar, and H. Y. Li,

Marine Biotechnology, 16(5), 538-546 (2014).

34. <u>Carrot antifreeze protein enhances chilling tolerance in transgenic</u> tomato,

S. R. Kumar, R. Kiruba, S. Balamurugan, H. G. Cardoso, A. S. Birgit, A. Zakwan, and **R. Sathishkumar**,

Acta Physiologiae Plantarum, 36(1),21-27 (2014).

33. In vitro symbiotic seed germination of South Indian endemic orchid Coelogyne nervosa,

K. Sathiyadash, T. Muthukumar, S. B. Murugan, **R. Sathishkumar**, and R. R. Pandey,

Mycoscience, 55(3),183-189 (2014).

32. Utility of DNA barcoding for plant biodiversity conservation,

D. Selvaraj, J. I. Park, M. Y. Chung, Y. G. Cho, **S. Ramalingam**, and I. S. Nou, Plant Breeding and Biotechnology, 1(4), 320-332 (2013).

31. Synthesis of silver nanoparticles using rhizome extract of *Gloriosa superba* (Linn.) show antibacterial activity,

S. A. Yadav, A. J. Raj, P. B. Vasantha, and R. Sathishkumar,

Indo-American Journal of Pharmaceutical Research, 3(12), 1740-1746 (2013).

30. <u>DNA barcoding detects contamination and substitution in North American</u> <u>herbal products</u>,

S. G. Newmaster, M. Grguric, D. Shanmughanandhan, **S. Ramalingam**, and S. Ragupathy,

BMC Medicine, 11(1), 222 (2013).

29. Realising the value of plant molecular pharming to benefit the poor in developing countries and emerging economies,

J. K. C. Ma, P. Christou, R. Chikwamba, H. Haydon, M. Paul, M. P. Ferrer, **R. Sathishkumar**, E. Rech, E. Rybicki, A. Wigdorowitz, H. Thangarajand D. C. Yang,

Plant Biotechnology Journal, 11(9), 1029-1033 (2013).

28. <u>Antioxidant perspective of selected medicinal herbs in India: A probable</u> source for natural antioxidants,

S. B. Murugan, R. Deepika, A. Reshma, and **R. Sathishkumar**, Journal of pharmacy research, 7(4), 271-274 (2013).

27. In vitro asymbiotic seed germination, mycorrhization and seedling development of *Acampaepraemorsa* (Roxb.) Blatt. & Mc Cann, a common South Indian orchid,

K. Sathiyadash, T. Muthukumar, S. B. Murugan, **R. Sathishkumar**, E. Uma, S. Jaison, and P. Priyadharsini,

Asian Pacific Journal of Reproduction, 2(2), 114-118 (2013).

26. <u>Antioxidant capacities of *Amaranthus tristis* and *Alternanthera sessilis*: A <u>comparative study</u>,</u>

S. B. Murugan, A. Reshma, R. Deepika, S. Balamurugan, and **R.** 

### Sathishkumar,

Journal of Medicinal Plants Research, 7(30), 2230-2235 (2013).

25. Antioxidant activity in in vivo and in vitro cultures of onion varieties (Bellary and CO3),

M. Ashwini, J. Balaganesh, S. Balamurugan, S. B. Murugan, and **R.** Sathishkumar,

Food and Nutrition Sciences, 4(9), 918-923 (2013).

24. <u>Genomic valorization of the fine scale classification of small millet</u> landraces in Southern India,

S. G. Newmaster, S. Ragupathy, S. Dhivya, C. J. Jijo, **R. Sathishkumar**, and K. Patel,

Genome, 56(2), 123-127 (2013).

23. Overexpression of homogentisatephytyltransferase (HPT) and tocopherol cyclase (TC) enhances  $\alpha$ -tocopherol content in transgenic tobacco,

M. C. Harish, P. Dachinamoorthy, S. Balamurugan, S. B. Murugan, and **R.** Sathishkumar,

Biologia Plantarum, 57(2), 395-400 (2013).

22. Enhancement of  $\alpha$ -tocopherol content through transgenic and cell suspension culture systems in tobacco,

M. C. Harish, P. Dachinamoorthy, S. Balamurugan, S. B. Murugan, and R.

#### Sathishkumar,

Acta PhysiologiaePlantarum, 35(4), 1121-1130 (2013).

21.<u>Cadmium induced physio-biochemical and molecular response in *Brassica juncea*,</u>

B. M. Shanmugaraj, H. M. Chandra, B. Srinivasan, and **S. Ramalingam**, International Journal of Phytoremediation, 15(3), 206-218 (2013).

20. Isolation and characterization of cold inducible genes in carrot by suppression subtractive hybridization,

S. R. Kumar, S. Anandhan, S. Dhivya, A. Zakwan, and **R. Sathishkumar**, Biologia Plantarum. 57(1),97-104 (2013).

19.<u>DNA barcode ITS effectively distinguishes the medicinal plant</u> <u>Boerhaviadiffusa from its adulterants,</u>

D. Selvaraj, D. Shanmughanandhan, R. K. Sarma, J. C. Joseph, R. V. Srinivasan, and **S. Ramalingam,** 

Genomics, Proteomics & Bioinformatics, 10(6), 364-367 (2012).

18. In-vitro antioxidant activity of Barlerianoctiflora L. f.

S. A. Yadav, A. J. Raj, and **R. Sathishkumar**,

Asian Pacific Journal of Tropical Biomedicine, 2(2), S716-S722 (2012).

17.Active Mechanism against free radical using *Tragiainvolucrata* L. leaves and root extract by in-vitro antioxidant models,

#### S. A. Yadav, A. J. Raj, and **R. Sathishkumar**,

Journal of Pharmacy Research. 5(8), 4299-4302 (2012).

16.<u>Influence of genotypic variations on antioxidant properties in different</u> <u>fractions of tomato</u>,

H. M. Chandra, B. M. Shanmugaraj, B. Srinivasan, and **R. Sathishkumar**, Journal of Food Science. 77(11), C1174-C1178 (2012).

15.<u>Antioxidant activity of Withaniasomnifera (L.) Dunal by different solvent</u> extraction methods,

S. A. Yadava, L. F. Hakkim, and **R. Sathishkumar**, Journal of Pharmacy Research. 4(5), 1428-1430 (2011).

14.<u>Morphological variation in the Indian gooseberries (*Phyllanthus emblica* and *Phyllanthus indofischeri*) and the chloroplast trnL (UAA) intron as candidate gene for their identification,</u>

N. Sangeetha, S. Mercy, M. Kavitha, D. Selvaraj, **R. Sathishkumar,** and D. Ganesh,

Plant Genetic Resources, 8(3), 191-197 (2010).

13.<u>Molecular characterization and phylogenetic analysis of BZIP protein in plants</u>,

D. Selvaraj, A. Loganathan, and **R. Sathishkumar**, Journal of Proteomics and Bioinformatics, 3, 230-233 (2010).

12. Efficient in vitro callus induction and regeneration of different tomato cultivars of India,

M. C. Harish, S. R. Kumar, and **R. Sathishkumar**,

Asian Journal of Biotechnology, 2(3), 178-184 (2010).

11.<u>Phylogenetic analysis of chloroplast matK gene from zingiberaceae for</u> plant DNA barcoding,

D. Selvaraj, R. K. Sarma, and **R. Sathishkumar**, Bioinformation, 3(1), 24-27 (2008).

10.Brassica juncea chitinase BjCHI1 inhibits growth of fungal phytopathogens and agglutinates Gram-negative bacteria,

Y. Guan, **S. Ramalingam**, D. Nagegowda, P. W. Taylor, and M. L. Chye, The Journal of Experimental Botany, 59(12), 3475-3484 (2008). 9. <u>Overexpression of membrane-associated acyl-CoA-binding protein ACBP1</u> enhances lead tolerance in Arabidopsis,

S. Xiao, W. Gao, Q. F. Chen, **S. Ramalingam**, and M. L. Chye, The Plant Journal, 54(1), 141-151 (2008).

8.<u>Accumulation of recombinant SARS - CoV spike protein in plant cytosol and</u> <u>chloroplasts indicate potential for development of plant-derived oral</u> <u>vaccines</u>,

H. Y. Li, S. Ramalingam, and M. L. Chye,

Experimental Biology and Medicine, 231(8), 1346-1352 (2006).

7. Brassica juncea HMG-CoA synthase: localization of mRNA and protein,

D. A. Nagegowda, **S. Ramalingam**, A. Hemmerlin, T. J. Bach, and M. L. Chye, Planta, 221(6), 844-856 (2005).

6.<u>An agglutinating chitinase with two chitin-binding domains confers fungal</u> protection in transgenic potato,

M. L. Chye, K. J. Zhao, Z. M. He, **S. Ramalingam**, and K. L. Fung, Planta, 220(5), 717-730 (2005).

5.<u>Functional analyses of the chitin-binding domains and the catalytic domain</u> of Brassica juncea chitinase BjCHI1,

C. M. Tang, M. L. Chye, **S. Ramalingam**, S. W. Ouyang, K. J. Zhao, W. Ubhayasekera, and S. L. Mowbray,

Plant Molecular Biology, 56(2), 285-298 (2004).

4.BjCHI1 from Brassica juncea displays both chitinase and agglutination activity,

S. W. Ouyang, K. J. Zhao, L. X. Feng, M. L. Chye, and **S. Ramalingam**, Chinese Journal of Biotechnology, 18(5), 572-577 (2002).

3.<u>Consequences of the expression of a bacterial glucokinase, both in</u> <u>combination with and independently of yeast-derived invertase, in Potato</u> <u>tubers</u>,

R. F. Alisdair, W. R. Jorg, M. Annette, **R. Sathishkumar**, W. Lothar, and N. T. Richard,

Australian Journal of Plant Physiology, 27(8/9), 827-833 (2000).

2.<u>Particle-mediated DNA delivery and transient expression of GUS gene in</u> plated cells of rice, **R. Sathishkumar**, S. Agrawal, and K. Manoharan, Biologia Plantarum, 40(2), 305-309 (1997).

1.<u>Lipid changes due to growth factor supplements in callus and plasma</u> membrane - enriched fraction of rice cultures,

**R. Sathishkumar**, and K. Manoharan, Phytochemistry, 43(6), 1771-1174 (1996).

### 2017-2010

4.Phylogenetic analysis of chloroplast matK gene from Zingiberaceae for plant DNA barcoding Selvaraj, D., Sarma, R. K., and Sathishkumar, R. Bioinformation 3 24-27 2008

3.Antioxidant activity of Withania somnifera (L.) Dunal by different solvent extraction methods Yadava, S. A., Hakkim, L. F., and Sathishkumar, R. Journal of Pharmacy Research 4 1428-1430 2011

2.Active Mechanism against free radical using Tragia involucrata L. leaves and root extract by in-vitro antioxidant models.Yadav, S. A., Raj, A. J., and Sathishkumar, RJournal of Pharmacy Research 5 4299-4302 2012

1. Rapid production of therapeutic proteins using plant system Defence Life Science Journal 2 95-102 2017.

G. Iyappan, S. Hari Priya, K. Kadirvelu, J. Kingston, N. Gopalan, R.K. Sharma and R. Sathishkumar

1.Genetically modified plants comprising SARS-CoV viral nucleotide sequences and methods of use thereof for immunization against SARS Mee Len Chye, Hong Ye Li, Sathishkumar Ramalingam, Leo Lit Man Poon and Joseph Sriyal Malik Peiris,

International (USA), 2005 WO200505 4473-A1 Granted

2.Detection of fragrant and non-fragrant rice genotypes by simple PCR- RFLP marker system

R Sathishkumar, S Balamurugan, S BalaMurugan, IP Varghese and MC Harish,National 2018 201741012732 Filed

#### **International Conferences**

76.Transient gene expression in Indica rice cultures following Particle bombardment and Agrobacterium-mediated DNA delivery R. Sathishkumar, A. Blau, R. N. Trethewey, L. Willmitzer and K. Manoharan 5th International Congress of Plant Molecular Biology Sept. 21-27, 1997 Oral 5th International Congress of Plant Molecular Biology Singapore

75.Changes in the composition of membrane lipids during in vitro regeneration of rice. R. Sathishkumar and K. Manoharan International Conference on "Frontiers in Biotechnology Nov. 26-29, 1997 Oral Trivandrum India

74.Growth factor supplements and membrane lipid changes in rice cultures K. Manoharan and R. Sathishkumar International Symposium on "Trends in Life Sciences" 17-19 Dec, 1997 Oral Jawaharlal Nehru University, New Delhi India

73.Application of plated cell cultures of rice in raising transgenics K. Manoharan and R. Sathishkumar International Symposium on "Trends in Life Sciences" 17-19 Dec, 1997 Oral Jawaharlal Nehru University, New Delhi India

72.Application of cell cultures for DNA delivery in rice Jerusalem, R. Sathishkumar, A. Blau, R.N. Trethewey, K.Manoharan and L. Willmitzer IX International Congress on Plant tissue and Cell Culture June 14-19, 1998 Oral Israel Jerusalem, Israel

71.National Plant Lipid Cooperative (NPLC), Biochemistry and Molecular Biology of Plant fatty acids and Glycerolipids Girish Mishra, Sathishkumar Ramalingam, M.S.F. Lie Ken Jie and Mee Len Chye June 4-8, 2003 Oral Isolation and characterization of an Arabidopsis T-DNA tagged mutant in ACBP2. California, USA California, USA

70.Expression of a novel chitinase with two chitin-binding domains confers fungal protection in transgenic potato Barcelona, Spain Barcelona, Spain ,Mee-Len Chye, Kai-Jun Zhao, Zhu-Mei He, King-Leung Fung, Sathishkumar Ramalingam ISPMB June 23-28, 2003 Oral

69.Characterization of a mutant in Arabidopsis ACBP2 Girish Mishra, Sathishkumar Ramalingam, M.S.F. Lie Ken Jie and Mee Len Chye 16th International Plant lipid Symposium June 1-4, 2004 Oral Budapest, Hungary Budapest, Hungary

68.Tissue culture studies and quantification of the α-tocopherol in the high altitude tomato cultivars. M.C.Harish and Ramalingam Sathishkumar International Conference on New Horizons in Biotechnology Nov. 26-29, 2007 Oral National Institute for Interdisciplinary Science and Technology India

67.Rapid high frequency plant regeneration, genetic transformation and antimicrobial activity of wild medicinal rice Varghese PI, Dhivya S, Rajeev Kumar Sarma, and Ramalingam Sathishkumar International Conference in Biotechnology February 4-6, 2008 Oral Vellore Institute of Technology, Vellore India

66.In silico approach to define DNA barcodes for traditional medicinal plants - Dhivya S, Rajeev Kumar Sarma, Varghese PI and Ramalingam Sathishkumar International Conference in Biotechnology February 4-6, 2008 Oral A new tool to conserve biodiversity Vellore Institute of Technology, Vellore India

65.Genetic transformation of chitinase and glucanase to Dianthus caryophyllus L. (carnation) for pathogen resistance Rajeev Kumar. S, S. Dhivya, S. Girija and Ramalingam Sathishkumar International Conference in Biotechnology February 4-6, 2008 Oral ,Vellore Institute of Technology, Vellore India

64.Enhancing the - tocopherol (vitamin E) content in high altitude tomato cell suspension culture M.C. Harish, N. Sowmiya Devi and R. Sathishkumar First Congress of Asia- Pacific Society for Mountain Medicine Nov. 28- 30, 2008 Oral . New Delhi India

63.Tissue culture and biochemical studies in high altitude and temperate tomato varieties for elucidating cold tolerance mechanism Rajeev Kumar Sarma, Varghese PI, Dhivya S and Ramalingam Sathishkumar First Congress of Asia- Pacific Society for Mountain Medicine Nov. 28- 30, 2008 Oral New Delhi India 62.Extraction and quantification of food flavouring compound 2-Acetyl-1pyrroline from traditional land rice varieties of Kerala Indian Institute of Crop Processing Technology S. Balamurugan, P. Varghese, S. Rajeev Kumar, M.C.Harish, SarikaMathure, K.V. Wakte, A.B. Nadaf and R. Sathishkumar International conference on Food Technology 2009 August 28-29, 2009 Oral , Thanjavur India

61.Conventional and novel DNA barcoding for Apocyanaceae Ramalingam S, Selvaraj D, Sarma R and Ramachandran VS 3rd International Barcode of Life Conference Nov. 7-13, 2009 Oral 3rd International Barcode of Life Conference Mexico

60.Isolation of cold responsive genes in carrot by suppression subtractive hybridisation. Rajeev Kumar Sarma, Anandhan Sivalingam, Mani Chandra Harish, Dhivya Selvaraj, Varghese Philipose Inchakalody, Zakwan Ahmed and Ramalingam Sathishkumar 34th International Carrot Conference, Washington July 26-28, 2010 Oral 34th International Carrot Conference, Washington USA

59.Poster PCR-based RFLP marker for fragrance genotyping of Indian rice varieties Balamurugan S, BalaMurugan S, Varghese P I and Sathishkumar R International Conference on Genomic Sciences Nov. 12 – 14, 2010 Madurai Kamaraj University, Madurai, Tamil Nadu India

58.International Symposium on Taxonomy, Plant Diversity and Conservation Nov 26 – 28, 2010 Oral Modern Trends in Plant Taxonomy. XX Annual Conference of Indian Association for Angiosperm Taxonomy Dhivya. S, Rajeev Kumar. S, Dhivya. S, Ramachandran. VS and Sathishkumar. R Bharathiar University, Coimbatore India

57.DNA barcoding of Indian medicinal plants National Agriculture Dhivya S and Sathishkumar R International Consultation on DNA Barcoding Nov 6 – 7, 2010 Oral Science Complex, Pusa India

56.Developing vaccines against Chikungunya virus Inchakalody VP, van Dolleweerd CJ, Reljic R, Paul M, Ramalingam S and Ma JKC St. George's Research Day Dec 1, 2010 Poster St. George's University of London, London UK 55."Plant-based Vaccines and Antibodies" Varghese Inchakalody, Craig van Dolleweerd, Rajko Reljic, Mathew Paul, Sathishkumar Ramalingam and Julian Ma International Conference on June 8-10, 2011 Poster Developing a plant based vaccine against Chikungunya virus Tiara Park Atlantica Hotel, Porta Portugal

54.DNA barcode-based PCR-RFLP tool to authenticate the herbal products Adelaide, Dhivya. S, Dhivya. S, Rajeev. K. S, Sathishkumar. R 4th International Barcode of Life Conference Nov. 28 – Dec. 4, 2011 Poster Australia Adelaide, Australia

53.DNA barcoding to identify the morphologically similar medicinal plants for pharmacovigilance and to resolve the taxonomical disputes Adelaide Dhivya. S, Dhivya. S, Rajeev. K. S, Sathishkumar. R 4th International Barcode of Life Conference Nov. 28 – Dec. 4, 2011 Poster, Australia Adelaide, Australia

52.SFRR SATCON and International Symposium on Free Radical Damage and Herbal Antioxidants in Health and Disease Ashwini. M, Balaganesh. J, S. Balamurugan, S. BalaMurugan and Sathishkumar. R Feb 4th & 5th , 2013 Poster In vitro and in vivo antioxidant activity in onion varieties of Bellary and CO3 Avinashilingam University, Coimbatore, TN India

51. Appraisal of green leafy vegetables, as a source for natural antioxidants Deepika. R, S. Bala Murugan, S. Balamurugan, Reshma. A and Sathishkumar. R SFRR SATCON and International Symposium on Free Radical Damage and Herbal Antioxidants in Health and Disease Feb 4th & 5th , 2013 Poster Avinashilingam University, Coimbatore, TN India

50. Assessment of antioxidant activity of Amaranthus tristis and Alternanthera sessilis and their importance in human diet Reshma. A, S. Bala Murugan, S. Balamurugan, Deepika. R and Sathishkumar. R SFRR SATCON and International Symposium on Free Radical Damage and Herbal Antioxidants in Health and Disease Feb 4th & 5th , 2013 Poster Avinashilingam University, Coimbatore, TN India

49. Free radical scavenging analysis of highly nutritious fodder Lolium perenne under cold and normal conditions S. Balamurugan, J. Susan Ann, I. Gowtham, S. Bala Murugan and R. Sathishkumar SFRR SATCON and International Symposium on Free Radical Damage and Herbal Antioxidants in Health and Disease Feb 4th & 5th , 2013 Poster Avinashilingam University,

#### Coimbatore, TN India

48. Assessment of Invitro antiviral activity of Cynodon Dactylon methanolic extract against chikungunya virus Research and Development Centre ,Krishnan Saravana Murali, Varghese inchakalody, Bala Murugan Shanmugaraj, sundaram dines, Vijayan senthilkumar, Giridaran Bupesh, Palani Gunasekaran, K. Kaveri, S. Mohana, Muthuraj Velusamy, Ramalingam Sathishkumar Two day International Symposium on "Research Innovation for Quality Improvement in Higher Education" Oct 11-14, 2014 Oral, Bharathiar University, Coimbatore India

47. Appraisal of antioxidant properties of selected green leafy vegetables Research and Development Centre, Shanmugaraj Bala Murugan, Aziz Reshma, Ramamoorthy deepika and R. Sathishkumar Two day International Symposium on "Research Innovation for Quality Improvement in Higher Education" Oct 11-14, 2014 Oral Bharathiar University, Coimbatore India

46.Heterologous expression of antifreeze proteins in transgenic plant Rajeev kumar Sarma, Balamurugan Srinivasan, Anunanthini Pushpanathan, Mohanapriya Gunasekaran and Ramalingam Sathiskumar International Conference on Recent Trends in Biomedical and Translation Research Dec 17 to 19, 2014 Oral . IIT, Roorkee India

45.Ethnobotany genomics—use of DNA barcoding to explore cryptic diversity in medicinally important plants in the Indian subcontinent Biodiversity Institute of Ontaria, K. Sambandan, S.G. Newmaster, S. Ragupathy, N. Dhatchanamoorthy, R. Saravanan, and R. Sathishkumar Sixth International Barcode of Life Conference Aug 17-21, 2015 Poster University of Guelph Guelph, Canada

44.DNA barcoding of Pteris species by psbA-trnH intergenic spacer: Taxonomically complex and polyploid ferns Biodiversity Institute of Ontaria Baskaran Xavier Ravi, Ramalingam Sathishkumar, Selvaraj Dhivya, Shanmughanandhan Dhivya and Shouzhou Zhang Sixth International Barcode of Life Conference Aug 17-21, 2015 Poster , University of Guelph Guelph, Canada

43. Confirmation of genetic diversity in morphologically distinct accessions of the Solanum nigrum L. complex using DNA barcodes Biodiversity Institute of Ontaria, L.Nalina, T. Nandhini, K.Rajamani, P. Paramaguru, S.Dhivya, C.Jijo, S. Ramachandran and R. Sathishkumar Sixth International Barcode of Life Conference Aug 17-21, 2015 Poster University of Guelph Guelph, Canada

42.DNA- based technologies for authentication of herbs and its admixtures a review Biodiversity Institute of Ontaria S. Dhivya, S.G. Newmaster, S.Ragupathy, M.Saravanan and R. Sathishkumar Sixth International Barcode of Life Conference Aug 17-21, 2015 Poster, University of Guelph Guelph, Canada

41.Authentication of Indian herbal products using DNA barcodes Biodiversity Institute of Ontaria ,S. Dhivya, S.G. Newmaster, S.Ragupathy, M.Saravanan and R. Sathishkumar Sixth International Barcode of Life Conference Aug 17-21, 2015 Poster , University of Guelph Guelph, Canada

40.DNA barcodes in resolving the taxonomic nomenclature of Pseudoxytenanthera stocksii endemic to the Western Ghats, Shanmughanandhan Dhivya, Selvaraj Dhivya and Ramalingam Sathishkumar Sixth International Barcode of Life Conference Aug 17-21, 2015 Poster India Biodiversity Institute of Ontaria, University of Guelph Guelph, Canada

39.DNA barcodes for authentication of commercially important Indian spices Biodiversity Institute of Ontaria M. Saravanan, S.G. Newmaster, S. Ragupathy, S. Dhivya, and R. Sathishkumar Sixth International Barcode of Life Conference Aug 17-21, 2015 Poster, University of Guelph Guelph, Canada

38.DNA Barcoding for the authentication of Morphologically similar and taxonomically disputed species of Zingiberaceae Department of Environmental science, S Dhivya and R. Sathishkumar. 2nd International Conference on Environment and Ecology Mar 7 – 9, 2016 Oral Bharathiar University, Coimbatore India

37.Application of DNA Barcoding in Biodiversity conservation. Department of Environmental science Karpaga Raja Sundari and R. Sathishkumar 2nd International Conference on Environment and Ecology Mar 7 – 9, 2016 Oral , Bharathiar University, Coimbatore India

36.DNA barcoding of honey samples to study the plant diversity M. Saravanan, R Laldinfeli, R.C. Laha, B. Karpaga Raja Sundari and R. Sathishkumar International Conference on Recent Trend in Biosciences April

### 7 - 9, 2016 Oral Alagappa University, Karaikudi India

35.Alternative oxidase (AOX) enhances tolerance against abiotic stress through oxidative defense mechanism in tobacco Mohanapriya G, Rajeev Kumar S and R. Sathishkumar International Conference on Recent Trend in Biosciences April 7 – 9, 2016 Poster Alagappa University, Karaikudi India

34.Development of DNA barcode based CHIP for visual detection of adulterants in herbal products Dhivya S and Sathishkumar R International Conference on DNA Technology for Authentication, Quality Control and Conservation of Herbal Material Dec 12-14, 2016 Oral The Chinese University of Hong Kong Hong Kong

33.Authentication, Quality Control and Conservation of Herbal Material Dec 12-14, 2016 Oral Application of DNA barcoding to unravel the taxonomical complexity in Ficus L. (Moraceae) of Weatern GhatsMahima K, Sathishkumar R and Sudhakar J V International Conference on DNA Technology for , India The Chinese University of Hong Kong Hong Kong

32. DNA barcoding for authentication of the commercial Indian herbal tea Saravanan M, Krishnaveni C and Sathishkumar R International Conference on DNA Technology for Authentication, Quality Control and Conservation of Herbal Material Dec 12-14, 2016 Oral The Chinese University of Hong Kong Hong Kong

31.Application of Universal DNA Barcode system – Experience with India Herbal Industries Sathishkumar R International Conference on DNA Technology for Authentication, Quality Control and Conservation of Herbal Material Dec 12-14, 2016 Oral The Chinese University of Hong Kong Hong Kong

30. Assessment of commercial Indian herbal products by DNA barcodes Sathishkumar R International Conference on Herbal and Natural Components as the Future of Pharmacology & 7th Annual Meet of the National Society of Ethnopharmacology Feb 27 – Mar 1, 2017 Oral Avinashilingam Institute for Home Science and Higher Education for Women India

29.Metabolic engineering of phenyl propanoid pathway in Rice (Oryza sativa) Safia and Sathishkumar.R International Conference on Herbal and Natural Components as the Future of Pharmacology & 7th Annual Meet of the National Society of Ethnopharmacology Feb 27 – Mar 1, 2017 Oral Avinashilingam Institute for Home Science and Higher Education for Women India

28.Pharmaceutical and Cost Benefit Analysis of Commercially Important Pomegranate Varieties Sree Preethy.K and Sathishkumar. R International Conference on Herbal and Natural Components as the Future of Pharmacology & 7th Annual Meet of the National Society of Ethnopharmacology Feb 27 – Mar 1, 2017 Oral Avinashilingam Institute for Home Science and Higher Education for Women India

27.A Genome wide analysis of the ethylene-responsive element binding factor gene family in Saccharum officinarum Dhivya S, Anunanthini P and Sathishkumar R International Symposium on 'Sugarcane Research Since Co 205: 100 Years and Beyond Sept. 18-21, 2017 Poster Coimbatore India

26.Functional characterization of cold inducible promoter from carrot using transient gene expression system in sugarcane Anunanthini P, Dhivya S and Sathishkumar R International Symposium on 'Sugarcane Research Since Co 205: 100 Years and Beyond Sept. 18-21, 2017 Poster Coimbatore India

25.Study on morphology and DNA barcoding of four taxonomically complex groups of Ficus L. (Moraceae). J.V.Sudhakar, Mahima Karthikeyan and R Sathishkumar "XXVII Annual Conference of Indian Association for Angiosperm Taxonomy and International Symposium on Plant Systematics: Priorities and Challenges" Nov. 10-12, 2017 Oral Department of Botany, University of Delhi Delhi, India

24.DNA barcoding of Ficus virens Aiton (Moraceae) complex present in biodiversity hotspot of South India and its taxonomical implications Mahima K, Sudhakar JV and Sathishkumar R 7th International Conference on Barcoding of Life Nov, 2017 Oral 7th International Conference on Barcoding of Life South Africa

23.DNA barcoding resolves the highly complex banana sub-species and synonyms Dhivya S and Sathishkumar R 7th International Conference on Barcoding of Life Nov, 2017 Oral 7th International Conference on Barcoding of Life South Africa 22.DNA barcoding reveals the medicinal value of honey by its floral composition. Saravanan M and Sathishkumar R 7th International Conference on Barcoding of Life Nov, 2017 Oral 7th International Conference on Barcoding of Life South Africa

21.Authentication of herbal plants and products using DNA-based biological reference material library Sathishkumar R 7th International Conference on Barcoding of Life Nov, 2017 Oral 7th International Conference on Barcoding of Life South Africa

20.A potential alternate production platform for plant biologics – Chickungunya vaccine candidates Viruses to Viromes in Health and Disease, Sathishkumar R, Bala Murugan S, Gowtham I and Julian K-C Ma 26th Annual Conference of Indian Virological Society Dec 7 – 9, 2017 Oral Nitte University India

19.Department of Biochemistry, Biotechnology, Microbial Biotechnology and Bioinformatics, Gowtham I, Hari Priya and Sathishkumar R International Conference on Biosciences and Bioinformatics Dec 14-16, 2017 Oral -Bharathiar University, Coimbatore India

18.Phytoconstituent and antioxidant profiling of pigmented and nonpigmented traditional rice cultivars of India,Safia N, Arun, Sathish S and R Sathishkumar InternationalConference of Phyotmedicine (ICPM-2018) Aug 28 -31, 2018 Poster Bharathiar University, Coimbatore India

17.Rebecca Oziohu Omosimua, David Macham, Adebola Onanuga, Benjamin Thoha Thomas, Curtis Onoye Ugbomor, Gowtham Iyappan, Ramalingam Sathishkumar, Samuel Abolade Afolabi InternationalConference of Phyotmedicine (ICPM-2018) Aug 28 -31, 2018 Oral Antioxidant and antimicrobial activities of flavonoids from the fruit extract of Dacryodes edulis Bharathiar University, Coimbatore India

16. InternationalConference of Phyotmedicine (ICPM-2018) Aug 28 -31, 2018 Oral In silico screening of potent natural anti-inflammatory compounds from Indian medicinal plants to treat skin disease ,S. Dhivya, K. Mahima, M. Saravanan and R. Sathishkumar. Bharathiar University, Coimbatore India

15. "Molecular identification and evolutionary relationships between the subspecies of Musa by DNA barcodes", S. Dhivya, I. Gowtham, A Baala Harini, S. Mukunthamumar and R. Sathishkumar CoB, 2018 Sep, 26-27, 2018 Oral JNAU, New Delhi India

14.2nd International Conference on DNA Technology for Authentication, Quality Control and Conservation of Herbal Material Dec 2-4, 2018 Oral Species delimitation of Ficus krishnae C.DC. from Ficus benghalensis L. complex based on DNA barcoding and HP-TLC,Mahima K and Sathishkumar R The Chinese University of Hong Kong Hong Kong

13.2nd International Conference on DNA Technology for Authentication, Quality Control and Conservation of Herbal Material Dec 2-4, 2018 Oral Computational identification of miRNAs from Mentha piperita L.predicts its therapeutic potential, Dhivya S and Sathishkumar R The Chinese University of Hong Kong Hong Kong

12.2nd International Conference on DNA Technology for Authentication, Quality Control and Conservation of Herbal Material Dec 2-4, 2018 Oral Biological authentication of natural Indian honey samples. Sathishkumar R and Saravanan M The Chinese University of Hong Kong Hong Kong

11.Oral Developing PCR-RFLP- and SNP-based markers for determining cytoplasmic male sterile factors in Musa sp. (Musaceae). SRM Institute of Science and Technology, Dhivya S and Sathishkumar R Indian Plant Science Congress Jan 23-25, 2019 Kattankulathur, Chennai India

10.Oral Molecular and phyto-chemical profiling discriminates the species complex in select endemic south India Ficus genus SRM Institute of Science and Technology, Mahima K, Sudhakar J V and Sathishkuma R Indian Plant Science Congress Jan 23-25, 2019 Kattankulathur, Chennai India

9.Oral Enhanced α-tocopherol (vitamin E) levels in transgenic rice coexpressing Arabidopsis thaliana TC and HPT genes SRM Institute of Science and Technology, Sathish S, Safia N and Sathishkumar R Indian Plant Science Congress Jan 23-25, 2019 Kattankulathur, Chennai India

8.Oral Role of silver nitrate on in vitro callus induction and regeneration capacities of Canscora decussate - a critically endangered medicinal plant SRM Institute of Science and Technology, Sivakumar, Sathish S and Sathishkumar.R Indian Plant Science Congress Jan 23-25, 2019 Kattankulathur, Chennai India 7.Indian Plant Science Congress Jan 23-25, 2019 Oral Metabolic engineering of the phenylpropanoid pathway using bacterial tyrosine ammonia lyase and soybean isoflavone synthase for biofortification of flavonoids Safia N, Sathish S and Sathishkumar R SRM Institute of Science and Technology, Kattankulathur, Chennai India

6.Indian Plant Science Congress Jan 23-25, 2019 Oral Plant based biologics to tackle Staphylococcal food poisoning Sathishkumar R and Gowtham I . SRM Institute of Science and Technology, Kattankulathur, Chennai India

5.Plant Based Vaccines, Antibodies and Biologics June 10-12, 2019 Oral Cost effective production of engineered antigen antibodies for early differential diagnosis of Dengue and Chikungunya viral infection Parthiban S, Gowtham I, J-K.C. Ma, and Sathishkumar R University of Latvia, Riga Latvia

4. 8th International Barcode of Life Conference at Clarion Hotel and Congress June 17 – 20, 2019 Oral Combined multivariate analysis and DNA barcoding studies unravel the species complexity in Ficus (Moraceae) endemic to South India Mahima K, Sudhakar J.V., and Sathishkumar RTrondheim, Norway Trondheim, Norway

3.8th International Barcode of Life Conference at Clarion Hotel and Congress June 17 – 20, 2019 Oral Developing PCR-RFLP and SNP-based markers for determining cytoplasmic male sterile factors in the genus Amaranthus (Amaranthaceae). Dhivya S and Sathishkumar R Trondheim, Norway Trondheim, Norway

2. International Barcode of Life Conference at Clarion Hotel and Congress June 17 – 20, 2019 Sathishkumar R, Mahima K, Dhivya Selvaraj and Saravanan M 8th Oral Intricacies involved in authentication of herbal industry samples by DNA barcoding Trondheim, Norway Trondheim, Norway.

1. Species Boundary delimitation of Ficusvirens complex using DNA barcoding and HPTLC. In: International Symposium on Plant taxonomy and Ethnobotany conducted by Botanical Survey of India, Ministry of Environment, Forest and Climate Change, Mahima K, Sudhakar J.V., and Sathishkumar R. Kolkata. 13-14 February 2020. (Oral presentation) 60.Advances in Plant Transgenics: Methods and Applications - Sathishkumar R, Kumar. S.R, Hema. J, Bakar. V - Springer, Singapore November 2019 978-981-13-9624-3

59.<u>Advances in Plant Transgenics: Methods and Applications.</u> (2019) In **Sathishkumar R**, Kumar SR, Hema J, Bakar V (Eds.). Published by Springer International Publisher. ISBN: 978-981-13-9624-3.

Chapter in Edited Book

58.Herbal Perspectives-Present and Future/ DNA Barcoding of Indian Medicinal Plants- A Case Study Dhivya. S Rajeev Kumar. S, Ramachandran. V.S Sathishkumar. R SSPH, Delhi 2010 8189304917

57.Herbal Drug Research- Recent Trends and Progress / Authentication of Herbal S. Dhivya S Dhivya, S Rajeev Kumar, M.C. Harish, and S. Balamurugan R. Sathishkumar LAP, Lambert Academic Publishing, Germany January2012 9783846558010

56.Turning Plants into Medicines-Novel Approaches/ Screening of Common Leafy Vegetables of Tamil Nadu for its Nutraceutical and Antioxidant Properties S. Bala Murugan R. Deepika, and A. Reshma R. Sathishkumar NIPA Publishing, India 2013 9789381450468

55.Biotechnology: Plant Biotechnology (Volume 2)/ Plant Antifreeze Proteins: An Overview Rajeev Kumar. S Dhivya. S Sathishkumar. R Studium Press LLC, USA 2014 1626990174

54.Recent Progress in Medicinal Plants (Volume 39)/ DNA Barcoding of Indian Medicinal Plants Dhivya. S Rajeev Kumar. S Sathishkumar. R Studium Press LLC, USA 2014 193369999X

53.Alternative Respiration Pathways in Higher Plants /Gene Technology Applied for AOX Functionality Studies Rajeev Kumar S - Sathishkumar. R John Wiley and Sons, USA May2014 9781118790465

52.Heavy Metal Remediation: Transport and Accumulation in Plants /Mechanisms and Engineering Plant Metal Accumulation and Transport. Rajeev Kumar.S Varghese Inchakalody and Hema J Sathishkumar.R Nova Science Publisher, USA May2014 9781633215931 51.Handbook of Medicinal Plants and their Bioactive Compounds/ Onion (Allium cepa) – Ethnomedicinal and therapeutic properties. Ashwini M -Sathishkumar R Research Signpost 37/661 (2), Fort P.O. Trivandrum, Kerala, India 2014 978-81-308-0548-1

50.Reactive Oxygen Species and Oxidative Damage in Plants under Stress/ Transgenic plants and Antioxidant Defense: Present and Future? Rajeev Kumar.S, Hema. J Sathishkumar.R Springer International Publisher, Switzerland September2015 9783319204208

49.Modern Methods in Phytomedicine /Evaluation of DNA Barcodes for the effective Discrimination of Zingiberaceae Species. Dhivya. S Rajeev Kumar .S, Dhivya. S, Saravanan. M Sathishkumar .R Daya Publishing House, India January2015 9789351306849

48.Redox State as a Central Regulator of Plant-Cell Stress Responses/ Abiotic Stress Induced Redox Changes and Programmed Cell Death in Plants-A Path to Survival or Death? Kumar. S.R Mohanapriya. G R. Sathishkumar Springer International Publishers AG, Germany September2016 978-3-319-44080-4

47.Plant Epigenetic/ Small RNAs: Master Regulators of Epigenetic Silencing in Plants Kumar. S.R Safia R. Sathishkumar Springer International Publishers AG, Germany January2017 978-3-319-55519-5

46.Arsenic Contamination in the Environment /Genomics and Genetic Engineering in Phytoremediation of Arsenic. Kumar. S.R Gowtham. I and Hema. J Sathishkumar .R Springer International Publishers AG, Germany May2017 10.1007/978-3-319-54356-7-8

45.Sugarcane Biotechnology: Challenges and Prospects/Factors Affecting Genetic Transformation Efficiency in Sugarcane P. Anunandhini S.R.Kumar R. Sathishkumar Springer International Publishing AG, Switzerland August2017 978-3-319-58945-9

44.Sugarcane Biotechnology: Challenges and Prospects/ Plastome Engineering: Yesterday, Today and Tomorrow S.R. Kumar P. Anunandhini R. Sathishkumar Springer International Publishing AG, Switzerland August2017 978-3-319-58945-9

43.Biofuels: Greenhouse Gas Mitigation and Global warming Next Generation Biofuels and Role of Biotechnology/ Predicting Biomass Production from Plant Robustness and Germination Efficiency by Calorespirometry Birgit Arnholdt-Schmitt, Gunasekaran Mohanapriya, Elisete Santos Macedo, José Hélio Costa Ramalingam Sathishkumar Springer International Publishers AG, Germany February2018 978-81-322-3761-7

42.Vector-borne Diseases and Treatment/ Chikungunya: A Neglected Reemerging Disease S.B. Murugan - R. Sathishkumar Open access eBooks 2018 978-93-87500-10-5

41.Antioxidants and Antioxidant Enzymes in Higher Plants / Role of Flavonoids in Plant Stress. V. Baskar R. Venkatesh R. Sathishkumar Springer March2018 9783319750880

40.Rice Science Biotechnological and Molecular Advancements/ Assessment of Aromatic Content and in- vitro Responses in Traditional Indian Rice Varieties. Srinivasan Balamurugan Shanmugaraj Bala Murugan, Inchakalody P. Varghese, Ashwini Malla, Kantilal V. Wakte, Sarika Mathure, Altafhusain B. Nadaf Ramalingam Sathishkumar Apple Academic Press. Part 2 December2018 9781771886925

39.Role of Materials Science in Food Bioengineering-A Volume in Handbook of Bioengineering Volume 19/Health Perspectives of an Isoflavonoid Genistein and its Quantification in Economically Important Plants. Ashwini Malla - Sathishkumar Ramalingam Academic Press April2018 9780128114483

38.Essential Technique for Medical and Life Scientists: A Guide to Contemporary Methods and Current Applications with the Protocols: Part 1/ Reverse Transcription PCR. V. Baskar - R. Sathishkumar Bentham Science Publishers, UAE September2018 9781681087108

37.Cadmium Toxicity and Tolerance in Plants: From Physiology to Remediation (1stEdition)/ Cadmium Stress and Toxicity in Plants: An Overview. S Bala Murugan Ashwini Malla R .Sathishkumar Academic Press December2018 9780128148648

36.Reactive Oxygen, Nitrogen and Sulfur Species in Plants: Production, Metabolism, Signaling and Defense Mechanisms / Methods/Protocols for Determination of Oxidative Stress in Crop Plants. Venkidasamy. B Karthikeyan.M Ramalingam. S Wiley-Blackwell July2019 9781119468677 35.Advances in Plant Transgenics: Methods and Applications /New-Generation Vectors for Plant Transgenics: Methods and Applications. Baskar. V Sree Preethy K. and Ramkumar. S Sathishkumar. R Springer, Singapore November2019 978-981-13-9624-3

34.Advances in Plant Transgenics: Methods and Applications Enhanced Production of Therapeutic Proteins in Plants: Novel Expression Strategies. Iyappan. G Omosimua. R.O Sathishkumar. R Springer, Singapore November2019 978-981-13-9624-3

33.Advances in Plant Transgenics: Methods and Applications/Green Biotechnology: A Brief Update on Plastid Genome Engineering. Bharadwaj R.K.B Kumar S.R Sathishkumar. R Springer, Singapore November2019 978-981-13-9624-3

32.Advances in Plant Transgenics: Methods and Applications / Integrating the Bioinformatics and Omics Tools for Systems Analysis of Abiotic Stress Tolerance in Oryza sativa (L.) Muthuramalingam. P Jeyasri. R, Krishnan. S.R., Pandian. S.T.K., Ramesh. M Sathishkumar. R Springer, Singapore November2019 978-981-13-9624-3

31. DNA Barcoding of Indian Medicinal Plants – A Case Study. In Parimelazhagan T., Manian S. and Pugalenthi M (Eds.) "Herbal Perspectives – Present and Future" Published by SSPH, Delhi. pp 280-289 Dhivya S, Rajeev Kumar S, Ramachandran VS and **Sathishkumar R** (2010). ISBN -8189304917S

30.Authentication of Herbal Products by DNA Barcoding Based PCR-RFLP Technique. In ParimelazhaganThangaraj (Ed.) "Herbal Drug Research- Recent Trends and Progress" Balamurugan and **R**. **Sathishkumar**(2012) Published by LAP, Lambert Academic Publishing, Germany. pp: 280-289.ISBN-9783846558010

29.Screening of Common Leafy Vegetables of Tamil Nadu for its Nutraceutical and Antioxidant Properties. In ParimelazhaganThangaraj (Ed.) "Turning Plants into Medicines-Novel Approaches" S BalaMurugan, R Deepika, A Reshma and **R Sathishkumar**(2013) Published by NIPA Publishing, India. pp: 256-260.ISBN-9789381450468

28.Plant Antifreeze Proteins: An Overview. In Govil. J.N (Ed.) "Biotechnology: Plant Biotechnology (Volume 2)" Published by Studium Press LLC, USA Rajeev Kumar S, Dhivya S and **Sathishkumar R** (2014) . pp: 319-336. ISBN:1626990174

27.DNA Barcoding of Indian Medicinal Plants. In Govil. J.N (Ed.) "Recent Progress in Medicinal Plants (Volume 39) Biotechnology and Genetic Engineering II" Dhivya S, Rajeev Kumar S and **Sathishkumar R** (2014) Published by Studium Press LLC, USA. pp: 43-68. ISBN:193369999X

26. Gene Technology Applied for AOX Functionality Studies. In Arnholdt-Schmitt (Ed.) "Alternative Respiration Pathways in Higher Plants" Rajeev Kumar S and **Sathishkumar R**. (2014) Published by John Wiley and Sons, USA. pp: 287-297. ISBN: 9781118790465

25.Mechanisms and Engineering Plant Metal Accumulation and Transport. In: D. K. Gupta (Ed.) "Heavy Metal Remediation: Transport and Accumulation in Plants" Rajeev Kumar S, Varghese Inchakalody, Hema J and **Sathishkumar R (2014)** Published by Nova Science Publisher, USA. pp: 73-88. ISBN:9781633215931/ 978-1-63321-568-9

24. "Handbook of Medicinal Plants and their Bioactive Compounds" Ashwini M and **Sathishkumar R** (2014) Onion (*Allium cepa*) – Ethnomedicinal and therapeutic properties. In: Nidhi Gupta (Ed.) Published by Research Signpost 37/661 (2), Fort P.O. Trivandrum, Kerala, India. pp: 27-34. ISBN:978-81-308-0548-1

23. "Reactive Oxygen Species and Oxidative Damage in Plants under Stress" Rajeev Kumar S, Hema J and **Sathishkumar R** (2015) Transgenic plants and Antioxidant Defense: Present and Future? In D. K. Gupta, J. S. Palma and F. J. Corpas (Eds.)Published by Springer International Publisher, Switzerland. pp: 353-370. ISBN: 9783319204208

22."Modern Methods in Phytomedicine" Dhivya S, Rajeev Kumar S, Dhivya S, Saravanan M and **Sathishkumar R** (2015) Evaluation of DNA Barcodes for the effective Discrimination of *Zingiberaceae*Species. In: ParimelazhaganThangaraj (Ed.) Published by Daya Publishing House, India. pp: 155-169. ISBN:9789351306849

21."Arsenic Contamination in the Environment" Kumar SR, Gowtham I, Hema J and **Sathishkumar R** (2017) Genomics and Genetic Engineering in Phytoremediation of Arsenic. In: DK Gupta, S Chatterjee (Eds.), Published by Springer International Publishers AG, Germany. Pp: 171-186. ISBN: 10.1007/978-3-319-54356-7-8

20."Redox State as a Central Regulator of Plant-Cell Stress Responses" Kumar SR, Mohanapriya G and **R. Sathishkumar**(2016) Abiotic Stress Induced Redox Changes and Programmed Cell Death in Plants—A Path to Survival or Death? In: Published by Springer International Publishers AG, Germany. pp: 233-252. ISBN:978-3-319-44080-4

19."Plant Epigenetic" Kumar SR, Safia and **R. Sathishkumar**(2017) Small RNAs: Master Regulators of Epigenetic Silencing in Plants. In: Rajewsky, N., Jurga, S., &Barciszewski, J. (Ed.,) Published by Springer International Publishers AG, Germany. pp 89- 106.ISBN:978-3-319-55519-5

18. "Sugarcane Biotechnology: Challenges and Prospects" P Anunandhini, SR Kumar and **R Sathishkumar**(2017) Factors Affecting Genetic
Transformation Efficiency in Sugarcane. In: Chakravarthi Mohan (Ed.,)
Published by Springer International Publishing AG, Switzerland. Pp: 61-73.
ISBN:978-3-319-58945-9.

17. "Sugarcane Biotechnology: Challenges and Prospects" SR Kumar, P Anunandhini and **R Sathishkumar**(2017) Plastome Engineering: Yesterday, Today and Tomorrow. In: Chakravarthi Mohan (Ed.,) Published by Springer International Publishing AG, Switzerland. Pp: 139-154. ISBN: 978-3-319-58945-9.

16. "Biofuels: Greenhouse Gas Mitigation and Global warming Next Generation Biofuels and Role of Biotechnology" Birgit Arnholdt-Schmitt, GunasekaranMohanapriya, **RamalingamSathishkumar**, Elisete Santos Macedo, José Hélio Costa (2018). Predicting Biomass Production from Plant Robustness and Germination Efficiency by Calorespirometry. In: A Kumar, S Ogita, F Yau (Eds.), . Published by Springer International Publishers AG, Germany. Pp: 81-94. ISBN:978-81-322-3761-7

15. "Vector-borne Diseases & Treatment" SB Murugan and **R Sathishkumar** (2017). Chikungunya: A Neglected Re-emerging Disease. In: Nathan Baker (Ed.,), . Published by Open access eBooks. Chapter 2. 1-6. ISBN:978-93-87500-10-5

14. "Antioxidants and Antioxidant Enzymes in Higher Plants" V Baskar, R Venkatesh, **R. Sathishkumar**(2018) Role of Flavonoids in Plant Stress. In: Dr. D. K. Gupata (Ed.,), Published by Springer International Publishing AG, Switzerland. pp: 253-268. ISBN:9783319750880

13.<u>Recent Advances in Metal Induced Stress Tolerance in Plants: Possibilities</u> and Challenges.Sarma R.K., Gowtham I., Bharadwaj R.K.B., Hema J., Sathishkumar R. (2018) In: Hasanuzzaman M., Nahar K., Fujita M. (eds) Plants Under Metal and Metalloid Stress. Springer, Singapore. ISBN : 978-981-13-2242-6.

 "Rice Science Biotechnological and Molecular Advancements" Srinivasan Balamurugan, ShanmugarajBalaMurugan, Inchakalody P. Varghese, AshwiniMalla, Kantilal V. Wakte, SarikaMathure, Altafhusain B. Nadaf, and **RamalingamSathishkumar**(2018) Assessment of Aromatic Content and in- vitro Responses in Traditional Indian Rice Varieties. In: DK Verma, PP Srivastav, AB Nadaf (Eds,) Published by Apple Academic Press. Part 2. 95-106 ISBN:9781771886925/ eISBN:9781351136587

11. "Role of Materials Science inFood Bioengineering-A Volume in Handbook of Bioengineering, Volume 19" AshwiniMalla and
SathishkumarRamalingam(2018) Health Perspectives of an IsoflavonoidGenistein and its Quantification in Economically Important Plants. In: A Grumezescy and AM Holban (Eds.,) Published by Academic Press. pp: 353-379. ISBN: 9780128114483

10. "Essential Technique for Medical and Life Scientists: A Guide to Contemporary Methods and Current Applications with the Protocols: Part 1" V Baskar and **R Sathishkumar**(2018) Reverse Transcription PCR. In: T Yusuf (Ed.,), Published by Bentham Science Publishers, UAE. pp: 109-117. ISBN: 9781681087108

9.Cadmium Stress and Toxicity in Plants: An Overview .S BalaMurugan, AshwiniMalla and **R Sathishkumar**(2018). . In: "Cadmium Toxicity and Tolerance in Plants: From Physiology to Remediation (1<sup>st</sup>Edition) Mirza Hasanuzzaman, M.N.V. Prasad, Masayuki Fujita (Eds.,)" published by Academic Press. pp: 1-17. ISBN: 9780128148648

8.Methods/Protocols for Determination of Oxidative Stress in Crop Plants .Venkidasamy, B., Karthikeyan, M., &**Ramalingam, S.** (2019).In: **Mirza Hasanuzzaman, Vasileios Fotopoulos, KamrunNahar, Masayuki Fujita (Eds.).,** *Reactive Oxygen, Nitrogen and Sulfur Species in Plants: Production, Metabolism, Signaling and Defense Mechanisms*, 421- 435. Published by Wiley Blackwell, US. ISBN: 9781119468677 7.<u>New-Generation Vectors for Plant Transgenics: Methods and Applications</u>.
Baskar V., SreePreethy K., Ramkumar S and **Sathishkumar, R.**(2019).Advances in Plant Transgenics: Methods and Applications In: **Sathishkumar**, R., **Kumar**, S.R., **Hema**, J., **Baskar**, V. (Eds.)., , Springer, Singapore.101 – 125, ISBN: 978-981-13-9624-3.

6.Enhanced Production of Therapeutic Proteins in Plants: Novel Expression Strategies Iyappan G., Omosimua R.O., **Sathishkumar R.** (2019) . In: Sathishkumar R., Kumar S., Hema J., Baskar V. (eds) Advances in Plant Transgenics: Methods and Applications. Springer, Singapore. 333 – 351, ISBN: 978-981-13-9624-3. **DOI:** 10.1007/978-981-13-9624-3

5. Green Biotechnology: A Brief Update on Plastid Genome Engineering. Bharadwaj R.K.B., Kumar S.R., **Sathishkumar R.** (2019) Advances in Plant Transgenics: Methods and Applications. In: Sathishkumar R., Kumar S., Hema J., Baskar V. (eds) Springer, Singapore. 79 – 100, ISBN: 978-981-13-9624-3. DOI: 10.1007/978-981-13-9624-3

4.Integrating the Bioinformatics and Omics Tools for Systems Analysis of Abiotic Stress Tolerance in Oryza sativa (L.). Muthuramalingam P., Jeyasri R., Krishnan S.R., Pandian S.T.K., **Sathishkumar R.,** Ramesh M. (2019) In: Sathishkumar R., Kumar S., Hema J., Baskar V. (eds) Advances in Plant Transgenics: Methods and Applications. Springer, Singapore. 59 – 77, ISBN: 978-981-13-9624-3. DOI: 10.1007/978-981-13-9624-3

3.Next Generation Biomanufacturing Technologies.IyappanGowtham and **RamalingamSathishkumar** (2019) Advances in Plant Based Biologics. In: NavaniethaKrishnarajRathinam., Rajesh K. Sani. (eds) ACS Symposium Series Vol. 1329, US. Chapter 4pp 57-79, ISBN13: 9780841235007. DOI: 10.1021/bk-2019-1329.ch004

2.Phyto-Microbiome in Stress Regulation, Environmental and Microbial Biotechnology series, Sivakumar S, **Sathishkumar R**, Muthu T, Shivraj HN, Baskar V (2020) Development of Abiotic Stress Tolerance in Crops by Plant Growth Promoting Rhizobacteria (PGPR). In: Manoj Kumar, Vivek Kumar, Ram Prasad(eds.), , Springer Nature, Singapore. 125 – 145, ISBN: 978-981-15-2575-9. 10.1007/978-981-15-2576-6\_8.

1.<u>Anti-oxidant and Anti-microbial Activities of Flavonoids from the Fruit</u> Extract of Dacryodesedulis. In ParimelazhaganThangaraj (eds)., Phytomedicine, CRC Press, Boca Raton Omosimua, R.O., Macham, B.D., Onanuga, A., Thomas, B.T., Ugbomor, C.O., Iyappan, G., **Ramalingam, S.,** Afolabi, A.S. and Thomas, S.A., 2020.131-137. eBook ISBN – 9781003014898.

1.Sathishkumar, R., Mahima, K., Sudhakar, J.V. and Murthy, G.V.S. psbA-trnH NCBI KU499524 2016

2.Sathishkumar, R., Mahima, K., Sudhakar, J.V. and Murthy, G.V.S. psbA-trnH NCBI KU499525 2016

3.Sathishkumar, R., Mahima, K., Sudhakar, J.V. and Murthy, G.V.S. ITS NCBI KU365054 2016

4.Sathishkumar, R., Mahima, K., Sudhakar, J.V. and Murthy, G.V.S. ITS NCBI KU365055 2016

5.Sathishkumar, R., Mahima, K., Sudhakar, J.V. and Murthy, G.V.S. ITS NCBI KU365056 2016

6.Sathishkumar, R., Mahima, K., Sudhakar, J.V. and Murthy, G.V.S. ITS NCBI KU365057 2016

7.Sathishkumar, R., Mahima, K., Sudhakar, J.V. and Murthy, G.V.S. ITS NCBI KU365058 2016

8.Sathishkumar, R., Mahima, K., Sudhakar, J.V. and Murthy, G.V.S. ITS NCBI KU365059 2016

9.Sathishkumar, R., Mahima, K., Sudhakar, J.V. and Murthy, G.V.S. ITS NCBI KU365060 2016

10.Sathishkumar,R., Mahima,K., Sudhakar,J.V. and Murthy,G.V.S. ITS NCBI KU365061 2016

11.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MF288765 2018

12.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MF288766 2018

13.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MF288767 2018

14.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MF288768 2018

15.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MF288769 2018

16.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MF288770 2018

17.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288771 2018

18.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288772 2018

19.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288773 2018

20.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288774 2018

21.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288775 2018

22.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288776 2018

23.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288777 2018

24.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288778 2018

25.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288779 2018

26.Sathishkumar,R., Mahima,K. and Sudhakar,J.V. psbA-trnH NCBI MF288780 2018

27.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. psbA-trnH NCBI MF288781 2018

28.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922239 2020

29.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922240 2020

30.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922241 2020

31.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922242 2020

32.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922243 2020

33.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922244 2020 34.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922245 2020 35.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922246 2020 36.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922247 2020 37.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922248 2020 38.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922249 2020 39.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922250 2020 40.Sathishkumar, R., Mahima, K. and Sudhakar, I.V. ITS NCBI MN922251 2020 41.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922252 2020 42.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922253 2020 43.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922254 2020 44.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922255 2020 45.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922256 2020 46.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922257 2020 47.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922258 2020 48.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MN922259 2020 49.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118725 2020 50.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118726 2020 51.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118727 2020 52.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118728 2020 53.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118729 2020 54.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118730 2020 55.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118731 2020 56.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118732 2020

57.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118733 2020

58.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118734 2020

59.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118735 2020

60.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118736 2020

61.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118737 2020

62.Sathishkumar, R., Mahima, K. and Sudhakar, J.V. ITS NCBI MT118738 2020

63.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201680 2013

64.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201681 2013

65.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201682 2013

66.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201683 2013

67.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201684 2013

68.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201685 2013

69.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201686 2013

70.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201687 2013

71.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R. And Patel,K. ITS NCBI KC201688 2013

72.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201689 2013

73.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201690 2013

74.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201691 2013

75.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201692 2013

76.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201693 2013

77.Newmaster,S.G., Ragupathy,S., Dhivya,S., Jijo,C.J., Sathishkumar,R.And Patel,K. ITS NCBI KC201694 2013

78.Sathishkumar,R., Dhivya,S., Dhivya,S., Baskaran,X.R. andJeyachandran,R. psbA NCBI JX987790 2013

79.Sathishkumar,R., Dhivya,S., Dhivya,S., Baskaran,X.R. andJeyachandran,R. psbA NCBI JX987791 2013

80.Sathishkumar, R., Dhivya, S., Dhivya, S., Baskaran, X.R. and Jeyachandran, R. psbA NCBI JX987792 2013

81.Sathishkumar, R., Dhivya, S., Dhivya, S., Baskaran, X.R. and Jeyachandran, R. psbA NCBI JX987793 2013

82.Sathishkumar,R., Dhivya,S., Dhivya,S., Baskaran,X.R. andJeyachandran,R. psbA NCBI JX987794 2013

83.Sathishkumar, R., Dhivya, S., Dhivya, S., Baskaran, X.R. and Jeyachandran, R. psbA NCBI JX987795 2013

84.Sathishkumar, R., Ayyappa Das, M., Dhivya, S. and Saravanan, M. rbcl NCBI KJ863565 2014

85.Sathishkumar,R., Ayyappa Das,M., Dhivya,S. and Saravanan,M. rbcl NCBI KJ863564 2014

86.Sathishkumar,R., Ayyappa Das,M., Dhivya,S. and Saravanan,M. rbcl NCBI KJ863563 2014

87.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406136.1 2015

88.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406137.1 2015

89.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406137.1 2015

90.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406138.1 2015 91.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406139.1 2015 92.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406140.1 2015 93.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406141.1 2015 94.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406142.1 2015 95.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406143.1 2015 96.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406144.1 2015 97.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406145.1 2015 98.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406146.1 2015 99.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS NCBI KP406147 2015 100.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856583 2016 101.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856584 2016 102.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856585 2016 103.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856586 2016 104.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856587 2016 105.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856588 2016 106.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856589 2016 107.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856590 2016 108.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856591 2016 109.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856592 2016 110.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856593 2016 111.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856594 2016 112.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856595 2016 113.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856596 2016

114.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856597 2016 115.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856598 2016 116.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856599 2016 117.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856600 2016 118.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856601 2016 119.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856602 2016 120.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856603 2016 121.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856604 2016 122.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856605 2016 123.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856606 2016 124.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856607 2016 125.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856608 2016 126.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856609 2016 127.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856610 2016 128.Sathishkumar, R., Saravanan, M. and Dhivya, S. rbcl NCBI KU856611 2016 129.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286515 2018 130.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286516 2018

131.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286517 2018

132.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286518 2018

133.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286519 2018

134.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286520 2018

135.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286521 2018

136.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286522 2018

137.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286523 2018

138.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286524 2018

139.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286525 2018

140.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286526 2018

141.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286527 2018

142.Sathishkumar, R., Baala Harini, A., Dhivya, S. and Saravanan, M. ITS NCBI MF286528 2018

143.Sathishkumar, R., Dhivya, SITS BOLD APOCOO1-11 2011

144.Sathishkumar, R., Dhivya, SITS BOLD APOCOO2-11 2011

145.Sathishkumar, R., Dhivya, SITS BOLD APOCOO3-11 2011

146.Sathishkumar, R., Dhivya, SITS BOLD APOCOO4-11 2011

147.Sathishkumar, R., Dhivya, SITS BOLD APOCO05-11 2011

148.Sathishkumar, R., Dhivya, SITS BOLD APOCOO6-11 2011

149.Sathishkumar, R., Dhivya, SITS BOLD APOCOO7-11 2011

150.Sathishkumar, R., Dhivya, SITS BOLD APOCOO8-11 2011

151.Sathishkumar, R., Dhivya, SITS BOLD APOCOO9-11 2011

152.Sathishkumar, R., Dhivya, SITS BOLD APOCOO10-11 2011

153.Sathishkumar, R., Dhivya, SITS BOLD APOCO011-11 2011 154.Sathishkumar, R., Dhivya, SITS BOLD DBTB005-12 2012 155.Sathishkumar, R., Dhivya, S ITS BOLD DBTB006-12 2012 156.Sathishkumar, R., Dhivya, SITS BOLD DBTB003-12 2012 157.Sathishkumar, R., Dhivya, SITS BOLD DBTB004-12 2012 158.Sathishkumar, R., Dhivya, SITS BOLD DBTB002-12 2012 159.Sathishkumar, R., Dhivya, SITS BOLD DBTB001-12 2012 160.Sathishkumar, R., Dhivya, S ITS BOLD ZING001-11 2011 161.Sathishkumar, R., Dhivya, SITS BOLD ZING002-11 2011 162.Sathishkumar, R., Dhivya, SITS BOLD ZING003-11 2011 163.Sathishkumar, R., Dhivya, SITS BOLD ZING004-11 2011 164.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM007-13 2013 165.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM046-14 2014 166.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM010-13 2013 167.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM009-13 2013 168.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM008-13 2013 169.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM042-14 2014 170.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM043-14 2014 171.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM044-14 2014 172.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM045-14 2014 173.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM049-14 2014 174.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM048-14 2014 175.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM047-14 2014 176.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM011-13 2013

177.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM012-13 2013 178.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM013-13 2013 179.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM050-14 2014 180.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM054-14 2014 181.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM053-14 2014 182.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM052-14 2014 183.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM051-14 2014 184.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM015-14 2014 185.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM002-13 2013 186.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM001-13 2013 187.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM018-13 2013 188.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM017-14 2014 189.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM016-14 2014 190.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM003-14 2014 191.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM022-14 2014 192.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM023-14 2014 193.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM024-14 2014 194.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM025-14 2014 195.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM026-14 2014 196.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM027-14 2014 197.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM028-14 2014 198.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM029-14 2014 199.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM030-14 2014 200.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM031-14 2014

201.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM032-14 2014 202.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM033-14 2014 203.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM034-14 2014 204.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM035-14 2014 205.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM036-14 2014 206.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM037-14 2014 207.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM038-14 2014 208.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM039-14 2014 209.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM040-14 2014 210.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM005-13 2014 211.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM004-13 2014 212.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM006-13 2013 213.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM019-14 2014 214.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM020-14 2014 215.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM021-14 2014 216.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM059-14 2014 217.Sathishkumar, R., Saravanan, M. and Dhivya, S. ITS BOLD FSSM041-14 2014 218.Sathishkumar, R., Dhivya, S matK BOLD PDBA003-10 2010 219.Sathishkumar, R., Dhivya, S matK BOLD PDBA013-11 2011 220.Sathishkumar, R., Dhivya, S matK BOLD PDBA014-11 2011 221.Sathishkumar, R., Dhivya, S matK BOLD PDBA009-11 2011 222.Sathishkumar, R., Dhivya, S matK BOLD PDBA015-11 2011 223.Sathishkumar, R., Dhivya, S matK BOLD PDBA010-11 2011 224.Sathishkumar, R., Dhivya, S matK BOLD PDBA006-10 2010

225.Sathishkumar, R., Dhivya, S matK BOLD PDBA011-11 2011 226.Sathishkumar, R., Dhivya, S matK BOLD PDBA012-11 2011 227.Sathishkumar, R., Dhivya, S matK BOLD PDBA004-10 2010 228.Sathishkumar, R., Dhivya, S matK BOLD PDBA016-11 2011 229.Sathishkumar, R., Dhivya, S matK BOLD PDBA017-11 2011 230.Sathishkumar, R., Dhivya, S matK BOLD PDBA007-10 2010 231.Sathishkumar, R., Dhivya, S matK BOLD PDBA031-11 2011 232.Sathishkumar, R., Dhivya, SmatK BOLD PDBA026-11 2011 233.Sathishkumar, R., Dhivya, S matK BOLD PDBA032-11 2011 234.Sathishkumar, R., Dhivya, S matK BOLD PDBA034-11 2011 235.Sathishkumar, R., Dhivya, S matK BOLD PDBA027-11 2011 236.Sathishkumar, R., Dhivya, S matK BOLD PDBA028-11 2011 237.Sathishkumar, R., Dhivya, S matK BOLD PDBA029-11 2011 238.Sathishkumar, R., Dhivya, S matK BOLD PDBA031-11 2011 239.Sathishkumar, R., Dhivya, S matK BOLD PDBA033-11 2011 240.Sathishkumar, R., Dhivya, S matK BOLD PDBA019-11 2011 241.Sathishkumar, R., Dhivya, S matK BOLD PDBA023-11 2011 242.Sathishkumar, R., Dhivya, S matK BOLD PDBA018-11 2011 243.Sathishkumar, R., Dhivya, S matK BOLD PDBA005-10 2010 244.Sathishkumar, R., Dhivya, S matK BOLD PDBA001-10 2010 245.Sathishkumar, R., Dhivya, S matK BOLD PDBA008-11 2011 246.Sathishkumar, R., Dhivya, S matK BOLD PDBA020-11 2011 247.Sathishkumar, R., Dhivya, S matK BOLD PDBA025-11 2011 248.Sathishkumar, R., Dhivya, S matK BOLD PDBA024-11 2011 249.Sathishkumar, R., Dhivya, S matK BOLD PDBA021-11 2011 250.Sathishkumar, R., Dhivya, S matK BOLD PDBA022-11 2011 251.Sathishkumar, R., Dhivya, S matK BOLD PDBA002-10 2010 252.Sathishkumar, R., Dhivya, SITS BOLD BOER004-11 2011 253.Sathishkumar, R., Dhivya, S ITS BOLD BOER001-11 2011 254.Sathishkumar, R., Dhivya, SITS BOLD BOER002-11 2011 255.Sathishkumar, R., Dhivya, SITS BOLD BOER003-11 2011 256.Sathishkumar, R., Dhivya, SITS BOLD TRB001-11 2011 257.Sathishkumar, R., Dhivya, SITS BOLD TRB002-11 2011 258.Sathishkumar, R., Dhivya, S ITS BOLD TRB003-11 2011 259.Sathishkumar, R., Dhivya, S ITS BOLD IIPSA003-12 2012 260.Sathishkumar, R., Dhivya, S ITS BOLD IIPSA004-12 2012 261.Sathishkumar, R., Dhivya, S ITS BOLD IIPSA005-12 2012 262.Sathishkumar, R., Dhivya, SITS BOLD IIPSA002-12 2012 263.Sathishkumar, R., Dhivya, S ITS BOLD IIPSA001-12 2012 264.Sathishkumar, R., Dhivya, SITS BOLD IIPSP001-12 2012 265.Sathishkumar, R., Dhivya, SITS BOLD IIPSP003-12 2012 266.Sathishkumar, R., Dhivya, SITS BOLD IIPSP002-12 2012 267.Gururaj Chalageri, Raghavendra P, Sathishkumar Ramalingam, U. V. Babu ITS BOLD TCHDC001-16 2016 268.Sathishkumar, R., Dhivya, SITS BOLD HPC001-11 2011 269.Sathishkumar, R., Dhivya, S ITS BOLD HPC002-11 2011 270.Sathishkumar, R., Dhivya, SITS BOLD HPC003-11 2011 271. Sathishkumar R, Bharadwaj R.K.B SUB10228182 EN1 MZ848142

272. Sathishkumar R, Bharadwaj R.K.BSUB10228182 EN2 MZ848143

## 273. Sathishkumar R, Bharadwaj R.K.BSUB10228182 EN3 MZ848144

Alumini Reflections:

- Name of the Alumni
- <u>Current Affiliation</u>

Harish M C

Assistant Professor, Department of Biotechnology, Thiruvalluvar University, Vellore