

BIODATA OF Dr. S. R. SENTHILKUMAR, PG AND RESEARCH DEPARTMENT OF BOTANY,  
ST. JOSEPH'S COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI-620002.

**1. Name** : Dr. S. R. SENTHIL KUMAR  
Ph.D/ Botany/ (1996)  
Department of Plant Science  
Bharathidasan University, Tiruchirappalli

**2. Present Position** : Head and Associate Professor  
PG and Research Department of Botany  
St. Joseph's College (Autonomous),  
(www.sjctni.edu)  
Tiruchirappalli – 620 002.Tamilnadu

**E.mail** : senkumar68@gmail.com  
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**3. Research Area** : Molecular Systematics of Angiosperms|Spectral Imaging

**4. Patent Granted** : International : 02 (Australia and Germany) and  
National 02

**5. Education**

<i>Degree</i>	<i>University/Institution</i>	<i>Year</i>
Ph.D.	Dept. of Plant Science Bharathidasan University	1996
M.Phil.	St. Joseph's College (Autonomous)	1992
M.Sc. (University Rank )	National College (Autonomous)	1991
B.Sc	National College (Autonomous)	1988
HSC	Municipal Higher Secondary School	1986
SSLC	Government Higher Secondary School	1984

## 6. Academic Programmes Establishment

- ✚ B.Sc., M.Sc - Biotechnology and M.Sc. Gene Technology syllabus Framed for Bharathidasan University, Tiruchirappalli. (1996 and 1999).
- ✚ Establishment of Biotechnology, Gene Technology and Environmental Sciences Departments, JJ College of Arts and Science, Pudukottai (1996-11<sup>th</sup> Jan 2000).

## 7. Administrative Responsibilities

- ❖ Head and Associate Professor (Government Aided) Department of Botany (2019- )
- ❖ Dean, School of Biological Sciences, St. Joseph's College, Tiruchirappalli (2017-2019).
- ❖ Head, Department of Biotechnology, St. Joseph's College, Tiruchirappalli (2014-2017).
- ❖ Head, Department of Biotechnology, Gene Technology and Env.Sciences, JJ College of Arts and Science, Pudukottai (1997-11<sup>th</sup> Jan 2000).
- ❖ Asst. Coordinator, DBT-STAR Scheme, St. Joseph's College, Tiruchirappalli.(2016-2019)
- ❖ Chief Superintendent of Examinations, St. Joseph's College, Tiruchirappalli (2015-2016)
- ❖ Coordinator, Ambient Air Quality Monitoring Station, SJC (2018-)
- ❖ Peer Team Member- UGC Paramarsh Scheme, St. Joseph's College, Tiruchirappalli 2019-
- ❖ Member, Ecology Commission of Madurai Jesuit Province, (2021)
- ❖ DBT-STAR College Scheme, Asst. Co ordinator, St.Joseph's College (2016)

## 8. Other Responsibilities in the College:

- ❖ Programme Officer- NSS Unit, St. Joseph's College, Tiruchirappalli (2004-2007)
- ❖ Director, nature Club, St. Joseph's College, Tiruchirappalli (2007-2010)
- ❖ Purchase Officer, St. Joseph's College, Tiruchirappalli (2010-2011)
- ❖ Member, Governing Body, St. Joseph's College, Tiruchirappalli (2017-2019)
- ❖ Member, Academic Council, St. Joseph's College, Tiruchirappalli(2017-2019)
- ❖ Member, Finance Committee, St. Joseph's College, Tiruchirappalli(2017-2019)
- ❖ Member, Planning and Evaluation Committee, St. Joseph's College, Tiruchirappalli (2017-2019)
- ❖ Member, Purchase Committee, St. Joseph's College, Tiruchirappalli (2017-2019)
- ❖ Member, Internal Quality Assurance Cell, St. Joseph's College, Tiruchirappalli (2017-2019)
- ❖ Member, Mentoring Facilitation Committee, St. Joseph's College, Tiruchirappalli (2017-2019)
- ❖ Member, Inventory Auditing Committee, St. Joseph's College, Tiruchirappalli (2017-2019)
- ❖ Member, UGC Affairs Committee, St. Joseph's College, Tiruchirappalli (2017-2019)
- ❖ Member, Curriculum Development Committee, St. Joseph's College, Tiruchirappalli (2017-2019)
- ❖ Member in various criteria's of NAAC – SSR preparation of the college for 4 Cycles (Cycle 1,2,3 & 4)

9. Experience : Teaching: 25 years, Research: 28 years.

## 10. Prize and Recognition

- M.Sc Proficiency Award (1991)
- M.Sc University Rank (1991)
- Best Paper Presentation Award - UGC Sponsored National Symposium on Plant Morphogenesis, Dept. of BioSciences, Sardar Patel University, Gujarat (1997).

## 11. Government of India Recognition

- Young Scientist Overseas Fellowships, Department of Biotechnology, Government of India (2006).
- Young Scientist Award -Dept. of Science and Technology, Government of India (2001).

## 12. Global competency

- 120 sessions with GenBank / NCBI,USA
- Young Scientist Bursary Award, Korean Microscopy Society(2008),S.Korea
- Young Scientist International mycological Congress, Oslo University, Norway (2002)
- Young Scientist Bursary Award -The Royal Microscopical Society, Oxford University, UK, (2000).

13. Research Guidance : Ph.D - 9 Awarded, /M.Phil:51

## 14. Independent Experience in guiding Research Students (Ph.D)

Name / Reference	Submission	Year of Award	University
Mrs.Dr.S. Kala (17462/Ph.D/Bot/Oct2002)	Sep.2006	20 <sup>th</sup> April 2007	Bharathidasan
Dr.T. Francis Xavier (13832/Ph.D/Bot/Jan2002)	Aug.2006	26 <sup>th</sup> April 2007	“
Dr.A.Egbert Selwin Rose (020052/Ph.D/Bot/Jan2004)	May 2008	15 <sup>th</sup> April 2009	“
Mrs. Dr.R. Sarala (52824/Ph.D/Bot/July2004)	June2009	1 <sup>st</sup> Dec. 2009	“
Dr.J. Kashmir (17161/Ph.D.1/Mol.Sys./Oct.2008)	Dec.2011	20 <sup>th</sup> April 2012	“
Mrs.Dr.R. Bhamadevi (31837/Ph.D1/Mol.Sys./Jan2009)	Oct.2012	5 <sup>th</sup> Oct'2013	“
Mrs. Dr.A.Freeda Rose 38736/Ph.D/K10/Botany/PT/Jan.2014	2019	Dec 2019	“
Dr.Arul (05874/Ph.D/K1/Botany/FT/2015)	April2015	09 <sup>th</sup> December 2020	“
Mrs.Dr.A. Asha Monica (004860/Ph.DK10/Pl.Biotechnology/FT/Jan2019)	Nov.2021	21 <sup>st</sup> .Feb 2022	“

### 15. List of M.Phil Candidates in Biotechnology

No	Name	University	Year
1	J. Senthilkumar, 2KFT-7730	Bharathidasan	2001
2	S.Sripriya,2353987	MS University	2003
3	D.Gomathi, 02CD-0216	Bharathidasan	2003
4	A.Brinda devi, 2353958	MS University	2003
5	D.Poorani Hopkins, 03CD-1797	Bharathidasan	2003
6	NS.Prabavathi, 03CD-1798	"	2004
7	RSR Priya, 03CD-1429	"	2004
8	A. Rathidevi, 03CD-1454	"	2004
9	K.R.Jeya,03CD-1780	"	2004
10	J.Ramadevi,02CD-0124	"	2004
11	S.Sakthivel, 03CD-1455	"	2004
12	N.Vinotha, 02CD-0248	"	2004
13	S.Jeyachandran, 04CD-13877	"	2005
14	P.Kavitha, 05CD-19567	"	2006
15	S.Sudha, 2K6FT-21326	"	2007
16	C. Dinesh, 066160211	Alagappa	2007
17	C.Diana Dorathi, 2K6FT-21323	Bharathidasan	2007
18	J.Kasmir, 06CD-29001	"	2007
19	K.S.Seethalakshmi	"	2007
20	M.Keerthiga, 2K9FT-34601	"	2010
21	J.Brigit Kavitha, 2K9FT -34599	"	2010
22	S.Punitha 066140064	Alagappa	2010
23	G.N.Vengadeshwari 2K10FT-35821	Bharathidasan	2011
24	U.Abirami, 2K10FT35818	"	2011
25	Y. Santha sheela	"	2011
26	P.Saravanan 12MBT103	"	2013
27	Joy Sebastian Prakash.J	"	2013
28	S.Saranya 12MBT104	"	2013
29	R.Senbagarani, 12MBT109	"	2013
30	S. Arul Delpin Sutha, 14MBT103	"	2015
31	C. Divya, 14MBT104	"	2015
32	R.Ranjani, 14MBT105	"	2015
33	Nivila Mathew, 14MBT106	"	2015
34	Bini Paul, 15MBT102	"	2016
35	R.Thilagavathi, 15MBT103	"	2016
36	A. Asha Monica, 16MBT102	"	2017
37	V. Jino Aancius, 16MBT104	"	2017
38	S.Caroline Green 17MBT101	"	2018

## 16. List of M.Phil Candidates in Botany

No	Name	University	Year
1	S.Padma, 02CD-0006	Bharathidasan	2003
2	M. Selvanayaki, 2K3FT-10998	"	2004
3	S.Prabhu, 2K4FT-12342	"	2005
4	S.Hema, 05CD-19564	"	2006
5	M.Dhanasekaran, 04CD-13871	"	2006
6	S.Kalpana,05MB0108	"	2006
7	M.Johnson Gritto, 06 CD-29344	"	2007
8	P.Mani, 06CD-29351	"	2007
9	T.J.Shaina, 06MPB101	"	2007
10	S. Sarathamary, 07MPB112	"	2008
11	M.Poyyamozi,08MPB102	"	2009
12	K.Saravanan,08MPB105	"	2009
13	M.Karthik, 12MBO105	"	2013

## 17. Abroad visit

- ❖ Department of Botany, University of Peradeniya, Srilanka,(1997, 2000;2004)
- ❖ Department of Biotechnology, University of Peradeniya, Srilanka (2005)
- ❖ Department of Biology, York University, UK, (2000;2006)
- ❖ University of Oslo, Norway(2002)
- ❖ International Islamic University, Malaysia(2004)
- ❖ Department of Molecular Biology, National University of Singapore (2004)
- ❖ Jeju National University, Jeju, South Korea, (2008)
- ❖ James Cook University, Townsville, Australia, (2010)
- ❖ Al-Balqa' Applied University, Petra, Jordan,(2012)
- ❖ Bulgarian Academy of Sciences, Bulgaria,(2013)
- ❖ Croatian Microbiological Society, Croatia(2014)
- ❖ Institute of Fundamental Studies, Kandy, Srilanka (2017;2018)
- ❖ University of North Carolina, USA (2014)
- ❖ Rumbaugh –Goodwin Cancer Research Institute, Florida, USA, (2014)
- ❖ University of British Columbia, Vancouver, Canada, (2018)

## **18. Conference/workshops organized:**

- ❖ One Day Workshop on Fluorescence Technology, Department of Botany, St. Joseph's College, Tiruchirappalli, 16<sup>th</sup> February, 2004.
- ❖ State level workshop on Techniques in Tissue culture and Histochemistry, -Department of Botany, St. Joseph's College, Tiruchirappalli, 16 and 17<sup>th</sup> September 2004.
- ❖ One day workshop on Grafting Techniques, Organized by Department of Botany, St. Joseph's College, Tiruchirappalli. 19<sup>th</sup> December, 2013.
- ❖ One Day workshop on Landscape Designing, Organized by Department of Botany, St. Joseph's College, Tiruchirappalli, 10<sup>th</sup> January, 2014.
- ❖ One Day International Seminar on International scientist meet 15<sup>th</sup> December 2015.
  
- ❖ One Day Workshop on Next generation sequencing 10<sup>th</sup> September 2015.
- ❖ DBT - STAR Scheme Sponsored Workshop on Molecular Taxonomy & Bioinformatics tools 22-29<sup>th</sup> February 2016.
- ❖ One Day workshop in On-Farm Food processing 11<sup>th</sup> January 2016.
- ❖ One Day Workshop on Electron Microscopy, Organized by Department of Biotechnology, St. Joseph's College, Tiruchirappalli, 25<sup>th</sup> July 2016.
- ❖ One Day Workshop on Vertical Gardening. Organized by Department of Botany, St. Joseph's College, Tiruchirappalli, 22<sup>nd</sup> September 2019.

## **National and State Level Workshop Attended**

1. DBT-GOI sponsored short term training course on Cloning and expression of animal genes, Organized by the School of Studies in Zoology, Jiwaji University, Gwalior, July 15-4<sup>th</sup> August, 1997.
2. DBT-GOI sponsored short term training course on Bioprocess Engineering with Genetically modified organisms, Organised by Department of Biotechnology, Indian Institute of Technology, Kharagpur, July 14 - July 30<sup>th</sup> 1999.
3. UGC sponsored Workshop on Indoor Ornamental Horticulture, Landscape Gardening and Fruit Preservation, Conducted by Department of Botany, Jamal Mohammed College, 3<sup>rd</sup> and 4<sup>th</sup> February 1990.
  
4. State level workshop on Mushroom Culture and Vermi Technology, organized by Department of Botany, St. Joseph's College, Tiruchirappalli on 20<sup>th</sup> December 2004.
  
5. DBT Sponsored workshop on Uses of Biotechnological tools for bioresource conservation and utilization for sustainable development Organised by the Rapinat Herbarium and Centre for Molecular Systematics, St. Joseph's College, Tiruchirappalli, 06-19<sup>th</sup> February, 2008.
  
6. DBT Sponsored workshop on Molecular Methods in Bioresources Conservation for sustainable Development, Organised by the Rapinat Herbarium and Centre for Molecular Systematics, St. Joseph's College, Tiruchirappalli 12-25<sup>th</sup> November 2008.

7. Molecular Training Programme, Organised by the Rapinat Herbarium and Centre for Molecular Systematics, St. Joseph's College, Tiruchirappalli 17<sup>th</sup> February -02<sup>nd</sup> March 2010.
8. State Level workshop on Mushroom Cultivation, organized by Department of Botany, St. Joseph's College, Tiruchirappalli, 18<sup>th</sup> December 2012.
9. One day state level workshop on Pharmacognostical screening of medicinal plants. Organised by Department of Botany, St. Joseph's College, Tiruchirappalli, 4<sup>th</sup> March 2013.
10. One day state level workshop on Microbiological and phytochemical techniques, Department of Botany, St. Joseph's College, Tiruchirappalli, 18<sup>th</sup> December, 2013.
11. Workshop in Plant Taxonomy key preparation, Organised by Department of Botany, St. Joseph's College, Tiruchirappalli, 26<sup>th</sup> September, 2014.
12. One day Regional level workshop on Vermiculture techniques, organized by Department of Botany, St. Joseph's College, Tiruchirappalli, 12<sup>th</sup> December, 2014.
13. One day State level workshop on Plant Tissue Culture techniques, Department of Botany, St. Joseph's College, Tiruchirappalli, 22<sup>nd</sup> December, 2014.
14. One day State level workshop on Plant Taxonomy, Organized by Department of Botany, St. Joseph's College, Tiruchirappalli, 26<sup>th</sup> February, 2014.
15. Participated in the workshop on Research based pedagogical tools for teachers of undergraduate Colleges, Organised by Indian Institute of Science Education and Research (IISER), Pune, sponsored by British Council and MHRD, Govt. of India. 10-12<sup>th</sup> March 2018.
16. UGC sponsored one day workshop for the Mentee Institution on Preparation for NAAC Accreditation-A participatory Process. Under UGC –PARAMARSH scheme, organized by IQAC, St. Joseph's College, Tiruchirappalli, 29<sup>th</sup> September 2021.




#### **UGC –Academic College Refresher Course Attended**

1. Five Day Faculty Orientation Course, conducted by Academic Staff College, Bharathidasan University, organized by JJ College of Arts and Science, Pudukottai. 26.05.1997 to 30.05.1997.
2. Orientation Course, organized by Academic Staff College, Bharathidasan University, 05.10.2002 to 01.11.2002.
3. Refresher Course on Bio Sciences, organized by Academic Staff College, Bharathidasan University, 15.11.2005 to 5.12.2005.
4. Special summer School, organized by Academic Staff College, Bharathidasan University, 22.7.2008 to 11.08.2008.

## 19. RESEARCH SCHEMES - COMPLETED

S. No	Title	Agency	Period
1.	Mass seedling production of endangered and endemic orchid species of Shervaroy's using Mycorrhizal	DST	2001-2003
2.	Popularisation of orchid floriculture among rural masses by the adoption of mycorrhizal fungal technology	DST	2003-05
3.	Mycorrhizal Diversity of Kolli hills, a part of Eastern Ghat's	UGC	2005-06
4.	Co-PI: Rare, Endangered, Threatened Medicinal Plants ex-situ Conservation and Sustainable Utilisation	AYUSH	2008-2011
5.	Co-PI: Study of Ecotypic, Morphological and Genetic variations in Accessions of <i>Morinda citrifolia</i> and its allies from varied ecoclimatic habitats in Tamilnadu using Molecular Tools.	NONI	2008-2011
6.	Ethnomedicinal studies on the Paliyan Tribes and local traditional health practitioners of the Palni hills of Western Ghat's in Tamilnadu,	DST	2008-2011
7.	In glass Technology in Bioresource Conservation	UGC	2015
8.	<i>In vitro</i> and <i>In vivo</i> Methods in Bioresource Conservation	DBT	2015
9.	Diversity and Mycorrhizal Specificity of Vanda and Cymbidium genus (Orchidaceae) of Western and Eastern Ghats	UGC	2015-2018

## 20. Fellow

-  Fellow of Linnean Society, UK
-  Journal of Swamy Botanical Club
-  International Society for Tissue Engineering, Malaysia



## 21. Practical Manual Published

- ✚ Hand Book on Fluorescence Microscopy (2003)
- ✚ Manual for Tissue Culture and Histochemistry (2004)
- ✚ Practical Manual for Microbiology- B.Sc (2012)

## 22. BOOK EDITED (S.John Britto and S.R.Senthilkumar)

- ✚ Diversity of Plants-A Molecular Approach,(2010)  
ISBN: 978-81-908503-0-8. The Rapinat Herbarium.

## 23. Workshop /Training Programme (N/IN) Resource person

S. No	Title of Lecture/practical	Title of the workshop (National/International)	Organizer
1.	Application of Confocal Microscopy (Invited talk and Practical Session)	Detection of Genetically Modified organisms of GM Food 22-24, March 2006	ICGEB (Italy) and UABC, (Srilanka)
2.	Use of Fluorescence Microscopy	UGC-SAP Sponsored Workshop on Histochemical techniques,17-18 Feb,2006	Dept. of Botany, Annamalai University
3.	Orchid Mycorrhiza Invited talk and Practical Session	Short term Training Programme on Identification and use of mycorrhizal fungi in Forestry, 26.5.2009-4.6.2009	Dept. of Agricultural Microbiology, TNAU, Coimbatore
4.	Mycorrhiza and Histochemical techniques	National Workshop on Mycorrhizal system for sustainable Agriculture, March 11-12,2010	Centre for Molecular Biology, Tamilnadu Agricultural University, Coimbatore

#### 24. Papers presented in National level seminars / Symposia / Conferences

1. S. Senthilkumar and K.V.Krishnamurthy 1996. A histochemistry study on the mycorrhizal fungus in the ground orchid, *Spathoglottis plicata* Blume. All India Symposium on in vitro and in vitro Morphogenesis. October 1996, 11- 12, Sardar Patel University, Gujarat, India.
2. S. Senthilkuma and K.V.Krishnamurthy 1996. An attempt to produce orchid mycorrhizal inoculum in a large scale. X Southern Regional Conference on Microbial Inoculants. December 10-11, Department of Botany, Sri AVVM Pushpam College, Poondi, Tamil Nadu, India.
3. S. Senthilkumar and D.I.Arockiasamy 1996. Role of VAM Fungi on heavy metal toxicity in *Sorghum bicolor* (L.) Moench seedlings. UGC – National Seminar on Recent Advances in Plant Biotechnology, March,26-27, Department of Botany, V.H.N.S.N. College, Virudhunagar, S. India.
4. S. Senthilkumar and K.V.Krishnamurthy 1997. A histochemical study on the cortical cells (*Spathoglottis plicata*) with special reference to mycorrhizal association. UGC-SAP Sponsored National Symposium cum Workshop on Plant Morphogenesis, 29-30 December, conducted by the Department of Biosciences, Sardar Patel University, Vallabh Vidyanagar, Gujarat.
5. S. Senthilkumar, G.N.Vengadeswari and K.V.Krishnamurthy 1998. The structure of the mycorrhizal roots of the epiphytic orchid *Papilionanthe subulata*. National Conference on Recent Trends in Biotechnology and Microbial Research, May 1998, 20 and 21, JJ College of Arts and Science, Pudukkottai, S. India.
6. S. Senthilkumar and M.Sathiyathan 1998. The role of Mycorrhizal colonization in heavy metal resistance. National Conference on Recent Trends in Biotechnology and Microbial Research, May 1998, 20 and 21, JJ College of Arts and Science, Pudukkottai, S. India.
7. S. Senthilkumar and K.V.Krishnamurthy 1998. Mycorrhizal fungi from the roots of *Dentrobium nanum*. National Symposium on Plant Morphogenesis – Biochemical and Molecular Approach. Organised by Department of Biosciences, Sardar Patel University, Gujarat. December 21-22.
8. S. Senthilkumar and N. Valladurai 1999. Observation on the mycorrhizal association in the epiphytic orchid, *Aerides crispata*. XI Southern Regional Conference on Microbial Inoculants. February 19-20, Vignan School of Postgraduates Studies, Guntur, Andhra Pradesh.
9. S. Senthilkumar and C.Hariharan 1999. Biochemical studies in the epiphytic orchid, *Aerides maculosum* with reference to mycorrhizal association. XI Southern Regional Conference on

Microbial Inoculants. February 19-20, Vignan School of Postgraduates Studies, Guntur, Andhra Pradesh.

10. S.Senthilumar and K.V.Krishnamurthy 1999. Mycorrhizal association of the ground orchid *Cymbidium aloifolium*. National Conference on Mycorrhiza. March 5-7. Organised by Institute of Microbiology and Biotechnology, Barkatulla University, Bhopal.

11. S.Senthilumar and N.Valladurai 1999. Studies on the mycorrhizal orchid *Cymbidium aloifolium*. National Conference on Mycorrhiza. March 5-7. Organised by Institute of Microbiology and Biotechnology, Barkatulla University, Bhopal.

12. S.Senthilumar and C.Hariharan 1999. Mycorrhizal studies on the epiphytic orchid *Coelogyne prolifera*. National Conference on Mycorrhiza. March 5-7. Organised by Institute of Microbiology and Biotechnology, Barkatulla University, Bhopal.

13. S.Senthilumar and Sarat Chandra 2000. National Symposium on Biotechnology of Plant Protection. CAS in Botany. Banaras Hindu University, Varanasi, Feb 25-27.

14. S.Senthilumar and S. John Britto 2001. Sensitivity pattern of bacterial strains on the terrestrial Orchid, *Calanthe triplicata* (Willmet) Ames. 6<sup>th</sup> National Seminar on Orchid Diversity in India. Science and Commerce, October 11-13. Organised by Department of Botany, Punjab University, Chandigarh.

15. S.Senthilumar 2001. Problems and Prospects of Orchid Mycorrhizal Research. . 6<sup>th</sup> National Seminar on Orchid Diversity in India. Science and Commerce, October 11-13. Organised by Department of Botany, Punjab University, Chandigarh.

16. S.Senthilumar 2001. Cellular analysis in the mycorrhizal colonization of some orchids. 6<sup>th</sup> National Seminar on Orchid Diversity in India. Science and Commerce, October, 11-13. Organised by Department of Botany, Punjab University, Chandigarh.

17. S.Senthilumar, T.Francis Xavier and G.Dhanasekaran 2002. Microbial approach of *Malaxis rheedii* Sw. UGC Sponsored National Conference on Medicinal plants, their utilisation, cultivation and marketing. Dept. of Botany, Govt. Arts College, Salem. June 26-27.

18. S.Senthilkumar and T.Francis Xavier,2002. Status of orchids in Shevaroy's hills, a part of Eastern Ghats, Tamilnadu. CSIR Sponsored Seminar on Plant Taxonomy in National Development. Dept. of Botany, Goa University, Sep'26&27.

19. S.Senthilkumar and T.Francis Xavier,2002. Mycorrhizal studies of some orchids. Asian Congress of Mycology and Plant Pathology, University of Mysore Oct'1-4.

20. S.Senthilkumar and T.Francis Xavier,2002. Distribution of orchids and their status in Shevaroy's. DST sponsored National Conference on Recent Trends in Plant Science Research, Dept. of Botany, St.Thomas College, Kottayam, Kerala No14-15.

21. T. Francis Xavier, G. Selvakumar and S. Senthilkumar 2004. In vitro effect of *Malaxis rheedii* Sw. leaf extracts on *E. coli* mutant strains. National Congress on Biome and Biosciences organized by Muthayammal College of Arts and Science, Rasipuram, Jan 9 &10.

22. S.Senthilkumar.2004. National Seminar on 'Recent Trends in NSS Projects and Programmes' - Organised by Bharathidasan University, Tiruchirappalli - 13-14 March.

23. S.R.Senthilkumar,2005.Participated National Seminar on 'e-Learning and e- Learning Technologies, at Department of Information Technology, Centre for Development of Advanced Computing, Hyderabad during 8-9 August2005.

24. S.R.Senthilkumar.National Seminar on 'Digitalized information exchange for Quality Sustenance and Enhancement among accredited Institutions' - St. Joseph's College (Autonomous), Tiruchirappalli - 3-4 March.

25. S.R.Senthilkumar, 2005. National Seminar on 'Advances in Biology' - Organised by Department of Botany, St. Joseph's College (Autonomous), Tiruchirappalli - 19-20 January.

26. S.R.Senthilkumar.2005. National Seminar on 'Recent Trends in Applied Chemistry' - Organised by Department of Chemistry, St. Joseph's College (Autonomous), Tiruchirappalli - 10-11 January..

27. S.R.Senthilkumar. 2009. National Conference on 'Higher Education and National Development' - Organised by St. Joseph's College (Autonomous), Tiruchirappalli - 30-31January.

## 25. Campus Achievement

Four times Best Performance among Science Departments Award-Received (2014, 2015 2016, and 2018), Department of Biotechnology and Botany of St. Joseph's College, Tiruchirappalli.

## 26. Board of Studies

- St. Joseph's College, Tiruchirappalli(2007-2009).
- Bishop Heber College (Autonomous), Tiruchirappalli, (2014)
- Bharathidasan University, Tiruchirappalli, (2017)
- Saraboji College (Autonomous), Thanjavur, (2014)
- Ayya Nadar Janaki Ammal College (Autonomous), Sivakasi, (2017)
- St. Xavier's College, Palayamkottai, (2021)

## 27. Review Member

- Asian Journal of Biotechnology, Microbiology and Env. Sciences
- Malaysian Journal of Microbiology
- Ceylon Journal of Science
- Phyta
- Agriculture and Biology Journal of North America
- KBM Scientific Publishing, USA
- The Journal of Plant Genomics - Associate Editor
- International Journal of Agricultural Sciences- Associate Editor
- African Journal of Biotechnology
- AgriScience-An International Academic Journal
- Academic Journal of Pharmacy

## 28. Papers Presented in International Conferences / Symposia

1. S. Senthilkumar et al.. 1998. Biochemical studies on the mycorrhizal association in the ornamental orchid, *Spathoglottis plicata* and *Papilionanthe subulata*. International symposium on Bio-Industry, Organised by Dept. of Zoology, Sri AVVM Pushpam College, Poondi, January 7-8.

2. S. Senthilkumar et al. 1998. Isolation of bacteria in the prawns of *Penaeus monodon* and *P. indicus*. International symposium on Bio-Industry, Organised by Dept. of Zoology, Sri AVVM Pushpam College, Poondi, January 7-8.

3. S. Senthilkumar and K.V. Krishnamurthy 1998. Structural and biochemical studies of the mycorrhizal orchid *Acampe praemorsa*. International symposium on Microbial biotechnology for

sustainable development and productivity. Organised by Dept. of Biological Sciences, Rani Durgavati University, Jabalpur, November 14-16.

4. S. Senthilkumar et al.. 1999. Mycorrhizal status of some orchids of Sri Lanka. International Conference on Frontiers in Fungal Biotechnology and Plant Pathogens relations. January 16-18. Organised by Department of Botany, Osmania University, Hyderabad.

5. S. Senthilkumar 2000. A Cytochemical study of some Sri Lankan orchids with reference to mycorrhizal association, combined Millennium Meeting Rhodes University, S. Africa, 23-28 January, p539.

6. S. Senthilkumar 2000. Histochemistry of Pelotonic and non pelotonic hyphae of some orchids of India and Sri Lanka. X1th International congress of Histochemistry and Cytochemistry September 3-8<sup>th</sup> Organised by Royal Microscopical Society, University of Oxford, UK

7. S. Senthilkumar 2000. A cytochemical study of some Sri Lankan orchids with reference to mycorrhizal association. Combined Millennium Meeting Rhodes University, S. Africa. 23-28 Jan. p539.

8. S. Senthilkumar 2002. Mycorrhizal and Ethnopharmacological value of some threatened orchid species of Shevaroy's, S. India. VII International Mycological Congress, Norway.

9. S. Senthilkumar and T. Francis Xavier 2003. Orchid Resources in Eastern Ghats of South India. International Conference on 'Sustainable Development and Management of Natural Resources'. 15-17 March 2003. Organised by Holy Cross College, Tiruchirappalli, South India.

10. S. Senthilkumar, T. Francis Xavier and T. Kala 2003. In vitro antibacterial evaluation in *Malaxis rheedii* Sw. An orchid used as a traditional medicine in India. International Conference on 'Sustainable Development and Management of Natural Resources'. 15-17 March 2003. Organised by Holy Cross College, Tiruchirappalli, South India.

11. S. Senthilkumar, 2004. Structural elucidation of peloton lysis using Epi- Fluorescence dyes. International Conference on Biomaterials and Tissue Engineering, Kuala Lumpur, Malaysia 24-26th May.

12. Senthilkumar, S. R. and John Britto, S. 2008. Structural organisation of the mycorrhizal fungi in *Aranda peterewart* - A histochemical Approach. 9th Asia Pacific Microscopy Conference, South Korea.

### **33 . Significant Publications:**

#### **1993-1994**

1. S.Senthilkumar and D.I Arockiasamy 1994. Role of vesicular arbuscular mycorrhizae reducing the heavy metal toxicity in *Sorghum bicolor* (L.) Moench with reference to nitrate reduction system. J. Swamy Bot.Cl. 11: 25-27. ISSN 0256-9493

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1. S. Senthilkumar and D.I. Arockiasamy 1995. Distribution of zinc in various parts of *Sorghum bicolor* (L.) Moench seedlings in the presence of VAM fungi. Indian Journal of Microbiology 35:185-188. ISSN 0046-8991

#### **1996-1997**

2. S. Senthilkumar and K.V. Krishnamurthy 1997. A histochemical study on the cortical cells of *Spathoglotti splicata* with special reference to mycorrhizal association. Plant Morphogenesis 7:77-78

3. S. Senthilkumar and D.I. Arockiasamy 1997. Effect of VAM fungi in alleviating the zinc phytotoxicity in *Sorghum bicolor* (L.) Moench. Ecology, Environment and Conservation 3(3-4):179-182. ISSN No 1945-6492.

4. S. Senthilkumar and K.V. Krishnamurthy 1997. Effect of root knot nematode and mycorrhiza on the growth of ground orchid, *Spathoglotti splicata* Blume Mycorrhiza News 8:13-14. ISSN0970-695X

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1. S. Senthilkumar and K.V. Krishnamurthy 1998: The role of root hairs in the mycorrhizal association in the ground orchid, *Spathoglotti splicata* Blume. Mycorrhiza News 10:15-17. ISSN0970-695X

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3. S. Senthilkumar 1999. rpk;gpbak; myha;/Nghspak; vDk; G+Q;ir Nth; Mh;fpBd; mikg;gpay; Ma;T. mwptpay; jkpopaf; Nfhit175-178.
4. S. Senthilkumar and K.V. Krishnamurthy 1999: Peroxidase and Acid phosphatase activity in the ground orchid, *Spathoglotti splicata* with special reference to mycorrhiza. Mycorrhiza News 10:11-13. ISSN 0970-695X
5. S. Senthilkumar P. Saravanakumar and P. Sathiyathan 1999. Role of vesicular arbuscular mycorrhizae on nitrate reduction systems and zinc uptake in Zea mays. Cylon Journal of Science. 27:27-32. ISSNNO-0366-8460
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#### **2011-2012**

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### **2019-2020**

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2. Green synthesis and characterization of silver nanoparticles from *Ocimum basilicum* and their antimicrobial antioxidant and anticancer activity - Research Journal of Pharmacy and Technology Vol.:13, Issue:12, December, 2020. [ISSN 0974-360X]
3. Molecular Docking Analysis of Bioactive Compounds from *Ocimum basilicum* Aqueous Leaf Extract against Estrogen Receptor - Bulletin of Environment, Pharmacology and Life Sciences Volume 9 [3] 2020. [ISSN 2277-1808]

#### **34. NATIONAL CENTRE FOR BIOTECHNOLOGY INFORMATION**

##### **2019**

*Ocimum americanum* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplastGenBank: MN660046.1

*Ocimum tenuiflorum* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplastGenBank: MN660047.1

*Ocimum gratissimum* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplastGenBank: MN660048.1

*Ocimum basilicum* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (Rbcl) gene, partial cds; chloroplastGenBank: MN186585.1

*Ocimum tenuiflorum* trnH-psbA intergenic spacer region, partial sequence; chloroplastGenBank: MN239512.1

*Ocimum basilicum* trnH-psbA intergenic spacer region, partial sequence; chloroplast GenBank: MN816238

*Ocimum americanum* trnH-psbA intergenic spacer region, partial sequence; chloroplast GenBank: MN755613

*Ocimum tenuiflorum* trnH-psbA intergenic spacer region, partial sequence; chloroplast GenBank: MN239512

*Ocimum gratissimum* trnH-psbA intergenic spacer region, partial sequence; chloroplast GenBank: MN816239

*Ocimum basilicum* TrnL-TrnF intergenic spacer region, partial sequence; chloroplast GenBank: MN816237

*Ocimum americanum* TrnL-TrnF intergenic spacer region, partial sequence; chloroplast GenBank: MN816234

*Ocimum tenuiflorum* TrnL-TrnF intergenic spacer region, partial sequence; chloroplast GenBank: MN816235

*Ocimum gratissimum* TrnL-TrnF intergenic spacer region, partial sequence; chloroplast GenBank: MN816236

*Tulasnella* sp. isolate 1.1 large subunit ribosomal RNA gene, partial sequence

GenBank: MH468786

*Tulasnella* sp. isolate 1.3 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence GenBank: MH47940

*Tulasnella* sp. isolate 1.5 large subunit ribosomal RNA gene, partial sequence GenBank: MH479403

*Tulasnella* sp. isolate 1.6 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. GenBank: MH479404

*Tulasnella* sp. isolate 1.7 5.8S ribosomal RNA gene, partial sequence; internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. GenBank: MH479405

## 2018

*Vanda tessellata* isolate *Epulorhiza* sp. 1.2 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence. GenBank: MK322733

*Vanda tessellata* isolate *Epulorhiza* sp. 1.5 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence GenBank: MK322736.1

*Vanda tessellata* isolate *Epulorhiza* sp. 1.4 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1 and 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence GenBank: MK322737.1

*Vanda tessellata* isolate *Epulorhiza* sp. 1.1 internal transcribed spacer 1, partial sequence GenBank: MK322735.1

*Vanda tessellata* isolate *Epulorhiza* sp. 1.3 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence GenBank: MK322734.1

*Ceratobasidium* sp. isolate kcac4 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence GenBank: KY945488.1

*Ceratobasidium cereale* isolate cacc5 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence GenBank: KY945489.1

*Ceratobasidium cereale* isolate Kodaikannal internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequenceGenBank: MG002431.1

*Ceratobasidium cereale* isolate Shervaroy Hills internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequenceGenBank: MG002433.1

*Ceratobasidium ramicola* isolate Kolli Hills 5.8S ribosomal RNA gene, partial sequence; internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequenceGenBank: MG002434.1

*Tulasnella* sp. isolate 1.2 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence GenBank: MH479401.1

*Vanda testacea* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplastGenBank: MF446877.1

*Vanda testacea* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplastGenBank: MF446878.1

*Vanda tessellata* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplastGenBank: MF446879.1

*Vanda tessellata* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplastGenBank: MF446880.1

*Cymbidium aloifolium* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplastGenBank: MF446882.1

*Vanda tessellata* ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplastGenBank: MF446884.1

*Vanda spathulata* pbs A-trnH intergenic spacer, partial sequence; chloroplast GenBank: MF446881.1

UNVERIFIED: *Cymbidium bicolor* PsbA-like gene and pbsA-trnH intergenic spacer, partial sequence; chloroplastGenBank: MF446883.1

## 2017

Uncultured Bacterium clone MN04--16S ribosomal RNA gene, partial sequence, KX059328.1

Uncultured Bacterium clone MN02--16S ribosomal RNA gene, partial sequence, KX059329.1

Uncultured Bacterium clone RAZ02--16S ribosomal RNA gene, partial sequence, KX059330.1

Uncultured Bacillus sp clone RAZ01 -16S ribosomal RNA gene, partial sequence, KX059331.1



Uncultured *Bacillus* sp clone RAZ03-16S ribosomal RNA gene, partial sequence, KX059332.1

Uncultured Bacterium clone MAV04--16S ribosomal RNA gene, partial sequence, KX059333.1

Uncultured *Pseudomonas* sp clone MAV03-16S ribosomal RNA gene, partial sequence, KX059334.1

Uncultured *Acinetobacter* sp clone MAV01-16S ribosomal RNA gene, partial sequence, KX059335.1

Uncultured *Pseudomonas* sp. clone MAV02--16S ribosomal RNA gene, partial sequence, KX059336.1

Uncultured Bacterium clone MA05-16S ribosomal RNA gene, partial sequence, KX059337.1

uncultured *Brevibacterium* sp clone MJC01 -16S ribosomal RNA gene, partial sequence, MF289386.1

Uncultured *Bacillus* sp clone MJC02-16S ribosomal RNA gene, partial sequence, MF289387.1

Uncultured *Bacillus* sp clone MJC03-16S ribosomal RNA gene, partial sequence, MF289388.1

Uncultured *Brevibacterium* sp clone MJC04-16S ribosomal RNA gene, partial sequence, MF289389.1

Uncultured bacterium clone MJC05-16S ribosomal RNA gene, partial sequence, MF289390.1

Uncultured *Bacillus* sp clone MJC06-16S ribosomal RNA gene, partial sequence, MF289391.1

Uncultured *Bacillus* sp clone MJC07-16S ribosomal RNA gene, partial sequence, MF289392.1

Uncultured *Bacillus* sp. clone MJC08 16S ribosomal RNA gene, partial sequence GenBank: MF289393.

Uncultured *Bacillus* sp clone MJC09-16S ribosomal RNA gene, partial sequence, MF289394.1

Uncultured *Bacillus* sp clone MJC10-16S ribosomal RNA gene, partial sequence, MF289395.1

Uncultured *Bacillus* sp clone MJC11-16S ribosomal RNA gene, partial sequence, MF289396.

Uncultured bacterium clone MJC12-16S ribosomal RNA gene, partial sequence, MF289397.1

Uncultured *Brevibacterium* sp clone MJC13 -16S ribosomal RNA gene, partial sequence, MF289398.1

Uncultured *Bacillus* sp clone MJC14-16S ribosomal RNA gene, partial sequence, MF289399.1

Uncultured *Bacillus* sp clone MJC15-16S ribosomal RNA gene, partial sequence, MF289400.

Uncultured *Bacillus* sp clone MJC16-16S ribosomal RNA gene, partial sequence, MF289401.

Uncultured *Bacillus* sp. clone MJC17 16S ribosomal RNA gene, partial sequence GenBank: MF289402

Uncultured *Bacillus* sp. clone MJC18 16S ribosomal RNA gene, partial sequence GenBank: MF289403

Uncultured *Streptomyces* sp clone MJC19-16S ribosomal RNA gene, partial sequence, MF289404.

Uncultured *Streptomyces* sp. clone MJC20 16S ribosomal RNA gene, partial sequence GenBank: MF289405

Uncultured *Streptomyces* sp clone MJC21-16S ribosomal RNA gene, partial sequence, MF289406.1

Uncultured *Streptomyces* sp clone MJC22-16S ribosomal RNA gene, partial sequence, MF289407.1

## 2016

*Acremonium fusidioides* strain SJCBT-F01 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence. ACCESSION KU837239

*Thielaviopsis paradoxa* strain SJCBT-F03 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence ACCESSION KU837240

*Fusarium sacchari* strain SJCBT-F02 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence ACCESSION KU837241

*Bipolaris oryzae* strain SJCBT-F04 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence ACCESSION KU837242

*Curvularia oryzae* strain SJCBT-F05 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence ACCESSION KU837243

*Rhizopus oryzae* strain SJCBT-F06 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene, complete sequence; and internal transcribed spacer 2, partial sequence ACCESSION KU837244

## 2013

Unverified: *Alstonia venenata* voucher RHT56089 psbK-psbI intergenic spacer, partial sequence: chloroplast GenBank KC244725; Version KC244725.1 GI:448588346- 237pb

Unverified: *Alstonia venenata* voucher RHT56091 psbK-psbI intergenic spacer, partial sequence: chloroplast GenBank KC244726; Version KC244726.1 GI:448588347- 237pb

Unverified: *Alstonia venenata* voucher RHT56112 psbK-psbl intergenic spacer, partial sequence: chloroplast GenBank KC244727; Version KC244727.1 GI:448588348- 236pb

Unverified: *Alstonia venenata* voucher RHT56113 psbK-psbl intergenic spacer, partial sequence: chloroplast GenBank KC244728; Version KC244728.1 GI:448588349- 237pb

Unverified: *Alstonia venenata* voucher RHT56123 psbK-psbl intergenicspacer partial sequence: chloroplast GenBank KC244729; Version KC244729.1 GI:448588350- 237pb

Unverified: *Alstonia venenata* voucher RHT56177 psbK-psbl intergenic spacer, partial sequence: chloroplast GenBank KC244730; Version KC244730.1 GI:448588351- 237pb

Unverified: *Alstonia venenata* voucher RHT64919 psbK-psbl intergenic spacer, partial sequence: chloroplast GenBank KC244731; Version KC244731.1 GI:448588352- 236pb

*Alstonia venenata* voucher RHT56089 trnL-trnF intergenic spacer, partial sequence: chloroplast GenBank KC244732; Version KC244732.1 GI:448588401-408pb

*Alstonia venenata* voucher RHT56091 trnL-trnFintergenic spacer, partial sequence: chloroplast GenBank KC244733; Version KC244733.1 GI:448588402-389pb

*Alstonia venenata* voucher RHT56112 trnL-trnFintergenic spacer, partial sequence: chloroplast GenBank KC244734; Version KC244734.1 GI:448588403-389pb

*Alstonia venenata* voucher RHT56113 trnL-trnFintergenic spacer, partial sequence: chloroplast GenBank KC244735; Version KC244735.1 GI:448588404-389pb

*Alstonia venenata* voucher RHT56123 trnL-trnFintergenic spacer, partial sequence: chloroplast GenBank KC244736; Version KC244736.1 GI:448588405-389pb

*Alstonia venenata* voucher RHT56177 trnL-trnFintergenic spacer, partial sequence: chloroplast GenBank KC244737; Version KC244737.1 GI:448588406-408pb

Alstoniavenenata voucher RHT64919 trnL-trnFintergenic spacer, partial sequence: chloroplast GenBank KC244738; Version KC244738.1 GI:448588407-398pb

*Celastrus paniculatus* voucher RHT56102A psbK-psbl intergenic spacer, partial sequence: chloroplast GenBank KC244739; Version KC244739.1 GI:448588432-461pb.

*Celastrus paniculatus* voucher RHT56130A psbK-psbl intergenic spacer, partial sequence: chloroplast GenBank KC244740; Version KC244740.1 GI:448588433-463pb.

*Celastrus paniculatus* voucher RHT56167 psbK-psbl intergenic spacer, partial sequence: chloroplast GenBank KC244741; Version KC244741.1 GI:448588434-462pb.

*Celastrus paniculatus* voucher RHT56167A psbK-psbl intergenic spacer, partial sequence: chloroplast GenBank KC244742; Version KC244742.1 GI:448588435-462pb.

*Celastrus paniculatus* voucher RHT56168 psbK-psbl intergenic spacer, partial sequence: chloroplast GenBank KC244743; Version KC244743.1 GI:448588436-464pb.

*Celastrus paniculatus* voucher RHT56169 psbK-psbI intergenic spacer, partial sequence: chloroplast GenBank KC244744; Version KC244744.1 GI:448588437-462pb.

*Celastrus paniculatus* voucher RHT64912 psbK-psbI intergenic spacer, partial sequence: chloroplast GenBank KC244745; Version KC244745.1 GI:448588438-462pb.

*Celastrus paniculatus* voucher RHT64913 psbK-psbI intergenic spacer, partial sequence: chloroplast GenBank KC244746; Version KC244746.1 GI:448588439-462pb.

*Celastrus paniculatus* voucher RHT56102A trnL-trnF intergenic spacer, partial sequence: chloroplast GenBank KC244747; Version KC244747.1 GI:448588461-357pb.

*Celastrus paniculatus* voucher RHT56130 trnL-trnF intergenic spacer, partial sequence: chloroplast GenBank KC244748; Version KC244748.1 GI:448588462-359pb.

*Celastrus paniculatus* voucher RHT56167 trnL-trnF intergenic spacer, partial sequence: chloroplast GenBank KC244749; Version KC244749.1 GI:4485884623 -360pb

*Celastrus paniculatus* voucher RHT56167A trnL-trnF intergenic spacer, partial sequence: chloroplast GenBank KC244750; Version KC244750.1 GI:448588464- 353pb

*Celastrus paniculatus* voucher RHT56169 trnL-trnF intergenic spacer, partial sequence: chloroplast GenBank KC244752; Version KC244752.1 GI:448588466-354pb

*Celastrus paniculatus* voucher RHT64912 trnL-trnF intergenic spacer, partial sequence: chloroplast GenBank KC244753; Version KC244753.1 GI:448588467-360pb

*Celastrus paniculatus* voucher RHT64913 trnL-trnF intergenic spacer, partial sequence: chloroplast GenBank KC244754; Version KC244754.1 GI:448588468-357pb

*Elaeocarpus munroii* voucher RHT56110 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244755.1; Locus JF244755 GI:448588497 -250pb.

*Elaeocarpus* sp.voucher RHT56155 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244756.1; Locus JF244756 GI:448588498 -277pb.

*Strobilanthes* sp.RHT56162 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244757.1; Locus JF244757 GI:448588499 -355pb.

*Strobilanthes* sp.voucher RHT56163 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244758.1; Locus JF244758 GI:448588500 -358pb.

*Salacia* sp.voucher RHT56164 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244759.1; Locus JF244759 GI:448588501 -429pb.

*Morindaum bellata*.voucher RHT56175 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244760.1; Locus JF244760 GI:448588502 -293pb.

*Maytenus* sp.voucher RHT56176 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244762.1; Locus JF244762 GI:448588504 -398pb.

*Olax* sp.voucher RHT56178 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244763.1; Locus JF244763 GI:448588505 -361pb.

*Clausena* sp.voucherRHT56179 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244764.1; Locus JF244764 GI:448588506 -350pb.

*Lepisanthes senegalensis* .voucher RHT64916 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244765.1; Locus JF244765 GI:448588507 -333pb.

*Clausena* sp.voucherRHT64918 trnL-trnF intergenic spacer, partial sequence: plastid GenBank KC244766.1; Locus JF244766 GI:448588508 -393pb.

## 2011

*Morinda citrifolia* var.*citrifolia* voucher RHT56006 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF437607.1; Locus JF437607 GI:326369283 - 386pb.

*Buchanania axillaris* voucher RHT56087 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF437608.1; Locus JF437608 GI:326369284-380pb.

*Alstonia venenata* voucher RHT56090 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF437609.1; Locus JF437609 GI:326369285-354pb.

*Nothapodytes nimmoniana* voucher RHT56096 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF437610.1; Locus JF437610 GI:326369286-386pb.

*Toddalia asiatica* voucher RHT56097 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF437611.1; Locus JF437611 GI:326369287-347pb.

*Elaeocarpus recurvatus* voucher RHT56114 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF437612.1; Locus JF437612 GI:326369288-354pb.

*Elaeocarpus recurvatus* voucher RHT56125 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF437613.1; Locus JF437613 GI:326369289-363pb.

*Liparis nervosa* voucher RHT56138 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF437614.1; Locus JF437614 GI:326369290-394pb.

*Celastrus paniculatus* voucher RHT56086 tRNA-Leu (trnL)gene, partial sequence;trnL-trnF intergenic spacer, complete sequence; andtRNA-Phe (trnF)gene,Partial sequence GenBank JF297590; version JF297590 .1 GI:325930165-404pb

*Celastrus paniculatus* subsp.*paniculatus* voucher RHT56098 tRNA-Leu (trnL)gene, partial sequence;trnL-trnF intergenic spacer, complete sequence; andtRNA-Phe (trnF)gene,Partial sequence GenBank JF297591; version JF297591.1 GI:325930165- 404pb

*Celastrus paniculatus* subsp.*paniculatus* voucher RHT56099 tRNA-Leu (trnL)gene, partial sequence;trnL-trnF intergenic spacer, complete sequence; andtRNA-Phe (trnF)gene,Partial sequence GenBank JF297592; version JF297592.1 GI:325930167- 404pb

*Celastrus paniculatus subsp.paniculatus* voucher RHT56102 tRNA-Leu (trnL)gene, partial sequence;trnL-trnF intergenic spacer, complete sequence; andtRNA-Phe (trnF)gene,Partial sequence GenBank JF297593; version JF297593.1 GI:325930168- 404pb

*Celastrus paniculatus subsp.paniculatus* voucher RHT56118 tRNA-Leu (trnL)gene, partial sequence;trnL-trnF intergenic spacer, complete sequence; andtRNA-Phe (trnF)gene,Partial sequence GenBank JF297594; version JF297594.1 GI:325930169- 404pb

*Celastrus paniculatus subsp.paniculatus* voucher RHT56130 tRNA-Leu (trnL)gene, partial sequence;trnL-trnF intergenic spacer, complete sequence; andtRNA-Phe (trnF)gene,Partial sequence GenBank JF297595; version JF297595.1 GI:325930170- 404pb

*Crotalaria mysorensis* voucher RHT56057 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF304304; version F304304.1 GI:323650770-339pb.

*Crotalaria walker* voucher RHT56061 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF304305; version F304305.1 GI:323650771-357pb

*Crotalaria weightiana* voucher RHT56062 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF304306; version F304306.1 GI:323650772-367pb

*Crotalaria lunata* voucher RHT56066 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF304307; version F304307.1 GI:323650773-335pb

*Crotalaria pulchra* voucher RHT56068 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF304308; version F304308.1 GI:323650774-353pb

*Crotalaria juncea* voucher RHT56071 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF304309; version F304309.1 GI:323650775-332pb

*Crotalaria verrucosa* voucher RHT56076 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF304310; version F304310.1 GI:323650776-339pb

*Crotalaria grahamiana* voucher RHT56077 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF304311; version F304311.1 GI:323650777-337pb

*Crotalaria juncea* voucher RHT56079 trnL-trnF intergenic spacer, partial sequence: chloroplast. GenBank JF304312; version F304312.1 GI:323650778-332pb

## 2010

*Aspergillus terreus* isolate SJCFBKe01 internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence ACCESSION GU564260

*Aspergillus terreus* isolate SJCFG Ae02 internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence ACCESSION GU564261

*Penicillium aculeatum* isolate RHTFDNe01 internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence  
ACCESSION GU564262

*Aspergillus terreus* isolate RHTFGDe03 internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence  
ACCESSION GU564263

*Canavalia mollis* voucher RHTCM04 trnL-trnF intergenic spacer, partial sequence; chloroplast.  
GenBank: HM587710.

*Canavalia rosea* voucher RHTCR06 trnL-trnF intergenic spacer, partial sequence; chloroplast.  
GenBank: HM587711.

*Crotalaria spectabilis* voucher RHT56064 trnL-trnF intergenic spacer, partial sequence; chloroplast.  
GenBank: HM208335.

*Crotalaria lunata* voucher RHT56060 trnL-trnF intergenic spacer, partial sequence; chloroplast.  
GenBank: HM208336

*Crotalaria medicaginea* voucher RHT56058 trnL-trnF intergenic spacer, partial sequence; chloroplast.  
GenBank: HM996994

*Crotalaria grahamiana* voucher RHT56059 trnL-trnF intergenic spacer, partial sequence; chloroplast.  
GenBank: HM996995.

*Crotalaria mysorensis* voucher RHT56067 trnL-trnF intergenic spacer, partial sequence; chloroplast  
GenBank: HM996996.

*Crotalaria madurensis* voucher RHT56070 trnL-trnF intergenic spacer, partial sequence; chloroplast  
GenBank: HM996997

*Crotalaria pallida* var. obovata voucher RHT56073 trnL-trnF intergenic spacer, partial sequence; chloroplast  
GenBank: HM996998

*Crotalaria verrucosa* voucher RHT56074 trnL-trnF intergenic spacer, partial sequence; chloroplast  
GenBank: HM996999.

*Crotalaria retusa* voucher RHT56075 trnL-trnF intergenic spacer, partial sequence; chloroplast.  
GenBank: HM997000.

### 35. Memorandum of Understanding (MoU) signed

Years	Institute
2014-15	Indian Academy Degree College, Bangalore
	NIST Institute Private Limited, Chennai
	St. Joseph's College (Autonomous), Bangalore

	Andhra Loyola College (Autonomous), Vijayawada
	M/S Panopharm Feltham House, Mumbai
	Cotton College, Assam
	Bharath College of Science and Management, Thanjavur
2015-16	K.S. Varier's Ashtanga Ayurvedics (P) Ltd, Trichy
	Centre for Alleviation of Poverty Through Sustainable Agriculture (CAPSA), Indonesia
	Mount Carmel College, Bangalore
	Indian Institute of Crop Processing Technology (IICPT), Thanjavur
2017-18	ICAR-Indian Institute of Horticulture Research, Karnataka
	MMS University, USA
	Tamilnadu Pollution Control Board, Chennai
2021-22	National Research Centre for Banana (ICAR), Trichy
	K.S. Varier's Ashtanga Ayurvedics (P) Ltd, Trichy Oceanic Edibles International, Chennai

### **Webinar and other programmes participated**

1. Madurai Jesuit Higher Education commission, Lectures meet, Chennai, Organised by MAJHC, 24 and 25<sup>th</sup> June, 2000.
2. National Conference on Medicinal plants, their utilization, cultivation and marketing, Organised by Department of Botany, Government College, Salem, 27 and 27, June, 2002.
3. International Conference on "Biomaterials and Tissue Engineering" –Structural Elucidation of peloton lysis using epifluorescence dyes- MINT and USM, Kuala Lumpur, 24-26<sup>th</sup> May, 2004.
4. National Seminar on Recent Trends in Applied Chemistry, organised by Department of Chemistry, by St. Joseph's College, Tiruchirappalli, 10 and 11<sup>th</sup> January 2005.
5. National Seminar on Advances in Biology, Organized by Department of Botany, St. Joseph's College, Tiruchirappalli, 19 and 20<sup>th</sup> January, 2005.
6. NAAC sponsored National seminar on Digitalised information exchange for quality sustenance and enhancement among accredited institutions. organised by St. Joseph's College, Tiruchirappalli, 3-4<sup>th</sup> March 2005.
7. Interactive meeting on Biopesticides in Horticultural crops, organized by Indian Institute of Horticultural Research, Bengaluru, 14-15, February, 2005.
8. 'E-learning and e-learning technologies' Eletech India. C-DAC Hyderabad collaborate with Department of Information Technology, Ministry of Communications and information Technology, GOI, 8-8<sup>th</sup> August, Academic Staff College, JNT University, Hyderabad, 2005.



9. DBT- GOI sponsored Interactive meeting on “ Bio pesticides in Horticultural Crops, Institution of Agricultural Technologies”, Bengaluru, 14 and 15<sup>th</sup> February 2005.
10. National Seminar on “Recent trends in Applied Chemistry”,organised by Department of Chemistry, St.Joseph’s College (Autonomous), Tiruchirappalli,10 and 11<sup>th</sup> January,2005.
11. Regional Conference on Fern Diversity of India. Organized by Department of Botany, St.Joseph’s College, Tiruchirappalli,24<sup>th</sup> February,2007.
12. UGC sponsored National Conference on Higher education and National Development:The challenge of expansion, quality and inclusion, organised by St.Joseph’s College, Tiruchirappalli,30-31<sup>st</sup> January 2009.
13. UGC sponsored National Conference on The role of ICT in Higher Education: Quality, Accessibility and Security,organised bySt.Joseph’s College, Tiruchirappalli 29-30<sup>th</sup> January, 2010.
14. International seminar on World bioheritage concerns over climate change with a special reference to ethnic vegetables. Organised by the Department of Botany, SreeNarayana College, Thiruvananthapuram, Kerala. September 7-8, 2012.
15. National seminar on Right to sustainable environment –subaltern perspective,Department of History, organised by St.Joseph’s College, Tiruchirappalli, 10-11<sup>th</sup> January,2012.
16. UGC sponsored National level conference on Recent trends in Exploration, achievement and developments in Biological Sciences, organiseddd by ChikkaiahNaicker College, Erode, 9-10<sup>th</sup> March,2012.
17. International conference on sustainable utilization, management and conservation of bioresources, Department of Botany, St.Joseph’s College, Tiruchirappalli,10-11<sup>th</sup> January,2013.
18. UGC sponsored National Conference on Advances in Biology, Organisedby Department of Botany, St. Joseph’s College, Tiruchirappalli, 6 and 7<sup>th</sup> January,2014.
19. Fr.Lazar Endowment Lecture on Scholarly open access e-journals.orgnized by St.Joseph’s College, Tiruchirappalli, 08<sup>th</sup> February,2014.
20. National Symposium on Recent advances in medicinal and aromatic plants, organized by Department of Botany, St.Joseph’s College, Tiruchirappalli.05<sup>th</sup> February,2014.
21. INSA sponsored Lecture weekshop on Vistas in Biosciences, ,Department of Botany, St.Joseph’s College, Tiruchirappalli, 30-31<sup>st</sup> January,2015.
22. National level one day lecture workshop on IPR as a strategic asset for technology transfer, KSR College of Technology, Tiruchengode, 15-02-2015.

23. UGC sponsored National Symposium on Recent advances in medicinal and aromatic plants, organized by Department of Botany, St. Joseph's College, Tiruchirappalli. 05<sup>th</sup> February, 2015.
24. National level seminar on Recent trends and Future advances in Life Sciences, organized by Department of Life Sciences, Central University of Tamilnadu, Thiruvarur, 26<sup>th</sup> February, 2015.
25. Higher Education Leadership Meet-2018, Venus International, Chennai, 06-01-2018.
26. Adoption, Promotion & Production of MOOCs SWAYAM Platform, South Eastern Regional Office, University Grants Commission, Hyderabad, 31-08-2018.
27. Draft National Education Policy 2019, St. Joseph's College (Autonomous), Tiruchirappalli, 25-07-2019.
28. 175<sup>th</sup> Science Exhibition, Department of Botany, St. Joseph's College, Tiruchirappalli, 21-11-2019.
29. 42<sup>nd</sup> Annual Conference of The Society of Ethnobiology, University of British Columbia-Vancouver, Canada, 10-05-2019.
30. Oral Cancer, Department of Biotechnology, St. Joseph's College, Tiruchirappalli, 07-01-2020.
31. 2<sup>nd</sup> National Conference on Current Trends in Biological Sciences, 2<sup>nd</sup> National Conference on Current Trends in Biological Sciences, St. Xavier's College (Autonomous), Palayamkottai, 06-02-2020 and 07-02-2020.
32. Research Aptitude in Historical Writings, B.E.T. Sadathunnisa Degree College, Bangalore, 30-07-2020
33. Applied Microbiology, Sacred Heart College (Autonomous), Tirupattur, 24-07-2020.
34. Webinar on Motivation for Perpetual Learning, KLE Society's Degree College, Bengaluru, 20-07-2020, 25-07-2020.
35. Webinar on Issues and challenges in filing of patents, KSR Institute of Technology and Sciences, Guntur, AP, 25-07-2020.
36. Webinar on Contemporary Market Trends: Employment opportunities and Employability skills, AMC Engineering College, Bengaluru, 25-07-2020.
37. Webinar on Awareness of IPR, copyright act and Plagiarism prevention, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, 25-07-2020.
38. Webinar on Innovations in Indian financial markets, Palamuru University, Mahabubnagar, Telangana, 24-07-2020.
39. Recent Trends in Biological Sciences, St. Andrew's College and St. Joseph's College, Gorakhpur and Tiruchirappalli, 03-06-2004, 04-06-2020.

40. Webinar on Fish Parasites are on the rise, Government Arts College, Melur, 04-06-2020.
41. Webinar on Finding your language, gaining a voice: A journey through select life writings, Saraswathi Narayanan College, Madurai, 25-07-2020.
42. Webinar On Trends In Plant Biology, The American College, Madurai, 01-06-2020.
43. Capacity Building In IPR & Innovation, Drug Discovery And Traditional Medicine, St. Andrews College, Uttar Pradesh, 28-07-2020, 30-07-2020.
44. Cyber Attacks & Defiance Mechanism in Data Security, Sreenivasa Institute of Technology And Management Studies, Andhra Pradesh, 26-07-2020.
45. National Webinar on Human Origin, Health and Diseases, St. Joseph`s College, Tiruchirappalli, 14-07-2020.
46. The Journey Within - Know Yourself & Know the World, St. Joseph`s College, Tiruchirappalli, 19-06-2020.
47. Webinar on microbes, The drivers of Human life, St. Joseph`s College, Tiruchirappalli, 06-06-2020.
48. Webinar on genetic factors- The root causes of Drug Response variation, St. Joseph`s College, Tiruchirappalli, 13-06-2020.
49. Webinar on Impact of climate change on Bio-Diversity and world food security, St. Joseph`s College, Tiruchirappalli, 15-07-2020.
50. Webinar on Unlocking approaches in Biological Research, St. Joseph`s College, Tiruchirappalli, 24-07-2020, 26-07-2020.
51. Webinar on Natural products for Human Health Management, St. Joseph`s College, Tiruchirappalli, 22-07-2020.
52. Webinar on Bioscience: A glance in Sharing and Learning, St. Joseph`s College, Tiruchirappalli, 24-06-2020.
53. Webinar on Strategies to control Covid- 19, St. Joseph`s College, Tiruchirappalli, 30-05-2020.

#### **Doctoral Committee Member**

1. DC Member/ Mr.G.Manoharan, Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli./2011
2. DC Member/ Ms.T.M.Jothimani, Department of Botany, Jamal Mohammed College (Autonomous), Tiruchirappalli./2011

3. DC Member/ Mr.Siva, Department of Plant Sciences, Bharathidasan University, Tiruchirappalli /2011.
4. DC Member/ Ms.T.Kavitha, Department of Botany, Government College, Ariyalur / 2011.
5. DC Member /A.N.Sundar, Department of Botany, Rajah Serfoji Government College, Thanjavur/ 2013.
6. DC Member/ U.Abirami, Department of Botany, National College, Tiruchirappalli /2013.
7. DC Member /M.Keerthiga, Department of Botany, National College, Tiruchirappalli/2014.
8. DC Member/ R.Annadurai, Department of Botany, Government College, Ariyalur/2014.
9. DC Member/ S.Deborah, Department of Botany, National College, Tiruchirappalli/2015.
10. DC member /V.Prabu,Department of Botany, National College, Tiruchirappalli / 2015.
11. DC member /RajanikanthGarapati, Department of Biotechnology, JJ College of Arts and Science, Pudukottai/ 2015.
12. DC member / B.Sivaramakrishnan, Department of Botany, National College, Tiruchirappalli / 2015.
13. DC member / G.Thilagavathi, Department of Botany, Government College, Ariyalur / 2016.
14. DC member / K.Bharathi, Department of Botany, Periyar EVR College, Tiruchirappalli / 2018.

#### **AICTE Training and Learning (ATAL) Attended**

1. Attended online Elementary FDP on Application of Computers in Biology. Organized by Galgotias University, 07-11<sup>th</sup> June 2021.
2. Attended online Elementary FDP on Recent trends in Drug discovery, Organized by the Department of Pharmaceutical Sciences, Kerala,05-09<sup>th</sup> July2021.
3. Attended online Elementary FDP on Secrets of human bioenergy fields and subconscious mind. Organized by Sona College of Engineering, Salem.12-17<sup>th</sup> July 2021.

### **Organizing Committee /Advisory Member**

1. National Symposium on Cutting edge approaches for sustainable plant disease management and ensuring farmers profit, Organized by Indian Phytopathological Society and National Research Centre for Banana, Tiruchirappalli. 21-23 December 2018.
2. National Seminar on Recent Trends in Nanotechnology and its applications. Organized by Imayam Arts and Science College, Kannaur, 23<sup>rd</sup> January 2019.
3. International Conference of Cancer inferno and its prevention strategies. Organized by Department of Biochemistry, Periyar EVR College (Autonomous), Tiruchirappalli, 22<sup>nd</sup> February 2019.
4. National Conference on Data Revolution in Computational Biology and Drug Development, Organized by St. Joseph's College (Autonomous), Bengaluru, 17 and 18<sup>th</sup> December 2019.

### **International Contribution**

Providing Microscopy picture and support in designing website for the 18<sup>th</sup> International Microscopy Congress, Prague, Czech Republic, 7-12, September, 2014.

**Articles/Chapter published in Books: 46**

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