

Dr. R. RAJENDRAN ADJUNCT FACULTY

Contact

Department of Botany

Address : Alagappa University Karaikudi – 630 003

Tamil Nadu, INDIA

Contact Phone (Office) : +91 04565- 228091

Contact Phone (Mobile) : +91 9095954191

Contact e-mail(s) : <u>rrrajendranbiotech@gmail.com</u>

Academic Qualifications

Degree	Institution	Year	Branch	Class
Ph.D.	Bharathidasan University	2020	Botany	Awarded
M.Phil.	Bharathidasan University	2012	Plant Science	First Class - Distinction with D+ Grade
M.Sc.	Bharathidasan University	2011	Botany	First Class with Distinction
B.Ed.	Tamilnadu Teacher Education University	2009	Biological Science	First Class with Distinction
B.Sc.	Bharathidasan University	2008	Botany	First Class

Teaching Experience

Total Teaching Experience : 3.5 Years

Position	Institution	Duration
Adjunct Faculty	Alagappa University	2020 – Till date

Research Experience

Total Research Experience : 11 Years

Position	Institution / University	Duration
Adjunct Faculty	Dept. of Botany, Alagappa University, Karaikudi	2020 – Till date
Research Scholar	Dept. of Botany, Bharathidasan University, Tiruchirappalli	2013-2020
University Research Fellow	Dept. of Botany, Bharathidasan University, Tiruchirappalli	2013-2016

Academic and Additional Responsibilities

S. No.	Position	University Bodies	Period		
5.110.	1 OSITION	Chiversity Boules	From	To	
	Department Level (Department of Botany, Alagappa University, Ka				
1.	Coordinator	IQAC - NAAC	2021	Continue	
2.	Coordinator	Alumni and Parent Teacher Association (PTA)	2021	Continue	
3.	Coordinator	Non- Major Elective	2021	Continue	
4.	Coordinator	Field Visits	2021	Continue	
5.	Coordinator	Value Added Course	2022	Continue	

Areas of Research

- Plant Tissue Culture
- Phytochemistry
- Bio-nanotechnology
- Pharmacognosy

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Project	PG	15	7

Completed and Ongoing PG Projects

S. No.	Name of the Student/ Registration number	Title of the Project	Academic Year
1.	Adaikkala Angel S. (2022525001)	Preliminary phytochemical analysis on the methanolic extract of flower of <i>Asystasia gangetica</i> (L.) T. Anderson	2023-2024
2.	Divya B. (2022525005)	Assessment of Traditional rice varieties for salt tolerance and heat treatment at early growth stages	2023-2024
3.	Hemalatha G. (2022525008)	Revision on the genus <i>Indigofera</i> L. (Fabaceae) in Tamil Nadu, India	2023-2024
4.	Kabini M. (2022525010)	Preliminary phytochemical analysis on the methanolic extract of leaves of <i>Grewia bracteate</i> B. Heyne ex Roth	2023-2024
5.	Kingston Vino R.	The family Amaranthaceae of Tamil Nadu: Diversity, Distribution, Morphology and Taxonomy	2023-2024
6.	Poongodi S. (2022525017)	Preliminary phytochemical analysis on the methanolic extract of inflorescence of <i>Crotalaria verrucosa</i> L.	2023-2024
7.	Priyadarshini M. (2022525020)	Anatomical and histochemical analysis of leaf, stem and root of <i>Endostemon viscosus</i> (Roth) M. R Ashby	2023-2024
8.	Gayathri S (2021525003)	Phytochemical analysis on the methanolic extract of Euphorbia corrigioloides Boiss: an endemic plant of Tamilnadu, India	2022-2023

9.	Hridya KH (2021525004) Green fabrication of silver nanoparticles on the fruit extracts of <i>Hydnocarpus wightianus</i> Blume and its biological activities		2022-2023
10.	Sharmila M (2021525010)	Phytochemical analysis of methanolic extract of invasive species <i>Prosopis juliflora</i> (sw) dc. Bark and its biological activities	2022-2023
11.	Seethal V (2021525011)	Anatomy and histochemistry of leaves, stems and roots of <i>Sida</i> species	2022-2023
12.	Meenakshi R (2020525005)	Green fabrication of AuNPs on the shoot and root extract of <i>Euphorbia corrigioloides</i> Boiss. And their antioxidant & anticancer potential	2021-2022
13.	Ramalakshmi C (2020525010)	High-frequency direct shoot multiplication from shoot tip and nodal explants of <i>Orthosiphon viscosus</i> Benth.	2021-2022
14.	Ramya T (2020525012)	Preliminary phytochemical analysis of the shoot and root extract of <i>Euphorbia corrigioloides</i> Bioss. and their antioxidant potential	2021-2022
15.	Sangeetha S (2020525013)	In vitro callus induction from leaf and internode explant of Orthosiphon viscosus Benth.	2021-2022

Publications

International		N	ational	Others
Journals	Conferences	Journals	Conferences	Books Chapters
12	5	1	6	2

Cumulative Impact Factor (as per JCR) : 9.002

h-index : 3
i10 index : 2
Total Citations : 36

Distinctive Achievements / Awards

 Best Young Scientist Award - 2023 (State Government - TNAU/International Conference on Agri-Tourism -ICAT) Certificate No: ICAT2023_A_

Events Participated

Number of Conferences / Seminars / Workshops: 42

Faculty Development Programme Participated:

- 1. Participated in the Faculty Development Programme on "Outcome Based Education" organized by IQAC and CD & DC, Alagappa University, Karaikudi held on 15th February 2023.
- Participated in the national level faculty development program on "Reimagining Plant Sciences for Sustainable Future – Opportunities and Challenges" organized by PG and Research Department of Botany, Holy Cross College, Trichy on 2nd to 6th August 2021.
- 3. Participated in Three days National level online faculty development programme on E-Content development, organized by Angels College of Education, Namakkal on 31st May to 02nd June 2021.

Workshop and Training Programme Participated:

- Participated in the "One day National Workshop on Patenting and Collaborations with Industries" organized by Industry and Consultancy wing & University Business Collaboration Centre, Alagappa University, Karaikudi held on 30th January, 2023.
- 2. Participated in the National Workshop cum Hands on training on "Vibrational Spectroscopy (FTIR-ATR)" held on 28th March, 2022, at the Department of Botany, Pasumpon Thiru Muthuramalinga Thevar Memorial College, Kamuthi, Ramanathapuram.
- 3. Participated in the Two Days Hands-on Workshop on "Analysis of Secondary Metabolites and Histochemical Screening Techniques" held on 24th to 25th February 2022, organized by the Department of Biotechnology, Kongu Arts and Science College (Autonomous), Erode.
- 4. Participated in one day Training Program on "Seaweed Culture and Utilization" organized by Jehovah Shamma Aqua One Center and Jehovah Shamma Centre for Marine and Wildlife Research, Mudiveeranpattinam, Ramanathapuram, Tamilnadu on 27th August 2021.
- Participated in the Online International Workshop on Food Safety and Food Biotechnology, organized by school of life sciences B.S. Abdur Rahman Crescent Institute of Science & Technology, Vandalur, Chennai on 7th June 2021.

- 6. Participated in the three days online National level workshop on E-Presentation Techniques from 05.07.2021 to 07.07.2021 organized by Lions club of Chidambaram excellence & Lions club of Pondicherry excellence, Lions clubs international, Tamilnadu.
- 7. Participated in the Science Academies Lecture Workshop on "Biodiversity for Human Welfare: Current and Future Trends" held on 24th & 25th September 2018, at the Department of Botany, Bharathidasan University, Tiruchirappalli.
- 8. Participated in National Level Industry academia training workshop light microscopy "From basic to optical sectioning" held on 14th & 15th May 2018, at the National centre for alternatives to animal experiments, Doerenkamp Enclave, Bharathidasan University, Tiruchirappalli.
- Participated in National Level "Lecture Workshop on Plant Tissue Culture and Phytochemistry" held on 21st March 2018, at the Department of Botany, Bharathidasan University, Tiruchirappalli.
- 10. Participated in the Science Academies Lecture Workshop on "Conservation and Protection of Bioresources" held on 24th & 25th January 2018, at the Department of Botany, Bharathidasan University, Tiruchirappalli.
- 11. Participated in 14th National Youth Parliament Competitions (Group Level) jointly organised by Ministry of parliamentary affairs government of India & BDU, on 09.09.2017 at Bharathidasan University Trichy.
- 12. Participated in Training Program on "BIOFUELS" held on 12th March, 2012 at the Department of Tree Breeding, Forest College and Research Institute, Tamil Nadu Agricultural University, Mettupalayam.
- 13. Participated in "Workshop on Frontiers in Catalysis Research" held on 01st October 2010, at the Department of Chemistry, National College, Tiruchirappalli.
- 14. Participated in "Inter Collegiate Oratorical Competition" on 29.09.2010, at Dept. of Zoology, National College, Trichy.
- 15. Participated in Training Program on "Edible Mushroom Cultivation" held on 27th December 2009, at the Department of Botany, National College, Tiruchirappalli.
- 16. Participated in "Workshop on Horticulture" held on 30.08.2007, at the Department of Botany, National College, Trichy.

Seminars and Conferences Participated:

- Participated in "International Conference on Plant Science ICOPS'22" organized by the Post Graduate Department of Botany, Korambayil Ahamed Haji Memorial Unity Women's College, Manjeri, Kerala held on 27th October 2022.
- 2. Participated in "National Conference on Emerging Trends in Plant Science for Sustainable Development" organized by Department of Botany, Bharathidasan University, Tiruchirappalli held on 30th march 2022.
- 3. Participated in "National science day and first bioforum annual conference on Biological Science" organized by Department of Biotechnology, The Madura College, Madurai, held on 28th February and 01st March 2022.
- 4. Participated in National Seminar on "Science and Society Challenges in Biotechnology" organized by Department of Botany, Bharathidasan University, Tiruchirappalli-620 024 held on 27th February, 2019.
- 5. Participated in "National Conference on Recent Advances in Plant Science: Towards Food Safety and Food Security" held on 15th March 2018, at the Department of Botany, Bharathidasan University, Tiruchirappalli.
- 6. Participated in "National Conference on Recent Advances in Plant Science" held on 09th & 10th March 2017, at the Department of Plant Science, Bharathidasan University, Tiruchirappalli.
- 7. Participated in "National Conference on "Emerging Trends in Plant Science" held on 10th & 11th March 2016, at the Department of Plant Science, Bharathidasan University, Tiruchirappalli.
- 8. Participated in the Golden Jubilee National Seminar On "Discources on past, present and future scenario on medicinal plant conservation in India" organized by PG & Research Department of Botany, Saraswathi Narayanan College, Madurai 625 022 held on 06th & 07th March, 2015.
- Participated in National Conference on "Recent Trends in Bioprospecting of Plants" held on 28th
 29th March 2014, at the Department of Plant Science, Bharathidasan University,
 Tiruchirappalli.
- Participated in National Conference on "Recent Trends in Plant Biotechnology" held on 27th &
 28th February 2013, at the Department of Plant Science, Bharathidasan University,
 Tiruchirappalli.
- 11. Participated in National Conference on "Genomics and Genetic Engineering Strategies for Crop Improvement" held on 27th & 28th February 2012, at the Department of Biotechnology, Periyar University, Salem.

- 12. Participated in "35th Annual Conference of Ethological Society of India" & "Symposium on Chemical Signals in Animal Welfare" held on 15th & 16th December 2011, at the Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli.
- 13. Participated in Prof. R. Jeyaraman Memorial Seminar on "Prospects in Chemistry" held on 11th March 2011, at the Department of Chemistry, National College, Tiruchirappalli.
- 14. Participated in "One Day Seminar on Biomedical Awareness" on 3.3.2011, Dept. of Zoology, National College, Trichy
- 15. Participated and in the National Conference on "Biotechnological Approaches for Sustainable Environment" held at the Department of Biotechnology, J.J. College of Arts and Science, Pudukkottai, TN, on 06th & 07th August 2010.
- 16. Participated in One Day Seminar on "Recent Trends in Zoology" held on 06th December 2006, at the Department of Zoology, National College, Tiruchirappalli.

Symposium and Webinars Participated/Attended:

- 1. Participated in the Webinar on "Covid-19 & Environment" organized by Department of Microbiology & Genetics, MNR Degree & PG College, Kukatapally, T.S., on 5th June 2021.
- 2. Participated in the international symposium on yoga and alternative medicine to combat COVID 19, organized by school of life sciences B.S. Abdur Rahman Crescent Institute of Science & Technology, Vandalur, Chennai on 21st June 2021.
- 3. Participated in one day webinar on "Principles of Food Safety for a Healthy Tomorrow" organized by Department of Chemical Engineering, Food and Pharmaceutical Technology, Paavai Engineering College, Namakkal, on 7th June 2021.
- 4. Participated in one day webinar on "Ocean A Treasure of Potent Bio-resources" organized by Department of Chemical Engineering, Food and Pharmaceutical Technology, Paavai Engineering College, Namakkal, on 8th June 2021.
- 5. Participated in one day webinar on "Madhya Pradesh A Treasure Trove of Ethnobotanical Studies in India" by Dr. Ram Lakhan Singh Sikarwa, Organized by centre for conservation of Natural Resources, TDU, Bengaluru on 3rd July 2021.
- 6. Participated in one day webinar on "Ethnobotany of Kerala, India by Dr. K. Radhakrishna" organized by FRLH Herbarium and Raw Drug Repository of medicinal plants used in Indian system of Medicine, Centre for Conservation of Natural Resources, TDU on 21st August 2021.

7. Participated in one day webinar on "Urban Ethnobotany in India; Prospects and Challenges by Dr. Vartika Jain" organized by FRLH Herbarium and Raw Drug Repository of medicinal plants used in Indian system of Medicine, Centre for Conservation of Natural Resources, TDU on 18.09.2021.

List of Research Articles / Recent Publications

S. No.	Authors/Title of the paper/Journal	Impact Factor
1	Rajasekar C, Jayaganesh M, Kavitha J, Rajendran , R , Kottaimuthu R. New record of <i>Brachystelma rapinatianum</i> Britto & Bruyns (Apocynaceae: Ceropegieae) from Eastern Ghats, India. Species 2023; 24: e38s1530. doi: https://doi.org/10.54905/disssi/v24i73/e38s1530	•
2	Radhika, R., Rajendran, R. , Thavamurugan, S., & Prabha, A. L. (2022). Determination of bioactive compounds and antioxidant activity of <i>Orthosiphon thymiflorus</i> (Roth) Sleesen stem extracts. Biomass Conversion and Biorefinery,1-14. https://doi.org/10.1007/s13399-022-03503-z	SJR 4.103
3	C. Rajasekar, G. Aazhivaendhan, R. Rajendran , T. Senthil Kumar, & R. Kottaimuthu* (2022). <i>Schoenorchis manilaliana</i> M.Kumar & Sequiera (Orchidaceae): A new record for Orchidaceae of Tamil Nadu, India. Plant science today, ISSN 2348-1900 (online) Vol 9(sp1): 19–20. https://doi.org/10.14719/pst.1614	SJR 0.83
4	Kottaimuthu R, Rajasekar C, Narmadhai Naachiyaar A and Rajendran, R., (2022). Mysore Grass Lily Iphigenia mysorensis (Colchicaceae), a new record for the Flora of Tamil Nadu, India. Indian Journal of Forestry, 44(3), pp.122-124. https://doi.org/10.54207/bsmps1000-2022-H35NP4 (January 2022).	-
5	Rajendran, R*., Pullani, S., Thavamurugan, S., Radhika, R., & Lakshmi Prabha, A. (2022). Green fabrication of silver nanoparticles from <i>Salvia</i> species extracts: characterization and anticancer activities against A549 human lung cancer cell line. Applied Nanoscience, 1-14. Vol 13; Issue 3: pages 2571–2584 (2023). https://doi.org/10.1007/s13204-021-02130-w	SJR 3.674

	Rajendran, R., Rajesh, R., Rajasekar, C., & Kottaimuthu, R. (2021). Drimia	
	raogibikei (Hemadri) Hemadri (<i>Asparagaceae: Scilloideae</i>): Addition to the	CITE
6	monocots of Tamil Nadu, India. Asian Journal of Conservation Biology, 10(2), 334-	SJR 0.395
	336. https://doi.org/10.53562/ajcb.69191	
	Suresh Pullani, Rajendran R and Lakshmi Prabha A, 2021. Anti haemolytic	
	potential of aqueous leaves extraction of Salvia leucantha Cav., against Indian cobra	
7	(Naja Naja) venom. International Journal of Botany Studies, ISSN: 2455-541X; Vol.	-
	6, Issue 1, pp. 321-324.	
	Suresh Pullani, Rajendran R and Lakshmi Prabha A, 2021. In vitro neutralization	
	of Naja naja venom enzymes by using aqueous leaves extraction of Salvia	
8	leucantha Cav. International Journal of Botany Studies, ISSN: 2455-541X; Vol. 6,	-
	Issue 1, pp. 72-76.	
	Rajendran R and Lakshmi Prabha A, 2020. Biosynthesis of Silver Nanoparticles	
9	using Salvia coccinea and its Antibacterial Activity. Alochana Chakra Journal, ISSN	-
	(Online): 2231-3990 – Vol. 9, Issue 5, pp. 2383-2389.	
	Radhika R, Rajendran R and Lakshmi Prabha A, 2020. High Frequency Direct	
10	Shoot Multiplication from <i>Dipcadi montanum</i> Bulb. Alochana Chakra Journal,	-
	ISSN (Online): 2231-3990 – Vol. 9, Issue 5, pp. 2367-2373.	
	Sandhiya U, Shanmugapriya A, Lakshmi Prabha A, Rajendran R , Bharathi V and	
	Hema S, 2020. Preliminary phytochemical screening, green synthesis of silver	
11	nanoparticles and antibacterial activity using leaf extraction of <i>Indigofera linifolia</i> .	-
	Alochana Chakra Journal, ISSN (Online): 2231-3990, Vol. 9, Issue 5, pp. 1928-	
	1941.	
	Rajendran R and Lakshmi Prabha A, 2016. Green Synthesis of AgNPs,	
12	Characterization and Antibacterial Activity from Salvia leucantha Cav. Plant	
12	Aqueous Extract. International Journal of Science and Research (IJSR) ISSN	-
	(Online): 2319-7064 - pp. 1515-1519.	
	Rajendran R and Lakshmi Prabha A, 2015. AgNPs Synthesis, Characterization and	
13	Antibacterial Activity from Salvia splendens Sellow ex Roem. & Schult. Plant	
	Extract, International Journal of Science and Research (IJSR), ISSN (Online):	-
	2319-7064 - pp. 1086-1090	

Resource persons in various capacities

Invited Lectures : 3

Invited Lectures:

- 1. Resource person for the "Phytoclub Association Virtual Meeting on Exploration in Research" conducted by Department of Botany, Seethalakshmi Ramaswami College, Trichy, held on 10.10.2023.
- 2. Trainer in the "State level Workshop on Phytochemistry for Health and Environment" conducted by Department of Environmental Biotechnology and Plant Science, Bharathidasan University, Trichy, held on 08th to 11th February 2016.
- 3. Resource person for the "Two days Workshop on Phytochemistry, Cytochemistry and Electrophoretic Techniques" conducted by Department of Botany, Holy Cross College (Autonomous), Trichy, held on 11th and 12th December 2014.

Dr. R. RAJENDRAN
ADJUNCT FACULTY