

Profile –Aug. 2023

1) Name: **Dr. P. RAVICHANDRAN**

2) Date of Birth: April 5, 1965

3) Designation : Professor & Head, Department of Plant Science, MSU,
Tirunelveli – 627 012

E-mail : grassravi@gmail.com; grassravi@msuniv.ac.in

Contact Number: 9442640072

4) Educational Qualifications:

Degree	Year	College/University	Subject/Specialization
Ph. D.	1996	Madras Christian College, University of Madras	Botany-Plant Biotechnology
M. Phil.	1990	Madras Christian College, University of Madras	Botany-Plant Biotechnology
M. Sc.	1989	Madras Christian College, University of Madras	Botany
B.Sc.	1986	Loyola College, University of Madras	Botany

5) Experience: Research : 30 years ; Teaching : 23 years

Position	Institution	Period	No. of Years
Lecturer	Loyola College, Chennai -34	June 1, 1996 – May 31, 1998	2
Lecturer	SPKCES, M.S. University, Alwarkurichi	June 1, 1998 - April 4, 2002	4
Lecturer (SS)	SPKCES, M.S. University, Alwarkurichi	April 5, 2002 – May 31, 2007	5
Reader	SPKCES, M.S. University, Alwarkurichi	June 1, 2007 May 2010	3
Associate Professor	SPKCES, M.S. University, Alwarkurichi	June 1, 2010 – May 2010	3
Professor and Head i/c	SPKCES, M.S. University, Alwarkurichi	June 1, 2013 – June 2015	2
Professor and Head	Department of Plant Science, M.S. University, Tirunelveli	July 2015 -	till date

6) Ph. D. Guidance

Degree	Awarded	Thesis submitted	In progress
Guide Ph. D.	12	-	6
Co. Guide Ph.D.	8	-	-
M. Phil.	4	-	0

7) Research Area: LIFE SCIENCE (Plant and Environmental Sciences)

Areas of Specialization :**1. Plant Conservation Biotechnology**

2. Agrostology (Study of Grasses)

3. Natural Dyes

- Tissue culture and *in vitro* conservation of rare, endangered and medicinal plants.
- Use of molecular (RAPD, RFLP, ISSR, AFLP, SCAR) markers in assessment of genetic diversity of medicinal plants and grasses.
- Studying variations in medicinal plants through Anatomy, Histochemistry and Electron microscopy.
- Application of natural dyes as alternatives for synthetic dyes in textile and industrial plant fibres.
- Employing Natural dyes as biological stains for localization of biochemicals, DNA, RNA and various other tissue components.
- Use of natural substances such as plant extracts, metals and heavy metals as cleaving agents of DNA in the place of restriction enzymes.

8). RESEARCH PUBLICATIONS

I. Papers published in Journals:

1. **P. Ravichandran**, S. Krishnan, N.P. Samson, V.R. Subbiah, K. Azhakanandam & D. Narasimhan. 1995. *Eragrostis dayanandanii* – a new grass from Tamil Nadu, India. ***Kew Bulletin* vol. 51(1) 55-157. 0.577.**
2. S. Ignacimuthu, S. Arokiasamy, M. Antonysamy and **P. Ravichandran**. 1999. Plant regeneration through somatic embryogenesis from mature leaf explants of *Eryngium foetidum* condiment. ***Plant Cell, Tissue and Organ Culture* 56: 131-137. IF. 2.02.**
3. S. Krishnan, N.P. Samson, **P. Ravichandran**, D. Narasimhan & P. Dayanandan. 2000. Phytoliths of Indian Grasses and their potential use in identification. ***Botanical Journal of Linnean Society*. 132: 241-252. IF. 2.523.**

4. V. Manimekalai, **P. Ravichandran** and A. Balasubramanian. 2002. Fibres of *Sorghum bicolor* (L.) Moench. and their potential use in paper and board making. *Phytomorphology* **52**: (1), 61-67. IF. 0.23
5. R. Vijaya Sankar, K. Ravikumar and **P. Ravichandran**. 2003. Endemic species, *Brahcystelmabrevitubulatum* (Bedd.) Gamble (Asclepiadaceae), relocated after a century. *Phytotaxonomy* **3** : 130-133.
6. R. Vijaya Sankar, K. Ravikumar and **P. Ravichandran**. 2004. *Dipteracanthusbeddomei* (C.B. Clarke) Santapau (Acanthaceae) - A new report to southern India *Zoos Print Journal* **19**(4): 142 and www.zoosprint.org.
7. P. Manoj, E.V. Soniya, N.S. Banerjee and **P. Ravichandran**. 2004. Recent studies on well known spice, *Piper longum* Linn. *Natural Product Radiance* **3**(4): 222- 227. IF. 0.568
8. P. Manoj, N.S. Banerjee, **P. Ravichandran** 2005. Development of sex-associated SCAR markers in *Piper longum* L. *Plant Genetic Resources News letter*, vol. **141**, 44 - 50. IF. 0.23
9. **P. Ravichandran**, B. Mathithumilan, J. Fathima Benazir and V. Manimekalai. 2005. Anatomy and Vascular Bundle Diversity in Mat Sedges. *International Journal of Phytomorphology* vol. **55**, 75 - 83. IF. 0.23
10. V. Manimekalai and **P. Ravichandran**. 2006. Natural colours for silk/superfine mats and mat products of Pathamadai. In: Naturally, Gita Ram (Ed), The Crafts Council of India, Published in International Symposium, Hyderabad. pp.124 - 135.
11. P. Manoj, N.S. Banerjee, **P. Ravichandran** 2008. Development of Sex Specific Molecular markers in Dioecious *Piper Longum* L. plants by Differential Display, *Journal of Theoretical and Applied Information Technology* **459- 464**. IF. 0.18
12. Fathima Benazir, R. Suganthi, **P. Ravichandran**, M. Padmini Pooja. 2008. Phytochemical Screening and Cytotoxicity Studies of Rhizome Extracts of *Cyperus Pangorei* Rottb. *Research & Reviews in BioSciences*, Volume 2 (1), 83-87. IF. 1.44.
13. Fathima Benazir, R. Suganthi, Manju Das, **P. Ravichandran**. 2008. Antimicrobial Screening of Rhizome Extracts of *Cyperus Pangorei* Rottb., *Research & Reviews in BioSciences*, Volume 2(1), 80-82. IF. 1.44
14. J F Benazir, B Mathithumilan, **P Ravichandran**, Vinodhini Jochebed, R Suganthi and V Manimekalai. 2009. *In Vitro* Regeneration of Mat Sedge (*Cyperus pangorei* Rottb), *J. Plant Biochemistry & Biotechnology* Vol. **18**(2), 209-215. IF. 0.954.

15. J F Benazir, V Manimekalai, **Perumal Ravichandran**, R Suganthi and D .C. Dinesh. 2010. *Properties of fibres/culm strands from mat sedge - Cyperus pangorei*Rottb. **Bioresources** 5 (2), 951 -967.IF. 1.334.
16. K. Thangavel, M.G. Ebbie and **P. Ravichandran**. 2011. Antibacterial Potential of *Decalepishamiltonii*Wight&Arn. Callus Extract. Nature of Pharmaceutical Technology, NPT 1(1):14-18.
17. J. Fathima Benazir, V. Manimekalai and **Perumal Ravichandran**.2012. Epicuticular Waxes From The Mat Sedge - Cyperus PangoreiRottb. DOI 10.3923. 8 (1):38-44.*International Journal of Botany as Research Article*. I.F 5.12.
18. **P. Ravichandran**, 2013. A new species of Trachys (Poaceae) from East Coast of Tamil Nadu, India. *Rheedea*Vol. 23(1) 22-25. IF 0.22.
19. M.V. Sumanth, M. B. Yellanthoor, K. Ravikumar, **P. Ravichandran**. 2013. Comparative physicochemical, phytochemical and HPTLC studies on root species used as Patala in Ayurvedic system of medicine. *Journal of Pharmacy Research*. [volume 7, Issue 9](#), September 2013, Pages 810-816 IF. 2.855.
20. Thangavel K, MG Ebbie and **P Ravichandran**. 2014. Biotechnology and *In Vitro* Conservation of Medicinal Plants. *Annals of Plant sciences*, 3 (06), ISSN: 2287-688X , 1-10.
21. Thangavel K, **P Ravichandran** M.G. Ebbie and V. Manimekalai. 2014. *In vitromicrorhizome* production in *Decalepishamiltonii*, vol. 13 (11), 1308 -1313, *African Journal of Biotechnology*, ISSN 1684-5315, 12 April 2014. IF 0.55.
22. Geethakumary M P, Pandurangan A G and**P Ravichandran**. 2014. Nomenclatural status of *Exacumwrightianum*var. *uniflorum* Henry & Swaminathan and *Exacumklackenbergii*Gopalan-little known endemics from Southern India. *Annals of Plant Sciences*, 2014, 3 (07), 758-760.
23. **Amuthapriya T and P Ravichandran**. **Oct. 2014**. Rapid *In Vitro* Shoot Multiplication Through Hypocotyl Segment Culture In*Calotropis gigantean* R. BR. *Int. J. Bioassays*, 2014, 3 (11), 3523-3525. IF. 2.398.

24. Dintu, K. P., Sibi, C.V., **Ravichandran, P.** Satheeshkumar, K. 2015. Vivipary in *Ophiorrhizamungos* L. – a rare phenomenon in angiosperms, *Plant Biology*, 17 (2015) 294–295 © 2014 German Botanical Society and The Royal Botanical Society of the Netherlands. IF. 2.106.
25. M. P. Geethakumary, A. G. Pandurangan, and **P. Ravichandran.** *Canscora stricta* Sedgw. (Gentianaceae): an endemic species of Western Ghats. *TAPROBANICA*, ISSN 1800–427X. August, 2014. Vol. 06, No. 02: pp. 135–136, pl. 14. IF. 0.41.
26. Dintu K P · Sibi C Varghese · Deepthi S, **Ravichandran, P.** Satheeshkumar K. Krishnan P N. 2015 Estimation of Camptothecin and in vitro studies on the selected accession of *Ophiorrhizamungos* L.
27. T. Amutha Priya, V. Manimekalai, **P. Ravichandran.** 2015. Intra Specific Genetic Diversity Studies on *Calotropis gigantea* (L) R. Br. - Using RAPD Markers. *European Journal of Biotechnology and Bioscience*, Volume: 3, Issue: 4, 7-9, April 2015, ISSN: 2321-9122, Impact Factor: 3.742
28. SM Siva, T Amuhtapriya, P Balasubramanian, V Manimekalai, **P Ravichandran.** 2015 *In vitro* regeneration of an endangered tree – *Elaeocarpus blascoi* –Weibel. (*Rudrakksah*) from southern Western Ghats, *Tamilnadu, India.* *European Journal of Biotechnology and Bioscience* Vol 3, Issue 11, Nov. 2015, pp 62-66. IF. 5.44.
29. A novel in vitro approach for enhanced production of *Musa paradisiaca* L. (cv. Nendran) using split sucker explants. Radhika B. J, P. **Ravichandran** and K. Satheeshkumar. 2016. ISSN: 2320-5407 *Int. J. Adv. Res.* 4(8), 696-703. IF 6.11
30. A new species of *Exacum* (Gentianaceae) from Western Ghats, India. M. P. GEETHAKUMARY, A. G. PANDURANGAN, **P. RAVICHANDRAN**, S. DEEPU. 2016. *Phytotaxa* 282(3):225-229 · October 2016. IF 1.62
31. Sibi CV, Renjith R, RojaGopalakrishnan, Ravichandran P, Satheeshkumar K. Dec. 2016. A novel and efficient method for the enhanced production of multiple shoots and camptothecin from *Ophiorrhiza trichocarpos* blume through subculture passages in media of alternating strength. *European Journal of Biotechnology and Bioscience*, Online ISSN: 2321-9122, Impact Factor: RJIF 5.44. Volume 4; Issue 12, December 2016; Page No. 12-16.
32. Anjana R.G. Nair, P. Ravichandran and M. Bejoy. 2017 PACLOBUTRAZOL MEDIATED ENHANCED MULTIPLICATION OF *MUSA PARADISIACA* LINN. CV. POOVAN (AAB). ISSN: 2320-5407 *Int. J. Adv. Res.* 5(6), 656-663. IF: 6.11.

33. Geethu Gopinath, Binoy Jose, P Ravichandran and K Satheeshkumar. 2018. Tissue culture of *Ophiorrhizamungos*L., a prospective method for the production of an anticancer drug,camptothecin. *Plant Science Today* (2018) 5(1): 1-8. [https:// dx. doi.org /10.14719/pst. 2018.5.1.359](https://dx.doi.org/10.14719/pst.2018.5.1.359).
34. K. MYDEEN FATHIMA BEGAM, P. RAVICHANDRAN, V. MANIMEKALAI.2018. Phytochemical analysis of some selected varieties of *Piper betle* L. *International Journal of Current Pharmaceutical Research*, ISSN-0975-7066 Vol 10, Issue 2, 89-93. I.F. **4.510**.
35. Manimekalai V., Mydeen Fathima Begam K and Ravichandran. 2018 Assessment of the potential of natural dyes as botanical Histochemical Stains. *International Journal of Recent Scientific Research* Vol. 9, Issue, 8(B), pp. 28384-28388, August, 2018.
36. Gokul S., K. Ravikumar and P. Ravichandran 2018. Simple propagation technique for a Steno-Endemic, Critically Endangered medicinal plant, Decalepisaroyalpathra (J.Joseph&V.Chandras.) Venter, from Southern Western Ghats, India" *My forester*, Vol. 54 (3), 23-30.
37. ANJANA R.G. NAIR, P. RAVICHANDRAN & M. BEJOY. 2019. Plant Regeneration from Callus cultures of ‘Poovan’ - A Popular Triploid Banana Cultivar, *International Journal of Research and Analytical Reviews* May 2019, Volume 6, (2) 758-766.
38. T. Amutha Priya, V. Manimekalai and P. Ravichandran. 2019. Callus Free *In Vitro* Clonal Propagation Of Giant Milk Weed - *Calotropis Gigantea* (L.) R.Br. *Think India Journal*, ISSN:0971-1260, Vol-22- Issue-14-December-2019.
39. E. Pandian and P. Ravichandran. 2020. Altitudinal variation of soil organic carbon stock in tropical forest of Courtallam hills, Southern Western Ghats of India. ISSN (Online): 2349-1183; ISSN (Print): 2349-9265, *The Journal of the Society for Tropical Plant Research*, 7(3): 702–714, DOI: 10.22271/tpr.2020.v7.i3.089.
40. E. Pandian and P. Ravichandran. 2020. Diversity and Threatened Climber Plants in CourtallamHills, Southern Western Ghats, *Journal of Tropical forestry and Environment* Vol. 9, No. 02 (2019) 12-20, DOI: <https://doi.org/10.31357/jtfe.v9i2.4464>.
41. K. Esakkimuthu, P. Ravichandran and V. Manimekalai. 2021. LEAF MIDRIB ANATOMY OF PALMYRA PALM – BORASSUS FLABELLIFER L. *Journal of Scott Research Forum*, Volume 11, 620-634; 2021ISSN: 0973-2705.
42. V.J. David, K. Esakkimuthu and P. Ravichandran EFFECT OF PGRs IN GROWTH AND DEVELOPMENT OF ROOTS AND SHOOTS FROM CONSTRICTED ROOTSTOCK OF OPHIUROS EXALTATUS (L.)

- KUNTZE , Journal of Scott Research Forum, Volume 11, 635-644; 2021ISSN: 0973-2705.
43. S. Priyatharshini, K. Nandhini and P. Ravichandran 2021. *IN VITRO* SEED GERMINATION AND MASS PROPAGATION OF EPIDENDRUM RADICANS PAV. EX LINDL. - AN ORNAMENTAL ORCHID; Journal of Scott Research Forum, Volume 11, 645-650; 2021ISSN: 0973-2705.
 44. K. Nandhini, P. Ravichandran, T. Geetha and N. Sivaranjini. 2021. *IN VITRO* MASS PROPAGATION OF ENICOSTEMA AXILLARE (LAM.) A. RAYANAL - A MEDICINALLY IMPORTANT HERB; Journal of Scott Research Forum, Volume 11, 651-657; 2021ISSN: 0973-2705.
 45. P. Ravichandran, K. Nandhini and S. Ayyammal. 2021. EFFECT OF PALMYRA LIQUID ENDOSPERM (PLE) AS A GROWTH PROMOTING SUPPLEMENT IN PLANT TISSUE CULTURE MEDIUM; Journal of Scott Research Forum, Volume 11, 658-666; 2021ISSN: 0973-2705.
 46. Sumanth M V, Ravikumar K & Ravichandran P. 2021. Taxonomy, pharmacognosy and phytochemical characteristics to identify the authentic and substitute botanical sources used as *Agnimantha*, *Indian Journal of Traditional Knowledge*, Vol 20: (2), pp 351-357.
 47. R Ragul, K Esakkimuthu & P Ravichandran. 2022. Determination of resource mobilization during seedling growth of palmyra palm, *Borassus flabellifer* L. *Indian Journal of Experimental Biology* Vol. 60, July 2022, pp. 498-509
 48. Manisha M. and P. Ravichandran. 2022. Comparative leaf micromorphology of the genus *Cymbopogon* Spreng (Poaceae), *Proceedings of the International Seminar on Plant Response to Climate change, Plantcliv 2022*, 69-85.
 49. Vijay Sharma and P Ravichandran. 2023. Native fodder grasses and grazing lands. *Kidai, Quarterly journal of Pastoral community and cultures, Patti 1, Eethu 1*, 40-52.
 50. P. Ravichandran. 2022. Impact of Climate Change on flowering plants with special emphasis on grasses and grasslands of India. *Proceedings of the International Seminar on Plant Response to Climate change, Plantcliv 2022*, 35.
 51. Nandhini K, Ravichandran P, David VJ & Manimekalai V. 2023. Floral biology of *Baccaurea courtallensis*- an endemic tree species from peninsular India, *Journal of Threatened Taxa* | www.threatenedtaxa.org | 26 April 2023 | 15(4): 22940–22954
 52. Nandhini K, Ravichandran P, David VJ & Manimekalai V (2022) In Vitro sterilization protocol for callus induction of *Baccaurea courtallensis* (Wight)

Müll. Arg. - An endemic tree of Southern Western Ghats, India. *Tropical Plant Research* 9(3): 96–102].

53. **K. Mydeen Fathima Begam, P. Ravichandran, V. Manimekalai. 2023. Aug. Comparative foliar anatomical study of six different varieties of *Piper betle* L.** *Current Botany* 2023, 14: 111-117, doi: 10.25081/cb.2023.v14.7959

II. Books authored and Co-authored

1. **P. Ravichandran** (Co- author). 1995. Handbook on native fodder grasses. Published by Society for Social forestry Research and Development, Chennai.
2. **P. Ravichandran.** 1998. (Co- author). Conservation of Biodiversity- Special reference to Plant Diversity. Published by Sri Paramakalyani Centre for environmental Sciences, Manonmaniam Sundaranar University.
3. **P. Ravichandran.** 2003. Plant Biotechnology. Refresher Course Monograph, Published by Sri Paramakalyani Centre for Environmental Sciences, Manonmaniam Sundaranar University. Tirunelveli.
4. M. Arunachalam, **P. Ravichandran** and A.G. Murugesan. 2007. Ecology and Biodiversity Conservation. Published by M.S. University, Tamil Nadu.
5. J. Fathima Benazir, and **Perumal Ravichandran.** 2011 Cyperus pangorei (Korai)- The Wonder Sedge: BIOLOGY OF A SEDGE (CYPERUS PANGOREI Rottb.) USED IN THE MAKING OF SUPER FINE SILK MATS OF PATHAMADAI. LAP LAMBERT Academic Publishing (February 21, 2011). **ISBN-10:** 3843382751, **ISBN-13:** 978-3843382755, Price \$. 108.
6. R. Vijayasankar, K. Ravikumar and **P. Ravichandran.** 2012. Plant Resources of Tiruvannamalai District, Tamil Nadu, India. Bishen Singh Mahendra Pal Singh, Dehra Dun, This book is a result of extensive and intensive field research in the Javvadhu hills of Eastern Ghats and its adjoining within Tiruvannamalai district. The district not only harbours a diversified vegetation but also known for its medicinal plants wealth. ISBN:9788121107365 lxiv+852 Yr. of Pub.2011 Rs. 4050/-.
7. **P. Ravichandran.** 2016. Lab manual on Microscopy, Histochemistry and Micro techniques. Department of Plant Science, M.S. University.
8. **Campus Flora of Manonmaniam Sundaranar University, 2018.** Department of Plant Science, M.S. University. (4 Booklets).

III. Monographs/Chapters Published in Books:

1. B. Muruganandam, **P. Ravichandran** and P. Dayanandan. 1996. Neem seedlings – growth potentials of different organs. In: *Neem and Environment*, Singh, R.P. Chari, M.S., Raheja, A.K. and Kraus, W. (Eds.) vol. 1 Oxford & IBH, New Delhi.

2. **P. Ravichandran** and V. Manimekalai, **2006**.“Plant Biotechnology and Conservation of Biodiversity”. In : Biodiversity : Life to our Mother Earth, Edited by Dr. John William, Loyola College, Chennai, pp 30- 48.
3. **P. Ravichandran. 2006**. Role of Biotechnology in Conservation of Biodiversity. *Botanical Trends, News Letter, March Issue 19, 2006*. Department of Botany and Research Centre, Scott Christian College, Nagercoil.
4. V. Manimekalai and **P. Ravichandran. 2006**. Natural colours for silk/superfine mats and mat products of Pathamadai. In: Naturally, Gita Ram (Ed), The Crafts Council of India, pp.124 – 135.
5. **P. Ravichandran.2007**. Morphology of Grasses. In: Work Book on Grass Systematics. S.R. Yadav (Ed). MOEN& F, Shivaji University, Kolhapur. Pp.1-15.
6. **P. Ravichandran.2007**. The Magical Maroon –Sappan Natural dye. 2007. In: Natural Dyes- The Colours of Nature, V. Manimekalai (Ed.), The Department of Botany, Sri Parasakthi College for Women, Courtallam.pp.15-21.
7. **P. Ravichandran. 2007**. Propagation and **Conservation of fodder Grasses of Indian Grazing lands through tissue culture**. In: Ecology and Biodiversity Conservation, Arunachalam et al., pp 61 -71. Published by the M.S. University, TN. 2007.
8. **P. Ravichandran. 2007**. Magnitude of Plant Molecular Biology and Tissue culture tools in conservation of Biodiversity. In: Ecology and Biodiversity Conservation, Arunachalam *et al.*, pp 71- 87. Published by the M.S. University, TN. 2007.
9. **P. Ravichandran** and P. Dayanandan. 2009. Secretory cells of Neem and *invitro* production of chemicals. In: Neem – a Treatise, K. K.Singh et. Al., (Eds.) I.K. International Publishing House Pvt. Ltd., New Delhi. Pp 163- 170.
10. P. Ravichandran and V. Manimekalai.2014. Dyeing of Precious Plant Fibres With Natural Indigo: An ecofriendly technology, In: Culture of Indigo in Asia – PLANTS PRODUCT POWER (Edt. Kapila Vatsyayan), Niyogi Books, INBN. 9789383098231.
11. P. Ravichandran and V. Manimekalai 2014. Conservation of red listed medicinal plants of Western Ghats India a success. In Chapter – 16 Linking traditional medicine, good healthcare access and conservation demonstration, In : Guide to the *Healthy Parks Healthy People* Approach and Current Practices. Proceedings from the **Improving Health and Well-being: Healthy Parks Healthy People** stream of the IUCN World Parks Congress 2014. Authorized and published by

Parks Victoria, L10, 535 Bourke Street, Melbourne VIC 3000, Copyright © Parks Victoria 2015, www.parks.vic.gov.au

12. Gokul S., **P. Ravichandran** and K. Ravikumar 2016. Reproduction biology and conservation of a critically endangered and ethno-medicinal plant *Decalepisarayalpathra*(j. Joseph & v. Chandras.) Venter - a keystone species of agasthyamalai biosphere reserve. *XXVI Annual Conference of Indian Association for Angiosperm Taxonomy and International Seminar on Conservation and Sustainable Utilization of Biodiversity (7th to 9th November 2016. Pp 120-121.*
13. Gokul S., **P. Ravichandran** and K. Ravikumar 2023. Pollen cryopreservation

IV. No. of Papers Presented and Published in National and International Conferences : 105

14. Plenary, Public and Invited/Lead Lectures Delivered:

1. Feb. 04, 1998. Guest Lecture, Recent Trends in Plant Tissue Culture. Lady Wellington College of Education, Chennai – 4.
2. July 08, 1998. Inaugural lecture Biology and Pesticidal properties of Neem. MANOCENS, SPKCES, MSU, Alwarkurichi.
3. August 1998, Biodiversity and Conservation of Native fodder grasses. Workshop on trainers training program, MSSRF and SPKCES, MSU, Alwarkurichi,
4. December 26, 1998. Floral variations in Poaceae. UGC-Refresher course in Botany- Plant Diversity. SPKCES, MSU, Alwarkurichi.
5. December 18, 1998. Plant tissue culture- a fundamental tool in Biotechnology programs. UGC-Refresher course in Botany- Plant Diversity. SPKCES, MSU, Alwarkurichi.
6. Dec. 15, 1999. Plenary Lecture on Avenues on Neem cell Culture. National seminar on Biotechnology: Hitherto and Henceforth, The American College, Madurai.
7. April, 2000. Plant Tissue Culture- An Over View. Sri Parasakthi College for Women, Courtallam.
8. April, 2000. Somatic Embryogenesis and Synthetic Seed Technology. Centre for Biodiversity and Biotechnology, St. Xavier's College, Palayamkottai.
9. November 2000. Embryoids and Artificial seeds. Centre for Biodiversity and Biotechnology St. Xavier's College, Palayamkottai.
10. Feb. 2001. Inaugural Lecture, Botany Club, Biology and importance of Grasses. Department of Botany, St. Xavier's College, Palayamkottai.
11. Feb 2001. Micropropagation and production of somatic embryos. Centre for Biodiversity and Biotechnology, St. Xavier's College, Palayamkottai
12. Marc, 2001. Biochemical and Histochemical properties of Brazil wood-A natural dye yielding plant. National Seminar on Plant Biochemistry and Biotechnology. The American College, Madurai, NE.105.

13. September 2001. Korai sedges and varieties-Their properties usefulness for different kinds of Mats, Mat weavers Association, Patthamadaai.
14. Feb. 2002. Invited Lecture, Plant Tissue Culture and Production of haploid plants. Work shop on Tissue culture Techniques, Centre for Biodiversity and Biotechnology St. Xavier's College, Palayamkottai.
15. Feb. 2002. Plenary Lecture, Utilization of Biotechnology in conservation of Biodiversity. UGC sponsored State level seminar on Recent Trends in Eco conservation, Department of Botany, St. John's College, Palayamkottai.
16. May 20 –29, 2002. Plant tissue culture- a fundamental tool in Biotechnology. Workshop on Advanced Techniques in Biotechnology, School of Biotechnology and Research institute, Muthyammal college of Arts and Science, Namakkal.
17. July 2002. Plant Tissue culture an alternative technology for conservation of plants. Inauguration of Planta, AyanadarJanakiammal College for Arts and Science, Sivakasi.
18. Jan. 7, 2003. Plenary lecture, Conservation of Medicinal Plants through Tissue Culture. "SiddharThiruvizha". State level Seminar on Siddha Medicinal Plants, Siddha Medical College, Palayamkottai.
19. Feb. 2003. Inaugural Lecture on Integration of Plant biotechnology in conservation programs. National Seminar on Gene fest 2003, Vivekanandhaa College of Arts and Science for women, Thiruchengode.
20. Nov. 2003. Inaugural Lecture on Prospects of Biotechnology, for Botany Association, St. Xavier's college, Palayamkottai.
21. April 2004, Invited Lecture on Role of Biotechnology in biodiversity conservation, School of Biotechnolgy, Barathidasan University, Tiruchirappalli.
22. May 2004, Invited Lecture on Integration of Plant Biotechnology in Biodiversity conservation Programs, Department of Biotechnology, Madurai Kamaraj University, Madurai.
23. September, 23-24, 2004, Plenary Lecture on Plant Morphogenetic patterns in Micropropagation, Workshop on advanced Techniques in Plant Biotechnology, JJ. College for Arts and Science, Pudukkottai.
24. October, 2004. Guest lecture on Introduction to Plant Biotechnology and Molecular biology, department of Biotechnology, Sri Paramakalyani College, Alwarkurichi.
25. December 2-4, 2004, Plenary Lecture on Prospects of Biodiversity and Biotechnology on Conservation Programs, National seminar on Healthy Environment for the next generation, School of Entomology and Centre for Natural Resources Management, Loyola College, Chennai.
26. February 9, 2005, Invited Lecture on "Scientific Research and Future Prospects", organized by Research committee, Sri Parasakthi College for Women, Courtallam.
27. February 14, 2005, Plenary Lecture on In vitro Production of Plant secondary metabolites, National Seminar on emerging trends in Industrial Biotechnology, Bioxplore 2005, Vivekanandhaa College of Arts and Science for women, Thiruchengode.

28. August 25, 2005. Inaugural Lecture, Prospects of Biotechnology. Organized by Biology Association, Department of Botany and Zoology, St. John's College, Palayamkottai.
29. September 24, 2005. Lead lecture on "In vitro production of Secondary metabolites" National seminar on Nutraceuticals: Status and Prospects, organized by School of Biotechnology, Dr. G. R. Dhamodharan college of Science, Coimbatore.
30. September 26, 2005. Lead and Public lecture on Biotechnology and Society. Organized by Indian Institute of Public Administration, Tirunelveli at St. John's College, Palayamkottai.
31. September 29, 2005, Invited Lecture on "Integrating Scientific Research and Teaching Programs", organized by Research Committee, Sri Parasakthi College for Women, Courtallam.
32. October 7, 2005, Invited Lecture on "Plant Tissue culture", organized by Department of Botany, Sri Parasakthi College for Women, Courtallam.
33. January, 30-31, 2006. Plenary Lecture On "Plant Biotechnology and conservation of Biodiversity", National Conference Biodiversity, School of Entomology and Centre for Natural Resources Management (SECNARM), Loyola College, Chennai.
34. February 24-25, 2006. Invited paper Presentation On Biological, Histochemical and Fluorescent properties of *Caesalpinia sappan* L. – natural dye yielding plant, National seminar on Advances in Plant Sciences, Department of Plant science, Bharathidasan University, Tiruchirappalli.
35. March 19-11.2006. Presented a Poster on 'An *in vitro* protocol for rapid clonal propagation of East Indian red wood (*Caesalpinia sappan* L.) – a natural dye yielding medicinal plant'. At first International Conference on Biotechnology for Sustainable Agriculture and Agro Industry, Hyderabad, India.
36. September 2006. Invited Plenary Lecture on Perspectives of Biotechnology. Two days Seminar on Biosciences, organized by Zoology Department, Sri Paramakalyani College, Alwarkurichi.
37. October 2006. Invited Lecture on Environmental Problems and Remedies. One day seminar on Environment organized by Rani Anna college of Arts and Science College, Tirunelveli.
38. Nov.6-12.2006. Presented a poster and Demonstrated on Natural Dyeing of sedge culm strands (4 hrs Program). International Symposium on Natural Dyes. Organized by UNESCO and Craft Council of India, Hyderabad.
39. Nov.30 and Dec.1, 2006. Invited lecture on Grasses of Tamil Nadu- Diversity, Distribution and Ecology. Workshop on "Herbaceous Taxa in south India- Ecology, Distribution and Applications in Palaeovegetation studies" organized by French Institute, Pondicherry.
40. Dec.2, 2006. Invited lecture on Natural Dyes. Refresher course in Environmental Sciences, organized by Academic Staff College and School of Ecological Sciences, Pondicherry University, Pondicherry.
41. Dec.2, 2006. Invited lecture on Biodiversity of Grasses. Refresher course in Environmental Sciences, organized by Academic Staff College and School of Ecological Sciences, Pondicherry University, Pondicherry.

42. Dec.2, 2006. Invited lecture on Plant Biotechnology in conservation of Biodiversity. Refresher course in Environmental Sciences, organized by Academic Staff College and School of Ecological Sciences, Pondicherry University, Pondicherry.
43. Feb. 8. 2007. Invited plenary lecture on Biological resources of Natural Dyes. One day seminar cum Workshop on Natural Dyes. Organized by Department of Botany, Sri Parasakthi College for Women, Courtallam.
44. March 5-9, 2007. Invited lectures on Morphology of Grasses. National workshop on Grass Systematics, MOEN&F, organized by Department of Botany, Shivaji University, Kolhapur.
45. March 5-9, 2007. Invited lectures on Floral Diversity of Grasses. National workshop on Grass Systematics, MOEN&F, organized by Department of Botany, Shivaji University, Kolhapur.
46. Invited Guest Lecture, on The significance and Revival of Natural Dyes – CAS in Marine Biology, Annamalai University, Parangipettai, on October 2007.
47. November 29 to December 1, 2007. Invited Plenary Lecture on Natural Dyeing of Precious Plant fibres with Indigo, International seminar on Culture of Indigo – Exploring the Asia panorama: Plant, Product, and Power. Organized by India International Centre – Asia Project (IIC) in association with Indian Council of Cultural Relations and Indian Council for Historical Research, IIC, New Delhi.
48. Jan. 22, 2008. Plenary lecture on Perspectives of Plant biotechnology, one day seminar at Vivekananda College of Arts and Science, Thiruchengodu.
49. Jan. 30, 2008. Invited lecture on Biotechnology: Recent trends and Issues. One day State level seminar organized by Department of Plant Biology and Biotechnology, St. Xavier's college, Palayamkottai.
50. Feb. 18, 2008. Invited Plenary Lecture on MOLECULAR MARKERS AND BIOLOGY OF MAT SEDGES. National seminar on Biotechnology – recent trends, organized by The Madras Christian College, Tambaram, Chennai.
51. September 24th2008. Invited Guest Lecture on Environmental Sciences: Grasses and Grass lands – Are we missing them? At University of Pondicherry.
52. September 24th2008. Invited Guest Lecture on Environmental Sciences: Natural dyes – an ecofriendly technology, At University of Pondicherry.
53. Jan. 31, 2009. Invited special Lecture on “Natural dyes- Revival and Importance”, Department of Life Sciences, University of Manipur, Imphal.
54. Jan. 05, 2009. Delivered an invited lecture on *Caesalpinia sappan* – natural dye yielding plant, at a National conference on Modern trends in plant In vitro Biology held at Department of Plant Science, Bharathidasan University, Tiruchirappalli.
55. 2-4 July 2009. First platinum Jubilee meeting of the Indian Academy of Sciences, Indian academy of sciences, IAS, DBT Bangalore – 560 080.
56. July 2010. Plenary lecture on Grasses and Grasslands of India, Department of Microbiology, Bharathiar University, Coimbatore.
57. 2010. Invited plenary lecture on Importance of Molecular Markers in Biodiversity Characterization and Plant Breeding Programmes, during the Alumni national Seminar organised by Department of Botany, Loyola College, Chennai.

58. March 2010. Plenary lecture in Pachaiyappas, 2009
59. Invited lecture on Grasses of Southern Western Ghats, MUNDANTHURAI, KMTR.
60. Feb.2, 2010. Invited Inaugural and Key note Lecture on Plant molecular markers” at a national seminar on Vistas in Plant and Microbial biotechnology, PG and Research Department of Biotechnology, Sengunther Arts and Science College, Tiruchengode.
61. March 15, 2010. Invited special lecture on Mycorrhiza in Grassland Ecosystem” at a training program on Mycorrhizal systems for sustainable Agriculture, horticulture and forestry, by Department of Agricultural Microbiology, TNAU, Coimbatore.
62. Oct. 15, 2010. Mundanthurai, Natural Heritage Site – Nomination of working sheets at KalakadMundanthurai Tiger Reserve KMTR UNESCO, IUCN, TN forest dept.
63. Dec. 7, 2010. NATURAL DYEING – AN ALTERNATIVE COLOURING FOR HANDICRAFT PRODUCTS, National Seminar on Handicraft products, Sri Paramakalyani College, Alwarkurichi
64. Dec. 28 -29, 2010. Assessment of Fruit Variations in *KingiodendronPinnatum* – A Red Listed Species From Southern Western Ghats by Random Amplified Polymorphic DNA (RAPD), at a National Seminar on Forestry and Workshop on forest genetic Resource management network, organized by IFGTB, Coimbatore.
65. Feb. 14. 2011. Invited inaugural and lead lecture on ‘**Revival of Natural Dyeing – Eco-friendly Dyeing of Precious Plant Fibres**’ at a state level seminar on Modern trends in Biotechnology, Department of Botany, Loyola College, Chennai.
66. Feb. 23, 2011. Invited key note address at state level seminar on **Avenues in Biotechnology- need of the hour.** Department of Zoology, Sri Parasakthi College for Women, Courtallam.
67. April 24- 30, 2011. Invited lecture New standardized application methods of natural dyes from South India on plant fibres used in handicrafts and cottage industries” – International symposium on natural dyes (ISEND) 2011, La Rochelle, **France**, organized by UNESCO, ARRDHOR CRITT HORTICOL.
68. June 9, 2011. Delivered a special lecture and Sensitized school children on “**Environmental Problems**” on the Environment Day celebration, at Pushpalatha Vidhya Mandir, Thiyagarajan Nagar, Tirunelveli.
69. Aug. 12, 2011. Delivered a Plenary lecture on “Plant Protoplasts and Secondary Metabolites” and provided Hands training and served as a Resource person at plant tissue culture applications organized by networking resource Centre in Biological sciences, School of Biological Sciences, Madurai Kamaraj University.
70. Aug. 26, 2011. Invited inaugural lecture on ENVIRONMENTAL PROBLEMS – YOU AND I, at the Inauguration of Biotechnology Association, Department of Biotechnology, Sri Paramakalyani College, Alwarkurichi.

71. Dec. 21. 2011. Invited Lecture on Natural Dyes – an Eco-friendly technology” at the UGC Refresher course in Ecology and Environmental Sciences, Academic Staff College, University of Pondicherry.
72. Feb. 27 & 28. 2012. Invited Inaugural lecture on **My Search and Research** at PG Seminar in Plant biology and Plant biotechnology, Department of Botany, Madras Christian College, Tambaram.
73. March, 19, 2012. Invited plenary lecture on Thrust areas in Plant science. – Orientation Program on Research Activities in Science for College teachers, Manonmaniam Sundaranar University, Tirunelveli.
74. Sep.11. 2012, Lead lecture on **Botany and Beyond**, Inspire program organized for school children, organized by Sacred heart’s college, Thevara, Kerala.
75. Sep. 27, 2012. Special lecture series. Invited Guest lecture – Environmental Issues and Application of Biotechnology organized by Zoology Department, SadakathullahAppa College, Tirunelveli.
76. Oct. 08, 2012 Invited Valedictory lecture – ‘**Wildlife trade**’during wild life week celebration, organized by Department of Zoology, Rani Anna Govt. College, Tirunelveli.
77. **Oct. 12, 2012.** Delivered a Plenary lecture on “Plant Protoplasts isolation, culture and Extraction of Secondary Metabolites” at Plant cell culture applications organized by UGC Networking resource (NRCBS) Centre in Biological Sciences, School of Biological Sciences, Madurai Kamaraj University.
78. Jan. 10 & 11, 2013. Invited plenary lecture on **MISCELLANEOUS PLANT FIBRES AND NATURAL DYES – SUSTAINABLE UTILIZATION, MANAGEMENT AND CONSERVATION** at an International conference on sustainable utilization, management and conservation of bio resources Centenary Year celebrations. Department of Botany, St. Joseph’s College, Triuchirappalli – 620 002.
79. March 28, 2013. Invited plenarypubliclecture on **Climate Change and Loss of Biodiversity**, organized by Southern zone agro climatic workshop, Tirunelveli Division, at St. Xavier’s college, Palayamkottai.
80. Aug. 21, 2013. Invited special lecture on ORGANOGENESIS – SOMATIC EMBRYOGENESIS. DBT sponsored training program on Biotechnological methods, organized by Dept. of Botany, St. Xavier’s college, Palayamkottai.
81. **Nov. 26, 2013.** Served as a Resource person and delivered a talk on **Environmental issues YOU and I**, at the UGC-ASC Refresher course organized by Dept of Environmental Sciences, Bharathiar University, Coimbatore- 46.
82. **Nov. 26, 2013.** Served as a Resource person and delivered a talk on **NATURAL DYES**, at the UGC-ASC Refresher course organized by Dept of Environmental Sciences, Bharathiar University, Coimbatore- 46.
83. **Nov. 30, 2013.** Invited Popular Science Lecture on J.C. BOSE – THE FIRST MODERN SCIENTIST OF INDIA, during J. C. Bose centenary Birthday celebrations for school students organized by District Science Centre, Thirunelveli.
84. **Dec. 5-6, 2013.** Invited Plenary lecture on BIODIVERSITY ASSEMENT AND CONSERVATION OF RET MEDICINAL PLANTS OF SOUTHERN

- WESTERN GHATS, UGC sponsored national seminar on Natural Resources Management : a key to sustainability organized by Dept. of Botany, Assumption college, Changanacherry, Kerala.
85. **Dec. 13, 2013.** Invited Plenary lecture on **PLANT DIVERSITY AND CONSERVATION OF RED LISTED PLANTS OF SOUTHERN WESTERN GHATS**, UGC sponsored national Conference on Ecology and Conservation organized by Dept. of Botany, St. Johns College, Palayamkottai, Thirunelveli. Kerala.
 86. **Dec. 16, 2013.** Invited Plenary lecture on **BIODIVERSITY AND CONSERVATION OF SOUTHERN WESTERN GHATS**, Kerala forest department sponsored National seminar on ‘Mountains – the repository of Biodiversity’ organized by Dept. of Botany, The Cochin College, Cochin– 682 002, Kerala.
 87. **Dec. 17, 2013,** Invited guest lecture on ‘Revival of Natural Dyes’, department of Botany, Sacred heart’s College, Thevara, Kerala.
 88. **Feb. 27, 2014.** Invited Key note address/lecture on **Natural Dyes – prospects and revival for environmental safety**, at the state level seminar on Modern Biology- ‘Henceforth and Hitherto ‘organised’ by Department of Biochemistry, V.V.V Vanniaperumal College for Women, Virudhunagar on 27.02.2014.
 89. **June 5, 2014.** Invited popular Science lecture – on **Climate change** at the district Science Centre, Environment day celebrations, Tirunelveli.
 90. **Jul. 25, 2014.** Invited lead lecture. **Perspectives of Plant biotechnology-towards conservation.** National seminar on Recent scenario in biotechnology-concepts and applications, organized by Sri Parasakthi College for women, Courtallam. Sponsored by TNSCST.
 91. **Aug. 07, 2014.** Invited lead lecture and live demonstration on **Anatomy – facts and fabulous evidences.** National workshop on Taxonomy and anatomy, organized by St. Johns College, Palayamkottai, Sponsored by TNSCST.
 92. **OCT. 27TH 2014.** An invited Inaugural lecture for the Inauguration of Botany club 2014, ‘The miracle and revival of natural Dyes’ at The Department of Botany American College, Madurai.
 93. **Oct 28, 2014.** Invited lecture and Resource person on Grasses – Diversity, Ecology and Distribution and silica Phytoliths INQUA-HABCOM workshop entitled Paleoanthropological perspectives on plant communities in south Asia Organized by Sharma centre for heritage Education and French Institute of Pondicherry.
 94. **Nov. 05. 2014.** Inaugural lecture on Medicinal Plants – Utilization and Conservation at the Extension Activities Workshop Organized by SPCKES, MSU, ALWARKURICHI.
 95. **Nov. 12– 19.2014.** Theme paper Oral presentation on ‘‘**Conservation of Red listed Medicinal Plants of western Ghats India – A Success Demonstration**’’ in the **IUCN WORLD PARK CONGRESS 2014** –organized by IUCN held in Sydney (Nov. 12 – 19, 2014), Australia.
 96. **Nov.20. 2014.** Invited Special Lecture on ‘Floristic Diversity of Peninsular India’. School of Agricultural and Wine Sciences, Charles Sturt University, Orange, NSW, Australia.

97. Jan. 09, 2015. Invited plenary lecture and Resource person on “Floral Diversity and Reproductive Biology of Grasses of Western Ghats ” at National seminar on Flowering Plant reproduction and diversity” sponsored by UGC, SERB, KSCSTE, organized by Post Graduate Department of Botany, Fatima Mata National College, Jan. 09, 2015, Kollam – 1.
98. Jan. 29, 2015. Invited lead lecture on Plant Histochemistry and Developmental Biology, at a “**National seminar on New frontiers in Plant Sciences and Biotechnology**” organized by department of Botany, Goa University, Jan. 29-30, 2015.
99. Feb. 16, 2015. Invited plenary lecture and Resource person on “Floristic Diversity of and conservation of red listed medicinal plants” a national seminar on **Biodiversity: Current trends and Prospects**, organized by Department of Botany, LADY DOAK COLLEGE, Feb. 02, 2015, Madurai.
100. Feb. 02, 2015. Invited plenary lecture and Resource person on “**Diversity and Conservation of Red listed Medicinal Plants of Southern India**” a national seminar on **Biodiversity: Current trends and Prospects**, organized by Department of Botany, Meenakshi College, Feb. 02, 2015, Madurai.
101. Feb. 02, 2015. Invited plenary lecture and Resource person on “**Diversity and Conservation of Red listed Medicinal Plants of Western Ghats**” at a national seminar on biodiversity: Conservation organized by Department of Botany, Meenakshi Govt. Arts College for Women, Feb. 02, 2015, Madurai.
102. Jan. 20, 2016. Key note address & An invited **Inaugural lecture on the Work shop on Plant tissue culture techniques**, organized by Department of Biotechnology, Sri Paramakalyani College, Jan. 20 -21, 2016, Alwarurich.
103. Jan. 22, 2016. Invited plenary lecture and Resource person on **Grasses – Diversity, Ecology and Distribution and Silica Phytoliths** INQUA-HABCOM workshop entitled Paleanthropological Perspectives on Plant Communities in South Asia Organized by Sharma centre for heritage Education and French Institute of Pondicherry, Jan. 18-24, 2016.
104. Jan. 30, 2016. Invited lead lecture on “**Success Conservation of Red Listed Medicinal Plants of Southern Western Ghats**”, at the International Symposium on Medicinal Plants and Herbal Drugs in Human Wealth A Global Prospective, organized by P. G. Research Department of Botany, Pachaiyappa’s College, 29- 31st Jan, 2016, India.
105. Feb. 23, 2016. Invited guest Lecture at Thiagarajar College, Madurai on the topic “**Beyond Botany and Biotechnology**” Organized by Botany and Biotechnology Departments.
106. Oct. 06, 2016. Delivered an Endowment lecture (Fr. Balam Memorial 47th Lecture) on **Biodiversity conservation with biotechnological interventions – a successful model based on net work projects**. Organized by Department of Botany, St. Josephs college, Trichirappalli – 620 002.
107. Dec. 19-21, 2016. Delivered special lectures on Anatomy & Fluorescent Microscopy to participants from southern India, on a Workshop on Microscopy, Histochemistry and micro techniques organized by Dept. of Plant Science, MSU during the three day national workshop.

108. Feb. 08, 2017. As a Resource and Delivered a invited lecture on "**Climate change and Biodiversity**" at a state level seminar on "Awareness on climate change and its impact on Biodiversity of southern Tamil Nadu" organized by research department of Botany, VHNSN College, Virudhunagar – 626 001.
109. Feb. 13,2017, Delivered special lectures on Natural Dyes and their applications at a WORK SHOP ON "NATURAL DYES AND THEIR APPLICATIONS" under the Research extension activities on **Feb. 13, 2017** at the Department of Plant Science, Manonmaniam Sundaranar University, Abishekapatti – 627 012
110. Feb. 16, 2017. Delivered a Lead lecture on "**Biology And Conservation Of Medicinal Plants From Southern Western Ghats**"in National Conference on "Agrotechnology and Profitable Marketing of Tropical Medicinal and Aromatic Plants" Jointly organized by Tamil Nadu Agricultural University, Coimbatore and Society for Conservation and Resource Development of Medicinal Plants, New Delhi, India.
111. Feb. 25, 2017. Delivered a lecture on Recent trends in Plant Science, For Intercollegiate Botany students at Dept. of Plant Science, MSU during Science day Celebrations 2017.
112. Mar. 01, 2017. Delivered a Plenary lecture on **PLANTS, PEOPLE AND PRODUCTS** in a National conference Organized by Department of Botany, St. Xavier's College, Palayamkottai.
113. July 28, 2017. Delivered a plenary lecture on Conservation of Red listed medicinal plants of Southern western Ghats, On World nature conservation day celebrations, Organized jointly by Department of Plant Science, Manonmaniam Sundaranar University, Environment Amelioration Services Trust, Tirunelveli and Nellai Nature club, M.S. University, Tirunelveli.
114. Jan. 18, 2018. Delivered a Key note address on the Red listed medicinal plants of Southern western Ghats. During silver jubilee celebration national conference on Environmental technologies and organized by SPKCES, MSU, Alwarkurichi.
115. Feb. 01, 2018. Delivered a plenary lecture/Key note address on "Sustainable Utilization of natural dyes and coloring of unconventional plant fibres during a National conference on Bioresource utilization for Sustainable food and energy production organized by Department of Botany, Periyar University, Salem, Feb 1 – 2 . 2018.
116. Feb. 12-13, 2018. Delivered two lectures on Morphology of Grasses and Evolution of Grass inflorescence during the Science Academies Lecture workshop on Plant Taxonomy: Concerns and Strategies organized by St. Xavier's College (Autonomous), Palayamkottai.
117. Feb. 15, 2018. Delivered an invited plenary lecture on Medicinal plant of southern western ghats" at UGC sponsored national seminar on Phytomedicines, organized by Department of Botany, Nandanam Govt. Arts college for Men, Chennai –
118. Feb. 28, Delivered the Chief Guest Address and Key note lecture on the National Science day Celebrations at K.R, College of Arts & Science K.R" Nagar, Kovilpatti - 628 503. Thoothukudi (dist).

119. March 28, 2018. Delivered an invited plenary lecture on “Diversity And Conservation Of Medicinal Plants Of Southern Western Ghats” at UGC sponsored national seminar on , organized by Centre for Advanced Studies in Botany, Madras University, Guindy Campus.
120. Aug. 29, 2018. Delivered an invited Plenary lecture on “Understanding Anatomy And Reproductive Biology Of Medicinal Plants For Long Term Conservation In Western Ghats, at an International Conference on Phytomedicine, 29th –31st August 2018, organized by Dept. of Botany - Bharathiar University – Coimbatore.
121. Sep. 28, 2018. Delivered a lead lecture on Plants Pigments and Dyes for Coloring Remarkable Plant Fibres, at a National seminar on Biodiversity - A Resource For Future Sustenance on 27 & 28 September, 2018, organized by Department of Botany & Research Centre, Scott Christian College (Autonomous), Nagercoil, Tamilnadu.
122. Oct. 29-31, 2018. Delivered a lead lecture on Grasses of south Western Ghats – Spikelet Diversity in XXVIII Annual conference of Indian Association for Angiosperm Taxonomy & international Symposium on Conservation of Angiosperm Diversity L: Hidden Treasure of Today and Tomorrow, Organized by Indian Association for Angiosperm Taxonomy (IAAT) at The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India.
123. Feb. 13, 2019. Delivered a lead lecture on “New dimensions of Agrostology” at a State level seminar on Emerging trends in Plant Taxonomy organized by Department of Botany, SriParasakthi college for women, Courtallam.
124. March 03, 2019. Delivered Inaugural address at a “National seminar on Bioprospecting of Bioresources from sea, organized by Department of Botany, Rani Anna Govt. College for women, Tirunelveli.
125. March 13, 2019. Delivered a Plenary Lecture on “Recent trends in Plant Sciences”, organized by St. Xavier’s College (Autonomous), Palayamkottai.
126. July, 2019. Delivered a Special Invited Lecture on “Scope of Botany ”, organized by St. Johns College, Palayamkottai.
127. July 17, 2019. Delivered an Invited lecture on “Revival of Natural Dyeing Processes, At the UGC (MHRD) sponsored Refresher course in Life Sciences, organized by UGC – Human Resource Development Centre, Bharathidasan University, Trichy.

128. Aug. 21, 2019. Delivered an Invited Special lecture on Diversity and conservation of Red listed medicinal plants of Western Ghats, at national Seminar on Conservation and Role of Academic Institutions' organized by GVN College, Kovilpatti.
129. Sep. 18, 2019. Delivered an Invited Special lecture on perspectives on people and plants at State level Seminar on "Emerging trends in Plant Sciences" organized by Department of Botany, V.H.N.S.N.College, Virudhunganur, Tamilnadu.
130. Feb. 10. 2020. SPKCES "WET LAND DAY" celebration Invited lecture. SPKCES. M.S. University, Alwarthur.
131. Feb. 14. 2020. Delivered an invited lecture on Palmyra – The pinnacle palm. At a national seminar on Plant sciences – fourth wave. Organized by Department of Botany, Meenakshi Govt. arts and Science college, Madurai.
132. Jul. 11, 2020. Served as a Resource person and delivered an online public Lecture on Introduction on Grasses organised by SuzhalArivomgroup.
133. Jul. 27, 2020. Delivered an invited lecture on Research Ethics at a webinar on Integration of teaching and Research, organized by Department of Botany, SFR college, Sivakasi.
134. Aug. 07, 2020. Delivered an invited lecture on Taxonomy of Grasses. At a National level one week online short term course on Plant Taxonomy Organized by Department of Botany, Nizam College, Osmania University, Hyderabad, Telangana.
135. Oct. 12, 2020. Served as a Resource person and delivered a lecture on "Botany of Palmyra Palm" at a national Refresher Course in Botany, Organized by Centre for Advanced Studies in Botany, Guindy Campus, University of Madras.
136. Jan. 06, 2021. Delivered an Invited lecture on Conservation of few red listed medicinal plants of Southern western Ghats, at the International Conference on New Horizons in Plant Science, organized by Kerala University.
137. Jan. 20, 2021. Delivered an Invited lecture on Conservation of Red listed plants of Western Ghats, at two-day webinar (sponsored by TNSCST) on Biodiversity and Bioprospecting, organized by Department of Botany, St Mary's College, Thoothukudi.
138. Feb.22, 2021. Served as a resource person and delivered an invited lecture on Histochemistry and its applications in Biology during the Refresher Course in Life Sciences: organized by HRDC, Goa University.
139. Feb. 26 & 27, 2021. Best paper presentation during the 11th All India Conference of The Scott Research Forum, Scott Christian College, Nagercoil, on the topic "Leaf Anatomy of Palmyra Palm – *Borassus flabellifer* L."
140. Mar. 28, 2021. Served as a Resource person and delivered an online public Lecture on "**PanaiArivom**" organized by SuzhalArivom group.

141. June 5, 2021. Served as a Resource person and gave a special invited online talk on “Ecosystem Restoration” during the World Environment Day Celebration organized by Department of Botany, Bishop Heber College, Tiruchirappali.
142. Sep. 09, 2021. Served as a Resource person and gave a special invited online talk on “Why Not Botany” motivational talk to Life science students. Organized by department of Botany of Mount Carmel College, Bangalore.
143. Sep. 13, 2021. Served as a Resource person and delivered an Invited guest Lecture on “Integration of Plant Biotechnology in conservation programs” organized by Department of Botany, Nirmala college, Coimbatore.
144. Sep. 14, 2021. Served as a resource person and delivered an invited lecture on “Wetland Biodiversity – Management Perspectives”, during the Refresher Course in Life Sciences: sponsored by HRDC, (Interdisciplinary), conducted by the UGC-Human Resource Development Centre, Bharathidasan University, Tiruchirappalli for University and College Teachers on Google Meet.
145. Aug. 26 -28, 2021. Best paper presentation award (third place) during the First Nabs International Conference on Life Sciences: Contemporary Approaches in Biological Science for Food, Health, Nutrition Security and Conservation of Biodiversity, organized by Faculty of Agriculture, Annamalai University and National Academy of Biological Sciences, Chennai on the topic “Determination of resource mobilization during seedling growth of palmyra palm(*Borassus flabellifer* L.)”
146. Oct 17, 2021. Delivered a Public lecture to St. Josephs Ecology communion on Climate change and its concerns. Organized by St. Josephs Ecology communion, Trichirappalli.
147. Nov. 15, 2021. Served as a resource person and delivered an invited lecture on “Climate change and its predictions”, during the Refresher Course in Environmental Sciences: sponsored by HRDC, (Interdisciplinary), conducted by the UGC-Human Resource Development Centre, Bharathiar University, Coimbatore for University and College Teachers on Google Meet.
148. Nov. 30, 2021. Served as a resource person and delivered an invited lecture on “Taxonomy of Grasses” during the Refresher Course in Botany: sponsored by HRDC, conducted by the CAS Botany, the University of Madras for University and College Teachers on Google Meet.
149. Dec. 10, 2021. Served as Chief Guest and resource person to inaugurate and delivered the inaugural address on the Conservation of Biodiversity at One day webinar on diversity and conservation of Tropical plants organized by the department of Botany and Research Centre Scott Christian College, Nagercoil.
150. Dec. 16, 2021. Served as a Resource Person and delivered a public lecture on “*Thamizhar Vazhviyalil Vinnai thodum Panai*” at the 6th Bell Pins-Atree

- Conservation Leadership Award & Lecture organized by District Science Centre Tirunelveli.
151. Feb. 04, 2022. Served as a resource person and delivered an invited lecture on "Seedling biology of Palmyra Palm during a Two-day National Webinar on Advances in Plant Science" organized by the Department of Botany, Goa University.
 152. April, 22, 2022. Served as a resource person and delivered an invited lecture on Conservation Biology on World Earth day celebrations, theme Investment in our Planet, virtual guest lecture, organized by Department of Biotechnology, School of Bioengineering in association with Unnat Bharat |Abhiyan 2.0 SRMIST and SRM innovation, Incubation & Entrepreneurship Centre, SRM University, Chennai.
 153. Nov. 04, 2022. Served as a resource person and delivered an invited lecture on "Biology of Palmyra palm" during the Refresher Course in Botany: sponsored by HRDC, conducted by the School of Life Sciences, Madurai Kamaraj University for University and College Teachers on Google Meet.
 154. 08.09.2022. Served as a resource person and delivered an invited lecture on Mycorrhiza in the National conference on Emerging trends in Microbial Technology, organized by the Department of Botany, St. Mary's College, Tuticorin.
 155. 12.10.2022. Served as a resource person and delivered an invited lecture on "Natural Dyes and Botanical Histochemistry" during the Refresher course in Botany for college and university teachers (Batch XV) conducted by the UGC – HUMAN RESOURCE DEVELOPMENT CENTRE, UNIVERSITY OF Madras, in association with Centre for Advanced studies in Botany, by Zoom meeting platform.
 156. 09.12.2022 Served as a Resource person and delivered an invited lecture on the Impact of CLIMATE CHANGE on flowering plants with special reference to Grasses and Grasslands of India, Organized by the Department of Botany and Research Centre Scott Christian College, Nagercoil.
 157. 12.12.2022. Served as a resource person and delivered an invited lecture on "Climate Change and its Consequences" during the induction program for college and University teachers UGC – HUMAN RESOURCE DEVELOPMENT CENTRE, UNIVERSITY OF CALICUT Teachers on Google Meet.
 158. Jan. 12, 2023. Served as a resource person and delivered an invited expert lecture on "Shrinking Habitats and consequences", on the World Habitat Day celebrations, organized by Department of Botany, Alagappa University, Karaikudi.
 159. March 27, 2023. Served as a resource person and delivered an invited lecture on "Biology of Palmyra Palm", One day Lecture seminar on Emerging trends in environment and Bioscience, by the Department of Botany, S.T. Hindu College, Nagercoil.
 160. 28.03.2023. Served as a resource person and delivered an invited lecture on "Millets - " during the Refresher course for college and University teachers UGC – HUMAN RESOURCE DEVELOPMENT CENTRE, Madurai Kamaraj University, by Google Meet.
 161. March 29, 2023. Served as a resource person and delivered an invited lecture on Millets – the forgotten boost of human Life, Two-day International conference on Applied biosciences – a sustainable developmental Goal, organized by Botany, the Department of Botany, St. Mary's College, Tuticorin.

9. SEMINAR, CONFERENCES, SYMPOSIA & WORKSHOPS


Conducted/ Organized :

Name of the Seminar/Conferences/Symposia/Workshop	Name of the Sponsoring Agency	Place and Date
Trainers Training Program on Community Participation in Conservation of Biodiversity- One of the organizing committee members.	MSSRF and MSU	SPKCES, Alwarkurichi, 10-15 Aug. 1998
UGC-Refresher Course in Botany- Plant Diversity – One of the Coordinators.	UGC	SPKCES, MSU, Alwarkurichi, 16 Nov. to 13 Dec. 1998
Tamil Science Congress, Organizing committee member	MSU	SPKCES, MSU, 26-27 Dec. 1998
National Seminar on Thermal Ecology, One of the Organizing committee members	BARC	Jan. 30-31. 2002. M.S. University, Abishekapatti.
UGC-Refresher Course in Botany- Plant Biotechnology- Coordinator	UGC	SPKCES, MSU, Alwarkurichi, Jan. 22 to Feb. 12, 2003
Workshop on Natural dyes for Mat weavers of Pathamadai – Jointly Organized with Department of Botany, Sri Parasakthi College for Women, Courtallam.	DST	Pathamadai, November 20, 2005
Natural Heritage Site – Nomination of working sheets at KalakadMundanthurai Tiger Reserve	UNESCO, IUCN, TN Forest Dept.	15.10.2010.Mundanthurai, KMTR
Dissemination of Innovative Technology (DIT) –Hands on Training Workshop on natural dyes	TNSCST, MSU	Feb. 23- 25, 2012 SPKCES, MSU Alwarkurichi.
National Conference on Impact of Climate Change on Environment and Biodiversity	UGC 12 TH PLAN, TNSCST, MSU	Mar. 26 & 27, 2015. SPKCES, MSU
Inter collegiate Science Quiz on National Science Day Celebration	Plant Science Annual Budget	MSU PLANT SCIENCE Feb .26, 2015
Inter collegiate Science Quiz on National Science Day Celebration.	Plant Science Annual Budget	MSU PLANT SCIENCE Feb .26, 2016.
Workshop on Microscopy, Histochemistry and Microtechniques	UGC 12 TH PLAN, DST – SERB, MSU	Dec. 19-21, 2016. Department of Plant Science, MSU
Work shop on “Natural Dyes and their	UGC	Feb. 13, 2017.

Applications”	12 TH PLAN, MSU	Department of Plant Science, MSU.
Inter collegiate Science Quiz on National Science Day Celebration	Plant Science Annual Budget	Plants Club – Palmyra, Feb .26, 2017
One Day Seminar on World nature conservation day celebration.	Plant Science Annual Budget and Amelioration services Trust	July 28, 2017. Organized jointly by Department of Plant Science, Amelioration Services Trust, Tirunelveli and Nellai Nature club.
Intercollegiate Botany Quiz on National Science Day Celebration.	Plant Science Annual Budget and sponsors	Plants Club – Palmyra Feb .26, 2018
Intercollegiate Botany Quiz and Palmyra Fest on National Science Day Celebration.	Plant Science Annual Budget and sponsors	Plants Club – Palmyra Feb .26, 2019
Workshop on Restoration of Wetlands: 23 Jan 2020M.S.University, AbhishekapattiiCross-learning from Scientific Approaches and Community Efforts	Plant Science Annual Budget and sponsors	Jan. 23, 2020
Intercollegiate Competitions andBotany Quiz and Palmyra Fest on National Science Day Celebration.	Plant Science Annual Budget and sponsors	Plants Club – Palmyra Feb.26, 2020
Intercollegiate Competitions and Botany Quiz and Palmyra Fest on National Science Day Celebration.	Plant Science Annual Budget and sponsors	Plants Club – Palmyra Feb .26, 2021
Intercollegiate Competitions and Botany Quiz and Palmyra Fest on National Science Day Celebration.	Plant Science Annual Budget and sponsors	Plants Club – Palmyra Feb .26, 2022
Two days Exhibition and One day National conference on Revival millets in our diets organized along with ATREE, MSU, sponsored by Annamalais Toyota.	Plant Science Annual Budget and Annamalais Toyota	Feb. 27 & 28, 2023

10) Merits/ Awards/Honors/Recognition/Scholarships:

S. No.	Name of the Award	Name of the Organization	Year
1	JRF/SRF –Fellowship Award	UGC, India	1991
2	Overseas Doctoral Fellowship	Ministry of Welfare, India	1994
3	Best Researcher Award	Loyola College, Madras	1997
4	TN SLET/TRB	TN SLET/TRB Cleared	1997
5	Envis. Expert On Indian Grasses	MOEN & F, New Delhi	2000
6	Natural Dye Specialist	UNESCO, FRANCE	2006

7	Potential Mentor	 DST INSPIRE	2005 – till date
8	Potential Teacher and Research Contributor	Indian Academy of Sciences	2005- 2008
9	IUCN - SSC Indian Sub-continent Plant Specialist Group (ISPSG), WORLD LEVEL	International union for conservation (IUCN), Gland, Switzerland	2007- till date
10	Advocate Commissioner for Environmental Impact Assessment at Courtallam	Madras High court – Madurai bench	2016
11	Advocate Commissioner for Creation of Awareness on eradication of SeemaiKaruvellam – <i>Prosopis juliflora</i>	Madras High court – Madurai bench	2017
12	Commissioner for Impact Assessment on sand mining at River Cauvery	Madras High court – Madurai bench	Sept. 1-12-2017
13.	Consultant & Expert for Removal and Transplantation of Road side trees.	Highways Department, Kanyakumari, Tirunchendhur to Ambasamudram Industrial Corridor	Oct – Nov. 2021
14.	Member in Technical Support Group for Biodiversity Management Committee, Tenkasi District.	Forests- Biodiversity- Tamil Nadu Biodiversity Board - Chennai	Nov. 2021 onwards

11. RESEARCH PROJECTS :
(i).Completed : 5 projects

Title of the Project	Agency	Duration	Grant LAKHS
1. Documentation of grasses and soil properties of M.S. University main campus.	UGC, MRP	March 2000-2002	0.42
2. Improvement of infrastructure facilities in existing botanical garden for ex situ conservation of endangered, rare, endemic and medicinal grasses of southern western Ghats.	MOENF	Feb.2003- 5	6 .00
3. Molecular Marker Assisted Genetic And Population Diversity Studies On <i>Kingiodendron pinnatum</i> – A Critically Vulnerable Timber Species Of Southern Western Ghats.	DST	Nov. 2007-10	28.41
4. Net Work Project: Ret Medicinal Plants Conservation And Utilization In South And North East India :“Exploration, Ex Situ Conservation (Tissue Culture) And Botanical	NMPB - AYUSH	Dec. 2007-10	15.20

Authentication of Selected RET Medicinal Plants From Southern Western Ghats of Tamil Nadu.			
5. Net workProject : Assessing Genetic diversity, Micro Propagation and Restoration of <i>Elaeocarpus blascoi</i> and <i>K. pinnatum</i> - Ret Species From Southern Western Ghats Through Biotechnological Interventions	DBT	Nov. 2009 -14	82.37
6. Network project on Reproductive Biology, Conservation and Restoration of Three Red Listed Medicinal Plants of Southern Western Ghats, Tamil Nadu through Biotechnological Approaches	DBT - Ongoing	Feb. 2019 - 2022	58.392
7. Major network project on “Long-term monitoring of biodiversity and ecosystem processes in Indian grasslands”	MOEFCC	Mar. 2020- 2024	40.579
Total Grant in lakhs	231.371		

12. EXTENSION ACTIVITIES

Restoration of RET medicinal plants in southern Western Ghats:

- a. 1000 *Kingiodendron pinnatum* saplings were restored in Western Ghats in 2009.
- b. 500 saplings of seven RET medicinal plants were handed over to forest department in 2011.
- c. 1000 *Kingiodendron pinnatum* saplings were handed over to forest department and planted in 2012.
- a. 700 *Kingiodendron pinnatum* saplings were planted in Southern western Ghats in 2013.
- b. Work shop on Natural dyes – Pathamadi - November 20, 2005
- c. Dissemination of Innovative Technology – Natural Dyes work shop Feb. 23- 25, 2012
- d. Extension Activities Workshop Organized by SPCKES, MSU, Alwarkurichi. Nov. 05. 2014.
- e. Extension activity on Natural dyeing of Unconventional Plant Fibres **Feb. 13, 2017**
- f. Demonstration of Natural Dyes other than Indigo, During the International seminar on Culture of Indigo – Exploring the Asia panorama: Plant, Product, and Power. Organized by India International Centre – Asia Project (IIC) in association with Indian Council of Cultural Relations and Indian Council for Historical Research, IIC, and November 29 to December 1, 2007.
- g. Natural Dye Demonstration at World Congress on Natural Dyes, Hyderabad –
- h. Natural Dye Demonstration at an International Symposium on and Exhibition on Natural Dyes, La Rochell, France (ISEND) April 24 - 30, 2011.

- i. Plantation of RED listed plants of DBT project at Kurumbai near Ambasamudhram on Nov. 2021
- j. Field study at Arnaya Forest and Merveille villages, Tamil Nadu near Pondicherry Jan.20-23, 2023.

13. Other Duties and Responsibilities:

- a) Professor and Head i/c – SPKCES -2014 -2015
 - b) Director- CPTDI& T – 2016 – Till Date
 - c) MSU, Animal Ethical Committee – Secretary – 2014- Till date
 - d) Research Board Advisor – ANJAC – FEB. 2018
 - e) University Nominee – GVN COLLEGE – 2013-15
 - f) University Nominee – KR COLLEGE – 2017-2020
 - g) CHAIRMAN BOS SPKCES – 2013-2015
 - h) CHAIRMAN BOS MSU, Plant Science – 2015-21
1. MEMBER BOS – MSU BOTANY COLLEGES – 2015-18
 2. MEMBER BOS – University of Madras, BOTANY COLLEGES – 2016-19
 3. MEMBER BOS – Gandhi Gram University BOTANY – 2017-20; 2021-2023
 4. MEMBER BOS – The American College, BOTANY – 2015-18
 5. MEMBER BOS – Lady Doak College, BOTANY – 2016 -19
 6. MEMBER BOS – St. Xavier’s College Botany– 2010-2014
 7. MEMBER BOS – Sri Parasakthi College for Women, Courtallam - 2017 – 2020
 8. MEMBER BOS – Scott Christian College Nagercoil, - 2016 – 2019
 9. MEMBER BOS – ANJA College, Sivaksi, - 2020 – 2023
 10. Member ABS committee – National biodiversity Authority – 2017-18
 - a. Editorial committee
 11. Rheedea – Life member - Reviewer
 12. International Journal of Biochemistry and Biotechnology - Life member - Reviewer
 13. Indian Association of Angiosperm Taxonomy – Life Member
 14. Editor – Member – Journal of Taxonomy and Economic Botany
 15. Editorial Member – Current Science
 16. Review member – Journal of Phytology
 17. Review member – Journal of Threatened Taxa
 18. Review Member -Journal of Ayurveda and Integrative Medicine
 19. Review Member-Physiology and Molecular Biology of Plants – Springer
 20. Reviewer Member-Journal of Biotechnology, Elsevier's
 21. Reviewer Member -Plant Gene, Elsevier's
 22. Reviewer Member -Biotechnology Reports, Elsevier's
 23. Reviewer Member - Biotechnic & Histochemistry

14. Served as External examiner for Ph.D. Thesis evaluation and conduct of viva voce examination

- A. Madurai Kamaraj University, Madurai
- B. University of Kerala, Trivandrum
- C. Calicut University, Kerala
- D. Barathiar University, Coimbatore
- E. Pondicherry University, Pudhucherry
- F. University of Goa, Goa
- G. Annamalai University, Chidambaram
- H. Kannur University, Kerala
- I. Rajiv Gandhi University, Itanagar
- J. Central university of Kerala, Kasargod
- K. University of Madras, Chennai
- L. Mahatma Gandhi University, Kochi
- M. Periyar University, Salem
- N. Osmania University, Telengana

- O. Textbook writing committee - Reviewer –SCERT - TNHEB

- P. Examiner at TNPSC, Tamil Nadu.

Self-attested



April 2023