

Name : Dr. K. Kalimuthu
Designation : Dean, Research & Development
Department : Biotechnology
Qualification : M.Sc., M.Phil., PhD
Experience : Teaching: 23 Years Industry: 7 Years Research: 23 Years
Area of Specialization(s) : Plant tissue culture, Nanotechnology, Phytochemistry, Pharmacognosy
Email (Official ID) : Kalimuthu.k@drngpasc.ac.in



Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph. D.	Botany (Plant tissue culture)	Bharathiar University, Coimbatore	2006
M. Phil.	Botany	Bharathiar University, Coimbatore	1988
MSc.,	Botany	Bharathiar University, Coimbatore,	1987
BSc.,	Botany	Madras University	1983

Additional Qualifications

Diploma / Vocational / Certification	Area of Specialization	Institution / University / Agency Name	Year
PGDS	Sericulture	Tamilnadu Agricultural University, Coimbatore	1985

Grants Received

Event Title	Agency	Amount	Date
National level Seminar on “Emerging trends in Plant Biotechnology”	UGC, New Delhi	Rs. 55,000.00	04.02.2010 to 05.02.2010.
Short term training course Entitled “The recent techniques and application in animal tissue culture and plant tissue culture	Department of Biotechnology, Ministry of Science & Technology, Govt. of India, New Delhi.	250000.00	16.08.2007 to 30.08.2007

Short term training course Entitled “Commercial plant tissue culture and <i>Agrobacterium</i> mediated gene transformation techniques and its applications”	Department of Biotechnology, Ministry of Science & Technology, Govt. of India, New Delhi.	300000.00	
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Projects

Completed

Project Title	Agency	Amount	Duration
Micropropagation of <i>Pterocarpus</i> species.	UGC	55,000.00	2003 - 2005
Evaluation of conservation strategies for the sustainable utilization of herbaceous bio resources in the shoals of Nilgiris, Western Ghats.	Environment & Forests, Govt. of India, New Delhi	8.61Lakhs	2004-2007
<i>Ex situ</i> conservation of certain important endemic members of Asclepiadaceae in Western Ghats of Southern India employing Micropropagation and RAPD techniques	UGC	8.11 lakhs	2009-2011
Micropropagation of <i>Aloe vera</i> L.A medicinal plant	TNSCST, Govt. of Tamilnadu, Chennai	5000.00	2008 to 2009
Successful exploitation of Micropropagation techniques for rapid clonal multiplication and crop improvement in Cardamom	TNSCST, Govt. of Tamilnadu, Chennai	10000.00	2009 to 2010
Clonal propagation of <i>Gloriosa superba</i> - an important medicinal plant through tissue culture	TNSCST, Govt. of Tamilnadu, Chennai	6000.00	2010-2011
<i>In vitro</i> response and evaluation of bioactive compounds of Cassava (<i>Manihot esculenta</i> Crantz) – a cash Crop	TANSCH, Govt. of Tamilnadu, Chennai	15000.00	2016-2017
Optimization of plant regeneration protocol for Broccoli with salt stress and molecular an analysis of regenerants	TNSCST, Govt. of Tamilnadu, Chennai	10000.00	2016-2017
Biosynthesis, characterization and bioactive studies of wild and tissue culture plants of <i>Ceropegia juncea</i>	TNSCST, Govt. of Tamilnadu, Chennai	10000.00	2017-2018
Conservation through micropropagation and novel therapeutic approach for antidiabetic	TNSCST, RSRF Govt. of Tamilnadu, Chennai	3.0 Lakhs	2019-2021

and antiobesity activity through animal model from wild and micropropagated plants of <i>Caralluma bicolor</i> – an endemic medicinal plant			
Efficient <i>in vitro</i> clonal propagation of <i>Rauwolfia serpentina</i> L.- and Salt stress tolerance - An important medicinally plant	TNSCST, Govt. of Tamilnadu, Chennai	15000.00	2022-2023

On-going

Project Title	Agency	Amount	Duration
	NIL		

Research Guidance

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.	13	-
M. Phil.	25	-

Research Publications (Indexed)

International

1. M. Laxmi Kiruthika, KM Jerun Nisha, E. Shanthi Priya, D. Sathiya Sheela and **K. Kalimuthu** Bio-synthesis, characterization and ecotoxicology of selenium nanoparticles using *Sansevieria cylindrica* Bojer Ex Hook plant extract (2023) Advances in Pharmacology and Pharmacy (Accepted) **Web of Science**. ISSN: 2332-0044
2. Antony kingslin, Ammasaikutty Vanitha, Devaraj Sathiya Sheela, Kandasamy **Kalimuthu** (2023). Algae mediated green fabrication of silver nanoparticles *Sargassum prismaticum* V.D. Chauhan and its biological application potential. Analele Universităţii din Oradea, Fascicula Biologie Tom. XXX, (1): 28-38 **Web of Science**. ISSN 12245119, 18447589
3. E. Shanthi Priyaa, Sathiya Sheela. D, P. Viswanathana, B. Davidson raja, K. Thangavelu and **K. Kalimuthu** (2023) Various solvent effects on the analysis of anti-inflammatory, antibacterial, and anti-diabetic activities in *Pancreaticum zeylanicum* (L) bulbs. Journal of Xidian University 17(1): 351-368. ISSN No: 1001-2400 <https://doi.org/10.37896/jxu17.1/030>.
4. K. Bhuvaneshwari, KM Jerun Nisha, **K. Kalimuthu**, M. Lakxmi Kiruthika, E. Shanthi Priya, Sathiya Sheela. D (2023). *In vitro* anti-inflammatory, anti-diabetic and anticancer properties of Copper Nanoparticles Synthesized by Medicinal Plant *Leucas aspera* (Willd.). Advances in Pharmacology and Pharmacy 11(1): 57-65. ISSN: 2332-0044 **Web of Science DOI: 10.13189/app.2023.110106**

5. Sathiya Sheela D, P. Viswanathan, **K. Kalimuthu** and A. Vanitha (2022). Facile synthesis of silver nanoparticles, anti-inflammatory, antibacterial and photocatalytic activities using *Pogostemon speciosus* Benth. An endemic medicinal plant. *Journal of Water and Environmental Nanotechnology* 7(3): 306-316 ISSN: 24766615, 24767204 SCOPUS. DOI: 10.22090/jwent.2022.03.006
6. P. Subramaniam, A. Vanitha, **K. Kalimuthu**, D. Sathiya Sheela and E. Shanthi Priya (2022). Phytosynthesis of copper nanoparticles using wild *Ceropegia juncea* and its therapeutic activities. *Res. Jr. of Agril. Sci.*, 13(4): 1024–1031 ISSN: 22497218, 2249720X UGC CARE
7. E. Shanthi Priya, P. Viswanathan, **K. Kalimuthu**, Sathiya Sheela D, A. Vanitha and M. Laxmi Kiruthika (2022). Qualitative and Quantitative Phytochemical Analysis and Antioxidant Activity of *Pancreatium zeylanicum* L. Bulb – An Endemic Medicinal Plant. *Res. Jr. of Agril. Sci.* 13: 1293–1303. ISSN: 22497218, 2249720X UGC CARE
8. Jerun Nisha KM, Kiruthika ML, Sheela DS, Priya ES, **Kalimuthu K.** (2022). *In-vitro* Antioxidant Capacity of Leaves of *Tephrosia villosa* Linn. (Leguminosae) in Various Solvent Extract. *Asian Pac. J. Health Sci.*, 2022;9(4):265-271. UGC CARE <https://doi.org/10.21276/apjhs.2022.9.4.52>
9. Sathiya Sheela D, P. Viswanathan, **K. Kalimuthu** E. Shanthi Priya and A. Vanitha (2022). Phytochemical Screening, FTIR, GCMS and Antioxidant Activity of Aqueous Extract of *Pogostemon speciosus* Benth.: An Endemic Medicinal Plant. *Res. Jr. of Agril. Sci.* 13(3): 624–632 ISSN: 22497218, 2249720X UGC CARE.
10. Sathiya Sheela D, P. Viswanathan, A. Vanitha, **K. Kalimuthu** and E. Shanthi Priya (2022). Investigation on Indigenous and Exotic Fruits of Nilgiris, *Res. Jr. of Agril. Sci.* 13(2): 430–439. ISSN: 22497218, 2249720X UGC CARE.
11. A.Kingslin, **K.Kalimuthu**, M. Laxmi kiruthika, Amany Salah Khalifa, Phuong Tran Nhat, Kathirvel Brindhadevi (2022). Synthesis, Characterization and biological potential of silver nanoparticles using *Enteromorpha prolifera* algal extract. *Appl. Nanosci*, (2022). ISSN: 2190-5517 <https://doi.org/10.1007/s13204-021-02105-x> (Springer).
12. A. Kingslin, **K. Kalimuthu** and P. Viswanathan (2022). Nanocatalytic efficacy of silver nanoparticles fabricated using *Chaetomorpha antennina* algal extract, their characterization, and its Applications. *J. Sci. Res.* 14 (1), 343-362 (2022) ISSN 2070-0245 <http://dx.doi.org/10.3329/jsr.v14i1.53782>. (UGC CARE).
13. Subramaniam, P., Nisha, K.M.J., Vanitha, A. M. Laxmi Kiruthika, P. Sindhu, Basem H. Elesawy, Kathirvel Brindhadevi & **K. Kalimuthu** (2021). Synthesis of silver nanoparticles from wild and tissue cultured *Ceropegia juncea* plants and its antibacterial, anti-angiogenesis and cytotoxic activities. *Appl Nanosci*. ISSN: 2190-5517 <https://doi.org/10.1007/s13204-021-02092-z> (Springer)
14. Gangadevi S, Viswanathan P, **Kalimuthu K**, Chinnadurai V (2021). Phytochemical characterization of *Mundulea sericea* leaf extracts and analysis of antioxidant and antidiabetic activities. *Asian Pac. J. Health Sci.* 8(4):1-8. E-ISSN: 2349-0659 UGC CARE. <https://doi.org/10.21276/apjhs.2021.8.4.24>
15. Vanitha A, **Kalimuthu K**, Ranjitha V (2021). *In vitro* antioxidant and antidiabetic activities of wild and micropropagated plants aqueous Extracts of *Caralluma bicolor* – An endangered medicinal plant. *Asian Pac. J. Health Sci.*, 8(3):1-7. E-ISSN: 2349-0659 UGC CARE. <https://doi.org/10.21276/apjhs.2021.8.3.18>

16. Jerun Nisha KM, Kiruthika ML, Vanitha A, **Kalimuthu K.** (2021). Various solvent effects on phytochemical screening and Gas Chromatography–Mass Spectroscopy analysis of *Tephrosia villosa* leaf extract. *Asian Pac. J. Health Sci.*, 2021;8(3):153-162. E-ISSN: 2349-0659 **UGC CARE** <https://doi.org/10.21276/apjhs.2021.8.3.28>
17. Gangadevi S, Gnanadeebam DS, **Kalimuthu K.**, Chinnadurai V, Viswanathan P. (2021). Effects of Various Phytochemical Fractions of *Mundulea sericea* on Free Radical Scavenging and Inhibition of Inflammatory Agents. *Asian Pac. J. Health Sci.*, 2021;8(3):1-9. E-ISSN: 2349-0659 **UGC CARE.** <https://doi.org/10.21276/apjhs.2021.8.3.21>
18. Jerun Nisha KM, Vanitha A, Kiruthika ML, Viswanathan P, **Kalimuthu K.** (2021). Biosynthesis of Silver and Copper Nanoparticles Using *Cadaba fruticosa* (L.) Druce and its Biological Applications. *Asian Pac. J. Health Sci.*, 8 (3):1-12. E-ISSN: 2349-0659 **UGC CARE.** <https://doi.org/10.21276/apjhs.2021.8.3.12>
19. Bhuvaneshwari, M. Laxmi kiruthika, V.Chinnadurai, KM. Jerun Nisha & **K.Kalimuthu** (2021). Plant mediated Silver Nanoparticle synthesis of *Leucas aspera* extract and its photocatalytic and antimicrobial activities. *International Journal of Pharmaceutical Research*, 13(2): 1411-1422. ISSN 0975-2366: Scopus. <https://doi.org/10.31838/ijpr/2021.13.02.116>
20. Ranjitha Venkatachalam, **Kandasamy Kalimuthu,** Vajjiram Chinnadurai Mythili Saravanan, Ramalingam Radhakrishnan, Rajashree Shanmuganadhan, Arivalagan Pugazhendhi (2020). Various solvent effects on phytochemical constituent profiles, analysis of antioxidant and antidiabetic activities of *Hopea parviflora*. *Process Biochemistry.* 89: 227–232. ISSN 1359-5113 **SCI Journal Elsevier.** <https://doi.org/10.1016/j.procbio.2019.10.025>
21. A. Vanitha, **K. Kalimuthu,** V. Chinnadurai, KM. Jerun Nisha. (2019). Phytochemical screening, FTIR and GCMS analysis of aqueous extract of *Caralluma bicolor* – an endangered plant. *Asian Journal of Pharmacy and Pharmacology.* 5(6): 1122-1130. ISSN: 2455-2674 **UGC DOI:** <https://doi.org/10.31024/ajpp.2019.5.6.7>
22. Vajjiram Chinnadurai, Periannan Viswanathan, **Kandasamy Kalimuthu,** Ammasai Vanitha, Venkatachalam Ranjitha, Arivalagan Pugazhendhi. (2019). Comparative studies of phytochemical analysis and pharmacological activities of wild and micropropagated plant ethanol extracts of *Manihot esculenta*. *Biocatalytic and Agriculture Biotechnology.* 19:101166. ISSN 1878-8181 **Elsevier.** <https://doi.org/10.1016/j.bcab.2019.101166>
23. A. Vanitha, S. Vijayakumar, V. Ranjitha and **K. Kalimuthu.** (2019). Phytochemical screening and Antimicrobial activity of wild and tissue cultured plant extracts of *Tylophora indica*. *Asian Journal of Pharmacy and Pharmacology.* 5(1): 21-32. ISSN: 2455-2674 **UGC**
24. Mythili Saravanan, Palanisamy Senthilkumar, **Kandasamy Kalimuthu,** G. Rajalakshmi and Chinnadurai Vajjiram. (2018). Regeneration of plants from leaf derived callus of *Turnera subulata* Sm. – an important medicinal herb. *Malaya Journal of Biosciences.* 5(2): 64-70. ISSN 2348-3075
25. Y. Sharmila Juliet, **K. Kalimuthu,** Chinnadurai Vajjiram, V. Ranjitha and A. Vanitha. (2018). Antimicrobial and anticancer activities of ethanol and methanol extracts of wild and micropropagated *Cadaba fruticosa* (L.) Druce. *Asian Journal of Pharmacy and Pharmacology.* 4(6): 1-8. ISSN: 2455-2674 **UGC**
26. V. Ranjitha, **K. Kalimuthu,** Chinnadurai Vajjiram, Y. Sharmila Juliet and M. Saraswathy. (2018). Comparative study of anti-angiogenic and cytotoxic activity of leaf and leaf callus silver nanoparticles of *Tephrosia villosa* Pers. *Asian Journal of Pharmacy and Pharmacology.* 4(6): 796-801. ISSN: 2455-2674 **UGC**
27. V. Ranjitha, **K. Kalimuthu,** Chinnadurai Vajjiram, and A. Vanitha. (2018). *In vitro* seed germination and regeneration of *Tephrosia villosa* (L.) Pers – An important ethno medicinal

- plant. *International Journal of Scientific Research and Reviews*. 7(3), 1903-1914. ISSN 2277-8179 UGC
28. Y. Sharmila Juliet, **K. Kalimuthu**, V. Chinnadurai, V. Ranjitha and A. Vanitha. (2018). Anti-diabetic and anti-inflammatory activities of wild and micropropagated *Cadaba fruticosa* L. *International journal of Pharmaceutical, Chemical and Biological Science*. 8(4). ISSN, 2249-9504
 29. Mythili Saravanan, Palanisamy Senthilkumar, **Kandasamy Kalimuthu**, Vajjiram Chinnadurai, Seerangaraj Vasantharaj, Arivalagan Pugazhendhi (2018). Phytochemical and pharmacological profiling of *Turnera subulata* Sm., a vital medicinal herb. *Industrial Crops and Products*. 124: 822-833. ISSN 0926-6690 **SCOPUS (Elsevier)**. <https://doi.org/10.1016/j.indcrop.2018.08.065>
 30. S. Jayaraman, S. Rajeshkumar, M. C. Nisha, **K. Kalimuthu** and Chinnadurai Vajjiram. (2018). Isolation and identification of chemical constituents from various polar solvent crude leaf, stem and root extracts of endemic- *Pogostemon speciosus* Benth. of the Nilgiri. ***World Journal of Pharmaceutical Research***.7(14):946-968. ISSN: 2277-7105 DOI : 10.20959/wjpr201814-12946
 31. Y. Sharmila Juliet, **K. Kalimuthu**, Chinnadurai Vajjiram and V. Ranjitha (2018). Evaluation and comparison of phytochemical, GCMS and FTIR analysis of wild and micropropagated *Cadaba fruticosa* (L.) *World Journal of Pharmaceutical Research*. 7(14): 746-760. ISSN: 2277-7105
 32. Chinnadurai Vajjiram, **K. Kalimuthu**, Mythili Saravana. (2018). Isolation and identification of chemical constituents from various polar solvent crude leaf extracts of vulnerable aromatic tree - *Chloroxylon swietenia* Dc. ***World Journal of Pharmaceutical Research***. 7 (10): 983-1013. ISSN: 2277-7105
 33. V. Ranjitha, **K. Kalimuthu**, V. Chinnadurai, Y. Sharmila Juliet and M. Saraswathy. Green synthesis and antioxidant analysis of *in vivo* leaf and *in vitro* callus of *Tephrosia villosa*. ***Pharmacognosy Magazine***. 14: S147-153. (2017). ISSN: 0976-4062 (**SCI Journal**). DOI:10.4103/pm.pm_64_17
 34. Vanitha. A, Chinnadurai. V and **Kalimuthu. K.** (2018). A Comparative study of phytochemical constituents of *Benkara malabarica* (Lam.) leaf and leaf callus extracts. *Int J Pharma Res Health Sci*. 6 (2): 2401-09. ISSN:2348-6465.
 35. Chinnadurai Vajjiram, Vanitha, A. and **Kalimuthu. K.** (2017). FTIR and GC-MS analysis of bioactive compounds in ethanol extract of tobacco callus (*Nicotiana tabacum* L.). *World Journal of Pharmaceutical Research*. 6(14): 530-545. ISSN: 2277-7105
 36. Vanitha A, Janani M, **Kalimuthu K** and Chinnadurai V. (2017). Anatomy, antiangiogenesis activity of wild, tissue culture and salt stress plants of *Brassica oleracea* L. *Malaya Journal of Biosciences*. 4(2):77-87. ISSN: 2348-3075
 37. M. Saraswathy, **K. Kalimuthu**, V. Chinnadurai and R. Prabakaran. *In vitro* conservation of *Ceropegia juncea*, an endemic species of Western Ghats. ***Research Journal of Biotechnology***. 12(11); 29-33: 2017. ISSN: 22784535(**SCIE Journal**).
 38. K. Kalimuthu, A. Vanitha, Vajjiram Chinnadurai, R. Prabakaran. Antimicrobial and antioxidant activities of salt stress callus of Brinjal (*Solanum melongena* L.). *International Journal of Environment, Agriculture and Biotechnology*. 2 (5): 2448-2456; 2017. ISSN - 0974-1712
 39. M. Saraswathy, **K. Kalimuthu**, V. Chinnadurai and A. Vanitha. Antimicrobial, antioxidant and anticancer activity of *in vivo* and *in vitro* extracts of *Ceropegia juncea* Roxb. an

- medicinally important threatened species. **Research Journal of Biotechnology**. 12 (9); 22-41: 2017. ISSN: 22784535 (SCIE Journal).
40. Y. Sharmila Juliet, **K. Kalimuthu**, V. Chinnadurai and Rajendiran Krishnasamy. Effect of Growth Regulators on Direct Shoot Formation from Leaf Explant and Antioxidant Activity of in situ and *in vitro* plants of *Cadaba fruticosa* - An Endemic Medicinal Plant. *European Journal of Medicinal Plants*. 18(4): 1-10, 2017. ISSN: 2231-0894
 41. M. Saraswathy, **K. Kalimuthu**, V. Chinnadurai and Y. Sharmila Juliet. *In vitro* evaluation of antidiabetic and anti-inflammatory activity of *in vivo* and *in vitro* plants of ethanol and methanol extracts of *Ceropegia juncea*. *British Journal Pharmaceutical Science*. 15(2); 1-9: 2017. ISSN:2456-9836
 42. A. Vanitha, **K. Kalimuthu**, V. Chinnadurai, Y. Sharmila Juliet and R. Prabakaran. GCMS analysis of leaf and salt stress callus of Eggplant (*Solanum melongena* L.). *British Journal of Pharmaceutical Research*. 14(6); 1-11: 2016.ISSN:2231-2919.
 43. **K. Kalimuthu**, V. Chinnadurai, R. Prabakaran and M. Saraswathy. Comparative study of GCMS, antimicrobial, antioxidant activity of callus and leaf extracts from *Baccharoides anthelmintica* (L.) Moench. **Research Journal of Biotechnology**. 11(11); 49-63: 2016. ISSN: 22784535 (SCIE Journal).
 44. V. Chinnadurai, **K. Kalimuthu**, R. Prabakaran and Y. Sharmela Juliet. 2016. Antiangiogenesis and anticancer activity of leaf and leaf callus extracts from *Baccharoides anthelmintica* (L.) Moench (Asteraceae). *British Journal Pharmaceutical Science*. 13(15); 1-9: 2016. ISSN:2456-9836
 45. G. Uma, R. Prabakaran, **K. Kalimuthu**, V. Chinnadurai and V. Balasubramaniam. Effects of exogenous phytohormones on direct and Indirect micropropagation of *Corbichonia decumbens* (forssk.) (Molluginaceae). *British Journal of Pharmaceutical Research*. 13(1): 1-9, 2016. ISSN:2231-2919
 46. **K. Kalimuthu**, V. Chinnadurai, R. Prabakaran, P. Subramaniam and Y. Sarmila Juliet. Antimicrobial, Antioxidant and Anticancer Activities of *Turnera ulmifolia* (Yellow Alder) Callus. *British Journal of Pharmaceutical Research*9(5): 1-12, 2016. ISSN:2231-2919
 47. **K. Kalimuthu**, R. Prabakaran. S. Paulsamy, and S. Jeyaraman Microtuberization of *Ceropegia pusilla* Wight and Arn an endangered medicinal plant. *European Journal of Medicinal Plants*2014;4(1): 64-74. ISSN: 2231-0894
 48. R. Prabakaran, **K. Kalimuthu**, C. Vani and C. Brindha. Angiogenesis and antioxidant activity of *in vitro* and *in vivo* tuber of *Ceropegia pusilla* Wight & Arn. *British Journal of Pharmaceutical Research* 4(5): 2014; 608-616. ISSN:2231-2919
 49. **K. Kalimuthu**, R. Prabakaran, M. M. Sudheer Mohammed and V. Chinnadurai. Phytochemical, anatomical and nutritional analysis of *in vivo* and *in vitro* plants of *Ceropegia pusilla* Wight & Arn. *International Journal of Medicinal Plants*. *Photon* (2014); 106; 430-438. ISJN: 6672-4384
 50. **K. Kalimuthu**, K. Kalaiyarasi, R. Prabakaran, and T. Sasikala. *In vitro* propagation of *Caralluma diffusa* (Wight) N.E.Br. *British Biotechnology Journal*. 2014. 4(2); 164-172.
 51. **K. Kalimuthu**, R. Prabakaran and T. Sasikala. *In vitro* propagation of *Boucerosia truncato-coronata*: nodal an endemic, medicinally important plant *J. of Trop. Med. Plants* 2014; Vol. 14 (1); 31-35.ISSN: 1511-8525
 52. **K. Kalimuthu**, R. Prabakaran, and V. Preetha. Direct and indirect micropropagation of *Turnera ulmifolia* (L.) *World Journal of Pharmacy and Pharmaceutical Sciences*, 2014 3, (8); 785-793.ISSN: 2321-3310

53. **K. Kalimuthu**, R. Prabakaran, and V. Chinnadurai. Antiangiogenic properties stem, leaf, and flower extracts of *Calotropis procera* in chick Chorioallantoic Membrane (CAM) *World Journal of Pharmacy and Pharmaceutical Sciences*, 2014 3, (8); 777-784. ISSN: 2321-3310
54. **K. Kalimuthu**, R. Prabakaran and M. Saraswathy. Antiangiogenic activity of *Boucerosia diffusa* and *Boucerosia truncato-coronata* extracts in chick Chorioallantoic Membrane (CAM). *Int.J. Curr.Microbiol.App.Sci*, (2014) 3(8); 107-114. ISSN:2319-7706
55. **K. Kalimuthu** and R. Prabakaran. *In vitro* Micropropagation of *Syngonium podophyllum*. *Int. J. Pure App. Biosci.* (2014); 2 (4): 2 (4); 88-92. ISSN: 2582 – 2845
56. **K. Kalimuthu**, R. Prabakaran and M. Saraswathy. *In vitro* anticancer activity of ethanolic extract of *in vitro* and *in vivo* tuber of *Ceropegia pusilla* Wight and Arn. *Int. J. Pure App. Biosci.* (2014); 2 (4); 82-87. ISSN: 2582 – 2845
57. **K. Kalimuthu**, R. Prabakaran and T. Sasikala. Phytochemical screening and antioxidant activity of ethanolic extract of *Boucerosia truncato-coronata* (Sedgw.) Gravelly Mayur. *Int. Res.J.Pharm.*2014, 5 (9): 663-666.ISSN:22308407.
58. **K. Kalimuthu**, R. Prabakaran, T. Sasikala and V.Chinnadurai. Evaluation of anticancer activity of methanolic extract of *Boucerosia truncato-coronata* (Sedgw.) Gravelly Mayur. *J. Adv. Pharm. Res Biosci.* 2014; 2 (4): 91-95.ISSN:2277-6222.
59. **K. Kalimuthu**. R. Prabakaran and V. Preetha. Antimicrobial and antioxidant activities of ethanolic crude extracts of *Turnera ulmifolia* Linn. *International Journal of Pharmaceutical Sciences and Drug Research*: 2014; 6(4): 329-333.ISSN:0975-248X. **UGC CARE.**
60. **K. Kalimuthu**. R. Prabakaran and V. Preetha. Phytochemical screening and GC-MS studies on the ethanolic extract of *Turnera ulmifolia* L. *Int. J. Pharm. Phytopharmacol. Res.* 2014; 4 (3): 179-181. ISSN (Online): 2249-6084
61. **K. Kalimuthu**, R. Prabakaran, S. Karuppusamy and R. Senthilkumar. Habitat note and seed germination studies on *Ceropegia pusilla* Wight & Arn. – An endangered plant species in Nilgiri hills of Western Ghats, Tamilnadu. *Journal of Biodiversity. Photon* 112 (2013); 248-253.
62. R. Prabakaran, T Sasikala and **K. Kalimuthu**. Regeneration of shoots from callus of *Ceropegia pusilla* Wight and Arn. *British Biotechnology Journal*, 2013, 3, (3); 416-423.
63. **K. Kalimuthu** and R. Prabakaran. Micropropagation of *Ceropegia pusilla* - medicinally important plant. *J. of Trop. Med. Plants* 2013.Vol. 14 (1); 37-42. ISSN: 1511-8525
64. **K. Kalimuthu** and R. Prabakaran. *In vitro* flowering from nodal explants of *Ceropegia pusilla*Wight and Arn. *International Journal of Botany and Research (IJBR)* 3, (3) 2013; 35-42.
65. **K. Kalimuthu** & R. Prabakaran. Preliminary phytochemical screening and GC-MS analysis of methanol extract of *Ceropegia pusilla*. *IMPACT: International Journal of Research in Applied, Natural and Social Sciences* Vol. 1, Issue 3, 2013; 49-58.
66. **K. Kalimuthu**, R. Prabakaran. Phytochemical screening and GC-MS analysis of methanol extract of *Ceropegia pusilla in vitro* tuber *Int. J. Inv. Pharm. Sci.* 1(4) 2013; 422 - 429.
67. **K. Kalimuthu**, R. Prabakaran and C. Brindha. Antimicrobial activity of *in vitro* and *in vivo* plant extracts of *Ceropegia pusilla*. Wight and Arn an endemic medicinal plant. *Int J Pharm Bio Sci.* 2013;4(4): (B) 187 - 191.
68. **K. Kalimuthu**, R. Prabakaran and C. Brindha. Antibacterial activity of different solvent extracts of *Ceropegia pusilla in vitro* tuber. Wight and Arn. An endemic medicinal plant. *World Journal of Pharmacy and Pharmaceutical Sciences* 2, (5) 2013; 2947-2955. ISSN: 2321-3310

69. R. Prabakaran and **K. Kalimuthu**. Antibacterial activity of whole plant of *Carallumanila griana* Kumari et Subba Rao – an endemic medicinal plant species *Int J. of Pharma and Bio Sci.* 2013.4(1) (B) 42-48. ISSN: 2230-7605 UGC.
70. **K. Kalimuthu**, P. Ravi Kumar and R. Prabakaran. GC-MS analysis of ethanolic extracts of *Cayratia pedata*. *Int. J. of Pharma and Research Devel.* 4 - (12). 2013. ISSN: 2664-6862
71. K. Kalimuthu, **R. Prabakaran** and T. Sasikala. *In vitro* propagation of *Boucerosia truncato-coronata*: An endemic, medicinally important plant *International Journal of Bio-Technology and Research (IJBTR)* Vol. 3, (3) 2013, 53-60. ISSN(Print) : 2249-6858
72. **K. Kalimuthu**, Kalaiyarasi, T. Sasikala, M. Boopathi Ayyanar and R. Prabakaran. GC-MS analysis of *Caralluma truncato-coronata* (Sedgw.) Gravelly & Mayur. *Asian Journal of Plant Science and Research*, 2013, 3(4): 42-46. ISSN: 2249- 7412
73. **K. Kalimuthu**, K. Kalaiyarasi, R. Prabakaran, V. Preetha and T. Sasikala. GC-MS analysis of *Caralluma diffusa* (Wight) N.E.Br. *Asian Journal of Plant Science and Research*, 2013, 3(4):130-133. ISSN: 2249- 7412
74. **K. Kalimuthu**, R. Prabakaran, K. Kalaiyarasi, S. Jeyaraman and T. Sasikala , GC-MS Analysis of Bioactive constituents of *Caralluma truncato-coronata* (Sedgw.) Gravelly & Mayur. (Asclepiadaceae).*Asia Pacific Journal of Research* 1 (9), **2013**;42- 50. ISSN: 2347-4793
75. **Kalimuthu.K**, Senthilkumar,R., M.Sathya and S.Vijayakumar. **2012** Propagation of *Dendrobium aggregatum* through the culture of immature seeds from green capsules. *Lankesteriana* 12(2): 131-135. ISSN: 14093871 (**Scopus**).
76. **Kalimuthu. K.**, S. Vijayakumar, and Senthilkumar, R., **2010**. Micropropagation of *Aloe vera* Linn.- A medicinal plant. *International Journal of Biotechnology and Biochemistry* .Vol. 6 (3), 405 – 410. ISSN 0973-2691 (Impact factor = 1.5)
77. **Kalimuthu. K.**, P. Deenathayalan and S. Vijayakumar, **2010**. *In vitro* regeneration of the endangered leguminous tree,*Pterocarpussantalinus* L. *Journal of Agriculture, Biotechnology and Ecology* .Vol. 3 (1), 99 – 107. ISSN 2006-3938 (Impact factor = 1.5)
78. **Kalimuthu. K.**, S.Vijayakumar, and Senthilkumar, R., **2010**. Antimicrobial activity of the biodiesel plan, *Jatropha curcas* L. *International Journal of Pharma and Biosciences* .Vol. 1 (3), 405 – 410. ISSN: 0975-6299 (Impact factor = 1.5)
79. **Kalimuthu. K.**, Senthilkumar, R., and S. Vijayakumar. **2007**. *In vitro* micropropagation of an orchid, *Oncidium* sp. (Dancing Doll). *African Journal of Biotechnology*.Vol. 6 (10), 1171 – 1174. ISSN: 1684-5315 (Impact factor = 1.5)
80. **Kalimuthu. K.**, Paulsami, S.,Senthilkumar, R and M.Sathya. **2007**.*In vitro* propagation of the Biodiesel plant *Jatropha curcas* L. **Plant tissue Cult. & Biotech.** 17(2): 137-147. ISSN. 18173721
81. **Kalimuthu. K.**, Saravanakumar M and Senthilkumar. **2007**. R. *In vitro* micropropagation of *Musa sapientum*. L (Cavendish Dwarf *African Journal of Biotechnology* vol. 6 (9), 1106 – 1109. ISSN: 1684-5315 Plant ISSN: 1684-5315 (Impact factor = 1.5).
82. Senthilkumar,P. Paulsamy S,. Vijayakumar, K. K and **Kalimuthu K.** **2007**. *In vitro* Regeneration of the Medicinal Herb of Nilgiri shola, *Acmellacalva* L. from Leaf Derived Callus. **Plant tissue Cult. & Biotech.** 17(2): 137-147. ISSN. 18173721
83. **Kalimuthu. K.**, Murugalatha. N. and Senthilkumar. R. **2006**. Regeneration and Mass multiplication of *Vanilla planifolia* Andr. – A tropical orchid. – *Current science*.Vol.91 (10),

1401-1403. (India; Impact factor = 2.0; International = 0.600). ISSN 0011-3891 **SCOPUS, Web Of Science**

National

1. P. Deenathayalan, S.Vijayakumar, and **Kalimuthu. K. 2010.** *In vitro* seed culture and the induction of enhanced axillary branching in *Pterocarpus marsupium R.* An endangered leguminous tree., *Biotechnology an Indian Journal* .435Vol4 (3). **ISSN: 09747**
2. Lali Grother, Vimala Hena J, Parimala, R, **Kalimuthu, K** and V. Rajeswari. **2007.** Synergistic microbial activity of *Pongamiapinnata* and *Azadirachta indica*. **Sajosps** vol.8 (1), 92 – 94. ISSN: 0972-4613
3. **Kalimuthu. K,** Dhanalakshmi, S. and Lakshmanan, K.K.1999. Micropropagation of *Eucalyptus tereticornis* Sm. through Cotyledons. *Indian Journal of Forestry.* Vol.22 (1), 42-48. (Impact factor = 1.0) ISSN (Print): 0971-9431 UGC CARE
4. **Kalimuthu. K,** and Lakshmanan, K. K. 1995. Effect of Different treatments on pod germination of *Pterocarpus* species, *Indian Journal of Forestry,* Vol.17, 192-195. (Impact factor = 1.0) ISSN (Print): 0971-9431 UGC CARE
5. **Kalimuthu. K,** and Lakshmanan, K.K 1994. Preliminary investigation on Micropropagation of *Pterocarpusmarsupium.* Rxb. *Indian Journal of Forestry.* Vol.17, 192-195. (Impact factor = 1.0) ISSN (Print): 0971-9431 UGC CARE
6. **Kalimuthu. K,** and Rajasekaran, P. 1992. Biodigestion of silkworm litter for biogas production, *Indian Journal Sericulture,* Vol.31, pp.17-22. ISSN: 04457722 (Impact factor = 1.5)
7. **Kalimuthu. K,** Nachiappan, K.M. and Lakshmanan, K.K. 1992. UV radiation on in vitro pollen germination in *Eucalyptus tereticornis* Sm. Van Vigyan, Vol.29, pp.182-183.
8. **Kalimuthu. K,** Poorinima, S., and Lakshmanan, K. K. 1992. Effect of plant extract on *in vitro* pollen germination in *Eucalyptus tereticornis* Sm. Advances in plant Sciences, Vol.5, pp-111-115. . ISSN: 0970-3586 (Impact factor = 1.5)
9. **Kalimuthu.K.** Nachiappan, K.M. and Lakshmanan. K.K 1991. Effect of Growth regulators on *Eucalyptus* pollen, Van Vigyan, Vol.29, pp.55-57.
10. **Kalimuthu. K,** Poorinima,S., and Lakshmanan, K.K. 1991. Effect of Nuvan and Thiobencarb on pollen germination in *Eucalyptus tereticornis,* *Indian J. Environ. Hlth.* Vol.33 pp.388-389. ISSN. 0367827X (Impact factor = 0.5)
11. **Kalimuthu. K,** and Lakshmanan, K.K. 1991. Effect of heavy metals on *Eucalyptus* pollen, Acta Botanica Indica Vol.19 pp.296-298. ISSN, 0379-508X
12. **Kalimuthu.K,** and Sivasubramniam.R. 1990. Physiological Effect of Heavy Metals on Zea Mays (Maize) seedlings, *Indian Journal Of Plant Physiology*Vol.XXXIII, PP.242-244. ISSN: 00195502 (Impact factor = 1.0)
13. **Kalimuthu. K,** and Sivasubramniam.R, 1989. Effect of Heavy Metals on Green Gram. *Indian Journal of Ecology.* 16 (1): 75-77. ISSN: 3045250 (Impact factor = 1.0).

Book Publications

Book Chapter

Gangadevi, **K. Kalimuthu**, and P. Viswanathan. Antidiabetic and cytotoxicity studies of ethanol extract of *Mundulea sericea* – A threatened medicinal plant Phytomedicine Research & Development, CRC Press Taylor Francis Group, Edited by Parimelazhagan Thangaraj 2020

Consultancy

Nature of Consultancy	Client	Amount	Completion Status
Plant tissue culture Lab designing	T.Stanes & Company Limited Coimbatore	Rs. 25,000	Completed
Plant tissue culture – <i>Jatropha curcas</i>	Classic Jatropha India (P) Ltd, Palladam	Monthly Rs.10000	Completed

Presentations in Conference

Tree borne Oil seeds as a source of Energy for Decentralized Planning, PSG College of Technology, Coimbatore, 28 & 29 Oct 2003.

Participation in Seminars

Biodiversity- Status, conservation and Management, Kongunadu Arts & Science College, Coimbatore, 12 & 13 Sep 2008.

Transgenesis, Avinashilingam Deemed University, Coimbatore, 12 Feb. 2001.

Recombinant DNA technology, Dr. G.R.D College of Science, Coimbatore, 15 & 16 May 2001

Medicinal Plants, Avinashilingam Deemed University, Coimbatore, 2 & 3 Nov. 2001

Commercialization exploitation of economically important Medicinal plants, Kongunadu Arts & Science College, Coimbatore, 24 & 25 Aug. 2000.

Recent trends in Biotechnology and its impact on the socio-economic improvement of the scheduled castes and tribes, Dr. G.R.D College of Science, Coimbatore, 6 & 7 June 2001

Participation in Workshop

Bioinstrumentation and Molecular Markers, Hindusthan College of Arts & Science, Coimbatore, 09 Sep 19.

Hands on training on transfer of Plant tissue culture technology to the stakeholders of farming community, Kongunadu Arts & Science College, Coimbatore, 27 Aug 19.

National workshop on Bioinformatics, Bharathiar University, Coimbatore, 03 March to 04 March 2010

Perspectives of Biodiversity Conservation: Status of species richness in protected areas, Kongunadu Arts & Science College, Coimbatore, 08 Feb to 9Feb 2007.

Biofuels, Government College of Technology, Coimbatore, 30 June to 01 July 2007

Latest techniques in Molecular Biology and Immunology, Kongunadu Arts & Science College, Coimbatore, 12 Dec 2002 to 13 Dec 2002.

Participation in Orientation Programme / Short Term Courses

Orientation (Intensive training Programme for the newly recruited Government College Lecturers (UGC Sponsored) UGC – Human Resource Development Centre, Bharathiar University, 26 Dec-2007 to 24-Jan-2008.

Participation in Faculty Development Programme

Refresher course in Botany, UGC – Human Resource Development Centre, Bharathiar University, 12 May-2011 to 01-June-2011.

Refresher course in Life Sciences, UGC – Human Resource Development Centre, Bharathiar University, 06 May-2015 to 26-May-2015

Refresher course in Botany, UGC – Human Resource Development Centre, Bharathiar University, 12 Sep-2019 to 25-Sep-2019

Conference / Seminar / Workshop Organized

Organizing secretary - UGC Sponsored National level Seminar on “Emerging trends in Plant Biotechnology” Dept. of Botany, Government Arts College, Coimbatore on 04.02.2010 to 05.02.2010.

Organizing secretary- One day National Seminar On “ADVANCES IN BIOLOGICAL SCIENCES”. (BIOSUMMIT 2007) Dept. of Biotechnology, Hindusthan College of Arts & Science, Coimbatore on 16.8.2007.

Organizing secretary -One day National Seminar On “ADVANCES IN BIOLOGICAL SCIENCES” .(BIOSUMMIT 2006),Dept. of Biotechnology, Hindusthan College of Arts & Science, Coimbatore on 08.08.2006.

Organizing secretary -One week Workshop on “TECHNIQUES IN ANIMAL TISSUE CULTURE” Dept. of Biotechnology, Hindusthan College of Arts & Science, Coimbatore on 10.08.2006 – 16.08.2006.

Organizing secretary -Two days National Level Seminar on “EMERGING TRENDS IN BIOLOGICAL SCIENCES”. (BIOSUMMIT 2005), Department of Biotechnology, Hindusthan College of Arts and Science, Coimbatore on 19.8.2005, 20.8.2005.

Organizing secretary -One day National Seminar on “ADVANCES IN BIOLOGICAL SCIENCES”. Dept. of Biotechnology, Hindusthan College of Arts & Science, Coimbatore on 13.8.2004.

CO-ORDINATOR- Summer Training and Workshop on COMMERCIAL APPLICATION OF PLANT TISSUE CULTURE TECHNOLOGY, Dept. of Biotechnology, Kongunadu Arts & Science College, Coimbatore From 17.05.2005 – 27.05.2005.

Course Director - Short term training course Entitled “The recent techniques and application in animal tissue culture and plant tissue culture sponsored by Department of Biotechnology, Ministry of Science & Technology, Govt. of India, New Delhi from 16.08.2007 to 30.08.2007

Course Director- Short term training course Entitled “Commercial Plant tissue culture and Agrobacterium mediated gene transformation techniques and its applications sponsored by Department of Biotechnology, Ministry of Science & Technology, Govt. of India, New Delhi from 24.11.2010 to 07.12.2010.

Invited Speaker / Session Chair- Conference / Seminar / Workshop

1. Resource person, delivered lecture on Plant tissue culture technique at Arulmigu Palani Andavar Arts College for women, Palani, on 11.02.2016
2. Resource person, delivered lecture and provided hands on training in Plant tissue culture technique in DBT sponsored Short term training course at Hindusthan College of Arts & Science, Coimbatore, from 06.11.2017 to 11.11.2017.
3. Resource person, delivered lecture Plant tissue culture at RVS Arts & Science College, Coimbatore, on 28.08.2017
4. Resource person, delivered lecture on Commercial Plant tissue culture at NGM College, Pollachi, on 08.02.2018
5. Invited lecture on plant tissue culture in one day seminar at CMS College of Science on 04.01.2018
6. Invited lecture on Techniques in commercial Plant tissue culture at Nandha Arts & Science College on 22.06.2018
7. Invited speaker in the one-day Workshop on Plant tissue culture at Dr. NGP Arts & Science College on 28.06.2019

8. Resource person, delivered lecture on *In vitro* conservation of rare & endemic plants at PSGR Krishnammal College for Women, Coimbatore on 19.08.2019
9. Resource person, delivered lecture on Introduction to Plant tissue culture techniques at Kongunadu Arts & Science College, Coimbatore on 27.02.2019
10. Resource person, delivered lecture on *In vitro* conservation of rare & endemic plants at PSGR Krishnammal College for Women, Coimbatore on 19.08.2019
12. Chief Guest and resource person, ISCA sponsored One day Hands-on training on Transfer of Plant tissue culture technology to the stakeholders of farming community on 27th August 2019 at Kongunadu Arts & Science College, Coimbatore
12. Resource person, delivered lecture Micropropagation techniques at Vellalar College for Women, Erode on 13.12.2021
13. Special Lecture on Micropropagation techniques at Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore on 07.02.2022
13. Lecture on Commercial Micropropagation techniques at Hindusthan college of Arts & Science, Department of Microbiology, Coimbatore, on 29.04.2022
14. Resource person, delivered lecture on Introduction to Plant tissue culture techniques at LRG Government Arts College for Women, Tirupur on 20.02.2023.
15. Lecture on Commercial aspects of Plant tissue culture at Hindusthan college of Arts & Science, Coimbatore, on 22.02.2023.

Member in BoS

- Board of Botany, Gobi Arts and Science College (Autonomous), 2015-2016 and 2016-2017
- Board of Botany, Vellalar College for Women (Autonomous), 2015-2016, 2016-2017 and 2017-2018
- Board of Botany, Arulmigu Palaniandavar Arts College for Women, (Autonomous) Palani, 2016 -2017
- Board of Botany, Government Arts College (Autonomous), Salem, 2017-2018
- Board of Botany, Vellalar College for Women (Autonomous), Erode, 2016-2017
- Board of Botany, Nallamuthu Gounder Mahalingam College, (Autonomous) Pollachi, 2019-2022 and 2019-2021
- Board of Botany, Kongunadu Arts and Science College (Autonomous), Coimbatore, 2019 -2020

Editorial / Review Board Member

Review Board Member of the following Journals

1. British journal of Pharmaceutical Research

2. Process Biochemistry **Elsevier**
 3. South African Journal of Botany **Elsevier**
 4. Analele Universității din Oradea, Fascicula Biologie, **SCOPUS**
 5. Journal of Experimental Agriculture International
 6. Journal of Scientific Research, Bangladesh **UGC CARE**
 7. Asian Journal of Microbiology and Biotechnology
 8. Asian Journal of Biotechnology and Bio resource Technology
 9. Journal of Pharmaceutical Research International
 10. Annual Research & Review in Biology
 11. British Biotechnology Journal
 12. Journal of King Saud University – Science **Elsevier**
 13. HortScience
 14. Journal of Advances in Medical and Pharmaceutical Sciences
- Associate Editor- Advances in Environmental Biology (01.09.2008- 01.09.2012).

Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
Biotechnology Research Society of India, Trivandrum	Life-time	-
The Indian Science Congress Association, Kolkata	Life-time	-

Awards / Honors

Awards / Honors	Agency / Institute	Year of Award
JRF	Tamilnadu Forest Department, Chennai	2009

Recognition National / International

Nature of Recognition	Organization / Institution	Year
	NIL	