

### Staff Profile



**Name** : **Dr.A.Vanitha**

**Position** : **Contractual Lecturer**

**Department** : **Botany**

**Email** : **avanithagreen@gmail.com**

**Phone** : **Mob: 9789408477**

**Office Location** : **NKR Govt. Arts College for Women, Namakkal**

**Education** : **M.Sc., M.Phil., B.Ed., Ph.D.,**

S. No	Degree	University	Year of Graduation
1	Ph.D (Botany)	Bharathiar University, Coimbatore	2022
2	M.Phil (Botany)	Bharathiar University, Coimbatore	2016
3	M.Sc (Botany)	Bharathiar University, Coimbatore	2014
4	B.Ed (Biological Science)	Tamilnadu Education University	2012
	B.Sc (Botany)	Bharathiar University, Coimbatore	2011

### Professional Experience:

S. No	Year	Position Held	Institution	Responsibility
1	March 2023 to Till Date	Contractual Lecturer (Botany)	NKR Govt. Arts College for Women, Namakkal	Teaching UG

**Research Interests:** Plant Biotechnology

**Publications:**

**RESEARCH PAPERS PUBLISHED**

1. Manoharan Laxmi Kiruthika, **Ammasaiikutty Vanitha**, Kandasamy Kalimuthu. Facile Synthesis Photochemical, Dye Degradation and Ecotoxicological Properties of Silver Nanoparticles Using *Sansevieria angolensis* Bojer Ex. Hook Plant Extract. *Pharmacognosy Research*, 16(2), 2024, 305-314.
2. Balrajmani Davidson Raja, Devaraj Sathiya Sheela, Elumalai Shanthi Priya, **Ammasaiikutty Vanitha**, Kandasamy Kalimuthu, Periannan Viswanathan. (2023). Phyto-mediated Synthesis of Silver Nanoparticles with *Afrohybanthus travancoricus* Leaf Aqueous Extract and Screening of their *in vitro* Antioxidant, Anti-Inflammatory, and Anti-diabetic Activities. *Pharmacognosy Research*. 15(4): 751-60. **(Web of Science)**.
3. Sathiya Sheela D; P Viswanathan; K Kalimuthu; **A Vanitha**. "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), 2022, 306-316. doi: 10.22090/jwent.2022.03.006. **Scopus**.
4. E. Shanthi Priya, P. Viswanathan, K. Kalimuthu, D. Sathiya Sheela, **A. Vanitha** and M. Laxmi Kiruthika. (2022). Qualitative and Quantitative Phytochemical Analysis and Antioxidant Activity of *Pancratium zeylanicum* L. Bulb – An Endemic Medicinal Plant. *Research Journal of Agricultural Sciences- An International Journal*. 13(4): 1293–1303. **UGC Care**.
5. 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. *Research Journal of Agricultural Sciences- An International Journal*. 13(4): 1024–1031. **UGC Care**.
6. D. Sathiya Sheela, 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. **UGC Care**.

7. D. Sathiya Sheela, 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. **UGC Care.**
8. Subramaniam, P., Nisha, K.M., **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.* <https://doi.org/10.1007/s13204-021-02092-z> (**Springer**).
9. **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. **UGC CARE.**
10. 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. **UGC Care.**
11. 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. **UGC CARE.**
12. **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. **UGC**
13. 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. (**Elesiver**).
14. **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. **UGC**

15. 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 *Cadabafruticosa* (L.) Druce. *Asian Journal of Pharmacy and Pharmacology*. 4(6): 1-8. **UGC**
16. 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. **UGC**
17. 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).
18. **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.
19. Chinnadurai Vajjiram, **Vanitha, A.** and Kalimuthu. K. (2017). FTIR and GC-MS analysis of bioactive compounds in ethanol extract of tobacco callus (*Nicotianatabacum* L.). *World Journal of Pharmaceutical Research*. 6(14): 530-545.
20. **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.
21. K. Kalimuthu, **A. Vanitha**, Vajjiram Chinnadurai, R. Prabakaran. (2017). Antimicrobial and antioxidant activities of salt stress callus of Brinjal (*Solanum melongena* L.). *International Journal of Environment, Agriculture and Biotechnology*. 2 (5): 2448-2456.
22. 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. (**Scopus Journal**).
23. **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.

24. **A. Vanitha**, R. Renganayagi, R. Prabakaran and M. M. Sudheer Mohammed. (2015). Pharmacognostic studies on *Trichodesma indicum* Linn. (Boraginaceae) – An ethnobotanically important herb from tropics. *Int.J Compre.Pharmacy*, 6: 1-5.

#### **ACHIEVEMENT:**

- Awarded for **RFRS (Research Fellowship for Research Scholars)** in **Tamilnadu State Council for Science and Technology (TNSCST), Chennai**, academic year **2019-2021 (3 Lakhs)**.

#### **NATIONAL/ INTERNATIONAL CONFERENCE/SEMINAR AND WORKSHOP ATTENDED**

- Hands on training on Plant tissue culture techniques held on 8<sup>th</sup> September, 2016, organized by the Department of Botany, Kongunadu Arts and Science College (Autonomous), Coimbatore.
- UGC Supported National Seminar on ‘THE ART OF THESIS WRITTING AND RESEARCH PUBLICATION’ held on 6<sup>th</sup> January 2017 at Government Arts College (Autonomous), Karur.
- Science academies lecture workshop on “Bio-Wealth” organized by the Department of Biochemistry and Bioinformatics, Karpagam University, Coimbatore on 9<sup>th</sup> and 10<sup>th</sup> January 2017.
- Workshop attended “**Prospects of Bioscience**” organized by Hindusthan College of Arts and Science, Coimbatore on 23<sup>rd</sup> and 24<sup>th</sup> August 2016.
- National level workshop attended “*In vivo* and *In vitro* cultivation practices of lucrative orchids” organized by Bharathiar University, Coimbatore on 27<sup>th</sup> October 2017.
- Short term Training Course on “**Basic Techniques in Plant and Animal tissue culture**” organized by Hindusthan College of Arts and Science, Coimbatore, on 6<sup>th</sup> Nov 2017.
- Participated COVID-19 online National Quiz Competition organized by Shri Narendra Tidke College of Arts and Commerce, Ramtek, dist. Nagpur on May 5, 2020.
- Participated in the National Level Webinar on “Multifaceted Role of Plants in Challenging Environmental Applications” delivered by Dr. K. Karthikeyan,

Gujarat Institute of Desert Ecology, Gujarat, organized by Hajee Karutha Rowther Howdia College (Autonomous), Department of Botany, held on 06th July 2020.

- Participated online Quiz on Plant Genetic Engineering organized by Nanjai Edayar Sankara Kandaswami Kandar's College PG & Research Department of Botany, P. Velur, Namakkal on 1-7-2020.
- Participated online Quiz on “Gardening and Ornamental Plants” organized by Kandaswami Kandar’s College, Department of Botany, on 27-6-2020, Namakkal.
- Participated E-Quiz on "Plant Tissue Culture" organized by Department of Botany, L.R.G. Government Arts College for Women, Tirupur on 27<sup>th</sup> May to 30<sup>th</sup> May 2020.
- Participated in International webinar on “MALDI-ToF Mass Spectrometry – A novel technique to analyse latent fingerprints” Quaid-E-Millath Government College For Women (Autonomous), Chennai, Department of Chemistry, 11<sup>th</sup> July 2020.
- Participated in National level quiz competition on “ Environmental Sustainability and Teaching Tools in COVID-19 scenario” organized by Department of Botany on the occasion of ‘World Environment Day’ UNDLIK MAHARAJ MAHAVIDYALAYA Nandura (Rly) Dist. Buldana Maharashtra, Department of Botany 5<sup>th</sup> June 2020.
- Participated in the Webinar Intellectual Property Rights and Patent Filing in collaboration with Rajiv Gandhi National Institute of Intellectual Property Management, Nagpur (Govt. of India) Aurora's Degree & Pg College held on 22<sup>nd</sup> May, 2020.
- Attended Webinar Advances in Biotechnology for Health, Food and Nutrition, to encounter Covid-19 organized by AKS University Batna on May 22-23, 2020.
- Participated E-Quiz on "Medicinal Plants" Organized by Department of Botany, L.R.G. Government Arts College for Women, Tirupur, Tamilnadu, on 10h July to 20<sup>th</sup> July 2020.
- Participated online awareness E-Quiz on Plant Products conducted by The PG & Research Department of Botany, Kandaswami Kandar’s College, Velur, Namakkal Dist. On 6-6-2020.

- Participated in the Online Quiz Programme entitled “Infectious Diseases” on 24-5-2020 organized by the Department of Biochemistry, Islamiah College (Autonomous), Vaniyambadi.
- Participated in Online Quiz on “BASIC BOTANY” organised by Department of Botany, H.P.T. Arts & R.Y.K. Science College, Nashik. On 12-7-2020.
- Participated in the National Webinar on Biodiversity informatics and documentation through Citizen Science on the India Biodiversity Portal organized by the Department of Zoology, St. Xavier’s College for Women, Aluva on 22.05.2020.
- Completed Research Skills Enhancement Quiz organized by University of Technology, Fatehpuria road, Jaipur on 16.5.2020.
- Participated in COVID-19 Awareness Quiz on 5/19/2020 organized by Sri Ramakrishna College of Arts & Science for Women.
- Completed of E-QUIZ ON "ECOSYSTEM" conducted through online mode by the Department of Botany & National Green Corps (NGC) organized Seethalakshmi Achi College for women, Pallathur, Sivagangai, on 7/8/2020.
- Participated in E-Quiz on Entrepreneurial Development organized by Kaamadhenu Arts and Science College, Erode, held on 12.05.2020.
- Participated in online awareness E-Quiz on Plant Products conducted by The PG & Research Department of Botany, Kandaswami Kandar’s College, Velur, Namakkal Dist. On 6-6-2020.
- Participated in the Webinar on Computer Aided Drug Discovery on 01.06.2020 organized by Department of Botany, Auxilium College (Autonomous), Vellore.
- Participated one day National Webinar on The great role of botanists in production of quality authentic ayurvedic/herbal medicine, held on 25<sup>th</sup> June 2020, organized by Dept. Of Botany, S.S.B. College, Egra, West Bengal.
- Participated in the National Level Webinar on “Multifaceted Role of Plants in Challenging Environmental Applications" organized by the Department of Botany, held on 06<sup>th</sup> July 2020.
- Participation in National Webinar on Environmental Sustainability Through Green Technology on July 11, 2020 organized by Mandsaur University, Faculty of Life sciences.

- Participated in the National Level FDP National level FDP on “Building A Predictive Understanding of Microbial Communities” Organized by PG and Research Department of Zoology Nirmala College for Women (Autonomous) Redfields, Coimbatore 23<sup>rd</sup> & 24<sup>th</sup> May, 2020.
- Participated in National level E-Quizon “Public Finance” Organized by the PG & Research Department of Economics, Kandaswami Kandar’s College, Velur, Namakkal District, Tamil Nadu, India. On 23-6-2020.
- Completed the E-Quiz on "Cell Biology". Organized by Department of Botany, L.R.G. Government Arts College for Women, Tirupur, Tamilnadu, India on 15<sup>th</sup> June to 20<sup>th</sup> June 2020.
- Participated in National Level E-Quiz on “Food and Dairy Microbiology” organized by Justice Basheer Ahmed Sayeed College For Women (Autonomous) Chennai Department of Microbiology, on 10-7-2020.
- Participated in National Level E-Quiz on “Microbial Physiology” Department of Microbiology, Justice Basheer Ahmed Sayeed College For Women (Autonomous), Chennai, on 10-7-2020.
- Participated in “National level online Quiz on Environmental Issues” organized by Government Of Tamilnadu Department of Environment & Department of School Education National Green Corps Eco Club of Villupuram District, Tamilnadu, on 7/7/2020.
- Performed in the Online Quiz -”World Environment Day- 2020” organised by the Department of Botany, PSGR Krishnammal College for Women, Coimbatore on 5<sup>th</sup> June 2020.
- Participated in “Biodiversity -Quiz 2020” organized by Government of Tamilnadu Department of School Education of Villupuram district, on 7/2/2020.
- Participated in E-Quiz on “Ethnomedicine” organized by the Department of Botany, Government Arts College for Women, Salem, on 15.06.2020.
- Participated in National webinar on “Role of Youth on Nation Building and National Integration” organised by IIIT Nagpur, NIT Rourkela, VNIT Nagpur, IIITDM Kurnool & IGNOU Center Nagpur on 10<sup>th</sup> July 2020.



- Participated in Skill Development Program- “General Microbiology” quiz organized by V.H.N. Senthikumara Nadar College, Virudhunagar, Dept. of Microbiology, on 7/4/2020.
- Participated in the International Webinar on “DNA Fingerprinting and its Applications” organized by Government Arts College (Autonomous) PG & Research Department of Botany Coimbatore, held on 22/06/2020.
- Participated in the Webinar entitled “Plant tissue culture - Biotechnological tool for conservation of medicinal plants” organized by the Department of Botany, Kamaraj College, Thoothukudi on 09.07.2020.
- Participated in the International webinar on “MALDI-ToF Mass Spectrometry – A novel technique to analyse latent fingerprints” organized by Quaid-E-Millath Government College for Women (Autonomous), Chennai Department of Chemistry on 11<sup>th</sup> July 2020.
- Participated in the National level Webinar on Bio prospecting of Medicinal Plants: Challenges and Opportunities organised by the PG & Research Department of Botany, V.O.Chidambaram College on 03.06.2020.
- Participated in the Webinar Application of Molecular Markers in Plant Systematics organised by the Department of Botany, V.O.Chidambaram College on 23.05.2020.

**Area of Specialization:** Algae

#### **Contact Information**

**Office Hours :** 10 a.m to 05 p.m

**Office Phone :** 04286-221152

**Email :** [nkrgacin@rediffmail.com](mailto:nkrgacin@rediffmail.com)

**Website :** [www.nkrgacw.org](http://www.nkrgacw.org)