# **CURRICULUM VITAE**

### Dr. V.CHINNADURAI

M.Sc., B.Ed., M.Phil., PhD.

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### 1. PERSONAL INFORMATION

### • Official address

Dr. V. Chinnadurai, M.Sc., B.Ed., M.Phil. PhD.

Assistant Professor and Head

Department of Botany

Sri VidyaMandir Arts and Science College (Autonomous)

Katteri (Post), Uthangarai(Taluk), Krishnagiri(District), Pin code: 636 902.

#### • Residence address

## V. Chinnadurai S/O G. Vajjiram

214, Sengattuputhur (Village), Adikarapatti (Post),

Pappireddipatti (Taluk), Dharmapuri (District), Pin code: 636905.

## 2. EDUCATION

# > Doctorate of Philosophy (Ph.D. Botany)

**Year: 2015 - 2019** 

**Institute:** Government Arts College (Autonomous), Affiliated to Bharathiar

University, Coimbatore - 641 018. Tamil Nadu, India (Affiliated to

Bharathiar University, Coimbatore, India).

**Thesis Title:** Evaluation of phytochemical and pharmacological activities and micropropagation of *Chloroxylon swietenia* DC – a medicinally important vulnerable aromatic tree

**Report: Highly Commented** 

## ➤ Master of Philosophy (M.Phil. Botany)

Year: 2013-2014

**Institute:** Government Arts College (Autonomous), Affiliated to Bharathiar

University, Coimbatore - 641 018. Tamil Nadu, India (Affiliated to

Bharathiar University, Coimbatore, India).

Thesis Title: Evaluation of therapeutic properties of leaf and leaf derived callus of

Baccharoidesanthelmintica (L.) Moench (Asteraceae) an oil yielding herb

Percentage: 60.2 %

**Report: Highly Commented** 

➤ Master of Science (M.Sc., Botany)

Year: 2011-2013

Institute: Kandaswami Kandar's College, Affiliated to Periyar University,

Namakkal – 638182. Tamil Nadu, India (Affiliated to PeriyarUniversity, Salem, India).

Percentage: 72.04 %

**▶** Bachelor of Education (B. Ed., Biological science)

Year: 2009-2010

Institute: Stanley College of Education, Affiliated to Tamil Nadu Education

University, Dharmapuri – 636 905. Tamil Nadu, India (Affiliated to Tamil

Nadu Education University, Chennai, India).

Percentage: 65.4 %

**▶** Bachelor of Science (B.Sc., Botany)

Year: 2006-2009

**Institute:** Government Arts College (Autonomous), Affiliated to Periyar University,

Dharmapuri – 636701. Tamil Nadu, India (Affiliated to PeriyarUniversity,

Coimbatore, India).

Percentage: 54.0 %

### 3. TEACHING EXPERIENCE

❖ 01/07/2019 to till date. (6 years in UG and PG Botany)

Assistant Professor and Head, PG Department of Botany, Sri VidyaMandir Arts and Science College (Autonomous), Katteri, Uthangarai – 636 902. Krishnagiri (Dt).

### 4. ACADEMIC PERFORMANCE

- Chairman of Botany Board of Studies (UG and PG Board of Botany)
- Sri Vidya Mandir IQAC member
- ❖ Sri Vidya Mandir NAAC member and Criteria VII coordinator
- ❖ Sri Vidya Mandir College R&D member
- ❖ Co-ordinator, Natural Nexes Botany Club, Sri Vidya Mandir College.

❖ Eco club coordinator, Sri Vidya Mandir College.

## 5. RESEARCH EXPERIENCE

- ❖ Five years (06)) experience in plant tissue culture, Plant tissue culture laboratory, PG and Research Department of Botany, Government Arts College (Autonomous), Coimbatore 18.
- ❖ Six months (06) training course completed in Pharmacological studies, Pharmaceutical Biotechnology, JSS College of Pharmacy, Udhagamandalam, Nilgiris and India.
- ❖ Three months (03) training course completed in molecular studies at Sugarcane Breeding Institute, Coimbatore, Tamil Nadu and India.

### 6. RESEARCH INTEREST

- ✓ Plant Tissue Culture
- ✓ Molecular analysis
- ✓ Phytochemistry
- ✓ Pharmacology and Pharmacognosy
- ✓ Nanotechnology
- ✓ Microbiology
- ✓ Bioremediation and Bio-degradation

#### 7. TECHNICAL EXPOSURE

### 7.1. Plant tissue culture

- Maintenance of mother plants, dissection of explants, sterilization, media preparation, culture initiation, development and hardening.
- > Protocol development at initiation, multiplication in orchid and medicinal plants.
- ➤ Proficient in hardening of plants in the polyhouse at both primary and secondary stages.
- Establishing stocks of plants to the production level in Banana, Sugarcane and medicinal plant.

# 7.2. Nanotechnology

- ❖ Nanoparticles synthesis by green and chemical methods
- Characterization nanoparticles

# 7.3. Molecular analysis

- Techniques of agarose gel electrophoresis and PAGE
- DNA isolation
- SSR marker analysis

# 7.4. Phytochemical studies

- Phytochemical screening
- Phytocompound separation by thin layer chromatography (TLC) and column chromatography

# 7.5. Pharmacological studies

- Antioxidant activity
- Anti-inflammatory activity
- Anti-diabetic activity
- Anticancer activity

# 7.6. Microbiology

- Culture media preparation
- Antimicrobial activity (Bacterial and Fungal study)

# 7.7. Bioremediation and Biodegradation

• Dye degradation

## 8. PROJECT

Sl. No.	Project Scheme	Project Title	Fund	Funding Agency	Year
1.	Student Project Scheme (SPC)	Mass cultivation and conservation of vulnerable plant of Chloroxylon swietenia under different stress condition by plant tissue culture		Tamil Nadu State Science and Technology (TNSCST), Chennai and Tamil Nadu.	2021

2.	Student Project Scheme (SPC)	Cultivation of draught induced  Camellia sinensis plant by  micropropagation for economic  development of Chitteri hills tribal	7,500/-	Tamil Nadu State Science and Technology (TNSCST), Chennai and Tamil Nadu.	2024
		peoples		Tamil Nadu.	

## 8.1. Current applied Project (Minor Project)

Sl. No.	Project Scheme	Project Title	Funding Agency	Status
1.	Science and Technology Project Scheme	Cultivation of drought tolerance micropropagated <i>Camellia sinensisassamica</i> plant in Sitheri hills and create entrepreneurship opportunity for tribal economic sustainability	Tamil Nadu State Science and Technology (TNSCST), Chennai and Tamil Nadu.	Waiting for result

# 9. PARTICIPATES TO WORKSHOP/ SEMINAR/ CONFERENCE

- 1. National seminar on animal welfare and ethics (2015).
- 2. Workshop on phytochemical isolation and characterization (2015).
- 3. UKIERI sponsored Indo-UK joint workshop Plant Molecular Farming III (2016).
- 4. Plant tissue Culture workshop (2016).
- 5. Science academies lecture workshop (2016).
- 6. Training course about animal cell culture, assessment of cell viability, cytotoxicity study, various antioxidant methods, antimicrobial study and anti-inflammatory activity (6 months).
- 7. One day nation hands an training course about plant tissue culture (2017)
- 8. Participate in Basic techniques in plant and animal tissue culture (2017).
- 9. One day international conference on "Advance trends and innovations in life sciences" (2019).
- 10. Participate faculty development program (FDF) through online mode in Sri VidyaMandir Arts and Sciecne College (Autonomous), Katteri from 18.05.2020 to 22.05.2020.

- 11. Participated in One Day National Webniar on Intellectual Property Rights (IPR) organized by IQAC and Science Department of Institute of Advanced Study in Education held on 27.02.2021.
- 12. Participate in UGC ParamarshScemeSposored A One Day Webinar On "Revised NAAC Criteria: A Clance" in Sri VidyaMandir Arts and Sciecne College (Autonomous), Katteri at 10.04.2021.
- 13. Participate in one week international workshop on How to write a quality research article jointly organized by Sri VidyaMandir Arts and Science College (Autonomous), Uthangarai, Christ University Bengaluru and Jyothi Engineering College, Thrissur from 24.05.2021 to 30.05.2021.
- 14. Participate in orientation program for Re-Accreditation of Autonomous College in The National College (Autonomous), Jaya Nagar and Bengalore at 03.06.2021.
- 15. Participate in NAAC sponsored A Two Da National Level Seminar on "Role of NAAC in Enhancing Quality in Higher Educational Institutions" organized by Internal Quality Assurance Cell (IQAC), Sri VidyaMandir Arts and Science College (Autonomous), Uthangarai, held on 7<sup>th</sup> and 8<sup>th</sup> September 2021.
- 16. Participated in AICTE Training And Learning (ATAL) Academy Faculty Development Program on Green Technology at Periyar University from 04/11/2024 to 09/11/2024.

## 10. JOURNAL REVIEW

- ➤ Biocatalysis and Agricultural Biotechnology (Elsevier)
- ➤ Plant Cell Biotechnology And Molecular Biology

#### 11. PUBLICATIONS

### 11.1. Publication Profile

Detail	Count/NASS
	Based (India)
Total Numbers Published/ accepted to be Published	33
International	21
National	12
Publication/Accepted in SCI journal/Elsevier	08
Publication/Accepted in UGC Journals	12
Google Scholar Citation	
Citation	172
h-index	10
i10-index	6

ResearchGate Citation	
Research Interest Citation	28.7
Citations	47
Scores	3

### 11.2. Details of Publications

- 1. **Vajjiram Chinnadurai** and Chandramohan Govindasamy. (2024). L-Asparaginase producing ability of Aspergillus species isolated from tapiocaroot soil and optimized ideal growth parameters for L-Asparaginase production. Environmental Research. 259: 119543.
- YanYuan, Yingji Wu, Vajjiram Chinnadurai, MythiliSaravanan, ArunachalamChinnathambi, SulaimanAli Alharbie, KathirvelBrindhadevi, Nguyen ThuyLan Chi and ArivalaganPugazhendhi. (2022). In vitro analysis of green synthesized copper nanoparticles using *Chloroxylon swietenia* leaves for dye degradation and antimicrobial application. Food and Chemical Toxicology, 113367.
- 3. **VajjiramChinnadurai**, ArivalaganPugazhendhi, MythiliSaravanan and KandasamyKalimuthu. (2022). Screening of cytotoxicity and anti-angiogenesis activities of different polar solvent fractions of *Chloroxylon swietenia* on various cancer cell lines. Applied Nanoscience (Accepted).
- 4. S. Gangadevi, P. Viswanathan, K. Kalimuthu and V. Chinnadurai. (2021). Investigation of phytochemical compounds from Munduleasericea leave extracts and analysis of antioxidant and anti-diabetic properties. Asian Pac. J. Health Sci. (Accepted).
- S. Gangadevi, D. SheebaGnanadeebam, K. Kalimuthu, V. Chinnadurai, P. Viswanathan. (2021). Effects of Various Phytochemical Fractions of Munduleasericea on Free Radical Scavenging and Inhibition of Inflammatory Agents. Asian Pac. J. Health Sci. 8(3): 2350-0964.
- 6. K Bhuvaneshwari, M LaxmiKiruthika, **V Chinnadurai**, KM JerunNisha and K Kalimuthu. (2021). Plant mediated Silver Nanoparticle synthesis of Leucasaspera extract and its photocatalytic and antimicrobial activities. International Journal of Pharmaceutical Research. 13(2): 1-12.
- 7. VenkatachalamRanjitha, KandasamyKalimuthu, **VajjiramChinnadurai**, MythiliSaravanan, ArivalaganPugazhendhi, RamalingamRadhakrishnan and RajasreeShanmuganathan. (2020). Effects of solvent on phytochemical constituent profiles and analysis of antioxidant and anti-diabetic activities of different solvent extracts of *Hopeaparviflora*. Process Biochemistry. 89: 227-232.
- 8. MythiliSaravanan,PalanisamySenthilkumara, **VajjiramChinnadurai**, KunnathurMurugathurSakthivel,Raman Rajesh Rajeshkumar and ArivalaganPugazhendhi.

- (2020). Antiangiogenic, anti-inflammatory and their antioxidant activity of *Turnerasubulata*Sm. (Turneraceae). Process Biochemistry. 89: 71-80.
- 9. **VajjiramChinnadurai**, PeriannanViswanathan, KandasamyKalimuthu, AmmasaiVanitha, VenkatachalamRanjitha, ArivalaganPugazhendhi. (2019). Comparative studies of phytochemical analysis and pharmacological activities of wild and micropropagated plant ethanol extracts of *Manihotesculenta*. Biocatalytic and Agriculture Biotechnology. 19: 101166.
- Ranjitha, V., Kalimuthu, K., ChinnaduraiVajjiram, Sharmila Juliet, Y and Saraswathy, M. (2018). Comparative study of anti-angiogenic and cytotoxic activity of leaf and leaf callus silvernanoparticles of *Tephrosiavillosa* Pers. Asian Journal of Pharmacy and Pharmacology. 4(6):796-801.
- 11. YessianSharmila Juliet, KandasamyKalimuthu, **ChinnaduraiVajjiram**, RanjithaVenkatachalam andAmmasaiVanitha. (2018). Antimicrobial and anticancer activities of ethanol and methanol extracts of wild andmicropropagated (L.) Druce. *Asian Journal of Pharmacy and Pharmacology*. 4(6): 1-8.
- 12. Ranjitha, V., Kalimuthu, K., **VajjiramChinnadurai** and A. Vanitha. (2018). *In vitro* seed germination, callus induction and regeneration of *Tephrosiavillosa* (L.) Pers an important ethanomedicinal plant. *International Journal of Scientific Research and Reviews*.7(3), 1903-1914.
- 13. MythiliSaravanana, PalanisamySenthilkumar, KandasamyKalimuthu, **VajjiramChinnadurai**, SeerangarajVasantharaj, ArivalaganPugazhendhi. (2018). Phytochemical and pharmacological profiling of *Turnerasubulata* Sm., avital medicinal herb. *Industrial Crops & Products*. 124. 822-833.
- Sharmila Juliet. Y., Ranjitha, V., Kalimuthu, K. and Chinnadurai Vajjiram. (2018).
   Evaluation and comparison of phytochemical, GCMS and FTIR analysis of wild and micropropagated Cadaba fruticosa (1.). World Journal of Pharmaceutical Research. 7(14):746-760.
- 15. Jeyaraman, S. Rajeshkumar, S., Nisha, M.C., Kalimuthu, K. and ChinnaduraiVajjiram. (2018). Isolation and identification of chemical constituents from various polar solvent crude leaf, stem and root extracts of endemic PogostemonspeciosusBenth of the Nilgiri. World Journal of Pharmaceutical Research. 7(14):946-968.

- 16. MythiliSaravanan, P Senthilkumar, K Kalimuthu, G Rajalakshmi and **ChinnaduraiVajjiram**. (2018). Regeneration of plants from leaf derived callus of *TurneraSubulata* Sm.- an Important Medicinal Herb. Malaya Journal of Biosciences, 5(2):64-70.
- 17. Ranjitha, V., Kalimuthu, K., **Chinnadurai, V.,** Saraswathy, M. and Sharmila Juliet, Y. (2017). Green synthesis and antioxidant analysis of *in vivo* leaf and *in vitro* Callus of *Tephrosiavillosa*. *Pharmacognosy Magazine*. 14 (55): S147-153. (**SCI Journal**).
- 18. **ChinnnaduraiVajjiram**, K. Kalimuthu, MythiliSaravanan. (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.
- 19. Vanitha. A, **Chinnadurai. V** and Kalimuthu. K. (2018). A Comparative study of phytochemical constituents of *Benkaramalabarica* (Lam.) leaf and leaf callus extracts. Int. J.Pharma. Res. Health. Sci. 6 (2): 2401-09.
- 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. **ChinnaduraiVajjiram**, 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.
- 22. Saraswathy, M., Kalimuthu, K., Chinnadurai, V. and Prabakaran. R. (2017). *In vitro* conservation of *Ceropegiajuncea*, an endemic species of Western Ghats. *Research Journal of Biotechnology*. 12(11):29-33. (SCI Journal).
- 23. Kalimuthu, K., Vanitha, A., VajjiramChinnadurai, and Prabakaran, R. (2017). Antimicrobial and antioxidant activities of salt stress callus of Brinjal (SolanummelongenaL.). International Journal of Environment, Agriculture and Biotechnology (IJEAB). 1-2(5):2448-2456.
- 24. Saraswathy, M., Kalimuthu, K., Chinnadurai V. and Vanitha, A. (2017). In Antimicrobial, antioxidant and anticancer activity of *in vivo* and *in vitro* extracts of *Ceropegiajuncea* Roxban medicinally important threatened species. *Research Journal of Biotechnology*. 12 (9): 22-41: (SCI Journal).
- 25. Sharmila Juliet, Y., Kalimuthu, K., Chinnadurai, V. and Rajendiran Krishnasamy. (2017). Effect of growth regulators on direct shoot formation from leaf explant and antioxidant

- activity of *in situ* and *in vitro* Plants of *Cadabafruticosa* an endemic medicinal plant. *European Journal of Medicinal Plants*. 18(4): 1-10.
- 26. Vanitha, A., Kalimuthu, K., **Chinnadurai**, **V.,** Sharmila Juliet, Y. and Prabakaran, R. (2016). GC-MS analysis of leaf and salt stress callus of Eggplant (SolanummelongenaL.). British Journal of Pharmaceutical Research. 14(6): 1-11.
- 27. Saraswathy, M., Kalimuthu, K., ChinnaduraiV. and Sharmila Juliet, Y. (2017). *In vitro* evaluation of antidiabetic and anti-inflammatory activity of ethanolic and methanolic extracts of *Ceropegiajuncea*. *British Journal of Pharmaceutical Research*. 15(2): 1-9.
- 28. Kalimuthu, K., **Chinnadurai**, **V.,** Prabakaran R. and Saraswathy, M. (2016). Comparative study of GC-MS, antimicrobial, antioxidant activity of callus and leaf extracts from *Baccharoidesanthelmintica*(L.) Moench. *Research Journal of Biotechnology*. 11(11): 49-63(**SCI Journal**).
- 29. **Chinnadurai**, **V.,**Kalimuthu, K., Prabakaran, R. and sharmela Juliet, Y. (2016). Antiangiogenesis and anticancer activity of leaf and leaf callus extracts from *Baccharoidesanthelmintica*(L.) Moench (Asteraceae). *British Journal Pharmaceutical Science*. 13(5): 1-9.
- 30. Kalimuthu, K., **Chinnadurai**, **V.,** Prabakaran, R., Subramaniam, P. and Sarmila Juliet, Y. (2016). Antimicrobial, antioxidant and anticancer activities of *Turneraulmifolia*(Yellow Alder) Callus. *British Journal of Pharmaceutical Research*. 9(5): 1-12.
- 31. Uma, G., Prabakaran, R., Kalimuthu, K. **Chinnadurai, V.** and Balasubramaniam, V. (2016). Effects of exogenous phytohormones on direct and indirect micropropagation of *Corbichoniadecumbens* (Forssk.) (Molluginaceae). *British Journal of Pharmaceutical Research*. 13(1): 1-9.
- 32. Kalimuthu, K., Prabakaran, R., Sasikala, T. and **Chinnadurai**, V. (2014). Evolution of anticancer activity of methanolic extracts of *Boucerosiatruncato-coronate* (Sedgw.) Gravely Mayur. *Journal of AdvancePharmaceutical research and Bioscience*. 2(4): 91-95.
- 33. Kalimuthu, K., Prabakaran, R. and **Chinnadurai**, V. (2014). Antiangiogenic properties stem, leaf and flower extracts of *Calotropisprocera*in chick chorioallantoic membrane (cam). *World Journal of Pharmacy and Pharmaceutical Sciences*. 3(8): 777-784.
- 34. Kalimuthu, K., Prabakaran, R., Sudheer Mohammed, M.M. and **Chinnadurai**, **V.** (2014). Phytochemical, anatomical and nutritional analysis of *in vivo* and *in vitro* plants of

CeropegiapusillaWight &Arn. International Journal of Medicinal Plants. Photon. 106: 430-438.