

CURRICULUM VITAE

PERSONAL DETAILS

NAME:- DR.V.S.ANIL KUMAR

DOB: 04-02-1972

DESIGNATION: PRINCIPAL, GOVERNMENT COLLEGE, KASARAGOD

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LANGUAGES KNOWN: ENGLISH, MALAYALAM (MOTHER TONGUE), HINDI, TAMIL

EDUCATION

DOCTOR OF PHILOSOPHY(PhD) BOTANY	2015, KERALA UNIVERSITY
MASTER OF PHILOSOPHY(MPHIL)BOTANY	1997, KERLA UNIEVRSTY
BATCHELOR OF EDUCATION (BED) NATURAL SCIENCE	1995, KERALA UNIVERSITY
MASTER OF SCIENCE(MSC) BOTANY	1994, KERALA UNIVERSITY, ABRAHAM MEMORIAL GOLD MEDAL, FIRST RANK IN THE UNIVERSITY
BATCHELOR OF SCIENCE(BSC) BOTANY	1992, KERAL UNIVERSITY, FISRT RANK IN THE UNIVERSITY

ACHIEVEMENTS/HONOURS RECEIVED

1. Secured First Rank with Gold Medal for Post Graduate Degree (Botany)from Kerala University (1994)
2. Secured First Rank for Graduate Course from Kerala University (1992)
3. A Grade for MPhil degree from Kerala University
4. Subject Expert of Various Government Academic Programmes
5. Subject Expert of State Council of Educational Research and Training, Kerala State, India
6. Reviewer of Journals like JoTT, JASP, Phytotaxa, Indian Forester, NORDIC Journal of Botany,*Bothalia*, Springer Nature
7. Resource person in National Seminars and invited lectures
8. Member, Board of studies for Post-graduation in University of Kerala
9. Member, Board of Studies in Mar Ivanios College (Autonomous) Kerala, India

11. Reported 23 new plant taxa from southern Western Ghats of Kerala (published in international indexed journals)

FELLOWSHIPS

1. FELLOW OF LINNAEAN SOCIETY OF LONDON (FLS)
2. FELLOW OF INDIAN ASSOCIATION OF ANGIOSPERM TAXONOMY (FIAAT)
3. FELLOW OF BOSE SCIENCE SOCIETY (FBSS)

MEMBER SHIPS IN ORGANISATIONS- NATIONAL & INTERNATIONAL

1. Life Member- Indian Botanical Society
2. Life Member- Indian Association of Angiosperm Taxonomy
3. Life Member- Italian Botanical Society
4. Life Member- Bose Science Society (TN)
5. Life Member- Society for Environment and Sustainable Development

RESEARCH EXPERIENCE

Supervised 32 MSc dissertations and 1 M.Phil. dissertation

Carried out the systematic studies of *Solanum* species with micromorphological and molecular data and reported the first species from the country

Carrying out extensive explorations in southern Western Ghats of Kerala state

Currently guiding 3 Ph.D. scholars

Two scholars awarded Ph.D. under guidance

Concentrating on **Amaranthaceae, Acanthaceae, Solanaceae and Poaceae**

TECHNICAL EXPERTISE

Knowledge in Plant Identification and Herbarium preparation

Knowledge in Molecular systematic tools - ISSR, ITS and cp genes

Expertise in Scanning Electron Microscopy and Data Interpretation

Expertise in FTIR spectral data interpretation and correlation with chemotaxonomy

Research Interests

1. Plant systematics
2. Conservation Biology
3. Phytochemistry
4. Biodiversity documentation and Plant migration

PAPER PRESENTATIONS AND CONFERENCE/SEMINAR PARTICIPATION

1. Analysis of variations among accessions of *Solanum torvum* Sw. revealed by RAPD, protein polymorphism and torvocide content
 - Second National Symposium on Innovative Approaches and Modern Technologies for Crop Productivity, Food Safety and Environmental Sustainability- 19-20 November 2012 at Trichur

2. Analysis of variations in genetic diversity and differentiation among *Solanum* species revealed by Random Amplified Polymorphic DNA
 - Second Indian Biodiversity Congress (IBC 2012) 9-11TH December at IISC Bangalore

3. Electron microscopic and IR spectral analysis of the nipple fruit plant (*Solanum mammosum* L.)
 - 8th National Seminar on Medicinal Plants 2013 1-2 March 2013 at RGCB TVPM

4. Taxonomic discrimination of *Solanum capsicoides* All. Accessions- A biosystematic approach
 - Regional Science Congress 15-16 December 2012 at Kongunadu Arts and Science College, COIMBATORE, TAMIL NADU

5. Spermoderm sculpturing patterns- A tool for solving taxonomic paradox among selected species of *Solanum*
 - First International and Third National Conference on Biotechnology Bioinformatics and Bioengineering, 28-29 JUNE 2013, Organised by SAB at Tirupati, Andrapradesh.

6. Phytochemical analysis, invitro antifungal activity and mode of action of ethanolic extracts of *Marchantia linearis* Lehm and Lindenb. , a bryophyte
 - 22nd Swadeshi Science Congress, 6-8 November 2012 at CPCRI Kasaragode

7. RAPD and ISSR marker analysis of genetic variability in *Solanum* species of Kerala

Anil Kumar VS and Murugan K
 (IAPT conference at Trichy on November 2014)

8. 24th Annual conference of IAAT and international conference on trends in plant systematic.
31st Oct – 2nd Nov 2014
9. FTIR spectroscopy- an effective tool in for the identification of pharmacognostically exploited *Solanum* species from Southern western Ghats- National conference at FMN College, Kollam on January 9th 2015
10. Silver jubilee conference of IAAT and council meeting of IAPT and International Seminar on Advancements in Angiosperm Systematics and Conservation. Dept of Botany, University of Calicut. 19th-21st November 2015
11. Convened a three-day seminar – Tools in Plant Science Research- A Conceptual Approach. Dept of Botany, University College. 8th – 10th Dec. 2015
12. Participation in International day for preservation of Ozone layer. PG and Research department of Botany, University College, Trivandrum. 23rd Sept. 2016
13. Participated in the National seminar on microbial technology for environment management. Dept of Botany, University College. 7th- 8th Dec 2016
14. Participated in the National Seminar on Chemical prospects of plant resources. Dept. of Chemistry, University College, Trivandrum.14th-15th Dec 2016.
15. Chaired a technical session on green ecology and environmental security. Indian Science congress Association, Coimbatore chapter, Konganad Arts and Science College, Coimbatore. 6th oct. 2016
16. Participation in National Seminar on Phytochemistry and Pharmacology. PG Dept of Botany and Research Centre, Govt. college for Women, Tvpm. 4th-6th October 2017.
17. Participation in Indian science congress association. 104th Indian Science Congress held at SV University, Thirupathi. 3rd- 7th Jan 2017
18. Participated in the national seminar on plant taxonomy- A tool for Biodiversity Conservation. Dept of Botany, university College, Trivandrum. 14th- 15th Dec 2017
19. Participation in recent trends in life sciences. Dept of Zoology, university college, Trivandrum. 19th- 20th. Jan 2017

20. Participated in the three day seminar on plants for human welfare, dept of botany, University College. 20-22nd Feb 2017.

POSTER PRESENTATIONS

1. Taxonomic significance of foliar micromorphology and their systematic relevance in the genus *Solanum* (Solanaceae)

-International Conference on advances in Biological Sciences, 15-17 March 2012 at Kannur

2. Protein polymorphism in selected species of Solanaceae- A molecular taxonomic approach - 25 TH Kerala Science Congress 29TTH January TO 1ST Feb. 2013 at Tvpm, Kerala

LIST OF PUBLICATIONS (Not Updated)

1. Duilio Iamonico, Amara Noor Hussain, Arya Sindhu, **Venugopalan nair Saradamma Anil Kumar**, Shabnum Shaheen, Mamoona Munir and Paola Fortini Trying to Understand the Complicated Taxonomy in *Amaranthus* (Amaranthaceae): Insights on Seeds Micromorphology *Plants* 2023, 12(5), 987
2. Sindhu Arya, **Venugopalan Nair Saradamma Anil Kumar*** (2023) *Amaranthus retroflexus* and *Amaranthus hypochondriacus* (Amaranthaceae) - Two New Records for India : *Indian Forester*, 149 (7) : 794-796.
3. Deepa Lekshmi V S, **Venugopalan Nair Saradamma Anil Kumar*** (2023), Conservation Demand of *Asystasia dalzelliana* (Acanthaceae) – An Endemic Medicinal Herb Of Southern Western Ghats, *Indian Forester*, 149 (1) : 86-89.
4. Sojan Jose, **Venugopalan Nair Saradamma Anil Kumar**, Suresh V(2022) *Ophioglossum Madhusoodanii* (Ophioglossaceae) A Striking New

Species from Southern Western Ghats of Kerala, India:, *Indian Fern Journal.* 39(2): 71-78

5. Punchiri Anilkumar Dhanya Lekshmi, Punnakkot Biju, **Venugopalan nair Saradamma Anil Kumar*** (2022) *Isachne veldkampii* var. *malabarica* (Poaceae)- a new wetland variety from Northern Kerala, India, *Plant Science Today*, 9(sp1): 29–32.
6. Viswakumar Sujatha Deepa Lekshmi, Arya Sindhu, **Venugopalan nair Saradamma Anil Kumar*** *Asystasia dalzelliana* var. *alba* (Acanthaceae), a new variety from southern Western Ghats of Kerala, India (2022) *Plant Science Today* 9(sp1):43-45
7. Arya Sindhu, **Venugopalan nair Saradamma Anil Kumar**(2022), *Amaranthus deflexus* L. (Amaranthaceae), a new addition to Indian Flora *Plant Science Today*. 2022; 9(3): 618–622.
8. Arya Sindhu, **Venugopalan nair Saradamma Anil Kumar**(2022), *Miliusa agasthyamalana* (Annonaceae), a new species from southern Western Ghats, India *Phytotaxa* 552 (4): 252–258
9. Biju Punnakot, Arya Sindhu, Elayanithottathil Joseph Josekutty, **Venugopalan nair Saradamma Anil Kumar**(2022), *Impatiens thulunadensis* (Balsaminaceae), a New Species from Northern Kerala, India, *Annales Botanici Fennici*, 59(1): 207-212.
10. Arya Sindhu, Duilio Iamonico, Suresh V, **Venugopalan nair Saradamma Anil Kumar**(2022): First molecular and morphometric data for the genus *Allmania* (Amaranthaceae), with the description of a new species from India *Phytotaxa*: 559 (3): 221–237

- 11.. Sindhu Arya, Murugan Govindakurup Govind, Veerankutty Suresh, Walsan Kalarikkal Vishnu, **Venugopalan Nair Saradamma Anil Kumar***(2021). Three New species of *Impatiens* (Balsaminaceae) from southern Western Ghats of Kerala. *PhytoKeys* 180: 157–171
12. Sindhu Arya, **Venugopalan Nair Saradhamma Anil Kumar***, Ambika Viswanathan Pillai, Alen Alex Philip, Jose Sojan, Veeran Kutty Suresh (2021) *Polycarpaea palakkadensis* (Caryophyllaceae), a new species from Kerala, South-West India ;*Phytotaxa* 527 (2): 151–157.
13. Duilio iamónico*, Sindhu Arya & **Venugopalan Nair Saradamma Anil Kumar** (2021), Typification and taxonomic remarks of *Indobanalia* (Amaranthaceae) in India, *Phytotaxa*, 513 (3): 265–270
14. Arya, Sindhu. Iamonico, Duilio., Sánchez-Del Pino, Ivonne &**Anilkumar, V. N. S***. (2021). *Alternanthera indica* (Amaranthaceae), a new species from Kerala (India). *Phytotaxa*, 482(2), 191-196.
15. Arya, Sindhu. &**Anilkumar V. N. S***. (2021). *Alternanthera ebracteolata* (Amaranthaceae), a new species from Kerala (SW-India). *Phytotaxa*, 480(3), 277-283.
16. Arya, Sindhu. Iamonico, Duilio., & **Kumar, V. N. S. A.** (2021). *Amaranthus powelli* (Amaranthaceae), a new addition for the flora of India and a preliminary list of the Indian *Amaranthus* species. *Hacquetia*. 20/2 • 257–262
17. Arya, Sindhu. Suresh, V., Biju, P., Vishnu, W. K., &**Anilkumar, V. N. S***. (2020). *Ludwigia venugopalani* (Onagraceae), a striking apetalous species from Kerala, India. *Phytotaxa*, 474(2), 191-196.

18. Biju, Punnakot., Arya, Sindhu., **Venugopalan Nair Saradhamma Anilkumar*** Josekutty, E. J., & Augustine, J. (2020). *Lepidagathis ananthapuramensis* (Acanthaceae): a new species from the lateritic plateaus of Kerala, India. *Phytotaxa*, 460(4), 269-276.
19. Arya, Sindhu, Reshma Raju, Parappurakkal Thazhe Arunraj, Walsan Kalarikkal Vishnu, Punnakot Biju, and **Venugopalan Nair Saradhamma Anilkumar*** (2020). "Utricularia kamarudeenii(Lentibulariaceae): a new species from Kerala, India." *Phytotaxa* 447, : 68-72.
20. Arya, Sindhu, **Anilkumar Venugopalan Nair Saradhamma**, Vishnu Walsan Kalarikkal & Duilio Iamonico. (2020) "Amaranthus rajasekharii" (Amaranthaceae), a new species from Kerala (SW-India)." *Phytotaxa* 433, 2: 153-160.
21. Arya, Sindhu, **Anilkumar Venugopalan Nair Saradhamma***(2020) *Amaranthus saradhiana* A new record to Tamil Nadu, India Indian Forester 146:9
22. Arya, Sindhu., **Kumar, V. N. S. A***., Vishnu, W. K., & Kumar, T. R. (2019). *Amaranthus saradhiana* (Amaranthaceae)—a new species from southern Western Ghats of Kerala, India. *Phytotaxa*, 403(3), 230-238.
23. Nazreen, Salma & S, AnilKumar & V, Viji & **Anil Kumar V.S***. (2018). Foliar features of *Alternanthera* (Forssk.) species of southern western ghats of Kerala, *International Journal of Advanced Research* 6(7):144-151 .
24. **Anil Kumar, V.S***., Sreeja Sudhakaran, Dinesh Babu, K.V., Arya, S (2018). Assessment of nutritional quality in tomato *Solanum lycopersicum.*) and

- cherry tomato *Solanum lycopersicum* l. var. *cerasiforme* fruits.
Indian Journal of Tropical Biodiversity, 26(2)
25. **Anil Kumar V. S***., Sunila A. V., Remya Krishnan and Murugan K (2018). ISSR Markers for Comparative Analysis of Genetic Variability in *Solanum* L. Species of Southern Western Ghats of Kerala, South India. *European Journal of medicinal and Pharmaceutical Research*5(2), 293-300
26. **Anil Kumar V. S***., Sunila A. V., S. Anil Kumar, Remya Krishnan and Greeshma R. B. (2018) Bio-potentials of *Acotrema arnottianum* Wight. – An Endemic Medicinal Herb of Southern Western Ghats of Kerala, South India, *World Journal of Pharmacy and Pharmaceutical Sciences*.7(2),1052-1063
27. **V.S. Anil Kumar***, A.V. Sunila and K. Murugan (2017) Foliar trichomes and their systematic relevance in Solanum (Solanaceae) species from southern Western Ghats, Kerala *Rheedia* 27(2)119–131
28. **V. S. Anil Kumar***, K.V. Dinesh Babu, R. Salini, Jollykutty Eapen, M. S. Deepa (2016). FTIR Spectroscopy Data as a Fingerprint of *Withania Somnifera* Root Tissues: A Case Study with Accessions of the Species from Kerala, South India. *Indo American Journal of Pharmaceutical Research*,6(6): 5748-5756.
29. A.V.Sunila, **V.S. Anil Kumar**, G.C. Satisha and K. Murugan*(2016)Nutritional Composition of the Egg Fruit (*Pouteria campechiana* (Kunth) Baehni): A Potential Alternative Source of Nutraceuticals *Indian Journal of Natural Sciences* 6: 36 10932- 1094
30. A.V. Sunila, **V.S. Anil Kumar**, K.V. Dinesh Babu and K. Murugan (2016) Comparison of FTIR fingerprints in the fruits of *Pouteria campechiana*

- (Kunth) Baehni at different developmental stages, *International Journal of Pure and Applied Biosciences*.4 (1): 226-234
31. A.V. Sunila, **V.S. Anil Kumar** and K. Murugan (2015) Phenolic acids composition during developmental stages of egg fruit *Pouteria campechiana* (Kunth) Baehni , *International Journal of Advanced Life Sciences*,8 (4), 430- 435
32. **V.S. Anil Kumar***, A.V.Sunila, and K. Murugan (2016) Micromorphological and FTIR spectral analysis of *Solanum trilobatum* l. (Solanaceae) - a medicinally valued thorny creeper from south India. *International Journal of Advanced Research* 4(1), 1249- 1257
33. **Anil Kumar V.S*.**, Maya Nair C. and Murugan. K. (2015) Pollen morphology of selected taxa of the genus *Solanum* from Southern Western Ghats, Kerala,India. *Rheedia*, 25(2): 128-145.
- 34.**V.S. Anil Kumar**, Maya C. Nair, Soumya. M. & K. Murugan (2015). Taxonomic delineation of *Solanum exarmatum*, a new species from *Solanum capsicoides* All. in Southern Western Ghats, Kerala, India, *Phytotaxa*. 221(3), 295-300.
- 35.**V.S. Anil Kumar** and K. Murugan (2015), Taxonomic implications with special reference to stomatal variations in *Solanum* species using light and scanning electron microscope. *International Journal of Applied Biology and Pharmaceutical Technology*. 6(2) 112-125.
36. **V.S. Anil Kumar*** and K. Murugan (2014) Floral Morphometrics of *Solanum* L. (Solanaceae) species in southern Western Ghats: Correlation with interspecific taxonomic affinities *Webbia: Journal of Plant Taxonomy and Geography*. Taylor and Francis group UK.

37. **V.S. Aniil Kumar***, P.J. Aswathy, A.V. Sunila and K. Murugan (2014) Characterisation of *Solanum diphyllum* L. - a medicinally potential species from southern Western Ghats in Kerala using SEM and FTIR spectroscopy. *World Journal of Pharmacy and Pharmaceutical Sciences* (3) 9: 592-603
38. **V.S. Anil Kumar*** and K. Murugan (2014). Evaluation of genetic variability using Random Amplified Polymorphic DNA markers in selected species of *Solanum* L. – A potential medicinal genus. *World Journal of Pharmacy and Pharmaceutical Sciences* VOL.3
39. **V.S. Anil Kumar*** and K. Murugan (2014) Electron microscopic and IR spectral Analysis of the medicinally important spiny *Solanum-Solanum melongena* var *insanum*. *Journal of Aquatic Biology and Fisheries*, 2 (2), 29-35.
40. **Anil Kumar V. S***, Meenu krishnan V. G and Murugan.K (2013), Scanning electron microscopic and IR fingerprinting study as taxonomic characters in medicinally important spiny nightshade- *Solanum virginianum* L.*Asian Journal of Plant Science and Research* 3 (2) 31-37
41. Remya krishnan, **V.S.Anil Kumar** and K. Murugan (2013) Establishment of cell suspension cultures in *Marchantia linearis* Lehm and Lindenb. For the optimum production of flavonoids *3 Biotech*, Springer, 4: 49-56.
42. **V.S. Anil Kumar** and K. Murugan (2013) Taxonomic significance of Foliar micromorphology and their systematic relevance in the genus *Solanum* (Solanaceae) Prospects of Biosciences, Addressing the Issues. Springer India Chapter 40 343-349

43. **Anil Kumar. V.S**, Priya Y.U and Murugan. K (2013) Variability of DNA, protein and Alkaloid content in *Solanum torvum* Sw. Accessions- A pharmacobotanical Herb. *Indian Journal of Plant Sciences*,2 (2) 85-99
44. **V.S. Anil Kumar**, Sruthy K Pand K. Murugan Foliar fingerprinting of *Solanum* spp from Kerala (2013) *Phytomorphology* 63 (1&2) 45-55
45. **Anil Kumar. V.S**, Dinesh Babu K.V, Sunukumar, S.S and Murugan.K(2012) Taxonomic discrimination of *solanum nigrum* and *Solanum giganteum* by Fourier Transform Infrared Spectroscopy Data. *Journal of Research in Biology*, 2(5)482-488
46. **V.S. Anil Kumar** and K.Murugan (2012) Morphological and IR fingerprinting of *Solanum* spp from Kerala. *Journal of Phytological Research*, 25(.1) 47-55
47. **V.S. Anil Kumar** and K. Murugan (2012), Taxonomic discrimination of *Solanum capsicoides* All. Accessions: A biosystematic Approach. *Phytomorpholgy*, 62 (3&4) 105-114