

CURRICULUM VITAE

Name : **Dr. T. FRANCIS XAVIER**
 Date of Birth : 07-04-1979
 Designation : Associate Professor
 Department of Botany
 St. Joseph's College (Autonomous)
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Educational Qualification :

Degree	University/Institution	Year	Class
Ph.D	Department of Botany, St. Joseph's College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli - 620 002	2007	Commended
M.Sc	Department of Botany, St. Joseph's College (Autonomous), Tiruchirappalli - 620 002	2001	First Class
B.Sc	Department of Botany, St. Joseph's College (Autonomous), Tiruchirappalli - 620 002	1999	Fist Class

Research Grants/ Funds received as Principal Investigator/ Coordinator

Funding Agency	Title of the Projects/ Programmes	Duration	Grant Received
UGC New Delhi	Isolation and characterization of opportunistic pathogens from hospitalized AIDS patients of Namakkal district and antimicrobial screening of traditional medicinal plants of Kolli hills	2012-2015 (Completed)	7 Lakh
SERB-DST New Delhi	Isolation and characterization of emerging opportunistic pathogens from hospitalized AIDS patients of Karur district of Tamil Nadu and antimicrobial screening of local medicinal plants on opportunistic pathogens	2013-2016 (Completed)	17 Lakh
Indian Academy of Sciences Bangalore	Science academies' Lecture Workshop on Vistas in Biosciences (30 & 31, Jan.2015)	2015	2 Lakh
	Science academies' Lecture Workshop Bioresources (10 -12, Feb, 2016)	2016	2 Lakh
	Science Academies' Refresher Course for College teachers on Experimental Biology: Orthodox to Modern (7-19, Nov. 2016)	2016	8 Lakh
	Science academies' Lecture Workshop on Vistas in Biodiversity and Biorecourses ,Bangalore (2-4 , Aug.2017)	2017	7.97 Lakh
	Science Academies' Refresher Course for College teachers on Bioprospection of Bioresources (4-18, Jan. 2018)	2018	7.97 lakh
	Science Academies' Refresher Course for College teachers on Known to Unknown Techniques in Biology (1-15, Nov 2018)	2018	7.97 lakh
DST - INSPIRE New Delhi	DST – INSPIRE sponsored Five day Internship Programme for School students (7- 12 Aug 2018)	2018	8 Lakh

Awards received

: **Young Scientist Award** in the form of Startup Research Grant **Rs.17 Lakhs** from Science and Engineering Research Board (SERB), Department of Science and Technology, New Delhi

: **Best Innovator Award from by Exnora and Tiruchirappalli City Corporation**

: **Best Paper Presentation Award received** (2004) for the paper presented on the title of *In vitro* effect of *Malaxis rheedii* Sw. leaf extract on *E. coli* mutant strains in National Biological Congress on BIOME and BIOSCIENCES, Jan 9- 10, Organized by Muthayammal College of Arts and Science and Flora, Sponsored by CSIR, New Delhi.

Product Developed: Ecofriendly cost effective Sanitary napkin from plant fiber 'Solvo'

Current Duties: Teaching; Dissertation Guidance; Research Supervision & Publication; Mentoring; Students' Progression, Community Work & Service Learning

Research Specialization / Current Area of Research:

- i. Clinical Microbiology- opportunistic pathogens from HIV/AIDS patients
- ii. Pharmacognosy

Research Output

- 6 M.Phil Microbiology and 8 Botany Theses supervised & declared
- Supervised 23 PG Research in Microbiology and Botany
- Publications

Cumulative Impact factor : 16 **H- Index**: 10

Ph.D Thesis Guided

1. **Dr.M.Kannan. Ethnobotanical**, Antimicrobial and Phytochemical Screening of Selected Medicinal plants of Kolli Hills on Opportunistic Pathogens of HIV/AIDS Patients. (**PhD awarded in Botany- July 2017**)

2. **Dr.A.Auxilia.** Isolation and Characterization of Emerging Opportunistic Pathogens from Hospitalized AIDS Patients of Karur District and Antimicrobial Screening of Local Medicinal Plants on Opportunistic Pathogens. (**PhD awarded in Botany -August 2017**)

3. **Dr. G. Gomathi**, Mycorrhizal Diversity and Specificity of *Vanda* and *Cymbidium* Species using DNA barcoding. (**PhD awarded in Biotechnology 2020**)

4. **Dr. D. Sathish Kumar**, *In vitro* Micropropagation, Antimicrobial Screening and Phytochemical Studies on *Andrographis ehioides* (L.), (**PhD awarded in Botany 2020**).

***Dr. P. Dhanalakshmi**, Studies on the opportunistic pathogens of HIV/AIDS patients of Perambalur district and antimicrobial screening of herbal extracts on the isolated pathogens (PhD awarded in Zoology)

6. **Dr. Balavivekananthan.** *In vitro* organogenesis and pharmacognostical screening of *Solanum elaeagnifolium* Cav. (**PhD awarded in Botany 2022**).

7. **Dr. R.Sabitha**, *In Vitro* Organogenesis and Pharmacognostical Screening of *Oxystelma esculentum* (**PhD awarded in Botany 2023**)

8. **Dr. K. Usha (Part time)**, Ethnobotanical and Pharmacognostical studies on selected medicinal plants of Javadi Hills, Eastern Ghats of Tamil nadu (**PhD awarded in Botany 2023**)

* Served as Co- Guide

Teaching Experience : 20 Years

Research Experience : 25 Years

Present Position : Associate Professor (Government Aided)
Department of Botany
St. Joseph's College (Autonomous)
Tiruchirappalli - 620 002

Extension Activities : Served as National Service Scheme (NSS) Programme
Officer from June 2011- May 2014 (**Annexure – I**)

Workshop / Training Programme organized

- i. One Day State Level Workshop on Microbiological and Phytochemical Techniques (**Invisibles and Phytobiotics '13**) on 18th December, 2013
- ii. One Day State Level Workshop on Basic Techniques in Microbiology for School Teachers (**MicroTech '14**) on 28th August, 2014
- iii. Science academies' Lecture Workshop on Vistas in Biosciences on 30 & 31, Jan.2015. sponsored by Indian Academy of Sciences.
- iv. Science academies' Lecture Workshop on Bioprospecting and Bioresources on 10 -12, Feb, 2016, sponsored by Indian Academy of Sciences.
- v. Science Academies' Refresher Course for College teachers on Experimental Biology-- Orthodox to Modern on 7-19, Nov. 2016, sponsored by Indian Academy of Sciences.
- v. Science academies' Lecture Workshop on Vistas in Biodiversity and Biorecources ,Bangalore on 2-4 , Aug.2017, sponsored by Indian Academy of Sciences
- vii. Science Academies' Refresher Course for College teachers on Bioprospection of Bioresources on 4-18, Jan. 2018, sponsored by Indian Academy of Sciences.

Workshop /Training Programme attended

- i) Science Academies Refresher course on 'Modern Biotechnology: concepts & practices (MBCP 2013) from 15th to 29th May, 2013 sponsored by Indian Academy of Sciences , Bangalore at School of Biotechnology , Madurai Kamaraj university, Madurai
- ii) **National workshop on Nanobiotechnology and Molecular biology** from 11th -14 **December, 2012** at Centre for Advanced Studied in Botany, University of Madras, Chennai.
- iii) **International Training Course on Biotechnological Tools for Plant Improvement 2003** at K. S. R. College of Arts & Science, Tiruchengode, Sponsored by International Cell Research Organization, UNESCO and EMBO.
- iv) **National Level Workshop on Phytochemistry and Plant Tissue Culture, 2005** at Centre for Advanced Studied in Botany, University of Madras, and Chennai.

National / International Research Publications (Annexure – II)

1. **T.Francis Xavier**, R.Sabitha A. Freeda Rose S. Balavivekananthan, 2024. Phytochemical composition, antimicrobial, antioxidant and antidiabetic effects of *Solanum elaeagnifolium* Cav.leaves : in vitro and in silico assessments, Journal of Biomolecular Structure and dynamics (**Impact Factor 5.2 -Taylor and Francis Group**)
2. **T. Francis Xavier**, K,Usha and R.Sabitha, 2024.Evaluation of Anti-hyperglycemic Potential of Ethno Medicinal plant *Grewia bracteata* B.Heyne ex Roth, 2024 Research Journal of Agricultural Sciences (UGC –CARE listed Journal) 15: 197-200.
3. **T.Francis Xavier**, R.Sabitha and S.Balavivekananthan, 2022. *In vitro* Pharmacological investigations of *Oxystelma esculentum* R.Br and in silico molecular docking analysis of its leaf constituents on diabetic related target , South African Journal of Botany , 149 : 320 -338 (Science Direct – Elsevier **Journal Impact Factor 3.3 Elsevier Journal**)
4. K.Usha, **T.Francis Xavier** and R.Sabitha.2021. In vitro sensitivity pattern of selected bacterial pathogens on *Urginea indica* kunth Rhizome extract, Research Journal of Agricultural Sciences, 14(1): 208-211
5. S.Balavivekananthan,**T. Francis Xavier**, S.R. Senthilkumar and R. Sabitha, 2021. Antibacterial activity of *Solanum elaeagnifolium* Cav. stem and leaf extract against human pathogenic bacteria, Research Journal of Pharmacy and Technology 14(3): 1339-1345.
6. S.Balavivekananthan, **T. Francis Xavier**,S.R. Senthilkumar and R. Sabitha, 2020. Direct Organogenesis from nodal explant of *Solanum elaeagnifolium* Cav. Bulletin of Environment, pharmacology and Life Sciences, 9(8) 121-126.
7. Arokiadoss Arun Bastin, **Thangaraj Francis Xavier**, Senthilkumar Balavivekananthan and Rajendren Sabitha, 2019. Antibacterial activity of *Blepharis madraspatensis* L. using various solvents, International Journal of Research and Analytical Reviews, 6(2) 457-459.
8. **T. Francis Xavier**, Arockiadoss Arun Bastin and Dr. Anthonysamy Auxilia, 2018, Ethnomedicinal survey on plants used by paliyar tribes in pachalur hills, Eastern ghats of Tamil Nadu, South India, World Journal of Pharmaceutical Research, 7(6):423-458.
9. **T. Francis Xavier** and D. Sathish Kumar, 2018, Indirect organogenesis of *Andrographis echinoides* (L.) Nees, World Journal of Pharmaceutical research, 7(5):1655-1664.
10. **T. Francis Xavier**, Freeda Rose and S.R. Senthil Kumar, 2018. *In vitro* antibacterial activity of *Clausena dentata* (Wild.) M. Roem leaf extract against opportunistic

- bacterial pathogens of HIV/AIDS patients, International Journal of Current Research and Academic Review, 5(9):60-65
11. **T. Francis Xavier**, Freeda Rose and S. R. Senthil Kumar, 2018, Clinical profile of opportunistic bacterial and fungal pathogens in HIV/AIDS patients of Thuraiyur region of Tiruchirappalli District, Tamil Nadu, India, International Journal of Current Research and Academic Review, 5(9):10-14.
 12. **T. Francis Xavier**, Packirisamy Dhanalakshmi and Mohamed Shamsudin, 2018. Biological efficacy of *Centella asiatica* (L) urban against opportunistic pathogens, International Journal of Pharmacy and Biological Sciences, 8(1):209-213.
 13. **T. Francis Xavier** and D. Sathish Kumar, 2018. Antibacterial screening of *Andrographis echinodes* (L.) nees against selected human pathogenic bacteria, World Journal of Pharmaceutical Research, 7(4):1212-1219.
 14. **T. Francis Xavier** and G. Dhanasekaran, 2018. In vitro antibacterial potential of *trichosanthes tricuspidata* Lour. against pathogenic bacteria, World Journal of Pharmacy and Pharmaceutical Sciences, 7(2):1436-1441.
 15. **T. Francis Xavier**, S. R. Senthil Kumar and G. Gomathi, 2017, DNA barcoding of Vanda species from the regions of shevaroy and kolli hills using rbcL gene, Biotechnological research, 3(4):94-98.
 16. **T. Francis Xavier**, Moorthy Kannan, Anthonysamy Auxilia, 2016, Sensitivity pattern of opportunistic bacterial pathogens of HIV/AIDS patients on *Cyclea peltata* (LAM.) HOOK.F. & Thompson – A Potential Medicinal Plant, World Journal of Pharmacy and Pharmaceutical Sciences. 5(3):864-870.
 17. **T. Francis Xavier**, Moorthy Kannan, Anthonysamy Auxilia, 2015, Observation on the traditional phytotherapy among the malayali tribes in eastern ghats of Tamil Nadu, South India, Journal of Ethnopharmacology, 165:198-214. (**Impact Factor 5.1 Elsevier Journal**)
 11. **T. Francis Xavier**, M. Kannan and A. Auxilia, 2015. Traditional Medicinal Plants Used in the treatment of different skin diseases, International Journal of Current Microbiology and Applied Sciences, 4(5):1043-1053.
 12. **T. Francis Xavier**, Moorthy Kannan and Anthonysamy Auxilia, 2015. Isolation and characterization of opportunistic bacterial and fungal pathogens from hospitalized

- HIV/AIDS patients of Namakkal district in Tamil Nadu, World Journal of Pharmacy and Pharmaceutical Sciences, 4(7):742-750.
13. **T. Francis Xavier** and A.Auxilia, 2014. Prevalence of Candida infection in HIV seropositive patients in Karur district of Tamil Nadu, India, Int.J.Curr.Microbiol. App.Sci, 3(5):312-317.
 14. **T.Francis Xavier**, M. Kannan , L. Lija , A. Auxillia , A.Freeda Rose , S.Senthilkumar. Ethnobotanical study of Kani tribes in Thoduhills of Kerala, South India, Journal of Ethnopharmacology, 152 (2014) 78–90 (**Impact Factor 5.1 Elsevier Journal**)
 15. **T. Francis Xavier** and S. Senthil Kumar, 2013. Bacteriostatic effect of *Seidenfia rheedii* on bacterial pathogens by time course assay, International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS), 2(3): 630-638.
 16. **T.Francis Xavier** and S. Senthil Kumar, 2013. Antibioqram profile of Pathogenic Fungi on *Seidenfia rheedii* leaf extracts, International Journal of Pharma and Biosciences, 4(3): 416-422.
 17. **T.Francis Xavier**, A. Auxilia, P.Suresh, M.Kannan and A.Arun Bastin, 2013. Floristic studies on selected sacred groves of Tiruchirappalli District, Tamil Nadu, International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS), 2(4):968-973.
 18. **T.Francis Xavier**, P.Suresh, A. Auxilia, M.Kannan and A.Arun Bastin, 2013. Floristic composition and practices on the selected sacred groves of Rajapalayam, Virudhunagar District, Tamil Nadu, Scholars Research Library, 5(3):7-10.
 19. **Thangaraj Francis Xavier**, Pandian Nirmal Kumar, Anthony Samy Auxilia and Moorthy Kannan, 2013. In vitro growth inhibition of pathogenic bacteria by *Solanum seaforthianum* L. Pelagia Research Library, 3(4): 70-76.
 20. **T.Francis Xavier**, A.Auxilia and M. Senthamil Selvi, 2013. Antibacterial and phytochemical screening of *Solanum erianthum* D. Don, Scholars Research Library, 3(2):131-133.
 21. **T. Francis Xavier**, A.Auxilia, M.Kannan, A.Freeda Rose and S. R. Senthil Kumar, 2013. Isolation and Identification of *Cryptococcus neoformans* from pigeon droppings in Tiruchirappalli district of Tamil Nadu, South India, Int.J.Curr.Microbiol.App.Sci, 2(11):404-409.
 22. M.Kannan, L.J. Lija, **T.Francis Xavier** and A.Auxilia, 2013. Antimicrobial activity of the medicinal plant *Senna obtusa* Roxb, International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS), 2(5): 1135-1140.
 23. **T.Francis Xavier**, M.Kannan and A.Auxilia, 2013. Spectrum of Opportunistic pathogens in HIV/AIDS patients of Namakkal district of Tamil Nadu, India, Int.J.Curr.Microbiol.App.Sci, 2(8): 110-113.

24. **T. Francis Xavier**, A.Auxilia, M.Kannan, A.Arun Bastin, A.Freeda Rose and S. R. Senthil Kumar, 2013.Comparison of different media for the pigment production of Pathogenic and Non pathogenic *Cryptococcus neoformans* isolates, Scholars Academic Journal of Biosciences, 1(6): 263-266.
25. **T.Francis Xavier**, A.Freeda Rose and M.Dhivyaa, 2011. Ethnomedicinal survey of malayali tribes in kolli hills of Eastern Ghats of Tamil Nadu, India, Indian Journal of Traditional Knowledge , 10(3):559-562 (**Impact Factor : 0.8**).
26. **T.Francis Xavier** and S.Agatheeswaran, 2010. Antibacterial effects of leaf extract of *Alpinia officinarum*, Journal of Tropical Medicinal plants, Malaysia, 11(1):49-52.
27. **T.Francis Xavier** and S. Senthilkumar. 2009. An evaluation of antibacterial activities of *Seidenfia rheedii* (Sw.) Szlach, African Journal of Biotechnology,8(23):6608-6611(**Impact Factor: 0.4**)
28. **T. Francis Xavier** and V.R.Arun, 2007. Sensitivity pattern of Bacterial pathogens on the medicinal plants on the Medicinal weed *Lantana camara* (Linn.),Journal of Plant Sciences,USA 2(5):5(7):592-582
29. **T. Francis Xavier** and P.Vijayalakshmi . 2007. Screening of Antibiotic Resistant Inhibitors from Indian Traditional Medicinal Plants Against *Streptococcus mutans* , Journal of Plant Sciences ,USA 2 (3): 370-373.
30. **T.Francis Xavier and S.Senthil Kumar**, 2007.Management and Conservation of Medicinal orchids of Eastern Ghats of Tamil Nadu, South India. Journal of Economic and Taxonomic Botany, 31(2):417-422.
31. **T. Francis Xavier** and S. Senthilkumar. 2006. Susceptibility of Bacterial pathogens to *Seidenfia rheedii* leaf extracts, Journal of Tropical Medicinal plants, Malaysia, 7(2):185-188.
32. **T. Francis Xavier** and V.Kalai Selvi . 2005. Antifungal activity of extracts of *Alangium salviifolium*, Journal of Tropical Medicinal Plants, Malaysia Vol.61:72 –175.
33. **T. Francis Xavier** and S. Senthilkumar. 2004. *In vitro* sensitivity of *E. coli* mutants to *Malaxis Rheedii* Sw.: A medicinal Orchid of Kolli Hills, South India. J. Swamy Bot. Cl. Vol.21: 47-50.
34. E. Natarajan, S. Senthilkumar and **T. Francis Xavier**. 2003. Antibacterial activity of *Alangium salviifolium* (L.) Wangerin leaf extracts. Journal of Tropical Medicinal Plants, Malaysia, Vol.4, (1): 9-13.

35. **T. Francis Xavier** and S. Senthilkumar. 2003. Antibacterial activity of *Malaxis rheedii* Sw. an ornamental orchid of Shevaroy Region of Eastern Ghats, S. India. Science Focus, an International Journal of Physical and Biological Sciences, Nigeria. Vol.5: 82-88.
36. **T. Francis Xavier** and S. Senthilkumar. 2003. Inhibition of *Aspergillus flavus* (an aflatoxin Producing fungus) by *Tinospora cordifolia* (Willd.) Hook. f. and Thomson Leaf Extracts, Science Focus, an International Journal of Physical and Biological Sciences, Nigeria. Vol.5: 56-59.
37. R. Jayachandran and **T. Francis Xavier** 2003. Antibacterial activity of *Zehneria scabra* root extracts. Journal of Tropical Medicinal Plants, Malaysia, Vol.4 (8): 173-179.
38. E. Natarajan and **T. Francis Xavier**. 2003. Sensitivity of *Aspergillus* species to *Tinospora cordifolia* (Willd.) Hook.f. and Thomson. Asian Journal of Microbiology, Biotechnology and Environmental Sciences. Vol.5 (4): 543-545.
39. R. Jayachandran and **T. Francis Xavier** 2003. Antibacterial activity of stem extracts of *Tinospora cordifolia* (Willd.) Hook. f. & Thomson. Ancient Science of Life, A Journal of International Institute of Ayurveda. XXIII (1): 40-43.
40. **T. Francis Xavier** and E. Natarajan 2003. Antibacterial potential of *Plectranthus amboinicus* (Lour.) Spreng. A study in vitro. Journal of Swamy Botanical Club, Vol.20: 55-58.