## Dr. S. VIJAYALAKSHMI

Plot no 39: Officers town,

Ayyampatti road, Kanagavel Avenue phase II,

Vazhavandhan kottai,

Thuvakudi, Trichy – 620015

Mobile: 9786966800

E-Mail: vijiselva10@gmail.com



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**Educational Qualification : Ph.D** Microbiology (UGC MAJOR RESEARCH

PROJECT-JRF)

July 2015

A.V.V.M. Sri Pushpam College, Thanjavur.

Title : BIODIVERSITY AND CHARACTERIZATION OF

ENDOPHYTIC FUNGAL SECONDARY METABOLITES
AGAINST CLINICAL ISOLATES OF β-LACTAMASES

PRODUCING GRAM NEGATIVE BACTERIA

Philosophy : M. Phil Microbiology

August, 2009

A.V.V.M. Sri pushpam College, Thanjavur.

PG : M.Sc. Microbiology

April, 2008

UG : B.Sc. Microbiology

April, 2006

Shrimati Indira Ghandi College, Trichy

**Computer Education**: PGDCA (Post Graduate Diploma in computer

Application), May, 2007

Shrimati Indira Ghandi College, Trichy

**Technical Qualification**: **DMLT** (Diploma in Medical Laboratory Technology)

June, 2005

#### **MEMBERSHIP**

- Life member of "Mycological Society of India (MSI)" .(LM-50-15)
- Life member of "Indian Initiative for Management of Antibiotic Resistance IIMAR."

## **GUEST LECTURE**

Title : Recent advances in Mycology

**Institution** : Department of Microbiology, A.V.C.College (Autonomous),

Mannampandal, Mayiladuthurai.

**Date** : 15-02-2016.

# **BOOK CHAPTERS**

**1. Book** : Fungi and their role in sustainable development: current

Perspectives.

**Editor** : Praveen Gehlot and Joginder singh.

**Chapter** : Bioactive compounds from Endophytic Fungi

Publishers : Springer.

**2. Book** : Recent trends and developments in natural product

Research.(Yet to publish)

**Chapter** : Marine fungi as Pharmacy

**Editor** : Vineet Meshram and Joginder singh.

Publishers : Springer.

# PAPERS PUBLISHED

- 1. Winny Fred Crossia James Rex Prabhu, **Vijayalakshmi Selvakumar**, Subashini Rajkumar and Sudha. (2019) Screening of *Anogeissus latifolia* for phytochemical and antimicrobial properties against human pathogens. *Journal of Emerging Technologies and Innovative Research*. 6(5)-120-127. (**UGC Approved Journal**).
- Winny Fred Crossia James Rex Prabhu, Subashini Rajkumar, Bhuvaneswari P ,
   Vijayalakshmi Selvakumar , Bhuvaneswari Manivel and Chitra Devi Senthilkumar (2019). Comparative microbiological water analysis stored in different vessels. *Journal of*

- Emerging Technologies and Innovative Research. 6(5)-592-603. (UGC Approved Journal).
- 3. Bhuvaneswari Manivel, Subashini Rajkumar, **Vijayalakshmi Selvakumar**, H Dharani.2018. Decolourisation of synthetic textile dyes by using *Calocybe indica*. *International Journal of Biology Research*, 3(4):11-15. (5.22).
- 4. **Vijayalakshmi Selvakumar,** Panneerselvam. A, Subhashini. G, Bhuvaneswari.S and Arockia suganya.S.2018. Prevalence and antimicrobial resistance pattern of diarrheagenic escherichia coli isolated from actue diarrhoea children. *International Journal of Biology Research.* 3(1): 306-311. (5.22). (**UGC Approved Journal**).
- Vijayalakshmi Selvakumar, Sivaranjani.S, Sujatha.S, Revathy.M and Panneerselvam. A. 2017. Isolation & Identification of Secondary metabolites producing bacteria isolated from soil. Asian journal of Science & Technology. 8(12):6949-6954. (6.74).
- S. Vijayalakshmi Selvakumar, G. Subhashini Rajkumar, S. Bhuvaneswari Manivel, K. Chitra Devi Senthilkumar. 2017. Calcium Precipitating Bacteria on Biomimitic Coating Material. *International Journal of Pharmaceutical Research and Bio-Science*. 6(2): 14-24. (5.567).
- 7. Bhuvaneswari S, Subashini G, **Vijayalakshmi S** and Spes Zanitha Franciska .2016. Bio-electrochemical removal of CR III from leather effluent by *Pseudomonas aeruginosa*". *International Journal of Applied research*. 2(9):528-532. (5.2).
- 8. Muthusamy Karnan, Pichai Tamilkani, Govindarajan Senthilkumar, **Selvakumar Vijayalakshmi** and Annamalai Panneerselvam.2016. *Volvariella bombycina of* TamilNadu. *International Journal of Current Research*. 3 (04):2175-2178. (6.226).
- 9. Muthusamy Karnan, Pichai Tamilkani, Govindarajan Senthilkumar, **Selvakumar Vijayalakshmi** and Annamalai Panneerselvam.2016. Cultivation, Nutrition, biochemicals and enzyme analysis of paddy straw mushroom (*Volvariella volvacea*). *International Journal of Current Research*. 8 (03): 27303-27308.(6.226).
- Deepa S, Vijayalakshmi S, Kanimozhi k., Panneerselvam A.2013. Novel anticancer compounds Isolated from mangrove derived actinomycetes: A Review Article.
   International Journal of Biochemistry. Photon, 108: 260-265.(3.97).
- **11. S. Vijayalakshmi,** Dr.C.Chandran, Dr.MP.Saravanan. Dr.S.Dhanapaul. Sodium Dodecyl Sulphate Polyacrylamide Gel Electrophoresis (SDS-PAGE) Pattern of Pre-Anti Retroviral

- Therapy (PRE ART) and Anti Retroviral Therapy (ART) Treated Male and Female HIV/AIDS Patients. World Journal of Pharmaceutical Research 3 (4) 1784-1797.(5.045)
- **12. Vijayalakshmi S**, Deepa S, Panneerselvam A and Kanimozhi K., 2013. Antimicrobial compounds isolated from endophytic fungi. *J.Sci. Trans.Environ. Technov*, 7(2):62-68.
- 13. **Vijayalakshmi Selvakumar**, Dr. A. Panneerselvam, Dr. N. Vijayakumar, Dr. Mohan A. Savery and Dr. N. Thajuddin., 2014. Diversity of Endophytic and Rhizosphere Soil Fungi of *Avicennia marina* in Maravakadu Mangrove Forest. *IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS)* **9(2)**:14-17.(1.138)
- **14. Vijayalakshmi Selvakumar**, Dr. A. Panneerselvam, Dr. N. Vijayakumar, Dr. Mohan A. Savery and Dr. N. Thajuddin., 2014. Diversity of Endophytic and Rhizosphere Soil fungi of *Suaeda monica* in Maravakadu mandrove forest. *International Journal of Current Research* **6(03)**:5343-5345. (6.226)
- **15. VijayalakshmiSelvakumar**, A. Ramamourti , Dr. N. Vijayakumar , Mr. Gerold Ashok Kumar, Mr. R. Kasinathan, Dr. A. Panneerselvam. 2014. Biological Suppression of *Fusarium oxysporum* f. sp. *lycopersici* (Sacc.) Synder and Hans using antagonistic fungus *Trichoderma harzianum* (Rifai) in Tomato (*Lycopersicon esculentum* (Miller)). *International Journal of Current Research*. **6(02)**:4962-4964. (6.226)

#### PAPERS PRESENTED

- **1. Vijayalakshmi Selvakumar**, Dr. A. Panneerselvam, Thajuddin and Suresh Mickymaray. Endophytic fungi assemblages in mangrove Plants of *Rhizophora mucronata* and their antibacterial activity against extended spectrum β-lactamases producing (CTX-M type) *Escherichia coli. National symposium on Mycological research-emerging trends, applications and prospects and 41<sup>th</sup> Annual Meeting of Mycological Society of <i>India (MSI)*. February 23-24, 2015. Organized by Punjabi University, Patiala.
- 2. Vijayalakshmi Selvakumar, A. Panneerselvam, N. Thajuddin, N. Vijayakumar. Diversity of endophytic fungi isolated from mangrove plants of Maravakadu and their antagonistic activity against Fusarium oxysporum f.sp.lycopersici. 36<sup>th</sup> Annual conference & National symposium on Challenges and management approaches for crop diseases of national importance-status and prospects. February 12-14, 2015. Organized

- by Tamil Nadu agricultural University, Coimbatore& Indian society of Mycology and Plant Pathology, Udaipur, Rajasthan.
- **3. Vijayalakshmi Selvakumar,** Dr. A. Panneerselvam. Antimicrobial and bioactive compounds from Mushroom. *International conference on Green energy & green environment*. January 21, 2015. Organized by Nadar Saraswathi college of Arts & Science, Theni.
- **4. S. Vijayalakshmi,** A. Panneerselvam, R.Selvam. Nanomedicine and Nanotechnology. *National seminar on new opportunities and challenges in chemical research.* December 29-30, 2014. Organized by Department of Chemistry, A.V.V.M Sri Pushpam college(Autonomous), Poondi, Thanjavur.
- **5. Vijayalakshmi Selvakumar,** A. Panneerselvam, N. Thajuddin. Endophytic fungi isolated from mangrove Plants of *Avicennia marina* and their antibacterial activity against β-lactamases producing gram negative bacteria. *Asian plant science conference*. November 1-3. Organized by Society for Applied biotechnology, Biotechnology Society of Nepal, Association for the Advancement of Biodiversity Science, Eurasian Academy of Environmental Sciences, Bhairahawa, Nepal.
- **6. Vijayalakshmi Selvakumar**, Dr. A. Panneerselvam, Dr. N. Vijayakumar and Dr. Mohan A. Savery. Studies on Endophytic Fungi and Rhizosphere soil Fungi of Some Mangrove Plants. *National Conference on Fungal Diversity and Biotechnology for Food and Chemicals (FDBFC-2014) & 40<sup>th</sup> Annual Meeting of Mycological Society of India (MSI).*February 27-28, 2014. Organized by Centre of advanced study in marine biology, Annamalai University, Parangipettai.
- **7. S. Vijayalakshmi,** S. Deepa, A. Panneerselvam. The future of forming: Eight solutions for a hungry world. *International Conference on food technology*. January 4-5, 2013. Organized by Indian institute of Crop Processing technology, Thanjavur.
- **8. S .Vijayalakshmi** and A. Panneerselvam. Biology of Endophytic Fungi Isolation, Molecular Characterization, Bio-Technological Application and Pharmaceutical Applications of Endophytic secondary Metabolites. *National Seminar on Cutting Edge Microbial Research and Challenges*. February 25-26, 2013. Organized by Department of Microbiology, Bharathidasan University, Tiruchirappalli.

- **9. S** .Vijayalakshmi and A. Panneerselvam. Diversity of fungi from Muthupettai mangroves. *National Conference on Microbes and Human Welfare*. July 20-21, 2013. Organized by Department of Microbiology, Bharathidasan University, Tiruchirappalli.
- **10. S** .Vijayalakshmi and A. Panneerselvam. Isolation and Identification of Endophytic Fungi from *Avicennia marina* in Muthupettai Mangroves. *National Conference on New opportunities and challenges in Microbial Research*. September 5-6, 2013. Organized by Department of Microbiology, Bharathidasan University, Tiruchirappalli.
- 11. S. Vijayalakshmi, C.Chandran, M.P.Saravanan, S.Dhanapal. Sodium Dodecyl Sulphate Polyacrylamaide Gel Electrophoresis (SDS-PAGE) pattern of Pre-Anti Retriviral Therapy(Pre ART) and Anti Retroviral Therapy (ART) treated male and female HIV/AIDS patients. *National symposium on emerging trends in life sciences*. March 17-19, 2010. Organized by P.G and research department of Zoology, Rajah Serfoji Govt. College (Autonomous), Thanjavur.
- 12. S. Vijayalakshmi, C.Chandran, M.P.Saravanan, S.Dhanapal. Serum protein expression of Pre-Anti Retriviral Therapy (Pre ART) and Anti Retroviral Therapy (ART) treated HIV/AIDS patients in an ART Clinic. 7<sup>th</sup> National symposium on Modern biological sciences. February 5-6, 2010. Organized by SNMV College of Arts & Science, Coimbatore (GOLD MEDAL FOR BEST PAPER AWARD).
- **13. S. Vijayalakshmi.** H1N1 Flu (Swine flu). *National conference on Emerging themes in infection biology*. July 15-16, 2010. Organized by Dhanalakshmi srinivasan college of Arts & science for women, Perambalur.
- **14. S. Vijayalakshmi,** C.Chandran. Post-Harvest diseases of tree fruits. *National seminor on Industry-academia synergy to enhance food security through processing and value addition*. March 6-7, 2010. Organized by Indian institute of Crop Processing technology, Thanjavur.
- 15. S. Vijayalakshmi, K. Anandhi, C.Chandran. Biological suppression of *Fusarium oxysporum f.sp.lycopersici* using anatagonistic fungus *Trichoderma harzianum* in Tomato. 6<sup>th</sup> *National symposium on Modern biological sciences*. January 28-29, 2009. Organized by SNMV College of Arts & Science, Coimbatore. (SILVER MEDAL FOR BEST PAPER AWARD).

#### SEMINARS ATTENDED

- 1. National seminar on "Thrust areas in Biotechnology"
- 2. State level conference on "Medical Laboratory Technician in Medical Fraternity"
- 3. Scientific seminar on "Medical Laboratory Science in Public health-2005"
- 4. Scientific seminar on "Medical Laboratory Science in Public health-2006"
- 5. National conference on Progress in Algology in the Indian context

# WORKSHOPS ATTENDED

- 1. Workshop on "Strategies for Biotech Enterpreneurship", SASTRA University, Thanjavur. January 2017.
- 2. International Workshop on "Biochemical Techniques", Shrimati Indira Gandhi College, Trichy. January 2017.
- 3. Plants for People and People for Plants, A.V.V.M Sri Pushpam College, Thanjavur. December 2014.
- 4. Leaf to Drug, Biozone Research Technologies, Chennai. May 2014
- 5. Edible mushroom cultivation technology, A.V.V.M Sri Pushpam College, Thanjavur. 2009

# 16S rRNA / 18S rRNA GENE PARTIAL SEQUENCES SUBMITTED TO GENBANK (NCBI)

1.	E.coli VSKPSC1	- KP244285
2.	Klebsiella Pneumoniae VSKPSC2	- KP244286
3.	Enterobacter VSKPSC3	- KP244287
4.	E.coli VSKPSN1	- KP244288
5.	Klebsiella pneumoniae VSKPSN2	- KP244289
6.	Trichodrma longibrachiatum VSKPE1	- KM222826
7.	Aspergillus awamori VSKPE2	- KM222825
8.	Penicillium citrinum 1 VSKPE3	- KM070816
9.	P. citrinum 2 VSKPE4	- KM198321
10.	P. citrinum 3 VSKPE5	- KM198322
11.	T. viride VSKPE6	- KM222827
12.	Bacillus cereus VSKPS4	- KM198323

13. *B. cereus* VSKPS5 - KM198324

14. *B. cereus* VSKPS6 - KM198325

15. Bacillus sp. VSCBNR7 -KY750317

16. *E.coli* SVSCBNR5 - KY787193

## **EXPERIENCE**

1. Institution : Shrimati Indira Gandhi College, Trichy

Designation: Lecturer

Period : May 2010 to Oct 2010

2. Institution : Indian Biotrack Research Institute, Thanjavur.

Designation: Microbiologist

Period : August 2015 to May 2016.

3. Institution : Shrimati Indira Gandhi College, Trichy

Designation : Assistant Professor

Period : June 2016 to Till date

# PERSONAL DETAILS

Father's Name: N. Sundararajan

Date of Birth : 22.11.1985

Gender : Female

Marital Status: Married

Language Known: English, Tamil & Hindi (Writing)

Nationality : Indian

# **DECLARATION**

I hereby declare that the above – Furnished details are true and correct to the best of my knowledge.

Yours Faithfully

(S. VIJAYALAKSHMI)

S. Vijayalalli

# **REFERENCES**

1. Dr.A.Panneerselvam

Associate Professor & Head

Department of Botany and Microbiology,

A.V.V.M Sri Puspam College, Poondi,

Thanjavur Dt.

Email: panner.botany@gmail.com,

Ph: 9443661858

2. Dr. N. Thajuddin

Professor& Head,

Dean Faculty of Science and

Engineering,

Bharathidasan University, Trichy

Department of Microbiology,

Email: nthaju2002@yahoo.com

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