



Dr. R. VIJAYAKUMAR
Associate Professor of Microbiology

Contact Information

Address	:	Centre for Distance and Online Education Bharathidasan University Tiruchirappalli – 620 024, Tamilnadu, India.
Employee Number	:	BDU1780945
Date of Birth	:	26.02.1978
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Academic Qualifications: M.Sc./M.Phil./Ph.D.

April 2002	Master of Science in Applied Microbiology (First Class; 62.7%) Kandhaswami Kandar's College, P.Velur - 638 182, Namakkal Dt., Tamilnadu. Affiliated to Periyar University, Salem. India.
Title of Dissertation	<i>In vitro effect of aqueous garlic extract against medically important yeast-like fungus.</i>
November 2003	Master of Philosophy (First Class with distinction; 85.8%) P.G. & Research Dept. of Botany and Microbiology, A.V.V.M. Sri Pushpam College, Poondi - 613 503, Thanjavur (Bharathidasan University, Tiruchirappalli – 24), India.
Title of Dissertation	<i>Studies on the characterization, growth and control of Malassezia furfur (Robin) Baillon, a dandruff fungus.</i>
18 August, 2007	Doctor of Philosophy (Thesis Commended) P.G. & Research Dept. of Botany and Microbiology, A.V.V.M. Sri Pushpam College, Poondi - 613 503, Thanjavur (Bharathidasan University, Tiruchirappalli – 24) India.
Title of the thesis	<i>Studies on actinomycetes from Palk Strait region of Tamil Nadu coast with reference to antibiotic production.</i>

Teaching Experience : 18 Years

1. Lecturer in Microbiology, Dr. G.R. Damodaran College of Science, Avanashi Road, Civil Aerodrome Post, Coimbatore - 641 014. India from June 23rd, 2006 – 15.06.2009.
2. Lecturer & Head in Microbiology, Bharathidasan University College for Women, Orathanadu – 614 625, Thanjavur District, Tamilnadu, India from July 1st, 2009 – 12.11.2009.
3. Assistant Professor & Head in Microbiology, Bharathidasan University College for Women, Orathanadu – 614 625, Thanjavur District, Tamilnadu, India from 12.11.2009 to 14.11.2012.
4. Assistant Professor in Microbiology, Bharathidasan University Constituent College, Kurumbalur – 621 107, Perambalur District, Tamilnadu, India from 14.11.2012 to 19.12.2022.
5. Associate Professor in Microbiology, Centre for Distance and Online Education (CDOE), Bharathidasan University, Tiruchirappalli – 620 024, Tamilnadu, India from 20.12.2022 onwards.

Research Experience : 20 Years

Additional Responsibilities

1. Co-ordinator, District Facilitation Centre (DFC-38), Perambalur - Tamilnadu Government Arts & Science (TNGASA) Colleges Admissions – 2020.
2. State Coordinator for *Microbiologist's Society, India (MSI)* for one year (1-6-2021-31-05-2022).
3. Coordinator for Learner Support Centre and Examination Centre, TNOU from 05.10.2021 to 19.12.2022.
4. Doctoral Committee member for Ph.D. Scholars in Bharathidasan University, Bharathiar University and PRIST University, Thanjavur.

Areas of Research

Actinobacteriology, mycology and phycology - Diversity, taxonomy and secondary metabolites derived from actinobacteria, bacteria, fungi and cyanobacteria for human and plant health improvement.

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	6	-
	M.Phil.	6	-
Project	M.Sc.	11	3

Publications

Journal	Conferences			Others
	International	National	State	Books /Chapters
79	22	57	07	Books : 04 Chapters: 13

Cumulative Impact Factor (as per JCR)	:	20.821
h-index	:	15
i10 index	:	22
Total Citations	:	1365

Funded Research Projects (Completed)

S. No.	Agency	Period		Project Title	Budget (Rs. in Lakhs)
		From	To		
1.	TNSCST, Govt. of Tamilnadu	2014	2016	Production and characterization of novel antifouling compounds using marine actinobacteria isolated from Palk Strait coastal regions of Tamilnadu.	4,58,000/-
2.	DBT, Govt. of India	2018 (May)	2019 (Sep.)	<i>In vitro</i> studies on the effect of various chemical fertilizers on plant growth promoting activities of soil fungi.	8,00,000/-
3.	TANSCHE, Govt. of Tamilnadu	January 2019	December 2019	Evaluation of <i>Fusarium</i> basal rot disease in onion crop and its eco-friendly biological control with marine actinobacteria	1,00,000/-

Patents

Filed an Indian patent on "A Process and System for Waste Water Treatment and Sludge Minimization" Application No.: 202141019297 A; Dt. 07/05/2021; Sheik Syed Ishack, Panneerselvam, A., Ambikapathy, V., Thajuddin, N., Mubarak Ali, D., Senthilkumar, T., Senthilkumar, G., Anis Ahamed, N., Gomathi, S., Kanimozhi, K., Kanimozhi, G., Babu, S., Dhanasekaran, D., Dhanasekar, R. and Vijayakumar, R.

Distinctive Achievements / Awards

- ❖ Received Shri P.K. Das Memorial “**Best Faculty Award 2013**” in Microbiology (Junior), the award given by Nehru Arts and Science College, Coimbatore – 641 105, Tamilnadu, India.
- ❖ Received **Best Paper Awards (11 times)** in various national level conferences/symposia/seminars.

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized : 15

1. **Organized – “Blood Group Testing Camp”** held at Dept. of Microbiology, Bharathidasan University College for Women, Orathanadu – 614 625, Thanjavur Dt. during 05.08.2009 and 06.08.2009.
2. **Organized - “Body Mass Index Testing Camp”** held at Dept. of Microbiology, Bharathidasan University College for Women, Orathanadu – 614 625, Thanjavur Dt. during 4th & 5th February, 2010.
3. **Organized - “Blood Grouping Camp”** held at Dept. of Microbiology, Bharathidasan University College for Women, Orathanadu - 614 625, Thanjavur Dt. from 10.08.2010 to 12.08.2010 for 1st UG students.
4. **Organized - “Blood Grouping Camp”** held at Dept. of Microbiology, Bharathidasan University College for Women, Orathanadu – 614 625, Thanjavur Dt. on 03.09.2010, for 1st year PG students.
5. **Organized - “Blood Grouping Camp”** held at Dept. of Microbiology, Bharathidasan University College for Women, Orathanadu - 614 625, Thanjavur Dt. during 24 & 25 August 2011 1st UG and PG students.
6. **Co-ordinator** in the **In-service Training Programme for Secondary Grade Science Teachers** held at Bharathidasan University College for Women, Orathanadu – 614 625, during 21st – 25th November, 2011, Sponsored by TNSCST, Chennai.
7. **Organizing Secretary** in a One Day Seminar on **Development of Women Entrepreneurs** held at Dept. of Microbiology, Bharathidasan University College for Women, Orathanadu – 614 625, during 14th February, 2012, Sponsored by TNSCST, Chennai.
8. **Organized - “Blood Grouping Camp”** held at Dept. of Microbiology, Bharathidasan University College for Women, Orathanadu - 614 625, Thanjavur Dt. During 21.09.2012 1st UG & PG students.
9. **Organized** two day Training Workshop on **Sanitary Napkin Preparation** held at Dept. of Microbiology, Bharathidasan University Constituent College, Perambalur – 621 107 on 21 & 22 December, 2017.
10. **Co-ordinator** in a One Day Training Workshop on **Assembly and Usage of Foldscope (An Educational, Training and Research Tool)** for College Students held at Dept. of Microbiology, Bharathidasan University Constituent College, Perambalur – 621 107, on 17th September, 2018, sponsored by DBT, Govt. of India.
11. **Co-ordinator** in a One Day Training Workshop on **Assembly and Usage of Foldscope** for Higher Secondary Students held at Govt. Higher Secondary School, Kurumbalur, Perambalur – 621 107 on 04.12.2018, sponsored by DBT, Govt. of India.
12. **Co-ordinator** in a One Day Training Workshop on **Assembly and Usage of Foldscope and Twinning Programme** Jointly organized by Dept. of Microbiology, Bharathidasan University Constituent College, Perambalur – 621 107, St. Edmund’s College, Shillong - 793 003, Meghalaya & M.R. Govt. College, Mannargudi - 614 001, Tamilnadu on 30.01.2019, sponsored by DBT, Govt. of India.
13. **Co-ordinator** in a One Day Training Workshop on **Assembly and Usage of Foldscope** for Students held at Govt. High School, Thambiranpatti, Perambalur – 621 104 on 09.02.2019, sponsored by DBT, Govt. of India.

14. **Co-ordinator** in a One Day Training Workshop on *Assembly and Usage of Foldscope* for UG and PG Students held at Dept. of Microbiology, SRM Arts and Science College (SRM University Campus), Kattankulathur, Tamilnadu on 02.03.2019, sponsored by DBT, Govt. of India.
15. **Conducted** – One Day **Awareness Programme on “CoViD’19”** for UG & PG Students, held at Government Arts and Science College, Kurumbalur, Perambalur – 621 107 on 11.02.2020 (FN & AN) and 10.03.2020.

Events Participated

International

1. International Conference on “*Oppourtunistics and Challenges in Biotechnology and Environmental Sciences*” during 22nd-23rd Feb., 2007 at Department of Botany, Vellalar College for Women, Erode. **Paper presented***: Isolation, characterization and antimicrobial activity of *Streptomyces griseus* from saltpan soils of Vedaranyam, Tamilnadu, India, **R. Vijayakumar**, C. Muthukumar, N. Thajuddin and A. Panneerselvam.
2. *Louis Pasteur Memorial International Symposium on Harnessing Microbes for Human Health and Resource Recuperation* during 7th-8th August, 2012 held at Post Graduate & Research Department of Microbiology, Dr. N.G.P. Arts and Science College, Coimbatore - 48. **Papers presented**:
 1. Studies on the Diversity and Antimicrobial Activity of Terrestrial Actinobacteria from the Crop Fields of Thanjavur District, Tamilnadu, India. Cholarajan, A. and **Vijayakumar, R.**
 2. Screening of Antibacterial Compound Producing Marine Actinobacteria from East Coast of India against Fish Pathogenic bacterium. Thirumurugan, D. and **Vijayakumar, R.**
 3. Isolation, Characterization and Antibacterial Activity of Terrestrial Actinobacteria from the soils of Thanjavur District, South India. Vaijyanthi, G., Cholarajan, A. and **Vijayakumar, R.**
3. International Conference on “*Reasserting Microbial Biotechnology to Deflate Global Disease Burden (RMBT’15)*” (Sponsored by DBT, Govt. of India, New Delhi), 28th & 29th September, 2015 held at Department of Biotechnology, Manonmaniam Sundaranar University, Tirunelveli – 627 012, Tamil Nadu, India. **Papers presented**:
 1. Isolation and screening of antifouling activity of marine actinobacteria from Palk Strait coastal region of Bay of Bengal, South India. Manikandan, R. and **Vijayakumar, R.**
 2. Biocontrol efficiency of chitinolytic actinobacteria isolated from Muthupet mangrove environment, east coast of India. G. Vaijyanthi and **R. Vijayakumar.**
4. International Conference on “*Health, Food and Energy Security*” on October 1st, 2015 held at Bharathidasan College for Women, Puducherry, India. **Paper presented**: Screening the antifouling activity of marine actinobacteria isolated from Palk Strait region of Tamilnadu coast. Manikandan, R. and **Vijayakumar, R.**
5. International Conference on *Innovative Research in Life Science* on 6th March, 2017 at Department of Life Sciences, Dhanlakahmi Srinivasan College of Arts and Science for Women, Perambalur – 621 212. **Papers presented**:
 1. Antifouling and antibiofilm activity of marine actionbacteria isolated from Palk Strait coastal regions of Tamilnadu, India. R. Manikandan, **R. Vijayakumar.**
 2. Isolation, screening and characterization of actinobacteria from mangrove soil for their potential to produce antifungal agents. G. Vaijyanthi and **R. Vijayakumar.**
6. International Seminar on “*Microbes, Microbial Processes and Products (MMPP)*” on 12.09.2017 held at P.G. and Research Department of Microbiology, STET Women’s College, Mannargudi – 614 016, Tamilnadu, India. **Papers presented**:
 1. Isolation, characterization and antifungal activity of chitinase producing marine *Nocardiopsis alba* VMK3 against phyto-pathogenic fungi. G.Vaijyanthi and **R. Vijayakumar**
 2. Prevalence, distribution and phenotypic identification of *Vibrio* sp. in fishes caught off Chennai, Bay of Bengal. Ravikumar, V. and **R. Vijayakumar.**

3. Antibiofilm compounds from *Streptomyces* sp. VS6, isolated from Saltpan soil, Vedharanyam, Tamilnadu, India. R. Manikandan, **R. Vijayakumar**.
7. International Seminar on “Life Science – Recent Trends and Applications” on 09.02.2018 held at Departments of Life Sciences, Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalur – 621 212. **Paper presented:** Actinobacteria *Streptomyces* spp. as a potent for chitinase production and bioactive substrate for phyto-pathogens, G. Vaijayanthi, A. Cholarajan and **R. Vijayakumar**.
8. *International Symposium on Fungal Biology: Advances, Applications and Conservation & 45th Annual Meeting of Mycological Society of India (MSI)*, November 19-21, 2018, held at National Fungal Culture Collection of India (NFCCI), Agharkar Research Institute, Pune - 411 004, Maharashtra. **Paper presented*:** Occurrence and fertilizer tolerance capacity of soil fungi isolated from cultivated soils of Perambalur district, Tamilnadu, K. Karthika and **R. Vijayakumar**.
9. International Conference on *Conservation of Natural Resources and Traditional Siddha Pharmacological Approach for Your Future* and DBT Foldscope Workshop (CNRTSPA – 2018) on 12-14th Dec. 2018 at William Research Centre, Nagercoil, Tamilnadu. **Paper presented#:** Foldscope: A Modern Research Tool for the Exploration of Soil Fungi. K. Karthika and **R. Vijayakumar** (*Awarded as best oral paper*).
10. *International Seminar on “Recent Trends in Biological Science” on 15.02.2019 held at Life Science Departments, Dhanalakshmi Srinivasan College of Arts & Science for Women (Autonomous), Perambalur District, Tamilnadu. Papers presented:*
 1. Application of Foldscope as a Modernized Tool for the Diversity of Fungi and its Tolerance against Synthetic Fertilizers. K. Karthika and **R. Vijayakumar**.
 2. Nutritional value of two different oyster mushrooms grown on different paddy straw substrate. A. Porselvi, **R. Vijayakumar** and S. Kalaiselvi.
11. *International Seminar on “Microbial Interventions for the Welfare of Human Beings-(MIWHB -2019)” on 09.08.2019 held at PG and Research Department of Microbiology, Sengamala Thayaar Educational Trust Women’s College, Sundarakkottai, Mannargudi - 614 016, Tamilnadu. Papers presented:*
 1. Assessment of chemical fertilizers tolerance skill and plant growth promoting activities of soil fungi identified through Foldscope: a paper based microscope. K. Karthika and **R. Vijayakumar**.
 2. Azo dye biodegradation potential of bacterial isolates from cattle excreta. G.Vaijayanthi and **R. Vijayakumar**.
 3. Nutritional value of different oyster mushrooms grown on different paddy straw substrate. A. Porselvi and **R. Vijayakumar**.
12. *International Conference on Future Perspectives on Bioresources and Nanosciences (FPBN-2023)* on 16.02.2023 - 17.02.2023 held at Department of Botany, Periyar University, Salem. **Papers presented:** Bioactive metabolites from endophytic actinobacteria of epiphytic plants. Moorthy, A., Kiruthika, N., C. Muthukumar and **R. Vijayakumar**.

National

1. National Seminar on *Superficial Mycoses Causes, Prevention and Cure with Plant Medicines*, during 12th and 13th September, 2003, held at Department of Botany, Kandhaswami Kandar’s College, P.Velur - 638 182, Namakkal Dt., Tamilnadu. **Paper Presented*:** Screening of plants for antifungal activity against *Malassezia furfur* (Robin) Baillon a fungus causing pityriasis versicolor, **R. Vijayakumar**, C. Muthukumar, S. Alaguraju and T. Kumar.
2. National Symposium on *Recent Trends in Biological Research* during Feb. 17-19th, 2004 at Dept. of Botany and Microbiology, A.V.V.M. Sri Pushpam College (Auto.), Poondi - 613 503, Thanjavur Dt. **Paper presented*:** Evaluation of efficiency of commercial shampoos and plant extracts in controlling the growth of *Malassezia furfur* (Robin) Baillon. **R. Vijayakumar**, C. Muthukumar, S. Alaguraju, T. Kumar, N. Nadimuthu and R. Saravanamuthu.

3. National Symposium on “*Biology and Biodiversity of Fresh Water Algae* during 8th-9th September, 2004, at CAS in Botany, University of Madras, Guindy Campus, Chennai – 25. **Paper presented:** Cyanobacterial biodiversity from different fresh water ponds of Thanjavur. C. Muthukumar, **R. Vijayakumar**, G. Muralidharan, A. Panneerselvam and N. Thajuddin.
4. VIII National Symposium on *Soil Biology in Human Welfare* during 5th-7th October, 2005 at Dept. of Microbiology, Ponnaiyah Ramajayam College, Thanjavur - 614 904. **Papers presented:**
 - a. *Screening of antagonistic actinomycetes from east coast of India, **R. Vijayakumar**, C. Muthukumar, N. Thajuddin and A. Panneerselvam.
 - b. Studies on the antagonism of some soil fungi against *Drechslera ellisii* a fruit rot causing organisms in Guava, C. Muthukumar, **R. Vijayakumar**, T. Kumar, A. Panneerselvam and R. Saravanamuthu.
5. National Seminar on *Industrial Perspectives of Microbes in Industry and Biotechnology* during 29th-30th January, 2007 at Department of Microbiology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore - 640 014. **Papers presented:**
 - a. #Antagonistic activity of actinomycetes against yeast pathogens, S. Anitha, V. Seethalakshmi, **R. Vijayakumar** and A. Panneerselvam (Best poster presentation 1st prize).
 - b. #Preliminary screening of actinomycetes from Coimbatore soil for their antibacterial activity, V. Seethalakshmi, S. Anitha, **R. Vijayakumar** and A. Panneerselvam (Best oral presentation 2nd prize).
 - c. #A study on the diversity of actinomycetes in Maruthamalai Hills, Western Ghats, Virali M. Sha, S. Vennila, S. Vignesh, K. Vikash and **R. Vijayakumar** (Best oral presentation 1st prize).
6. Fifth National Symposium on *Modern Biological Sciences* during 21st-22nd January 2008 at Department of Biosciences and Research, SNMV College of Arts and Science, Coimbatore - 641 021. **Paper presented:** Studies on the diversity and antimicrobial properties of marine actinomycetes from West Coast of India, **R. Vijayakumar** and M. Remya.
7. National Seminar on *Microbial Technology (mt-08)* during 19th-20th March, 2008 at Department of Microbiology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore - 640 014. **Papers presented:**
 - a. Isolation and identification of fungi from spoiled fruits and vegetables, Indu, C., Joysina Stephen, S., Karthick, M., Krishansamy, E., Lingeswaran, N. and **R. Vijayakumar**.
 - b. Studies on antibacterial activity of the actinomycetes isolated from the terrestrial soils of Tirupur, R. Malathi, E.S. Pooja, M. Remya and **R. Vijayakumar**.
 - c. Studies on the diversity and antimicrobial properties of actinomycetes from West Coast of India, Kerala, M. Remya and **R. Vijayakumar**.
 - d. Extra cellular enzyme activity of actinomycetes isolated from dye effluent polluted soils of Tirupur, R. Malathi, E.S. Pooja, M. Remya and **R. Vijayakumar**.
8. Louis Pasteur Memorial National Symposium on *Infectious Diseases* during 8th-9th, Aug. 2008 at Department of Microbiology, Dr. N.G.P. Arts and Science College, Coimbatore - 614 048. **Papers presented:**
 - a. Studies on the characterization of *Malassezia furfur* Baillon and its control by using plant extracts, **R. Vijayakumar**, K. Santhiya and G. Gopika.
 - b. #Antimicrobial efficacy of terrestrial actinomycetes against some bacterial pathogens, **R. Vijayakumar**, G. Gopika and K. Santhiya (Best Poster 2nd prize).
9. National Seminar on “*Enzyme Technology*” during 19th-20th, February, 2009 at Department of Biochemistry, Dr. G.R. Damodaran College of Science, (Auto.), Coimbatore – 641 014. **Paper presented:** Extracellular enzyme activity of actinomycetes isolated from polluted soils of Tirupur, S. Anitha, E.S. Pooja and **R. Vijayakumar**.

10. National Conference on *Developments in Deterrent Drug Formulation Against Microbial Infections (mt-09)* during 24th-25th February, 2009 held at Department of Microbiology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore - 640 014. **Papers presented:**
 - a. Isolation, characterization and antibacterial activity of actinomycetes from dye polluted soils of Tirupur, S. Anitha, R. Malathi and **R. Vijayakumar**.
 - b. Discovery of novel antibiotics from marine actinomycetes, Baskaran, R. and **R. Vijayakumar**.
 - c. Marine actinomycetes - a source of novel antibiotics, Gopika, G., Santhiya, K. and **R. Vijayakumar**.
11. National Seminar on *"The Role of Siddha and Ayurvedha Medicine in Geriatric Care"*, during October 19th-20th, 2009 held at Department of Microbiology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore - 640 014. **Papers presented:**
 - a. Studies on the antibacterial activity of medicinal plants against urinary tract infection pathogens, M. Bharathidasan, **R. Vijayakumar** and T. Kumar.
 - b. Antimicrobial efficacy of medicinal plants against UTI pathogens isolated from normal and HIV infected patients of Kanyakumari District, S.V. Shayja, M. Bharathidasan, **R. Vijayakumar** and T. Kumar.
12. National Symposium on *"Emerging Trends in Life Sciences"* during March 17th-19th, 2010 held at P.G. and Research Dept. of Zoology, Rajah Serfoji Govt. College (Auto.), Thanjavur – 613 005. **Paper presented:** Production of protease under submerged fermentation technique. S. Suganthi, R. Saranya and **R. Vijayakumar**.
13. National Seminar on *"Microbial Diagnostics (mt '10)"*, during March 18th, 2010 held at Department of Microbiology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore - 640 014. **Paper presented*:** *In vitro* antimicrobial efficacy of *Streptomyces griseus* VPTSA18 a marine actinomycete against clinical pathogens, **R. Vijayakumar**.
14. National Seminar on *"Medicinal Plants Conservation, Cultivation and utilization"* during 18th-20th, 2011 held at Dept. of Botany and Biotechnology, Bon Secours College for Women, Thanjavur - 613 006. **Paper presented:** "Effect of plant growth regulators on *in vitro* propagation of *Bacopa monnieri* L. and its transformation to field condition. M. Vijayakumar, R. Stephen, **R. Vijayakumar** and Banupriya, S.,
15. National Conference on *"Explorations of the Natural Bioactive Compounds from the Marine Resources" (BIOACTIVA' 11)* during February 10th-11th, 2011, held at Dept. of Marine Science, Bharathidasan University, Tiruchirappalli – 24. **Paper presented*:** Antimicrobial potential of marine actinomycetes isolated from Palk Strait region of Bay of Bengal, India. **R. Vijayakumar**, T. Thajuddin and A. Panneerselvam.
16. National Symposium on *"Prospects and Retrospects in Microbial Technology"* jointly organized by Dept of Microbiology, Bharathidasan University, Tiruchirappalli and Dept. of Microbiology and Biotechnology, Cauvery College for Women, Tiruchirappalli, during 17th-18th February, 2012. **Papers presented:**
 1. *Antimicrobial potentiality of *Streptomyces matensis* VPTS32 – a marine actinomycete isolated from Palk Strait of Bay of Bengal, South India. **R. Vijayakumar**, T. Thajuddin and A. Panneerselvam.
 2. Diversity of terrestrial actinobacteria from various cultivated field soils of Thanjavur district, Tamilnadu, India. A. Cholarajan and **R. Vijayakumar**.
 3. Diversity of marine actinobacteria from east coast of Tamilnadu, India. D. Thirumurugan and **R. Vijayakumar**.
17. 10th IAAM National Conference on *"Exploring the Potentials of Microbes for Bioscience, Biotechnology & Medicine" MICROCINCIENCIA – 2012* during 17th-18th December, 2012 held at Centre for Environmental Nuclear Research, SRM University, Chennai – 603 203, Tamilnadu. **Paper presented:** Antifungal activity of marine actinobacteria against human pathogen from east coast of India. D. Thirumurugan and **R. Vijayakumar** and T. Murugan.

18. National Seminar on “*Cutting Edge Microbial Research and Challenges*” during February 25th-26th, 2013 held at Dept. of Microbiology, Bharathidasan University, Tiruchirappalli – 24. **Paper presented:** Phytochemical analysis and antibacterial activity of the leaves of *Coccinia indica*. A. Cholarajan and **R. Vijayakumar**.
19. National Seminar on “*Emerging Novel Avenues and Opportunities in Modern Biological Sciences*” during March 1st-2nd, 2013 held at Dept. of Microbiology, M.R. Government Arts College, Mannargudi – 614 001, Thiruvavur (District), Tamilnadu. **Papers presented:**
 1. Purification and characterization of bacteriocin produced by bacterial isolates from fermented vegetables. A. Cholarajan and **R. Vijayakumar**.
 2. *Molecular characterization of bioactive compound producing streptomycetes isolated from Coromandal coast of Tamilnadu with reference to 16S rRNA gene sequencing. **Vijayakumar, R.**, Thajuddin, N. and Panneerselvam, A.
 3. #Antifungal activity of marine actinobacteria isolated from east coast regions (ECR) of Tamilnadu, South India. D. Thirumurugan and **R. Vijayakumar** (*Awarded with Special Prize*).
 4. Antibacterial activity of marine actinobacteria isolated from Point Calimere, east coast of India. G. Vaijayanthi, A. Cholarajan and **R. Vijayakumar**.
20. National Seminar “*Microbes and Human Welfare*” on 20th-21st July, 2013 at Dept. of Microbiology, Bharathidasan University, Tiruchirappalli in collaboration with National Academy of Biological Science, Chennai. Papers presented:
 1. *Diversity of bioactive compound producing marine actinobacteria from Palk Strait region of Bay of Bengal during tsunami era – a survey. **R. Vijayakumar**, A. Panneerselvam and N. Thajuddin.
 2. Isolation and characterization of plant growth promoting rhizobacteria (PGPR) from rhizosphere soils of *Cicer arietinum*. G. Vaijayanthi, A. Cholarajan and **R. Vijayakumar**.
 3. Separation, purification and characterization of secondary metabolites from terrestrial soil actinobacteria. A. Cholarajan and **R. Vijayakumar**.
 4. Screening, isolation and purification of antibacterial compounds from marine actinobacteria against fish pathogens. D. Thirumurugan and **R. Vijayakumar**.
21. National Conference on “*New Opportunities and Challenges in Microbial Research*” on 5th-6th Sep., 2013 at Dept. of Microbiology, Bharathidasan University, Tiruchirappalli. Papers presented:
 1. Separation and purification of secondary metabolites from terrestrial soil actinobacteria. A. Cholarajan and **R. Vijayakumar**.
 2. Optimization of antibacterial compounds production by *Streptomyces* spp. isolated from the marine soils of east coast of India. Thirumurugan, D. and **Vijayakumar, R.**
 3. Characterization of potential plant growth promoting rhizobacteria for the growth enhancement of black gram. G. Vaijayanthi and **R. Vijayakumar**.
22. National Conference on “*Global Trends and Challenges in Biosciences (Microzon 2014)*” on 6th December, 2014, held at Dr. M.G.R. Janaki Ammal College of Arts and Science for Women, Chennai, Tamilnadu. **Paper presented:** Biodiversity and exploration of bioactive actinobacteria from Muthupet mangrove soil, east coast of India (OP-73). Vaijayanthi, G. and **Vijayakumar, R.**
23. One Day National Seminar on “*Contemporary Molecular Techniques and their Potential Applications in Current Applied Biology*” (Sponsored by the UGC), January 30th, 2015 held at Research Department of Microbiology, M.R. Government Arts College, Mannargudi - 614 001, Tamilnadu. Paper presented:
 1. #Diversity and screening of extra-cellular enzyme activity of actinobacteria isolated from Muthupet mangrove sediments, Bay of Bengal. Vaijayanthi, G. and **Vijayakumar, R.** (*Awarded Best Poster presentation 1st prize*).
 2. #Marine actinobacterial diversity of from Palk Strait coastal region of Bay of Bengal. Manikandan, R. and **Vijayakumar, R.** (*Awarded Best Poster presentation 2nd prize*).

24. National Conference on “*Phytochemicals in Medicinal Plants and Food (PHYMED)*” on 30th & 31st July, 2015 held at Department of Biochemistry, Bharathidasan University Constituent College for Women, Orathanadu – 614 625, Thanjavur District, Tamilnadu. Paper presented:
1. Biological activity of actinobacteria from marine soils of West Coast of India. Vaijyanthi, G., Anitha, S. and **R. Vijayakumar**.
 2. Screening, production and characterization of novel antifouling compounds against biofouling bacteria from poultry. Manikandan, R. and **Vijayakumar, R.**
 3. Preliminary studies on phytochemicals and antimicrobial activity of solvent extracts of *Coriandrum sativum* L. roots (Coriander). Porselvi, A. and **Vijayakumar, R.**
25. National Conference on “*New Avenues in Life Science: Trends and Challenges*” on 28th & 29th January, 2016 held at Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalur – 621 212, Tamilnadu, India. Papers presented:
1. Screening of chitinolytic marine actinobacteria for biological control of *Fusarium oxysporum*: Causative agent of damping-off and basal rot diseases of onion. G. Vaijyanthi and **R. Vijayakumar**.
 2. Isolation, screening and characterization of antifouling compound producing marine actinobacteria from Palk Strait regions of Tamilnadu. R. Manikandan and **R. Vijayakumar**.
26. National Seminar on “*Frontiers in Biosciences*” (*FIB - 2016*) on 5th March, 2016 held at P.G. & Research Departments of Microbiology & Biotechnology Jamal Mohamed College (Auto.), Tiruchirappalli – 620 020, India. Papers presented:
1. Detection of biofilm bacteria from poultry production industry of Tamilnadu. R. Manikandan, **R. Vijayakumar**.
 2. Optimization of antibacterial metabolites production by marine actinobacteria isolated from mangrove sediments of Bay of Bengal, Tamilnadu. G. Vaijyanthi and **R. Vijayakumar**.
27. ICMR Sponsored One Day National Seminar on “*Awareness on Pathogen Carriage, Prevention and Personal Health Promotion Among Rural Adolescent Learners*” on 28.07.2017 held at Research Department of Microbiology, M.R. Government Arts College, Mannargudi - 614 001, Tamilnadu. **Paper presented:** Antibacterial activity of marine actinobacteria against biofilm forming bacteria isolated from poultry samples. R. Manikandan and **R. Vijayakumar**.
28. National Conference on “*Recent Advances in Modern Biology and Rural Development (RAMBARD - 2017)*” Organized by Department of Botany & Microbiology, A.V.V.M. Sri Pushpam College (Auto.), Poondi, Thanjavur in collaboration with Department of Microbiology, Bharathidasan University, Trichy - 24 during 5th & 6th October, 2017. **Paper presented:** Isolation and characterization of industrial important Multi-enzymes from marine actinobacteria. G. Vaijyanthi and **R. Vijayakumar**.
29. National Conference on “*Microbiome Research: Understanding the Diversity to Improve Plant, Animal, Human and Environmental Health*” organized by C. G. Bhakta Institute of Biotechnology, Uka Tarsadia University, Bardoli - 394 350, Surat, Gujarat in collaboration with Associations of Microbiologists of India between 07.03.2019 and 09.03.2019. Papers presented:
1. #Evaluation of Synthetic Fertilizers Tolerance Skills of Soil Fungi Identified Through Paper Microscope. K. Karthika and **R. Vijayakumar**. (*Awarded as best poster presentation 2nd prize*).
 2. *Isolation and Characterization of Chitinase Producing Actinobacteria from Muthupet Mangrove Soil, South India. G. Vaijyanthi and **R. Vijayakumar**. (*Awarded as best oral presentation 1st prize*).
30. 46th Indian Social Science Congress organized by Indian Social Science Academy in association with Bharathidasan University, Trichy – 24 during 27th – 31st January, 2023. **Papers presented:**
1. Production and characterization of novel antifouling compounds from marine-derived streptomycetes and its activity against biofouling bacteria of poultry farms. **Vijayakumar, R.** and Suresh S.S. Raja.

2. Antileptospiral activity of selected medicinal plants. Suresh S.S. Raja and **Vijayakumar, R.**

State/Regional

1. Golden Jubilee State Level Seminar on *Innovative Approaches to Plant Sciences* during 24th-25th Feb., 2005 at Department of Botany, A.V.C. College (Auto.), Mannampandal, Mayiladuthurai - 609 305, Tamilnadu. **Paper Presented:** Studies on leaf spot, fruit rot diseases of Guava and its control. C. Muthukumar, **R. Vijayakumar**, T. Kumar, N. Nadimuthu, A. Panneerselvam and R. Saravanamuthu.
2. State level Seminar on *Scope and Status of Phytochemistry and Bioremediation* during 10-11th Aug., 2005 at Department of Botany, K.N.G.A. College for Women (Auto.), Thanjavur, Tamilnadu. **Paper Presented:** Studies on fruit rot disease of Chilli (*Capsicum annum* L.) and its control. C. Muthukumar, **R. Vijayakumar**, T. Kumar, A. Panneerselvam and R. Saravanamuthu.
3. State Level Seminar on “*Emerging Advancements in Biosciences*” during 17th March, 2012 held at the Dept. of Microbiology & Biotechnology, Jamal Mohamed College (Auto.), Tiruchirappalli - 620 020. **Papers presented:**
 1. Screening of antibacterial potentials of marine actinobacteria against fish pathogen. D. Thirumurugan and **R. Vijayakumar**.
 2. Diversity and antimicrobial activity of terrestrial actinobacteria isolated from various cultivated field soils of Thanjavur district, Tamilnadu. A. Cholarajan and **R. Vijayakumar**.
4. One Day State Level Seminar on “*Newly Emerging Pathogens, Epidemic Diseases and their Management Challenges (NEPED & MC)*” on March 14th, 2014 held at Research Department of Microbiology, M.R. Government Arts College, Mannargudi – 614 001, Tamilnadu. **Papers presented:**
 1. *Optimization of antimicrobial compound production by *Streptomyces griseus* Isolated from saltpan soils of Tuticorin, Gulf of Mannar, India. **Vijayakumar, R.**, Thajuddin, N. and Panneerselvam, A.
 2. Screening of extra-cellular enzyme activity of marine actinobacteria isolated from Muthupet mangrove soils. Vaijyanthi, G. and **Vijayakumar, R.**
 3. #Optimization of culture conditions for enhanced antibacterial activity of *Streptomyces* sp. ECR-64 isolated from east coast region, Tamilnadu, India. Thirumurugan, D. and **Vijayakumar R. (Awarded with Special Prize).**

*Papers presented by Dr. R. Vijayakumar

#Papers received Best paper Award/ Cash Prize.

Other Training Programs

1. Training program on *Vaccine Production* at Pasteur Institute of India, Coonoor - 643 103, Nilgiris, Tamilnadu, from 24.09.2001 to 29.09.2001.
2. State level Workshop on *The State of the Art Technique in Agricultural Microbiology*, during October 4-6th 2002 held at Department of Botany and Microbiology, A.V.V.M. Sri Pushpam College (Auto.), Poondi - 613 503, Thanjavur Dt.
3. State level Training Workshop on *Collection, Preservation and Identification of Common Coastal and Marine Fauna and Flora Occurring in Mallipattinam, along South East Coast of India*, during 29th and 30th December 2004 at Sri Venkateshwara College of Arts and Science, Peravurani - 614 804, Thanjavur Dt., Tamilnadu.
4. Faculty Development Programme on “*Promoting Entrepreneurship in Educational Institutions*” during August 12th, 2008, at GRD - Entrepreneurship Development Cell, Dr. G.R. Damodaran College of Science, Coimbatore - 14.

5. One day Workshop on “*Human DNA Finger Printing for Teachers and Young Scientists*” during September 23, 2008 held at School of Biotechnology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore - 641 014.
6. UGC Sponsored 66th Orientation Course conducted by Academic Staff College, Bharathidasan University, Tiruchirappalli from 09. 11. 2010 to 06. 12. 2010 and got A Grade.
7. UGC Sponsored *Short Term Course in Life Science for Research Advisors* held at UGC – Academic Staff College, Bharathidasan University, Tiruchirappalli, from 25.03.2011 to 27.03.2011.
8. One day orientation Training Programme for College YRC Programme Officers and Students Volunteers on 09.02.2011 at Kundavai Nachiyar Govt. College for Women (Auto.), Thanjavur.
9. One day Workshop on “*Reform of Undergraduate and Postgraduate Curriculum for Enhancing Employability*” on 22.03.2013 organized by Curriculum Development Cell of Bharathidasan University, Tiruchirappalli.
10. UGC Sponsored Refresher Course in Life Sciences (ID) conducted by Academic Staff College, Bharathidasan University, Tiruchirappalli from 29.06.2013 to 19.07.2013.
11. One day Exclusive Workshop for Research Supervisors on “*Quality Research Report Writing*” on 28.02.2014 held at Curriculum Development Cell, Bharathidasan University, Tiruchirappalli - 24.
12. UGC Sponsored Refresher Course in Life Sciences (ID) conducted by UGC-Human Resource Development Centre (UGC-HRDC), Bharathidasan University, Tiruchirappalli from 03.03.2016 to 23.03.2016.
13. Two day FDP on Design, Develop and Deliver online Courses through Moodle platform conducted by TANSCHÉ with technical support of DOTE, Tamilnadu on May 29th and 30th 2020.
14. UGC Sponsored Refresher Course in Bio-Sciences (ID) conducted by UGC-Human Resource Development Centre (UGC-HRDC), Bharathidasan University, Tiruchirappalli from 11.12.2020 to 24.12.2020.
15. “A handholding Workshop for Assessment Accreditation of Government Arts and Science Colleges” organized by RUSA, State Project Directorate, Tamilnadu in collaboration with NAAC held on 29.03.2022 at Bharathidasan University, Tiruchirappalli – 24.

Membership in

Professional Bodies

1. Member in International Association of Computer Science and Information Technology (IACSIT) No.80337318, February 2010 onwards.
2. Member in British Science Association 19th April 2010 onwards.
3. Life member in National Academy of Biological Sciences from 2013 onwards.
4. Life Member in Mycological Society of India (MSI) from 2018 onwards.
5. Life Member in Microbiologist’s Society, India (MSI) MS/LM/620 from 2021 onwards.

Academic Bodies (such as Board of Studies etc.)

1. Member in Board of Studies, UG and PG Microbiology, Bharathidasan University, Tiruchirappalli for three years from 01.04.2012.
2. *University Nominee* for Board of Studies in Biotechnology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore – 641 014 for academic years 2012 – 2014.
3. *Member* in up-gradation of World Class Curriculum for UG & PG Microbiology syllabi, Bharathidasan University, Trichy during 2016.
4. Member as subject expert in Board of Studies, UG and PG Microbiology, A.V.C. College (Auto.), Mannampandal – 609 305, Mayiladuthurai for the academic years 2017-2020.

Resource persons in various capacities (Training Programme/Seminar/Symposia/Conferences): 31

1. Acted as Resource Person in the Training Program on *Edible Mushroom Cultivation* for Women Self Help Groups during 9-11th January 2004 at Dept. of Botany and Microbiology, A.V.V.M. Sri Pushpam College (Auto.), Poondi - 613 503, Thanjavur Dt.
2. Acted as a Judge in a district level NCSC Project presentation for School Students, on November 17th, 2006 at Department of Microbiology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore - 640 014.
3. Acted as a Judge in the Poster Session of a Two Day National Seminar on "*Biotechnology in the Genomics and Proteomics Platform*" organized by School of Biotechnology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore – 641 014, during September 25-26, 2008.
4. Delivered a Lecture on "*Milk Quality*" in a two days training programme on "*Microbiological Techniques - Microinnova*" for school students during October 13 and 14th, 2008, held at Department of Microbiology, Dr. G.R. Damodaran College of Science (Auto.), Coimbatore - 641 014, Tamilnadu.
5. Delivered a Lecture on "*Sutrupura Suzal Membadu*" in NSS Camp conducted Kannathangudi Keelayur by Bharathidasan University College for Women, Orathanadu - 614 625, Thanjavur Dt., Tamilnadu during 2010.
6. Acted as a Chair Person in the poster presentation of the National Symposium on "*Prospects and Retrospects in Microbial Technology*" jointly organized by Dept. of Microbiology, Bharathidasan University and Dept. of Microbiology & Biotechnology, Cauvery College for Women, Tiruchirappalli, during 17th & 18th February, 2012.
7. Delivered a Invited Special Lecture on "*Balanced Nutrition for Healthy Life*" in the Science Day Celebration on 19th February, 2013 at Bharathidasan University College for Women, Orathanadu – 614 625, Thanjavur Dt.
8. Acted as a Convener of oral presentation in the National Seminar on "*Microbes and Human Welfare*" on 20 & 21 July, 2013 at Dept. of Microbiology, Bharathidasan University, Tiruchirappalli in collaboration with National Academy of Biological Science, Chennai in session TS-III: Microbes in Biotechnological Innovations, 21st July, 2013.
9. Chaired the Scientific Session in the National Conference on "*New Opportunities and Challenges in Microbial Research*" on 5th & 6th Sep., 2013 at Dept. of Microbiology, Bharathidasan University, Tiruchirappalli, post presentation session (PP-96 to PP133), 6th Sep., 2013.
10. Acted as a Chair Person in Poster Competition in DST Sponsored "*INSPIRE - 2013*" Internship Science Camp on organized by Dept. of Microbiology, Bharathidasan University, Tiruchirappalli, during December 26th -30th, 2013.
11. Delivered a Lecture on "*Applications of Microbiology*" in the DST Sponsored INSPIRE - 2014 Internship Science Camp on 02.03.2014 at A.V.V.M. Sri Pushpam College (Autonomous), Poondi – 613 503, Thanjavur Dt., Tamilnadu.
12. Delivered a Lecture on "*Actinobacteria and their Industrial Applications*" in the One Day In-House Seminar held at Department of Microbiology, M.R. Government Arts College, Mannargudi – 614 001, Tamilnadu on 12.09.2014.
13. Delivered a Lecture on "*Marine Based Microbial Drug Discovery*" in the One Day seminar on Motivation Campaign and Promotion of Young Scientist on 10.02.2016 at Department of Microbiology, Bharathidasan University College for Women, Orathanadu – 614 625, Thanjavur.
14. Delivered a Lecture on "*Biotechnological Potentials of Actinobacteria*" in the Special Lecture programme conducted at the Department of Microbiology, M.R. Government Arts College, Mannargudi – 614 001, Tamilnadu on 07.07.2017.
15. Delivered a Lecture on "*Balanced Diet for Healthy Life*" in the NSS Programme held at Bharthidasan University P.G. Extension Centre, Bharthidasan University, Kurumbalur – 621 107, Perambalur 04.10.2017.
16. Acted as a Chair Person in Poster presentation in National Conference on "*Recent Advances in Modern Biology and Rural Development (RAMBARD - 2017)*" organized by the Department of

Botany and Microbiology, A.V.V.M. Sri Pushpam College (Auto.), Poondi, Thanjavur in collaboration with Department of Microbiology, Bharathidasan University, Trichy - 24 during 5th & 6th October, 2017.

17. Acted as a Chair Person of oral presentation in the International Seminar on "*Life Science – Recent Trends and Applications*" on 09.02.2018 held at Departments of Life Sciences, Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalur – 621 212.
18. Delivered a Lecture on *Assembly and Usage of Foldscope (An Educational, Training and Research Tool)* for College Students at Dept. of Microbiology, Bharathidasan University Constituent College, Perambalur – 621 107, in DBT, Govt. of India sponsored Workshop on *Assembly and Usage of Foldscope* during 17.09.2018.
19. Delivered a Lecture on *Assembly and Usage of Foldscope* for Higher Secondary Students at Govt. Higher Secondary School, Kurumbalur, Perambalur – 621 107 in DBT, Govt. of India sponsored Workshop on *Assembly and Usage of Foldscope* during 04.12.2018.
20. Delivered a Lecture on *Microbiology – Microorganisms, Basic Tools and Techniques and Assembly and Usage of Foldscope* for higher secondary students in the Young Students Programme (YSP) held at Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalur on 01.01.2019.
21. Delivered a Lecture on "*Foldscope: A Modern Tool for the Fungal Research*" in the DBT, Govt. of India sponsored One-Day National Seminar cum Workshop on '*Biological and Medical Applications of Foldscope and Mycorrhizal Commercial Productions*' conducted at Department of Microbiology, M.R. Government Arts College, Mannargudi – 614 001, Tamilnadu on 31.01.2019.
22. Acted as Resource person in the *Valedictory Function* of National Seminar on "*Frontiers in Bio-Mimicry Medicine*" held on 01.02.2019 at Department of Microbiology, Srinivasan College of Arts and Science, Perambalur.
23. Delivered a Lecture on *Assembly and Usage of Foldscope* for School Students at Govt. High School, Thambiranpatti, Perambalur – 621 104 in the DBT, Govt. of India sponsored Workshop on *Assembly and Usage of Foldscope* during 09.02.2019.
24. Lecture on *Assembly and Usage of Foldscope* for UG and PG Students at Dept. of Microbiology, SRM Arts and Science College (SRM University Campus), Kattankulathur, Tamilnadu in DBT, Govt. of India sponsored Workshop on *Assembly and Usage of Foldscope* during 02.03.2019.
25. Acted as a Co-Chair Person in Poster presentation in the National Conference on "*Microbiome Research: Understanding the Diversity to Improve Plant, Animal, Human and Environmental Health*" organized by C.G. Bhakta Institute of Biotechnology, Uka Tarsadia University, Bardoli - 394 350, Surat, Gujarat in collaboration with Associations of Microbiologists of India between 07.03.2019 and 09.03.2019.
26. Delivered a Lecture on *Assembly and Usage of Foldscope* for higher secondary students in the Young Students Programme (YSP) held at Sengunther College of Arts and Science, Tiruchengode, Namakkal Dt., Tamilnadu during 10.05.2019.
27. Acted as a Chairperson in the National Seminar on "*Microbes in Women Health*", during July 11-12, 2019 organized by Department of Microbiology, Bharathidasan University, Tiruchirappalli – 620 024, in collaboration with Trichy Obstetric and Gynaecological Society (TRIOGS), Session IV.
28. Acted as a Co-chairperson in the International Conference on "*Microbiome and Synthetic Biology (ICMSB 22)*", during September 23rd, 2022 organized by Department of Microbiology, Bharathidasan University, Tiruchirappalli – 620 024 and Society of Chemical and Synthetic Biology, Session IV.
29. Lecture on "*Scope and Challenges in Microbiology*" in the Guest Lecture Programme held at Department of Microbiology, M.R. Government Arts College, Mannargudi – 614 001, Tamilnadu during 26.09.2022.

30. Acted as a Chairperson in International Conference on “*Future Perspectives on Bioresources and Nanosciences (FPBN-2023)*” during February 16 & 17th, 2023 organized by Department of Botany, Periyar University, Salem.
31. Acted as a Co-chairperson in International Conference on “*Algae: Food, Feed, Fuels and Fine Chemicals (ICA-F4'23)*”, during September 06-08th, 2023 organized by National Repository for Microalgae and Cyanobacteria (NRMCC)-Fresh water and Marine Divisions & Department of Microbiology, Bharathidasan University, Tiruchirappalli – 620 024, Session 8 (Plenary Lecture 17, 18 and 21) and oral presentation session (OP32-50).

Others

1. No. of PhD Thesis evaluated	:	01
2. Sequences submitted in GenBank	:	22
3. Souvenir / manual / abstracts editing	:	04
4. Doctoral Committee Member for	:	14 Ph.D. candidates

Recent Publications

1. **Vijayakumar, R.**, Udayakumar, J. and Chandrasekaran, R. 2004. *In vitro* effect of aqueous garlic extract on *Candida albicans*. *J. Microb. World*, 6(2): 158-161.
2. **Vijayakumar, R.**, Muthukumar, C., Thajuddin, N. and Panneerselvam, A. 2004. Screening of antagonistic actinomycetes from East Coast of India. *J. Soil Biol. Ecol.*, 24(1&2): 71-77.
3. Muthukumar, C., **Vijayakumar, R.**, Kumar, T., Panneerselvam, A., Nadimuthu, N. and Saravanamuthu, R. 2006. Studies on the antagonism of some soil fungi against *Drechslera ellisii* a fruit rot causing organisms in Guava. *J. Soil Biol. Ecol.*, 26(1&2): 117-122.
4. **Vijayakumar, R.**, Muthukumar, C., Kumar, T. and Saravanamuthu, R., 2006. Characterization of *Malassezia furfur* and its control by using plant extracts. *Indian J. Dermatol.*, 51(2): 145-148. (IF: 1.757).
5. Muthukumar, C., Muralidharan, G., **Vijayakumar, R.**, Panneerselvam, A. and Thajuddin, N., 2007. Cyanobacterial Biodiversity from different freshwater ponds of Thanjavur, Tamilnadu (India). *Acta Botanica Malacitana*, 32: 17-25.
6. **Vijayakumar, R.**, Muthukumar, C., Thajuddin, N., Panneerselvam, A. and Saravanamuthu, R., 2007. Studies on the diversity of actinomycetes in the Palk Strait region of Bay of Bengal, India. *Actinomycetologica*, 21(2): 59-65.
7. Virali, M.S., Vennila, S., Vignesh, S., Vikash, K. and **Vijayakumar, R.** and Panneerselvam, A., 2007. Antagonistic activity of actinomycetes isolated from Marudhamalai Hills, Western Ghats. *J. Soil Biol. Ecol.*, 27(1 & 2): 19-25.
8. Remya, M. and **Vijayakumar, R.**, 2008. Isolation and characterization of marine antagonistic actinomycetes from West Coast of India. *Facta Universitatis Series Med. Biol.*, 15(1): 13-19.
9. **Vijayakumar, R.**, Sudha, S.S. and Panneerselvam, A., 2008. A comparative study on cultivation and nutritional status of oyster mushroom *Pleurotus ostreatus* on different substrates. *J. Sci. Trans. Environ. Technov.*, 1(4): 209-212.
10. **Vijayakumar, R.**, Muthukumar, C., Thajuddin, N., Panneerselvam A. and Saravanamuthu, R., 2008. Antagonistic activity of some actinomycetes isolated from marine soils of Point Calimere, East Coast of India. *Indian J. Appl. Microbiol.*, 89(1): 60-66.
11. **Vijayakumar, R.** and Mythili, P., 2008. Studies on antimicrobial effect of *Aegle marmelos* and *Allium sativum*. *J. Microb. World*, 10(1): 38-42.
12. Panneer Selvam, K., **Vijayakumar, R.**, Ravikumar, K., Thajuddin, N., Panneerselvam, A. and Manoharan, C., 2009. PCR analysis of *cyl* operon genes encoding cytolysin toxin – a virulence factor among the clinical isolates of *Enterococcus* spp. *Res. J. Biol. Sci.*, 1(4): 43-49.
13. **Vijayakumar, R.**, Seethalakshmi, V., Anitha, S. and Saravanamuthu, R., 2009. Isolation and characterization of antagonistic actinomycetes from Coimbatore soils, Tamilnadu, India. *J. Sci. Trans. Environ. Technov.*, 2(4): 191-201.

14. Vijayakumar, M., **Vijayakumar, R.** and Stephen, R., 2010. *In vitro* propagation of *Bacopa monnieri* L. - a multipurpose medicinal plant. *Indian J. Sci. Technol.*, 3(7): 782-787.
15. Murugesan, S., Manoharan, C., **Vijayakumar, R.** and Panneerselvam, A., 2010. Isolation and Characterization of *Agrobacterium rhizogenes* from the root nodules of some Leguminous Plants. *Int. J. Microbiol. Res.* 1(3): 92-96.
16. **Vijayakumar, R.**, Murugesan, S. and Panneerselvam, A., 2010. Isolation, characterization and antimicrobial activity of actinobacteria from Point Calimere coastal region, east coast of India. *Int. Res. J. Pharm.*, 1(1): 358-365.
17. Vijayakumar, M., Stephen, R. and **Vijayakumar, R.**, 2010. Effect of plant growth regulators on *in vitro* propagation of *Bacopa monnieri* L. - A multipurpose medicinal plant. *J. Nat. Sci. Technol. Life Sci. Bioinform.*, 2: 217-226.
18. **Vijayakumar, R.**, Murugesan, S., Cholarajan, A. and Sakthi V., 2011. Larvicidal potentiality of marine actinomycetes isolated from Muthupet mangrove, Tamilnadu, India. *Int. J. Microbiol. Res.* 1(3): 179-183.
19. Baskaran, R., **Vijayakumar, R.** and P.M. Mohan. 2011. Enrichment method for the isolation of bioactive actinomycetes from mangrove sediments of Andaman Islands, India. *Malaysian J. Microbiol.*, 7(1): 22-28. (IF: 0.44)
20. Murugesan, S., **Vijayakumar, R.** and Panneerselvam, A., 2011. Evaluation of phytochemical constituents from the leaves of *Memecylon umbellatum* Burm.f. *Res. J. Pharm. Biol. Chem. Sci.*, 2(4):1145-1152.
21. Murugesan, S., **Vijayakumar, R.** and Panneerselvam, A., 2011. Characterization of *Agrobacterium rhizogenes* isolated from the nodules of some leguminous plants. *World Appl. Sci. J.*, 15(1): 32-37.
22. Kasthuri, J., Cholarajan, A., **Vijayakumar, R.** and Muthukumar, P., 2011. Physico-chemical and microbial analysis of coir industry effluent. *Asian J. Res. Pharm. Sci.*, 1(2): 44-46.
23. Murugesan, S., **Vijayakumar, R.** and Panneerselvam, A., 2011. Antifungal activity of medicinal plants against plant pathogenic fungus *Fusarium oxysporum*. *J. Pharm. Res.*, 4(3): 843-844.
24. Bharathidasan, R., Murugesan, S., **Vijayakumar, R.** and Panneerselvam, A., 2011. Prevalence of *Staphylococcus aureus* in various health care workers. *J. Pharm. Res.*, 4(11): 4047-4049.
25. **Vijayakumar, R.**, Panneer Selvam, K., Muthukumar, C., Thajuddin, N., Panneerselvam, A. and Saravanamuthu, R., 2012. Optimization of antimicrobial production by the marine actinomycetes *Streptomyces afghaniensis* VPTS3-1 isolated from Palk Strait, East Coast of India., *Indian J. Microbiol.*, 52(2): 230 – 239. (IF: 3.1)
26. **Vijayakumar, R.**, Panneer Selvam, K., Muthukumar, C., Thajuddin, N., Panneerselvam, A. and Saravanamuthu. R., 2012. Antimicrobial potentiality of a halophilic strain of *Streptomyces* sp. VPTSA18 isolated from the saltpan environment of Vedaranyam, India. *Ann. Microbiol.*, 62(3): 1039-1047. (IF: 3.2).
27. **Vijayakumar, R.**, Gopika, G., Dhanasekaran, D. and Saravanamuthu, R., 2012. Isolation, characterization and antifungal activity of marine actinobacteria from Goa and Kerala, the west coast of India. *Arch. Phytopathol. Pl. Prot.*, 45(9): 1010-1025. (IF: 1.284)
28. Panneerselvam, A., Bharathidasan, Murugesan, S. and **Vijayakumar, R.**, 2012. Antibiotic susceptibility pattern of *Escherichia coli* isolated from urinary tract infected (UTI) patients. *Int. J. Biotechnol. Biosci.*, 2(1): 83-86.
29. Deepa, S., Panneerselvam, A., Dhanasekaran, D., Thajuddin, N. and **Vijayakumar, R.**, 2012. Diversity and antimicrobial potential of actinobacteria from saltpan environment. *Global Ad. Res. J. Microbiol.*, 1(8): 140-148.
30. Vaijyanthi, G., Cholarajan, A. and **Vijayakumar, R.**, 2012. Isolation, characterization and antibacterial activity of terrestrial actinobacteria in the soils of Thanjavur district, Tamil Nadu, India. *Res. J. Sci. Tech.*, 4(3): 132-139.
31. Cholarajan, A. and **Vijayakumar, R.**, 2013. Isolation, identification, characterization and screening of antibiotic-producing actinobacteria from the crop fields of Thanjavur district, Tamilnadu, India. *Int. J. Recent Sci. Res.*, 4(1): 55-60.

32. Thirumurugan, D. and **Vijayakumar, R.**, 2013. Exploitation of antibacterial compound producing marine actinobacteria against fish pathogens isolated from less explored environments. *Asian J. Res. Pharm. Sci.*, 3(2): 75-78.
33. Thirumurugan, D. and **Vijayakumar, R.**, 2013. A potent fish pathogenic bacterial killer *Streptomyces* sp. isolated from the soils of east coast region, South India. *J. Coastal Life Medicine*, 1(3); 175-180.
34. Cholarajan, A. and **Vijayakumar, R.**, 2013. Analyses of physical and chemical parameters of the rhizosphere soils from Thanjavur district, Tamil Nadu, India. *J. Ener. Environ. Sci. Photon*, 127: 219-223.
35. Thirumurugan, D. and **Vijayakumar, R.**, 2013. Exploitation of antibacterial compound producing marine actinobacteria against fish pathogens isolated from less explored environments. *Asian J. Pharm. Res.* 3(2): 75-78.
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1. ALLIED BOTANY – I: for B.Sc. Zoology.