

STAFF PROFILE



- 1) Name : Dr. D. KATHIRESAN
 2) Designation: ASSOCIATE PROFESSOR
 3) Department: BOTANY
 4) Qualifications:

Academic: M.Sc., M.Phil., B.Ed., Ph.D.

Additional:

- 5) Experience (in years): Teaching: 23 years Research: 28 years
 6) Area of Specialization: Plant Physiology, Biodiversity, Seaweed Utilization
 7) Contact: E-mail: KATHIRESANSNC@GMAIL.COM
 Mobile Number: 9894268332

- 8) Grants Received (Conference/Workshop/Seminar/any other):

Event Title	Agency	Fund Received	Date
Young Students Scientist Programme (YSSP)	Tamil Nadu State Council for Science and Technology, (TNSCST), Chennai.	Rs. 3,00,000/-	04.04.2017
Inservice Training Programme to Science Teachers of Government Schools of Madurai District	Tamil Nadu State Council for Science and Technology, (TNSCST), Chennai.	Rs. 90,000/-	10.12.2018

- 9) Project Completed:

Project Title	Agency	Fund Received	Duration
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- 10) Project ongoing:

Project Title	Agency	Fund Received	Duration
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- 11) Research Guidance:

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.	03	01
M. Phil.	07	NIL

- 12) Research Publications:

	International	National
Total Number of Publications	27	

List of International Publications:

1. Shunmugiah Mahendran, Subbiah Sankaralingam, Senthurpandian Muthuramalinga Sethupathi, **Durairaj Kathiresan**, Mahalingam Muthumani, Loganathan Kousalya, Selvam Palpperumal, Balasundaram Harinathan. Evaluation of antioxidant and cytotoxicity activities of polyphenol extracted from brown seaweed *Sargassum tenerrimum* biomass. *Biomass Conversion and Biorefinery*. 2022. <https://doi.org/10.1007/s13399-022-02301-x> (Springer).
2. Shunmugiah Mahendran¹ · Subbiah Sankaralingam² · Selvaraj Tamilarasi¹ · Pandiaraj Maheswari¹ · **Durairaj Kathiresan**² · Subramanian Sivasangari Ramya³ · Parthasarathi Sethupathy⁴ · Loganathan Kousalya⁵ · Balasundaram Harinathan⁶ · Selvam Palpperumal⁶. Bioactive potential of invertase by yeast *Saccharomyces cerevisiae* from the honey bee gut: isolation and characterization. *Biomass Conversion and Biorefinery*. 2022 <https://doi.org/10.1007/s13399-022-02499-w> (Springer).
3. Shunmugiah Mahendran¹ · Subbiah Sankaralingam² · Pandiaraj Maheswari¹ · Ramsingh Raja Dhivya¹ · **Durairaj Kathiresan**² · Santhanakrishnan Karthikeyan² · Subramanian Sivasangari Ramya³ · Parthasarathy Seethapathy⁴ · Balasundaram Harinathan⁵ · Selvam Palpperumal⁵. Production, characterization, and feed supplement applications of phytase enzyme from *Aspergillus tubingensis* isolated from Western Ghats soil. 2022. *Biomass Conversion and Biorefinery*. <https://doi.org/10.1007/s13399-022-02894-3> (Springer).
4. Ponnerulan Boomibalagan, Sivasangari Ramya Subramanian, P.E. Rajasekharan, Souravi Karpakal, Uthirapandi Veeranan, Eswaran Saminathan, Vijayanand Narayanan, **Durairaj Kathiresan***. Genetic relationship and polymorphism of selected medicinal plants of Asclepiadaceae using RAPD molecular analysis method. *Ecological Genetics and Genomics* 21 (2021) 100101. (Elsevier) <https://doi.org/10.1016/j.egg.2021.100101>
5. Narayanan Vijayanand, Sivasangari Ramya Subramanian, Boomibalagan Ponnerulan, Eswaran Saminathan, Uthirapandi Veeranan, **Durairaj Kathiresan***, Nagaraj Subramani. Potential of pink pigmented methylotrophic bacteria on growth and physiology of cluster bean and soil microbial community. *Biocatalysis and Agricultural Biotechnology* 37 (2021) 102161. (Elsevier) <https://doi.org/10.1016/j.bcab.2021.102161>.
6. Thiruvengadam Shankar, S. Palpperumal, **D. Kathiresan**., S. Sankaralingam, C. Balachandran, K. Baskar, A. Abdulaziz, A. Alqarawi, E. F. Allah. Biomedical and therapeutic potential of exopolysaccharide by *Lactobacillus paracasei* isolated from sauerkraut: Screening and characterization. *Saudi Journal of Biological Sciences*. 28:(2021) 2943–2950. Elsevier –IF – 4.219 (2020).
7. Uthirapandi, V., S. Sivasangari Ramya, S., P. Boomibalagan, S. Eswaran, N. Vijayanand and **D. Kathiresan***. Andrographolide production and enhanced antioxidant activity in *Andrographis paniculata* (Burm f.) Nees. promoted by seaweed liquid extracts. *Brazilian Journal of Botany*. 44: (2021) 317–330. Springer IF-1.394 (2020).
8. Sebastian, J., **D. Kathiresan*** and G. Kuriakose. Species diversity and abundance patterns of epiphytic orchids in Aralam Wildlife Sanctuary in Kerala, India. *Journal of Threatened Taxa*. 13:8 (2021) 19060-19069. IF-0.5 (2020). (Scopus)

9. S. Ramya, N. Vijayanand, P. Boomibalagan, S. Eswaran, V. Uthitrapandi and **D. Kathiresan*** (2020). Phytochemical screening, HPTLC analysis and Antidiabetic potential of *Trigonella foenum graecum* on Alloxan induced diabetic rats. **Plant Archives**. 20(1): 5315-5322. (Scopus)
10. V. Uthitrapandi, P. Boomibalagan, S. Eswaran, S. Ramya, N. Vijayanand and **D. Kathiresan*** (2019). Bio-fertilizing potential of seaweed liquid extracts of marine macro algae on growth and biochemical parameters of *Andrographis paniculata*. **Plant Archives**. 19(2): 3201-3206. (UGC CARE)
11. S. Palpperumal, B. Harinathan, S. Sankaralingam, T. Shankar, S. Mahendran, **D. Kathiresan** and N. Sivakumar (2019). Antioxidant activities of sulfated polysaccharides obtained from green seaweed *Ulva lactuca* L. in Tuticorin coast, Gulf of Mannar, South East coast of India. **International Journal of Microbiological Research**. 10 (1): 16-23.
12. Jeyaprakash, K, N. Balachandran and **D. Kathiresan**. *Champereiamanillana*(Blume) merr. (Opiliaceae) and *Stemodiaverticillata*(Mill.) Hassl. (Plantaginaceae): New distributional records to North East India. **Bio Bulletin**. 4(2): (2018) 17-20.
13. S. Sankaralingam, S. Palpperumal, Harinathan, **D. Kathiresan**, T. Shankar and S. Sundarapandian (2018). Screening and Characterization of Cellulase by *Bacillus megaterium* isolated from marine sediments and its antimicrobial activity. **World Applied Sciences Journal**. 36 (5): 646-653.
14. V. Uthitrapandi, S. Suriya, P. Boomibalagan, S. Eswaran, S. Ramya, N. Vijayanand and **D. Kathiresan** (2018). Organic Fertilizing Effect of Panchagavya on Growth and Biochemical Parameters of Holy Basil (*Ocimum sanctum* L.). **International Journal of Current Microbiology and Applied Sciences**. 7(6): 2637-2644.
15. V. Uthitrapandi, S. Suriya, P. Boomibalagan, S. Eswaran, S. Ramya, N. Vijayanand and **D. Kathiresan** (2018). Bio-fertilizer potential of seaweed liquid extracts of marine macro alga on growth and biochemical parameters of *Ocimum sanctum*. **Journal of Pharmacognosy and Phytochemistry**. 7(3): 3528-3532.
16. T. Shankar, S. Palpperumal, S. Sankaralingam, B. Harinathan, **D. Kathiresan** and B. Priyadharshini (2018). Statistical Optimization of Significant Variables for Exopolysaccharide Production by *Lactobacillus plantarum*. **International journal Microbiological Research**. 9 (3): 59-69.
17. S. Peer Mohamed, H.M. Mahilini, S. Sankaralingam and **D. Kathiresan** (2018). Pesticidal Activity of *Hyptissuaveolens* L. Seed Extract for the Control of the Rice Moth, *Corcyra cephalonicastainton*. **International Journal of Current Research and Academic Review**. 6(1): 11-16.
18. S. Sankaralingam, S. Palpperumal, N. Sivakumar, **D. Kathiresan**, B. Harinathan, T. Shankar and D. Prabhu (2017). Antifungal Activity of Mangrove Rhizobacterium *Pseudomonasaeruginosa* against Certain Phytopathogenic Fungi and its Growth Characterization. **American Journal of Current Microbiology**. 5(1): 1-10, ISSN: 2572-5815.
19. S. Sankaralingam, B. Harinathan, S. Palpperumal, **D. Kathiresan**, S. Rajendran, T. Shankar, D. Prabhu and N. Sivakumar (2017). Optimization of Culture Conditions for the Production of Halophilic Protease by Newly Isolated *Bacillus sonorensis*.

- American-Eurasian J. Agriculture & Environmental Science.** 17(4): 293-299, (ISSN 1818-6769).
20. S. Sankaralingam, B. Harinathan, S. Palpperumal, **D. Kathiresan**, S. Rajendran, T. Sivakumar, T. Shankar, G. Prabakaran and N. Sivakumar, (2016). Screening, Growth Characterization and Alkaline Phosphatase Potential of *Pseudomonasplegossicida* from Mangrove Soil. **British Microbiology Research Journal.** 17(6): 1-11, (ISSN: 2231-0886).
 21. B. Harinathan, S. Sankaralingam, S. Palpperumal, **D. Kathiresan**, T. Shankar and D. Prabhu, (2016). Effect of phosphate solubilizing bacteria on growth and development of Pearl millet and Ragi. **Journal of Advances in Biology & Biotechnology.** 7(3): 1-7, (ISSN: 2394-1081).
 22. S. Sankaralingam, **D. Kathiresan**, B. Harinathan, S. Palpperumal, T. Shankar, B. Ramya and D. Prabhu, (2016). Effect of arbuscular mycorrhizae fungi on growth and development of *Carica papaya*. **Scientific Journal of Seoul Sciences.** 4 (1): 1-7, (ISSN: 2415-6795).
 23. S. Sankaralingam, B. Harinathan, **D. Kathiresan**, A. Palavesam and Mohideen Askar Nawas (2016). Cell immobilization of *Bacillus flexus* for the production of moderately extracellular protease. **International Journal of Innovations in Agricultural Sciences** 1(1): 23 – 36.
 24. S. Palpperumal, S. Sankaralingam, **D. Kathiresan**, B. Harinathan, T. Shankar and D. Prabhu, (2016). Partial purification and characterization of haloalkaline protease by *Pseudomonas aeruginosa*. **British Microbiology Research Journal.** 15(3): 1-7, (ISSN: 2231-0886).
 25. Karuppasamy, K., Subhathra Devi, J., Suresh, K., Dhanya, M., and **Kathiresan, D.** (2012). Influence the growth of tree legume *Sesbaniagrandiflora* (Pers) by using stress tolerant *Rhizobium*. **Journal of Biosciences Research**, 3(1):76-82.
 26. Karuppasamy, K., Nagaraj, S., and **Kathiresan, D.** (2011). Stress Tolerant *Rhizobium* Enhances the Growth of *Samanea saman* (JECQ) Merr. **African Journal of Basic and Applied Sciences**, 3(6):278-284.
 27. **Kathiresan, D.**, Karuppasamy, K., Rameshbabu, R., Natarajan, K.K., Muthuchelian, K. (2006). Influence of rhizobial isolates from stressed soils on the growth of *Vignaradiata* (L.) R. Wilczek. **Proc. Natl. Sem. Current Trends in Biological applications**, 21-26.

List of National Publications:

13) Chapters in Books:

14) Other Publications (Proceedings):

1. B. Harinathan, S. Palpperumal, S. Karthikeyan, S. Sankaralingam, D. Kathiresan, Natesan Sivakumar, P. Thiyagarajan and T. Shankar. Enhancing the Efficacy of Cellulase Producing *Aspergillus niger* Isolated from Alagar Hills, Madurai District,

Tamilnadu. Proceedings of the National Conference on Innovations in Biotechnology (NCIB 2017), ISBN: 978-93-86568-22-9.

2. D. Kathiresan, S. Palpperumal, S. Sankaralingam, B. Harinathan, and K. Muthuchelian. Influence on the growth of tree legume *Erythrina variegata* L. using stress tolerant *Rhizobium* sp. Global life science conference on biological engineering. March 29th to 31st 2016, Kyoto, Japan, ISBN: 978-986-5654-38-5-2, 645-646.
3. S. Sankaralingam, S. Palpperumal, B. Harinathan, D. Kathiresan and T. Shankar. Optimization and characterization of exopolysaccharide produced by *Lactobacillus plantarum* isolated from curd. Global life science conference on biological engineering. March 29th to 31st 2016, Kyoto, Japan, ISBN: 978-986-5654-38-5-2, 535-537.
4. B. Harinathan, S. Sankaralingam, S. Palpperumal, D. Kathiresan, T. Shankar and D. Prabhu (2016). Effect of phosphate solubilizing bacterial strains isolated from *Calotropis gigantea* and *Cyanodondactylon* and their effect on growth and development of millets. Global life science conference on biological engineering March 29th to 31st 2016. Kyoto, Japan, ISBN: 978-986-5654-38-5-2, 533-534.

15) Books Published:

16) Presentation in Seminar / Conference:

International:

1. B. Harinathan, S. Sankaralingam, S. Palpperumal, **D. Kathiresan**, T. Shankar and D. Prabhu **Effect of Phosphate solubilizing bacterial strains isolated from *Calotropis gigantea* and *Cyanodondactylon*** in International conference on “**Converging Biotechnological Innovations for Health, Food and Environmental Welfare**” organized by Department of Biotechnology, Karunya University, Coimbatore, held between December 2nd to 4th 2015.
2. S. Palpperumal, S. Sankaralingam, **D. Kathiresan**, B. Harinathan, T. Shankar and D. Prabhu. **Purification and characterization of haloalkaline protease by *Pseudomonas aeruginosa*** in International conference on “**Converging Biotechnological Innovations for Health, Food and Environmental Welfare**” organized by Department of Biotechnology, Karunya University, Coimbatore, held between December 2nd to 4th 2015.
3. S. Sankaralingam, **D. Kathiresan**, B. Harinathan, S. Palpperumal, T. Shankar and D. Prabhu **Effect of arbuscular mycorrhizae fungi on growth and development of *Carica papaya*** in International conference on “**Converging Biotechnological Innovations for Health, Food and Environmental Welfare**” organized by Department of Biotechnology, Karunya University, Coimbatore, held between December 2nd to 4th 2015.
4. V. Meenakshi Sundaram, **D. Kathiresan**, S. Eswaran, S. Sankaralingam, P. Boomibalakan and B. Harinathan Phosphate solubilization and phytohormones production by rhizosphere microorganisms held at Department of Microbiology Ayya Nadar Janaki Ammal college in “**International Conference on Recent Trends in Biological Research - 2015**” Sivakasi, December 22nd 2015.
5. B. Harinathan, S. Sankaralingam, S. Palpperumal, **D. Kathiresan**, D. Prabhu and T. Shankar and Evaluation of Heavy metal tolerance on Phosphate solubilizing bacteria isolated from *Elephas Maximus Indicus dung* sample held at Department of Biology Gandhigram Rural Institute, Dindugal in “**National Conference on Advances in Biological and Environmental Science - 2016**” Dindugal, February 25 - 26 2016.

6. S. Palpperumal, S. Sankaralingam, B. Harinathan, S. SivasankaraNarayini, T. Shankarand D. Kathiresan. **Optimization of Cultural Conditions for Exopolysaccharides produced by *Enterobacter cloacae* held at Department of Biology Gandhigram Rural Institute, Dindugalin** “National Conference on Advances in Biological and Environmental Science - 2016” Dindugal, February 25 - 26 2016.

17) Participation in Conference:

18) Participation in Seminar:

19) Participation in Workshop:

S. No.	Programme	Topic	Centre	Period
1	Workshop	Higher Secondary Botany Textbook Writing Workshop	State Council of Educational Research and Training Chennai.	13.11.2017 To 15.11.2017
2	Workshop	ISTE STTP Workshop on Environmental Studies	Indian Institute of Technology, Bombay & MHRD, New Delhi & Thiagarajar College of Engineering, Madurai.	02.06.2015 To 12.06.2015
3	Workshop	National Seminar Cum Workshop on Microbial Diversity & Infectomics	Bioinformatics Infrastructure Facility and DBT, Alagappa University	27.02.2013 To 01.03.2013
4	Orientation Programme	Orientation Training for NSS Programme Officers	Empanelled Training Institution- NSS, Avinashilingam University, Coimbatore.	12.10.2012 To 18.10.2012
5	Workshop	All India Workshop on Research Methodology for Research Guide	Academic Staff College, Pondicherry University	21.07.2011 To 22.07.2011
6	Awareness Programme	e-Content Development for College Teachers	Madurai Kamaraj University, Madurai	27.09.2010 To 28.09.2010

7	Workshop	National Workshop on Genomics, Proteomics and Bioinformatics	Bioinformatics Infrastructure Facility, Alagappa University	14.03.2007 To 16.03.2007
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20) Participation in Orientation Programme/ Induction Programme/ Short term Courses:

21) Participation in Faculty Development Programme:

22) Conference/ Seminar/ Workshop Organized: 2

S. No.	Programme	Period	Agency Sponsored	Beneficiaries	Number of Beneficiaries
1	Young Students Scientist Programme (YSSP)	05.05.2017 To 19.05.2017	Tamil Nadu State Council for Science and Technology, (TNSCST), Chennai.	Students of Government Schools of Madurai and Virudhunagar Districts.	84
2	Inservice Training Programme to Science Teachers of Government Schools of Madurai District	18.02.2019 To 22.02.2019	Tamil Nadu State Council for Science and Technology, (TNSCST), Chennai.	Science Teachers of Government Schools of Madurai District.	50

23) Invited Speaker/ Session Chair – Conference/ Seminar/ Workshop: **10**

24) Other Co-curricular / Administrative Responsibilities:

- Deputy Controller of Examinations**, Saraswathi Narayanan College, Madurai. (07.04.2016 - 04.01.2021).
- Dean- Research and Co-ordinator**, Research & Development Cell, Saraswathi Narayanan College, Madurai.
- Programme Officer**, National Service Scheme, Saraswathi Narayanan College, Madurai. (29.09.2010 – 09.07.2014)
- Executive Member, Internal Quality Assurance Cell (IQAC)** of NAAC, Saraswathi Narayanan College, Madurai.(10.12.2014 –31.05.2021)

25) Member in Board of Studies:

- Member**, Board of studies for PG Botany, Madurai Kamaraj University, Madurai.
- Member**, Board of studies for UG Botany, University of Madras, Chennai.

3. **Member-University Nominee**, Board of Studies for PG Botany, Ayya Nadar Janaki Ammal College, Sivakasi.
4. **Member-University Nominee**, Board of Studies for PG Botany, The Madura College, Madurai.
5. **Member-University Nominee**, Board of Studies for UG & PG Botany, The American College, Madurai.
6. **Member**, Board of studies for Botany, Vivekananda College, Thiruvudagam West, Madurai.
7. **Member**, Board of Studies for UG and PG Botany, Standard Fireworks Rajaratnam College for Women, Sivakasi.
8. **Member**, Board of studies for UG Botany, Sri Vidya Mandir Arts & Science College, Katteri, Uthangarai, Krishnagiri District.

26) Editorial/ Review Board Member:

27) Membership in Professional Bodies:

1. **Member-Domain Expert, SCERT Committee** for Text Book preparation for Higher Secondary School Education, Government of Tamil Nadu.
2. **Member** – Institutional Review Board on Research, N.Rama Varier Ayurveda Foundation, Vilachery Main Road, Madurai.
3. **Member**, Committee for UG Botany Book material preparation, DDE, Madurai Kamaraj University, Madurai.

28) Awards received:

29) Consultancy:

30) Patents:

31) Any other information:

* Note : Please provide the total Numbers and details for each metrics