




Bharathiar University

State University | "A⁺⁺" Grade by NAAC | 46th Rank in MoE-NIRF
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

Dr P PONMURUGAN Associate Professor Department of Botany Bharathiar University Coimbatore, 641025 Tamil Nadu E-mail: ponmurugan@buc.edu.in Phone: 9865857816 Office Number: 0422 2428304	
Research Area <ul style="list-style-type: none">• Biomedical Research• Biodiversity Conservation• Lichenology• Tea Pathology	Courses Teaching <ul style="list-style-type: none">• Plant Diversity-I• Algal Technology• Cytology, Genetics and Plant breeding• Applied Botany• Phytoinformatics
Research Experience: 21	Teaching Experience: 16
Research Credentials (as on September 2025 – Source: Google scholar) H-index: 4454 Citations: 35 i10-index: 79	
Copyright : 2 Patents : Granted: 7	
Publications International Journals: 95 Books/Chapters: 4	
Career Other Institutes 1. Designation : Assistant Professor Institution Name : K.S.R. College of Technology Period : June 2003 - June 2008 2. Designation : HoD Institution Name : K.S.R. College of Technology Period : July 2008 - November 2016 At Bharathiar University 1. Designation : Associate Professor Period : November 2016 - September 2025	
Education M.Tech Subject : Biotechnology Institution : Sathyabama University Affiliated University : Sathyabama University Year of Award : December 2010 Ph. D. Subject : Botany Institution : UPASI Tea Research Institute, Valparai Affiliated University : Bharathiar University Year of Award : February 2002	



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Dr P PONMURUGAN , Associate Professor , Department of Botany

M. Phil.

Subject : Botany

Institution : A.N.J.A. College, Sivakasi,

Affiliated University : Madurai kamarajar University

Year of Award : December 1997

M. Sc.

Subject : Botany

Institution : A.N.J.A. College, Sivakasi,

Affiliated University : Madurai kamarajar University

Year of Award : May 1996

B. Sc.

Subject : Botany

Institution : A.N.J.A. College, Sivakasi,

Affiliated University : Madurai kamarajar University

Year of Award : May 1994

Projects

National Level

Ongoing - 2 completed - 14

Research Guidance

Completed

Ph.D. - 5

International Level Institutional Responsibilities

Ongoing - completed - 1

Member in Academic Council & Board of Studies of Affiliated Colleges, of Bharathiar University

Period :Jan 2018 to Till date

Nature of Responsibility :

Member in Faculty Selection Committee of Affiliated Colleges of Bharathiar University

Period :Jan 2018 to Till date

Nature of Responsibility :

Member in Doctoral committee Affiliated Colleges and Served as Member for NIRF team.

Period :Jan 2018 to Till date

Nature of Responsibility :

Member in IQAC and NAAC Coordinator in Bharathiar University, Coimbatore.

Period :Jun 2021 to Till date

Nature of Responsibility :

Visits

1. INSA visiting fellow (2020-05-31 - 2020-04-01)
2. International Symposium on "Sustainable Development through Innovation" (2019-07-23 - 2019-07-25)
3. International Convention Centre, Jeju Island, South Korea. (2017-07-12 - 2017-07-15)
4. Toshi Center Hotel Tokyo 102-0093 Japan. (2014-09-16 - 2014-12-21)
5. Centre for Research and Development, Colombo, Sri Lanka (2013-12-18 - 2013-12-15)
6. Hyatt Hotel and Casino, Manila, Philippines. (2013-08-27 - 2013-04-24)
7. Lincoln University, Christchurch, New Zealand. (2012-08-27 - 2012-08-30)
8. University of Bonn, Bonn, Germany. (2010-09-11 - 2010-09-21)

Collaborations

1. Science and Technology Park, Tung Chung, Hong Kong. (2017-07-09 - 2017-07-17)
2. Leben Care Technologies Pte. Ltd., Singapore. (2018-04-24 - 2020-04-24)



3. Magnimous Info Tech Pvt. Ltd Bangalore Karnataka, India. (2019-04-27 - 2021-04-27)

4. Armats Biotek Private Limited Chennai Tamil Nadu, India. (2019-11-07 - 2021-11-07)

Programs organized

1. 9th Asian PGPR India Chapter National Conference in collaboration with Asian PGPR Society, Auburn, Alabama, USA (2024-07-30 - 2024-07-31)

2. One day training programme on Human Rights 02.11.2023 National Human Rights Commission, New Delhi (2023-11-02 - 2023-11-02)

3. Two weeks Science Academies'Refreshers Course on 'Modern Biotechnology Tools and Techniques in Biodiversity Conservation' (2022-04-12 - 2022-04-25)

4. Biological Sciences Research (2020-11-18 - 2020-11-19)

5. Faculty Development Programme (FDP) on 'Synthetic Biology' (2020-12-14 - 2020-12-18)

6. Faculty Development Programme on Rural Immersion & Community Engagement for Improving Rural Education (2019-08-09 - 2019-08-13)

7. Entrepreneurship Awareness Camp. (2019-11-07 - 2019-11-09)

8. Workshop on Identification, Bioprospecting and Conservation of Lichen (2019-09-12 - 2019-09-13)

9. Refresher Course on "Biotechnology techniques in biodiversity conservation" (2018-09-10 - 2018-09-24)

10. A Popular Series Lecture Programme on "Conservation of Plant diversity through Biotechnology approaches" (2018-01-22 - 2018-01-23)

11. Entrepreneurship Awareness Camp. (2018-08-06 - 2018-08-08)

12. Faculty Development Programme on Entrepreneurship' (2017-11-06 - 2017-11-21)

13. Recent trends in Life Sciences: Research, Practices and application for sustainable development" (2017-09-07 - 2017-09-08)

14. Science Academies Lecture Workshop on 'Biodiversity and its conservation' (2017-07-17 - 2017-07-18)

15. Entrepreneurship Awareness Camps (2017-07-06 - 2017-07-08)

Publications

International Journals - 95

95. Enhanced fast green dye degradation and biological activity of green synthesized Se@ZnO photocatalysts using Ficus religiosa plant extract.

Biomass Conversion and Biorefinery. (September 2025)

Anitha, A., Ponmurugan, P., Esath, N.S., Kannan, S., Sathishkumar, M. and Arunkumar, D.

94. Ameliorative potential of S-allyl cysteine on oxidative stress in STZ induced diabetic rats.

Chemco-Biological Interactions 189: 100–106. (May 2025)

Saravanan, G., and Ponmurugan, P

93. Green synthesized Se@ZnO nanocomposites using Ficus religiosa extract for enhanced photocatalytic degradation of fast green dye and biological applications.

Materials Science and Engineering: B 321: 118478. (March 2025)

Anitha, A., Ponmurugan, P. Esath, N.S., Kannan, S., Sathishkumar, M. and Arunkumar, D.

92. Deep Lichen-Net: Deep learning based automatic classification and segmentation of Lichens in Western Ghats, India.

Bol. Lat. Caribe Plant Med. Aromat. 24 (3): 328 – 344. (March 2025)

Govindasamy, A., Ponmurugan, P., Prabhu, P. and Ramesh, S.M. 2025.



91. Efficacy of various fungicides and indigenous biocontrol agents against red root rot disease of tea plants.

European Journal of Plant Pathology 137: 67–78 (March 2025)
Manjukarunambika, K., Ponmurugan, P. and Marimuthu, S.

90. Novel biosynthesized zinc selenite photocatalysts for enhanced degradation of oxytetracycline with antibacterial activity.

Biometals (December 2024)
Anitha, A., Ponmurugan, P., Arunkumar, D. and Sumathi, C.S.

89. Oxytetracycline degradation and antidermatophytic activity of novel biosynthesized MoS₂ photocatalysts.

Materials Science and Engineering B 301 (2024) 1 (September 2024)
Sathishkumar, M., Anitha, A., Ponmurugan, P., Arunkumar, D., Esath Natheer, S. and Kannan, S. 2024.

88. Hydroxycitric acid and capsaicin combination alleviates obesity-induced testicular apoptosis, oxidative stress and inflammation

Systems Biology in Reproductive Medicine 70: 20-37 (September 2024)
Sathibabu, V.V., Eraniappan, S., Ramajayam, A.B., Sengottuvelu, S., Anitha, R., Brahma Naidu, P., Chandrasekaran, P., Saravanan, G., Ponmurugan, P. and Vadivukkarasi, S.

87. In vitro, in vivo and in silico anticancer activity and toxicity of Usnic acid extracted from the mycobiont culture of Usnea baileyi.

Naunyn-Schmiedeberg's Archives of Pharmacology (September 2024)
Mariraj, M., Gundappa, M., Velayuthaprabhu, S., Shah, K., Ponmurugan, P., Mendem, S.K., Shivakumar, S., and Chauhan, N.S.

86. Oxytetracycline degradation and antidermatophytic activity of novel biosynthesized MoS₂ photocatalysts.

Materials Science and Engineering B (January 2024)
Sathishkumar, M., Anitha, A., Ponmurugan, P., Arunkumar, D., Esath Natheer, S. and Kannan, S.

85. Anti-Inflammatory Activity of Mycobiont Extract of Parmotrema austrosinense (Zahlbr.) Hale in a Zebrafish Model.

Journal of Marine Science Engineering (December 2023)
Kalidoss, R., Ponmurugan, P., Mohammed, R.S., Mujeeb, K., Tae, H.O. and Baji, S.

84. Phytoformulation with hydroxycitric acid and capsaicin protects against high-fat-diet-induced obesity cardiomyopathy by reducing cardiac lipid deposition and ameliorating inflammation and apoptosis in the heart.

Journal of Traditional and Complementary Medicine 14 (2): 162-172. (September 2023)
Uddandrao, V. S., Chandrasekaran, P., Saravanan, G., Brahmanaidu, P., Sengottuvelu, S., Ponmurugan, P., Vadivukkarasi, S. and Kumar, U. (2023).

83. Kinetic modelling and process optimization of textile effluent treatment with bacterial gamma polyglutamic acid.

Journal of Environmental Biology 44 (2): 175-184. (September 2023)
Mohanraj, R., Gnanamanga?, B. M., Ramesh, K. and Ponmurugan, P.

82. Anti-Inflammatory Activity of Mycobiont Extract of Parmotrema austrosinense (Zahlbr.) Hale in a Zebrafish Model.

Journal of Marine Science Engineering 11: 1081. (September 2023)
Kalidoss, R., Ponmurugan, P., Mohammed, R.S., Mujeeb, K., Tae, H.O. and Baji, S.

81. Effect of S-allylcysteine against diabetic nephropathy via inhibition of MEK1/2-ERK1/2-RSK2 signalling pathway in streptozotocin-nicotinamide-induced diabetic rats.

Archives of Physiology and Biochemistry 129 (1): 213-221. (September 2023)
Uddandrao, V.V.S., Parim, B., Ramavat, R., Pothani, S., Vadivukkarasi, S., Ponmurugan, P., Chandrasekaran, P. and Saravanan, G.

80. Linoleic acid mitigated high-fat diet-induced non-alcoholic fatty liver disease by regulating the intestinal-hepatic axis via TGF- β /NF- κ B/TLR4/ZO-1 Pathway.

Revista Brasileira de Farmacognosia 33: 617–628. (September 2023)
Tamilmani, P., Sathibabu Uddandra, V.V.S., Chandrasekaran, P., Saravanan, G., Sethumathi, P., Ponmurugan, P., Jagadesan, R. and Vadivukkarasi, S.



79. Bioefficacy of Lecanoric Acid Produced by Parmotrema austrosinense (Zahlbr.) Hale against Tea Fungal

Pathogens

Horticulturae, 9: 705. (September 2023)

Kalidoss, R., Ponmurugan, P., Gnanamangai, B.M., Mohammed, R.S., Mujeeb, K., Tae, H.O. and Baji, S.

78. Multifaceted plant growth-promoting traits of indigenous rhizospheric microbes against Phomopsis theae, a causal agent of stem canker in tea plants.

World Journal of Microbiology and Biotechnology 39 (9): 237-242. (September 2023)

Manjugarunambika, K., Abul, K.A.M., Mythili, G.B. and Ponmurugan, P.

77. Multifaceted plant growth-promoting traits of indigenous rhizospheric microbes against Phomopsis theae, a causal agent of stem canker in tea plants.

World Journal of Microbiology and Biotechnology (July 2023)

Manjugarunambika, K., Abul, K.A.M., Mythili, G.B. and Ponmurugan, P.

76. Developing a fast, reproducible, and simple protocol for virtual lichen herbarium using barcoding and QR code techniques

Journal of Threatened Taxa (July 2023)

Jeya Preethi S and Ponmurugan P

75. Bioefficacy of Lecanoric Acid Produced by Parmotrema austrosinense (Zahlbr.) Hale against Tea Fungal

Pathogens.

Horticulturae (June 2023)

Kalidoss, R., Ponmurugan, P., Gnanamangai, B.M., Mohammed, R.S., Mujeeb, K., Tae, H.O. and Baji, S.

74. A new record of bloodstain lichen (Haematomma) from Southern Western Ghats to the Indian biota.

Feddes Repertorium (January 2023)

Rajaprabu, N. and Ponmurugan, P.

73. Statistical modeling and optimization for the production of secondary metabolites by lichen mycobiont isolated from Parmotrema austrosinense.

Poornima, S., Rajivgandhi, G., Maruthupandy, M., Mothana, R.A., Noman, O.M., Nasr, F.A., Ponmurugan, P., Moorthy, I.G. and Sivarajasekar, N. 2022. Statistical modeling and optimization for the production of secondary metabolites by lichen mycobiont isolat (September 2022)

Poornima, S., Rajivgandhi, G., Maruthupandy, M., Mothana, R.A., Noman, O.M., Nasr, F.A., Ponmurugan, P., Moorthy, I.G. and Sivarajasekar, N.

72. Developing a fast, reproducible, and simple protocol for virtual lichen herbarium using barcoding and QR code techniques

Jeya Preethi S and Ponmurugan P (2023) Developing a fast, reproducible, and simple protocol for virtual lichen herbarium using barcoding and QR code techniques Journal of threatened Taxa DOI: <https://doi.org/10.11609/jott.8081.15.7.23587-23595> (September 2022)

Jeya Preethi S and Ponmurugan P

71. Biochanin A Attenuates Hyperglycemia in High-Fat Diet–Streptozotocin–Induced Diabetic Rats by Modulating the Activities of Carbohydrate-Metabolizing Enzymes in Vital Organs.

2022. (September 2022)

Sethumathi, P., Pudhupalayam, V. V., Sathibabu, U., Chandrasekaran, P., Sengottuvelu, S., Tamilmani, P. Ponmurugan, P., Vadivukkarasi, S., Mustapha, Shabana, B. and Saravanan, G. 2022.

70. A new record of bloodstain lichen (Haematomma) from Southern Western Ghats to the Indian biota.

Rajaprabu, N. and Ponmurugan, P. 2022. A new record of bloodstain lichen (Haematomma) from Southern Western Ghats to the Indian biota. Feddes Repertorium. 2022: 1–6. [Impact Factor: 0.68]. (September 2022)

Rajaprabu, N. and Ponmurugan, P.

69. Phorophyte specificity of lichen community, with ecological taxation in Suruli watershed, Southern Western Ghats.

Rajaprabu, N. and Ponmurugan, P. 2022. Phorophyte specificity of lichen community, with ecological taxation in Suruli watershed, Southern Western Ghats. Asian Journal of Conservation Biology, 11 (1): 66–76. [Impact Factor: 0.75]. (September 2022)

Rajaprabu, N. and Ponmurugan, P.



68. Analysing drying characteristics of *Solanum trilobatum* leaves and nutritive assessment of cookies.

Materials Today: Proceedings 48: 316-321 (September 2022)

Dasthageer, N., Shanmugam, P., Balasubramanian, M.G., Nagarajan, N., Arumugam, V., Vivekanandhan, K., Palanisamy, D. and Ponmurugan, P.

67. Attenuation of lipid metabolic abnormalities, proinflammatory cytokines, and matrix metalloproteinase expression by biochanin-A in isoproterenol-induced myocardial infarction in rats.

Drug and Chemical Toxicology 45 (5): 1951-1962. (September 2022)

Sangeethadevi, G., VV, S. U., Jansy Isabella, R. A. R., Saravanan, G., Ponmurugan, P.,

66. Polyherbal Formulation Ameliorates Diabetic Cardiomyopathy Through Attenuation of Cardiac

Inflammation and Oxidative Stress Via NF- κ B/Nrf-2/HO-1 Pathway in Diabetic Rats.

Journal of Cardiovascular Pharmacology 79 (1): e75-e86 Journal of Cardiovascular Pharmacology 79 (1): e75-e86.. (September 2022)

Sathibabu, V.V., Brahmanaidu, P., Sengottuvelu, S., Ponmurugan, P., Chandrasekaran, P., Vadivukkarasi, S. and Saravanan, G.

65. A new record of bloodstain lichen (*Haematomma*) from Southern Western Ghats to the Indian biota.

Feddes Repertorium 2022: 1–6. (September 2022)

Rajaprabu, N. and Ponmurugan, P.

64. Statistical modeling and optimization for the production of secondary metabolites by lichen mycobiont isolated from *Parmotrema austrosinense*.

Physiological and Molecular Plant Pathology (January 2022)

Poornima, S., Rajivgandhi, G., Maruthupandy, M., Mothana, R.A., Noman, O.M., Nasr, F.A., Ponmurugan, P., Moorthy, I.G. and Sivarajasekar, N. 2022.

63. Inflammatory Activity of Mycobiont Extract of *Parmotrema austrosinense* (Zahlbr.) Hale in a Zebrafish

Model.

Kalidoss, R., Ponmurugan, P., Mohammed, R.S., Mujeeb, K., Tae, H.O. and Baji, S. 2023. Anti-Inflammatory Activity of Mycobiont Extract of *Parmotrema austrosinense* (Zahlbr.) Hale in a Zebrafish Model. Journal of Marine Science Engineering 11: 1081.

[Impact (September 2021)

Kalidoss, R., Ponmurugan, P., Mohammed, R.S., Mujeeb, K., Tae, H.O. and Baji, S. 2023

62. Linalool mitigated high fat diet-induced non-alcoholic fatty liver disease by regulating the intestinal-hepatic axis via TGF β /NF κ B/TLR4/ZO1 Pathway

Tamilmani, P., Sathibabu Uddandra, V.V.S., Chandrasekaran, P., Saravanan, G., Sethumathi, P., Ponmurugan, P., Jagadesan, R. and Vadivukkarasi, S. 2023. Linalool mitigated high fat diet-induced non-alcoholic fatty liver disease by regulating the intestinal-hepatic axis via TGF β /NF κ B/TLR4/ZO1 Pathway (September 2021)

Tamilmani, P., Sathibabu Uddandra, V.V.S., Chandrasekaran, P., Saravanan, G., Sethumathi, P., Ponmurugan, P., Jagadesan, R. and Vadivukkarasi, S. 2023.

61. Bioefficacy of Lecanoric Acid Produced by *Parmotrema austrosinense* (Zahlbr.) Hale against Tea Fungal

Pathogens.

Kalidoss, R., Ponmurugan, P., Gnanamangai, B.M., Mohammed, R.S., Mujeeb, K., Tae, H.O. and Baji, S. 2023. Bioefficacy of Lecanoric Acid Produced by *Parmotrema austrosinense* (Zahlbr.) Hale against Tea Fungal Pathogens. Horticulturae 2023, 9, 705. <https://doi.org/10.3390/hort9070705> (September 2021)

Kalidoss, R., Ponmurugan, P., Gnanamangai, B.M., Mohammed, R.S., Mujeeb, K., Tae, H.O. and Baji, S. 2023

60. Polyherbal Formulation Ameliorates Diabetic Cardiomyopathy Through Attenuation of Cardiac

Inflammation and Oxidative Stress Via NF- κ B/Nrf-2/HO-1 Pathway in Diabetic Rats

Sathibabu, V.V., Brahmanaidu, P., Sengottuvelu, S., Ponmurugan, P., Chandrasekaran, P., Vadivukkarasi, S. and Saravanan, G. 2022. Polyherbal Formulation Ameliorates Diabetic Cardiomyopathy Through Attenuation of Cardiac Inflammation and Oxidative Stress (September 2021)

Sathibabu, V.V., Brahmanaidu, P., Sengottuvelu, S., Ponmurugan, P., Chandrasekaran, P., Vadivukkarasi, S. and Saravanan, G.

59. Monitoring the decolourisation efficacy of advanced membrane fabricated phytosilica nanoparticles in

textile effluent water treatment

Chemosphere 273: 129681 (September 2021)

Mohanraj, R., Gnanamangai, B.M., Rajivgandhi, G.N., Wen-Jun Li, Vijayalakshmi, G.R., Ponmurugan, P., Alharbi, N.S., Kadaikunnan, S., Khaled, J.M. and Alanzi, K.F.



58. Ramalina obtusata, a new lichen flora addition to Southern Western Ghats, Tamil Nadu, India.

Trees, Forests and People 6: 100140. (September 2021)
Mariraj, M., Shenbagam, M., Kalidoss, R. and Ponmurugan, P.

57. An Assessment of Proximate Composition, Antioxidant Activities and LC/MS Based Phytochemical Profiling of Some Lichen Species Collected From Western Ghats of Southern Part of India

Jordan Journal of Biological Sciences 14 (4): 647 – 661. (September 2021)
Muthu, S., Murugan, M., Rajendran, K. and Ponnusamy, P.

56. Molecular characterization of the phytopathogen C. theae (Petch) – Causative of birds eye spot infection in Camellia sinensis host through DNA polymorphism and proteome analysis.

Physiological and Molecular Plant Pathology 118: 101809. (September 2021)
Gnanamangai, B.M., Robinson, J.P., Ponmurugan, P., AL-mekhlafi, F.A., Farrag, M.A., Maruthupandy, M., Selvankumar, T. and Sudhakar, C.

55. Analgesic activity of Annona squamosa Linn fruit peels on Swis Albino mice. Research Journal of Pharmacy and Technology

Research Journal of Pharmacy and Technology 13 (7): 3199-3204. (June 2020)
Velaga, V. S. A. R., Suryadevara, N., Ying, R. T. C., Ponmurugan, P and Devi, G.

54. Biosynthesis of silver nanoparticles from Streptomyces spp., characterization and evaluating its efficacy against Phomopsis theae and Poria hypolateria in tea plants (Camellia sinensis).

Nano Biomedicine and Engineering 12 (3): 272-280. (June 2020)
Karthik, N., Ponmurugan, P., Gnanamangai, B.M., Suganya, M. and Kavitha, S.

53. Evaluation of different native Streptomyces spp. for effective management of rhizome rot of turmeric.

Journal of Applied Botany and Food Quality 93: 225-233. (June 2020)
Nithya, M., Ponmurugan, P., Gnanamangai, B.M., Robinson, J.P., Mathivanan, N. and Senthilkumar, J. 2020

52. Association of multiple fungal pathogens to rhizome rot disease of turmeric.

Archives of Phytopathology and Plant Protection 53 (9-10): 440-458. (June 2020)
Chitra, C., Gideon, M.D., Ponmurugan, P. and Mathivanan, N.

51. Synthesis and characterization of proanthocyanidin-chitosan nanoparticles: An assessment on human colorectal carcinoma HT-29 cells.

Journal of Photochemistry and Photobiology B: Biology 210: 111966. (June 2020)
Mani, S., Balasubramanian, B., Balasubramani, R., Chang, S. W., Ponnusamy, P., Esmail, G. A., Arasu, M.V., Al-Dhabi, N.A. and Duraipandyan, V.

50. Cytotoxic effect induced apoptosis in lung cancer cell line on Ageratina adenophora leaf extract

Biocatalysis and Agricultural Biotechnology 22: 101381. (September 2019)
Suganya, M., Karthik, N., Kavitha, S., Mythili, G.B. and Ponmurugan, P.

49. Architectural effect of different tea clones on the development of blister blight disease.

. Journal of Applied Botany and Food Quality 92: 7-14. (September 2019)
Ponmurugan, P., Gnanamangai, M.B. and Karunambika, K.M. 2019.

48. Toxicity and anti-inflammatory study of Parmotrema austrosinense extract against oxozalone induced intestinal inflammation in zebrafish (Danio rerio) model

Biocatalysis and Agricultural Biotechnology 21: 101278. (September 2019)
Poornima, S., Nagarjun, N., Ponmurugan, P., Gnanamangai, B.M. and Narasimman, S.

47. . Molecular docking of multidrug resistant Klebsiella pneumoniae from river water of Klang Valley, Malaysia.

Journal of Pure Applied Microbiology 13 (4): 2141-2150. (September 2019)
Nagaraja, S., Kwan, Y.I., Shanmugam, G., Ponmurugan P., Ganapathy, B., Subramonie, S. and Velaga, V.S.

46. Fabrication of chitosan-alginate microencapsulated curcumin coated scaffold to develop novel cotton crepe bandage.

Indian Journal of Fibre Textile Research 44: 271-278. (September 2019)
Gnanamangai, B.M., Suganya, M., Sabarinathan, R. and Ponmurugan, P.



45. Utilization of waste tea leaves as bio-surfactant in CdS quantum dots synthesis and their cytotoxicity effect in breast cancer cells.

Applied Surface Science 487: 159-170. (September 2019)
Kavitha, S., Mythili, G.B., Anitha, D., Vijayshankar, Asokan, C., Matthew, L., Ponmurugan, P. and Pitchaimuthu, S.

44. Mitochondrial dysfunction mediated apoptosis of HT-29 cells through CS-PAC-AgNPs and investigation of genotoxic effects in zebra (Danio rerio) fish model for drug delivery.

Saudi Journal of Biological Sciences 26 (4): 767-776. (September 2019)
45. Suganya, M., Gnanamangai, B.M., Govindasamy, C., Elsadek, M.F., Pugazhendhi, A., Chinnadurai, V., Selvaraj, A., Ravindran, B., Chang, S.W. and Ponmurugan, P.,

43. Antineoplastic effect of PAC capped silver nanoparticles promote apoptosis in HT-29 human colon cancer cells.

Journal of Cluster Science 30: 483-493 (September 2019)
Suganya, M., Gnanamangai, B.M., Ponmurugan, P. and Vijayan, P

42. Biocontrol efficiency of native plant growth promoting rhizobacteria against rhizome rot disease of turmeric.

Biological Control 129: 55-64. (September 2019)
Chenniappan, C., Mathivanan, N., Daniel, G.M., Ramaraj, G.B., Ponmurugan, P. Sekar, J. and Ramalingam, V.P.

41. Antitumor effect of proanthocyanidin induced apoptosis in human colorectal cancer (HT 29) cells and its molecular docking studies.

BMC Chemistry 2019: 13-21. (September 2019)
Suganya, M., Gnanamangai, B.M., Ravindran, B., Chang, S.W., Selvaraj, A., Govindasamy, C., Elsadek, M.F. and Ponmurugan,

40. Asthma-alleviating potential of 6-gingerol: Effect on cytokines related mRNA expression in ovalbumin-sensitized asthma in rats.

Journal of Environmental Pathology, Toxicology and Oncology 38 (1): 41-50. [(September 2019)
Zaoni L., Sathibabu, U.V.V., Ponmurugan, P., Santharaj, B., Brahmanaidu, S., Vadivukkarasi C. and Saravanan, G.

39. Effects of asiatic acid, an active constituent in Centella asiatica (L.): restorative perspectives of streptozotocin-nicotinamide induced changes on lipid profile and lipid metabolic enzymes in diabetic rats.

Comparative Clinical Pathology 28: 1321-1329. [(September 2019)
Swapna, K., Uddand Rao, V.V.S., Brahmanaidu, P., Ravindarnaik, R., Suresh, P., Ponmurugan, P., Santharaj, B., Vadivukkarasi S., Harishankar, N., Prathap Reddy, K., Nivedha, P.R. and Saravanan, G.

38. Plasma treated fabrics coated with naturally derived Ag?NPs for biomedical application.

IET nanobiotechnology 13 (4): 368-375. (September 2019)
Manjula, S., Shanmugasundaram, O.L., Gnanamangai, B.M., Pavithra, R., Kavitha, S. and Ponmurugan, P.

37. Screening of biologically potent endolichenic fungi isolated from selected lichens habitat on silver oak tree.

Vegetos 31 (3): 89-94. (September 2019)
Poornima, S., Ponmurugan, P., Gnanamangai, M.B., Gayathri, G. Dheenadhayalan, K. and Ayyappadasan, G.

36. Green-synthesis-derived CdS Quantum dots using tea leaf extract: antimicrobial, bioimaging, and therapeutic applications in lung cancer cells.

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Books/Chapters - 4

4. Renewable Electrodes Incorporated with Green Synthesis Nanoparticles for the Development of High-Performance Lithium-Ion Batteries

Sustainable Green Synthesised Nano-Dimensional Materials for Energy and Environmental Applications Pages 185-200 Publisher CRC Press (December 2024)

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3. Beneficial Microbes for Sustainable Agriculture

Excel Publishers, New Delhi (ISBN: 978-93-89947-36-6), 680 Pages. ISBN: 978-93-89947-36-6 (July 2024)
Ponmurugan, P., Anitha, A. and Reddy, M.S.



2. Plants Body Language

Orange Books Publications, Bhilai, Chhattisgarh (ISBN: 978-93-5621-805-5), 291 Pages. (June 2024)
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1. Biodiversity Conservative Research.

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Patents

Granted - 7

1. Method of in vitro culturing of a mycobiont in a fungal algal symbiosis 07-2019 408182 1.Dr.P.Ponmurugan
2.Mr.R.Kalidoss 3.Mr.K.Arun Prasath
2. MICROWAVE ASSISTED DETECTION OF UV-ABSORBING COMPOUNDS FROM LICHEN 06-2013 407573
1.MR. G. AYYAPPADASAN 2.DR. P. PONMURUGAN 3.DR. RAMA S VERMA 4.DR. SANJEEVA NAYAKA et al.
3. Biosynthesis of gold and silver nanoparticles for stability and extended shelf-life of antagonistic activities 01-1970
US/12/916,497 Dr. Ponmurugan
4. Preparation of PGPR bioformulation for the biological control of red root rot disease in tea plants 10-2010
US/13/092 Dr. Ponmurugan
5. Bioformulation of vermicompost based Trichoderma atroviride against Phomopsis theae, causal agent of Phomopsis
canker disease in tea plants 01-2012 US/13/348,444 Dr. Ponmurugan
6. Lichens assisted feed mix for poultry management to enhance the egg production 01-1970 GB1315156.8 Dr.
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1. . A Simple Protocol for Identification of Lichens distributed in Tamil Nadu Ponmurugan
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Projects

Completed - 15

1. Bioinformatics approach for inhibition of toxic action of Russel's viper venom PLA2 by Lichen compounds validated
through Albino Wistar rats Others 25,29,240/- (February 2018 - February 2021)
2. Cytogenetic and biochemical studies of Lichenic extracts on human blood cells for biomedical applications Others
10,00,000/- (March 2019 - March 2021)
3. Value-added technology in Functional food product development for economic growth of women Tribes in Tamil
Nadu Others 5,00,000/- (December 2019 - June 2019)
4. Medicinal plants their role in human health and drug discovery for cancer Others 6,10,000/- (December 2020 -
December 2022)
5. Effect of biotic and abiotic factors on the growth metabolism of Cephaleuros parasiticus, the causal organism of red
rust disease in tea plants DST 8,76,000/- (September 2007 - September 2010)
6. Antimicrobial and anticancerous activities of lichens for biomedical applications Others 15,64,000/- (May 2009 - May
2012)
7. Evaluation of Streptomyces spp. for the biological control of stem and root diseases of tea plants Others 14,66,400/-
(April 2010 - April 2014)
8. Evaluation of the efficacy of garlic based anti-diabetic formulation using animal models - Jian Healthcare Private
Limited, Singapore Others 10,00,000/- (January 2012 - April 2014)
9. Evaluation of antioxidant properties of lichens obtained from Eastern Ghats for Biomedical applications Others
14,24,934/- (March 2011 - March 2014)



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Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

Dr P PONMURUGAN , Associate Professor , Department of Botany

10. Development of PGPR formulations for the management of rhizome rot disease of turmeric plants Others 42,71,000/- (June 2011 - June 2014)

11. Mass production of antibiotics from *Streptomyces* spp. for biomedical applications through Bioprocess Engineering- All India Council for Technical Education, New Delhi

Others 18,60,000/- (April 2015 - March 2016)
12. Evaluation of *Streptomyces* spp. against rhizome rot disease in turmeric (*Curcuma longa* L.) UGC-SAP 16,06,600/- (July 2015 - July 2018)

13. Nanobiotechnological approaches for the management of stem and root diseases of tea plants using biocontrol agents-National Tea Research Foundation, Kolkata.

(Ref. No.: NTRF: 17 (334) /2014/5152 dated 13th October, 2015)

Others 12,63,600/- (October 2015 - October 2018)

14. Development of protocol for identification of Lichens using Image processing techniques in cloud computing DST – SERB 29,71,000/- (March 2016 - March 2019)

15. Molecular mechanism of antimutagenic and anticancerous activities of southern Indian tea catechins DST 20,50,000/- (January 2016 - January 2020)

Ongoing - 2

1. Evaluation of Lecanoric acid extracted from the Lichen Mycobiont for the Integrated Management of Foliar Diseases in Tea Others 26,39,872/- (October 2024 - October 2027)

2. Carbon Foot printing, sequestration and neutralization in Tamil Nadu. Others 23,10,000/- (July 2025 - July 2028)