




Dr. P. Dhevagi, Ph.D.

Professor

Department of Environmental Sciences

Tamil Nadu Agricultural University

Coimbatore, Tamil Nadu, India - 641003

	91-0422- 6611252 09843530349		https://orcid.org/0000-0001-9212-0242
	devagisivaraj@gmail.com/ dhevagi.p@tnau.ac.in		https://www.researchgate.net/profile/Periyasamy-Dhevagi

Area of Research Interest

Ozone, plant abiotic stress, climate change, microbial remediation of waste, wastewater treatment, papermill wastewater management, dye industry wastewater treatment and panchagavya.

Position

Teaching faculty, Department of Environmental Sciences, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India. 2004 – Present.

Teaching experience : 18 years
Post-Graduate guidance: M.Sc. – 6; Ph.D. – 2

Recent Projects/Grants

1. Co-PI: Establishment and maintenance of Environmental Observatory at Wood House, Horticulture Research Station, Ooty for Atmospheric Trace gases Chemistry Transport Modeling (ATCTM), Funding agency: GOI-ISRO- GBP, 2018 to Present.
2. PI: Assessing the longterm impact of distillery effluent application on soil and crop and evaluation of alternative use of distillery effluent for crop production, Funding agency: Sakthisu gars Private Limited, Appakud al, Bhavani, 2014-2018
3. PI: Bioprospecting Marine Actinomycetes for therapeutic enzymes, Funding agency: GOI - University Grants Commission, New Delhi, India, 2011.
4. PI: Developing Ecofriendly Microbial Consortia for Pathogen Removal from Sewage Waste Water and Mitigation of Pathogen Entry into Hydrological Cycle, Funding agency: Ministry of Environment and Forests, Government of India, 2008

Recent University Research Projects

1. Assessment of Microplastics in Agricultural Soils - 2020
2. Impact of tropospheric ozone on Blackgram – 2019
3. Developing a low cost biosorbent for heavy metal removal from polluted water - 2019
4. Studies on Bio accessible Heavy Metal From Raw and Cooked Rice – 2018

Recent Publications

Research Articles

1. Ramya, A., P., Dhevagi, S.S. Rakesh, M. Maheswari, S. Karthikeyan, R. Saraswathi, C.N. Chandrasekhar and S. Venkataramani. 2021. Detection of ozone stress in rice cultivars using spectral reflectance. *Environmental Advances* 6; 100129. <https://doi.org/10.1016/j.envadv.2021.100129>.
2. Dhevagi, P., A. Ramya, S. Priyatharshini, and R. Poornima. 2021. Effect of Elevated Tropospheric Ozone Toxicity on *Vigna mungo* L. Varieties. *Ozone: Science & Engineering*. Online, <https://doi.org/10.1080/01919512.2021.2009332>.
3. Ramya, A., P., Dhevagi, S. Priyatharshini, R. Saraswathi, S. Avudainayagam and S. Venkataramani. 2021. Response of rice (*Oryza sativa* L.) cultivars to elevated ozone stress. *Environmental Monitoring and Assessment*. 193:808. <https://doi.org/10.1007/s10661-021-09595-w>.
4. Ramya, A. Dhevagi, P., Priyatharshini, S., Chandrasekhar, C.N., Valliappan, K, Venkataramani, S. 2021. Physiological and Biochemical Response of Rice Cultivars (*Oryza Sativa* L.) To Elevated Ozone, *Ozone: Science & Engineering*, 43 (4), 363-377. <http://doi.org/10.1080/01919512.2020.1796585>.
5. Dhevagi, P., Priyatharshini, S., Ramya, A. and Sudhakaran, M. 2021. Biosorption of lead ions by exopolysaccharide producing *Azotobacter* sp. *Journal of Environmental Biology*, 42, 40-50. <http://doi.org/10.22438/jeb/42/1/MRN-1231>
6. Dhevagi, P., Ramya, A., Priyatharshini, S., Sindhuja, M., Avudainayagam, S.. 2021. Bioavailable Forms Of Heavy Metals From Rice Samples And Its Potential Health Risk Assessment. *Journal of Experimental Biology and Agricultural Sciences*, 9(1); 25 – 35.
7. Ramya, A., Gopalakrishnan, B. and Dhevagi, P. 2020. Assessment Of Spatial And Temporal Variations In The River Water Quality. *International Journal of Advanced Biological Research*, 10(1): 1-3.
8. Haritha Gowri, C., Vijaya Priya, P., Ramya, A. and Dhevagi, P. 2020. Effect of Elevated Tropospheric Ozone on Photosynthetic Efficiency of Rice Cultivars. *International Journal of Advanced Biological Research*, 10 (4): 230-234.
9. Ramya, A., Dhevagi, P., Maheswari, M, Jayabalakrishnan, RM, Saraswathi, R and Chandrasekhar, CN. 2020. Assessment of Physiological, Biochemical and Yield Attributes of Rice Cultivars under Elevated Ozone Stress, *Madras Agricultural Journal*, 107: 10-12, 369-375. doi:10.29321/MAJ.2020.000463.

10. Dhevagi P, Sudhakarn M & Avudainayagam S. 2020. In Vitro studies on bioaccessible heavy metals in rice. *International Journal of Advanced Biological Research*. 10(2):119-225.
11. Dhevagi P, Khan Agha Shenwari, Priyatharshini S and Avudainayagam S. 2019. Application of response surface methodology for the biosorption of lead by banana peel. *International Journal of Chemical Studies*. 7(4): 1495-1501
12. GokulKannan T, Maheswari M, Balasubramaniam P and Dhevagi P. 2019. Role of Radial Oxygen Loss (ROL) and Rhizosphere microflora of reed plants in treating waste paper based paper and board mill effluent. *International Journal of Chemical Studies*. 7(4): 1077-1083
13. Jyothi Priya P, Suriya E, Jhon E and Dhevagi P. 2019. Biosorption of Heavy Metals by Cyanobacteria. *International Journal of Current Microbiology and Applied Sciences*. 8(12): 728-737.
14. Dhevagi, P., Priyatharshini, S. and Ramya, A. 2019. Response Surface Methodology as a Tool for Optimization of Metal Adsorption by Banana Peel Biochar. *International Journal of Current Microbiology and Applied Sciences*, 8(12): 996-1009
15. Priyatharshini, S, Ramya, A., Gomathi, V., Davamani, V. and Dhevagi, P. 2019. Removal of lead from aqueous solution by EPS producing bacteria, *International Journal of Chemical Studies*, 7(3): 3745-3750
16. Brundha A, Geetha K, Gobu R, Manju KAA, Karthiga V and Dhevagi P. 2017. A Preliminary Study On Antimicrobial Activity Of Marine Actinomycetes. *Journal of Environmental biology*, 38 (3): 483-488.
17. Dhevagi P, Poorani.E . and Mahimairaja S. 2017. Isolation of L-glutaminase producing Actinomycetes from marine sediments. *Ecology, Environment and Conservation*. 23: 51-58.

Review Articles

1. Dhevagi, P., and Ramya, A. 2020. Green House Gas Mitigation – A Scientific Approach for Sustainable Agriculture, *Chemical Science Review and Letters*. ISSN 2278-6783

Book chapters

1. Dhevagi, P., Ramya, A., Priyatharshini, S., Geetha Thanuja, K., Ambreetha, S. and Nivetha, A.. 2021. Industrially Important Fungal Enzymes: Productions and Applications, A. N. Yadav (ed.), *Recent Trends in Mycological Research, Fungal Biology*, Springer Nature Switzerland AG. pp: 263-309
2. Ramya, A., Nivetha, A., and Dhevagi, P. 2021. Overview of Indoor Air Pollution: A Human Health Perspective. In: P. K. Shit et al. (eds.), *Spatial Modeling and Assessment of Environmental Contaminants, Environmental Challenges and Solutions*, Springer Nature Switzerland AG. pp: 495-514.

3. Dhevagi, P., Sudhakarn, M., and Ramya, A. 2019. White Rot Fungi and Their Enzymes for the Treatment of Industrial Dye Effluents, In: A. N. Yadav et al. (eds.), Recent Advancement in White Biotechnology Through Fungi, Fungal Biology. Springer Nature Switzerland AG, pp:73-100.

Magazine – Popular Article

1. Dhevagi, P., Ramya, A. and Priyatharshini, S.. Banana peel as potential heavymetal adsorbent. In: P. Lal, B.R. Chhipa and Arvind Kumar (Eds.), AGROBIOS newsletter: Salt affected soils and crop production-A modern synthesis. 01 March 2020, Vol. (18), No. (10), pp: 143-144.
2. Dhevagi, P., Ramya, A. and Priyatharshini, S.. Organic Agriculture and the Environment. In: P. Balasubramaniyan, T. Singh, A. Agrawal, H. P. Sharma, N. Kachhawha and S. Purohit (Eds.), AGROBIOS newsletter. 01 February 2020, Vol. (18), No. (9), pp: 32-34.
3. Dhevagi, P., Ramya, A. and Priyatharshini, S.. Mitigation of Green House Gases for Sustainable Agriculture. In: Pushp Sharma (Eds.), AGROBIOS newsletter: Elementary botany. 01 January 2020, Vol. (18), No. (8), pp: 135-137.
4. Dhevagi, P., Ramya, A. and Priyatharshini, S.. Agricultural sources of Green House Gases. In: Pushp Sharma (Eds.), AGROBIOS newsletter: Elementary botany. 01 January 2020, Vol. (18), No. (8), pp: 140-141.
5. Priyatharshini, S., Ramya, A. and Dhevagi, P. Exopolysaccharide producing bacteria for heavy metal bioremediation. In: B. Sudhakar (Eds.), AGROBIOS newsletter: Mobile apps for agricultural development. 01 December 2019, Vol. (18), No. (7), pp: 138-140.
6. Ramya, A., Priyatharshini, S. and Dhevagi, P., Ground level ozone – will it affect crops?. In: G. K. Koutu, M. S. Bhale, R. S. Ramakrishnan and R. S. Sharma (Eds.), AGROBIOS newsletter: Climate change and quality seed production technology. 01 November 2019, Vol. (18), No. (6), pp: 141-142.
7. Priyatharshini, S., Ramya, A. and Dhevagi, P. Conservation of Biodiversity in India. AGROBIOS newsletter: sanitation mask and social distancing. Vol. (18), No. (11), pp: 130
8. Ramya, A., Priyatharshini, S. and Dhevagi, P. Genetically Engineered Microorganisms on Pollution Management. AGROBIOS newsletter: Locusts: A severe threat to agriculture in India. Vol. (19), No. (2), pp: 136
9. Priyatharshini, S., Ramya, A. and Dhevagi, P. IUCN red list: At a glance. AGROBIOS newsletter: Locusts: A severe threat to agriculture in India. Vol. (19), No. (2), pp: 134
10. Ramya, A., Dhevagi, P., Priyatharshini, S. and Sabareshwari, V. Wetlands in India – A conservation perspective, In: K. T. Parthiban and Keerthika A. (Eds.), AGROBIOS newsletter: Agroforestry- Principles, Practices and Applications, Vol. (19), No. (4), pp: 141

11. Ramya, A., Priyatharshini, S., and P. Dhevagi. Green Building - An Overview, In: K. T. Parthiban and Keerthika A. (Eds.), AGROBIOS newsletter: Agroforestry- Principles, Practices and Applications, Vol. (19), No. (4), pp: 139
12. Priyatharshini, S., Ramya, A. and Dhevagi, P. Bio-indicators in environment, In: K. T. Parthiban and Keerthika A. (Eds.), AGROBIOS newsletter: Agroforestry- Principles, Practices and Applications, Vol. (19), No. (4), pp: 142
13. Ramya, A., Priyatharshini, S., Dhevagi, P. and Sabareshwari, V. e-Waste disposal and recovery of valuables, In: K. T. Parthiban and Keerthika A. (Eds.), AGROBIOS newsletter: Agroforestry- Principles, Practices and Applications, Vol. (19), No. (4), pp: 144

Conference / Workshop / Training

1. Ramya, A., R. Poornima, P. Dhevagi and M. Maheswari. 2021. Non-Destructive Determination of Ozone Stress Assessment Using Spectral Reflectance in Rice Cultivars. Proceedings of 7th Agricultural Graduate Students Conference on “Food, Farmers And Future: Envisioning Amassment Of Regenerating And Nourishing Food” held at the School of Post Graduate Studies, Tamil Nadu Agricultural University, Coimbatore on September 07 & 08, TNAU Publications, Coimbatore, India, pp: 583-584. ISBN: 978-93-91845-00-1.
2. Ramya, A., P. Dhevagi, K. Valliappan. 2020. Tropospheric ozone impact on short duration rice cultivars. 5th National Conference on Agricultural Scientific Tamil on “Tamil Can do – Agriculture/Veterinary/Fishery”. Agricultural Scientific Tamil Society, PUSA, New Delhi. Page: 34-37. ISBN: 9788194443070.
3. Dhevagi, P., Ramya, A., S. Avudainaygam. 2020. Bioavailable Forms of Heavy Metals in Rice. 5th National Conference on Agricultural Scientific Tamil on “Tamil Can do – Agriculture/Veterinary/Fishery”. Agricultural Scientific Tamil Society, PUSA, New Delhi. Page: 41-43. ISBN: 9788194443070.
4. Dhevagi, P., Ramya, A., Jayabalakrishnan, R.M. and Maheswari, M. 2020. Variations of Trace Gases at High Altitude Region of Western Ghats, Southern India. In: Virtual Symposium Weather And Climate Services Over Mountainous Regions Organized by Indian Meteorological Society New Delhi, North Eastern Space Applications Centre (NESAC), Dept. of Space, Govt. of India, Umiam, Shillong, Meghalaya And Indian Meteorological Society – Shillong Chapter Shillong, Meghalaya, 14-17 December, pp. 103.
5. Ramya, A., Dhevagi, P., Jayabalakrishnan, R.M. and Maheswari, M. 2020. Detection of ozone stress using spectral reflectance. In: Virtual Symposium Weather And Climate Services Over Mountainous Regions Organized by Indian Meteorological Society New Delhi, North Eastern Space Applications Centre (NESAC), Dept. of Space, Govt. of India, Umiam, Shillong, Meghalaya And Indian Meteorological Society – Shillong Chapter Shillong, Meghalaya, 14-17 December, pp. 127-128.

6. Ramya, A., Dhevagi, P. and Valliappan, K. 2019. Assessing the sensitivity of rice cultivars to elevated ozone concentration. In: International Conference on “Challenges in Biological Sciences”, Namakkal, Tamil Nadu, India, 29-30 August, pp. 241.
7. Ramya, A., Suguna, A. R., Dhevagi, P. and Avudainayagam, S. Seasonal Variations of Trace Gases (O₃, NO_x, SO₂ and CO) at High Altitude Region of Ooty, Western Ghats Nilgirs 2019. In: S. Manivannan, V. Kasthuri Thilagam, K. Kannan, P. Sundarambal, H. C. Hombegowda, O.P.S. Khola, T. Senthilkumar, G. Thiyagarajan, Balaji Kannan and A. Valliammai (Eds.), 28th National Conference on Farmers’ Friendly Soil and Water Conservation Technologies for Mitigating Climate Change Impact. Soil Conservation Society of India, Indian Institute of Soil & Water Conservation, Regional Centre, Udhamandalam, Tamil Nadu. 31 January - 2 February, pp. 13-14.
8. Ramya, A., Gopalakrishnan, B. and Dhevagi, P. 2018. Assessment of spatial and temporal variation in the water quality of bhavani river. In: Prashant Srivastava, S. Avudainayagam, Adam Barclay, Ravi Naidu and S. Mahimairaja (Eds.) Proceedings of 1st global CleanUp Congress, Coimbatore, India, 22-24 October, pp. 276-278.
9. Suguna AR, Gayathri J, Ramya A, Dhevagi P and Avudainayagam S. 2018. Characteristics of aerosols and shortwave radiative force over a high altitude region of western ghats, Nilgris. In: Prashant Srivastava, S. Avudainayagam, Adam Barclay, Ravi Naidu and S. Mahimairaja (Eds.) Proceedings of 1st global CleanUp Congress, Coimbatore, India, 22-24 October pp: 391-392.
10. Sethupathi, N., Ramya, A., Boomiraj, K., Dhevagi, P. and Avudainayagam, S. 2018. The effect of elevated ozone concentration on micronutrients content of Cauliflower. In: Hindu Vemuri, Priyanka Joshi and Yashoda (Eds.), ICRISAT- Corteva Plant Science Symposium-2018, Climate is changing, agriculture must too, Hyderabad, India, September 6-7, pp. 60-61.
11. Khan Agha Shenwari, Priyatharshini S, Dhevagi P and Avudainayagam S. 2018. Biosorption of Lead from Aqueous Solutions by Banana Peel Powder. In: Proceedings: Global Cleanup Conference, Coimbatore, October, pp:128-129.
12. Madangi V.U, Priyatharshini S and Dhevagi, P. 2018 Heavy metal analysis in the greens of koyambedu market, Chennai In:Proceedings: Global Cleanup Conference, Coimbatore, October, pp:318-319
13. Dhevagi, P., Priyatharshini, S., G.K.Dinesh and P.T. Ramesh.2018.Effect of PMDSW application on characteristics of soil leachate. In: Proceedings: Global Cleanup Conference, Coimbatore, October, pp:339- 340
14. Dhevagi, P.and S.Anusuya. 2016. Bacteriophage based pathogen removal from sewage water. Contaminated site Remediation- In: Proceedings: CleanUp India – 2016 held at Tamil Nadu, Agricultural University, Coimbatore.

Recent Awards / Honour

1. Environmental Sciences Award 2019, Vasanthraj David Foundation for Agriculture, Chennai
2. Certificate of Honour in the international Conference on Contaminated Site Remediation 13-15 December 2016 Organized by TNAU, Coimbatore, CRC Care, The University of New Castle, Australia
3. Winner Women's Day Award – 2017. Outstanding Woman Educator and Scholar Award 2017 by National Foundation for Entrepreneurship Development (NFED), Coimbatore

Membership in Registered Professional bodies

1. Life Member - Association of Microbiologists of India, 2005-Till date
2. Life Member - National Environmental Science Academy, 2005-Till date
3. Life Member - Indian Society of Oil Seeds, 2006-Till date
4. Life Member – Environment Protection Movement, 2013-Till date
5. Life member – Agricultural Science Tamil Society, 2016-Till date
6. Annual member - AJES September 2016 to August, 2017
7. Life Member - Madras Agricultural Students Union, 2017-Till date
8. Life member – Society for Science and Nature, 2020-Till date
9. Annual member – Indian society of Soil Science, 2020-Till date
10. Life member -Society for Agriculture Arid Ecology Research, 2020-Till date