Dr. Ponni T.G.

Assistant Professor of Botany

ADDRESS & EMAIL

Shady bhavan,

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QUALIFICATION

M.Sc, M.Phil, Ph.D.

DATE OF JOINING

28-09-2020

EXPERIENCE IN YEARS

3 Years

ADMINISTRATIVE DISTINCTION

Member of "The ATAL RANKING 2021".

Member of "The ATAL RANKING 2022".

Member of PM USHA – 2023

Member of Nature Club - 2020-2023

Member of Debate Club - 2023

Member of Media Club. - 2023

PAPERS PRESENTATIONS

- PonniT.G. and Ashalatha S.Nair. 2019. "*Invitro* genetic fidelity assessment and Identification of drought responsive genes in wild banana-*Ensetesuperbum* (Roxb.)Cheesman". International conference" Provectus Plantae'19 – Exploring The Scope of Plant Genetic Resources". 22-24 May. Department of Botany, University of Kerala.
- PonniT.G. and Ashalatha S. Nair. 2016. "Transcriptional down regulation of *MaRAV* gene in banana under drought stress". International Seminaron New Frontiers in Cytogenetics, XIII conference of the society of cytologists & geneticists. 15-17 December. Department of Botany, University of Kerala.
- Resmi L., Ponni T.G. and Ashalatha S.Nair.2016. "Sequencing and expression analysis of Drought responsive genes in banana". National Conference on Genomics and Society Prospects, Challenges and Concerns. February 17-19.IU -CGGT, Department of Biotechnology, University of Kerala.
- Ponni T.G. and Ashalatha S. Nair. 2015. "Cormlet production in *Ensete superbum* (Roxb.) cheesman- an efficient means for conservation". National Multi-Disciplinary Annual Research Conference (MARC).15th to18th December. Department of Botany, University of Kerala, Karyavattom, Thiruvananthapuram.

- Ponni T.G. and Ashalatha S. Nair. 2014. "Somatic embryogenesis in *Ensete superbum* (Roxb.) cheesman-A wild medicinal plant". National symposium on underutilized and wild edible plants of India- Future crops" organized by Department of Botany, University of Kerala, Karyavottom on December10th to12th.
- Ponni T.G. and Ashalatha S.Nair. 2014. "Conservation of *Ensete superbum* (Roxb.) Cheesman through Micropropagation". National Seminar 'Role of Plant Systematics in Biodiversity and its Conservation' 4-5th March. Department of Botany, SN College, Cherthala.
- Resmi L., Ponni T.G. and Ashalatha S.Nair. 2016. "Differential expression analysis of Expansin gene in drought tolerant and susceptible banana cultivars". National Conference on Genomics and Society– Prospects, Challenges and Concerns. February17-19.IU-CGGT, Department of Biotechnology, University of Kerala.
- Archana Satheshan and Ponni T. G "Loss of Genetic Diversity in Cultivar Bananas increases Drought Susceptibility" Biodiversity Challenges and Threats; Current Scenario, organised by PG and Research Department of Botany In association with IQAC and Biodiversity club, held at S.N College Kollam on 21st and 22nd December 2022.

PARTICIPATION IN SEMINARS/ CONFERENCES/ WORKSHOPS

- "Transcriptomics and Metaboomics for Discovery Science in Plant Biology" Erudite Scholar in Residence Programme, held at Dept of Botany, University of Calicut, on 16th to 20 th May 2022.
- GNF National Seminar on 'Modern Trends in Conservation, Utilisation and Improvement of Plant Genetic Resources' held at the Department of Botany, University of Kerala on 23-24 November 2017.
- National Symposium on 'Biological Applications of Confocal Microscopy', held at the Department of Botany, University of Kerala on 9th March 2016.
- International Symposium on 'Science Education and Sustainable Development' held at the Department of Botany, University of Keralaon22-23 January 2016.
- National Seminar on 'Recent Advances in Plant Science' held at the Department of Botany, University of Kerala on 27 February 2016.
- National Seminar on 'New Perspectives in proteomics' held at Inter University Centre for Genomics and Gene Technology, Karyavattom on 27th March 2015.
- National Seminars on 'Current Vistas In Cell and Molecular Biology' held at the Department of Botany, University of Kerala on 26th March 2015.
- National Symposium on 'Plant Diversity, Utilization and Management' held at the Department of Botany, University of Kerala on 27-29 May 2010.

- 97th Indian Science Congress Held at Kerala University, Thiruvananthapuram on 3rd to 7th January 2010.
- 'Transcriptome Analysis in Plants' held at the Department of Botany, University of Kerala on 14th to16th February 2018.
- 'RNAi and miRNA inCrops' held at the Department of Botany, University of Kerala on 16th to 18th January 2018.
- 'Real Time PCR and its Applications' held at the Department of Botany, University of Kerala on17th to18th August 2015.
- 'Research Methodology' held at the Department of Botany, University of Kerala on 29th to 30th May 2015.
- 'Next Generation Sequencing Data Analysis' held at Dept. of Computational Biology and Bioinformatics, University of kerala on 16th to19th March 2015

PUBLICATIONS IN BOOKS OR JOURNALS

- Ponni T.G. and Ashalatha S.Nair. (2019) Somatic embryogenesis to overcome low Seed viability and conserve wild banana (*Ensete superbum* (Roxb.) Cheesman). *In Vitro Cell.Dev.Biol.- Plant* 55:371. https://doi.org/10.1007/s11627-019-09998-y
- Ponni T.G. and Ashalatha S.Nair. (2019) *Invitro* cormlet production- an efficient means for conservation in *Ensete superbum* (Roxb.) Cheesman. *Journal of Applied Horticulture*, 21(1), 20-24. DOI: https://doi.org/10.37855/jah.2019.v21i01.03
- Ponni T.G. and Ashalatha S.Nair. (2019) Differential effects of position and size of explants in the development of *invitro* cormlets in *Ensete superbum* (Roxb.) Cheesman. *International Journal of Research and Analytical Reviews.* 6(2):958-962
- Ponni T.G. and Ashalatha S.Nair. 2019. "*In vitro* genetic fidelity assessment and Identification of drought responsive genes in wild banana-*Ensete superbum* (Roxb.)Cheesman". International conference" Provectus Plantae'19 – Exploring The Scope of Plant Genetic Resources". 22-24 May. Department of Botany, University of Kerala.
- Archana Satheshan and Ponni T. G "Loss of Genetic Diversity in Cultivar Bananas increases Drought Susceptibility" Biodiversity Challenges and Threats; Current Scenario 2023 ISBN 978-81-958369-2-5

Orientation/Refresher/Short term Course/Workshops attended

- Thirty days " Induction Programme" (offline) organised by UGC – HRDC, University of Kerala, Kariavattom Campus, Thiruvananthapuram, from 25-07-2023 to 23-08-2023.
- Five day Faculty Development Programme on " Effective Teaching and Learning Through Moodle " organised by Department of Physics combined with IQAC, Sree Narayana

College Kollam in association with The Kerala State Higher Education Council from 31st May 2021 to 4 th June 2021.

INVITED LECTURES AS RESOURCE PERSON

- As a Resource person, have conducted a class on the Significance of Mangroves found in the Ashtamudi Wetland, Ramsar Site 1204 conducted as part of AZADI KA AMRIT MAHOTSAV- ICONIC WEEK CELEBRATIONS- 2021 organized by Sree Narayana College, Kollam in association with Ministry of Environment, Forest and Climate Change, State Wetland Authority of Kerala (SWAK) & Kollam Corporation.

CITATIONS AND INDEXING, IF ANY

- Singh, S., Thangjam, R., Harish, G. D., Singh, H., Kumar, R., Meena, D. P. S., & Agrawal, A. (2021). Conservation protocols for Ensete glaucum, a crop wild relative of banana, using plant tissue culture and cryopreservation techniques on seeds and zygotic embryos. *Plant Cell, Tissue and Organ Culture (PCTOC)*, *144*, 195-209.
- Yu, R., Li, F., Wang, G., Ruan, J., Wu, L., Wu, M., ... & Shan, Q. (2021). In vitro regeneration of the colorful fern Pteris aspericaulis var. tricolor via green globular bodies system. *In Vitro Cellular & Developmental Biology-Plant*, *57*, 225-234.
- Naikawadi, V., Devikar, S., Shirke, H., Naikawadi, V., Suprassanna, P., & Nikam, T. (2022). Wild banana (genus Ensete)–an underutilised plant as source of food, fodder, fibre and medicine and need for biotechnological interventions. *Crop and Pasture Science*.
- Anitha, S., Sujatha, G., & Kumari, B. R. (2023). MICROPROPAGATION OF RAUVOLFIA TETRAPHYLLA L. FROM IN VITRO SEEDLING DERIVED EXPLANTS USING VARIOUS AMINO ACIDS. *Journal of Animal & Plant Sciences*, *33*(4), 928-935.

Areas of Interests

- Molecular Biology
- Plant tissue culture
- Plant Biotechnology
- Bioinformatics
- Plant physiology

Technical Skills

- Gene expression analysis
- RNA isolation and qRTPCR
- Bioinformatics tools