



Dr. GAYATRI G.P.

Assistant Professor

Post Graduate and Research Department of Botany

Government College for Women

Thiruvananthapuram – 695014

Academic Qualifications

Ph.D. in Botany, University of Kerala.

M.Sc. in Botany, University of Kerala, 1995 – **I Rank**

Winner of *Prof. A. Abraham Gold Medal* for securing the highest percentage of marks in *M.Sc. degree* examination in Botany for the year 1995.

CSIR - UGC - 1995

B.Ed. Natural Science University of Kerala 1998 – **III Rank**

B.Sc. Botany University of Kerala 1993 – **III Rank**

Winner of *Prof. A. Abraham Gold Medal* for securing the highest percentage of marks in *B.Sc. degree* examination in Botany for the year 1993.

Areas of Interest-Seed physiology and Phytohormones, Plant tissue culture, Phytochemistry

Teaching Experience:

Higher Secondary level - 6 years

College level - 2 Years as Guest Lecturer

- 12 years and 7 months (Permanent Post).

Research Experience: - 15 Years

Minor Research Project

Completed a Minor Project *funded by UGC* (Rs. 1,20,000/-) entitled “*Invitro Introduction of Polyploidy in a Diploid Banana Variety.*” Submitted the project to UGC during 2017.

Publications

1. Jimtha, J. C., Smitha, P. V., Anisha, C., Deepthi, T., Meekha, G., Radhakrishnan, E. K., **G.P. Gayatri...** & Remakanthan, A. (2014). Isolation of endophytic bacteria from embryogenic suspension culture of banana and assessment of their plant growth promoting properties. *Plant Cell, Tissue and Organ Culture (PCTOC)*, 118, 57-66. (IF – 3.0)
2. Suada, E.P., Jasim, B., Jimtha, C.J., **G.P. Gayatri et al.** Phytostimulatory and hardening period-reducing effects of plant-associated bacteria on micropropagated *Musa acuminata* cv. Grand Naine. *In Vitro Cell.Dev.Biol.-Plant* **51**, 682–687 (2015). <https://doi.org/10.1007/s11627-015-9721-x> (IF - 2.6)
3. Vidyalakshmi, N & Thomas, Roshmi & R., Aswani & **Gayatri, G.P** & Krishnankutty, Radhakrishnan & Remakanthan, A. (2017). Comparative analysis of the effect of silver nanoparticle and silver nitrate on morphological and anatomical parameters of banana under in vitro conditions. *Inorganic and Nano-Metal Chemistry*. 47. 00-00. 10.1080/24701556.2017.1357605. (IF – 1.4)
4. **G. P. Gayatri.**, Ajith Kumar, K.G., Parvathy S. Nair and Sunil Kesava Deth, G (2018) FTIR Spectroscopic analysis of Biochemicals synthesised in the mature, germinated and desiccated seeds of *Vateria indica* L. – Journal of Trends in Biosciences (ISSN - 0974-8431) (Published in March 2018 and this journal was rejected on May 2018 by UGC Care List Sl. No – 67)
5. Parvathy S. Nair., **Gayatri, G.P.** Ajith Kumar, K.G., and Sunil Kesava Deth. Changes in moisture content and Phytochemicals during embryogeny in desiccation-tolerant *Vigna unguiculata* and desiccation - intolerant *Syzygium cumini* Skeels Journal of Trends in Biosciences (ISSN - 0974-8431) (Published in March 2018 and this journal was rejected on May 2018 by UGC Care List Sl. No – 67)
6. Parvathy S. Nair., Ajith Kumar, K.G., **Gayatri, G. P.**, and Sunil Kesava Deth, G (2020). Recalcitrant behaviour of the seeds of *Syzygium cumini*(L) Skeels during embryogeny and natural desiccation. -Journal - Plant Physiology Reports (ISSN 2662-253X / 2662-2548). (IF- 1.42)
7. **G. P. Gayatri.**, Ajith Kumar, K.G., Parvathy S. Nair., Sunil Kesava Deth, G and Baiju, K.V. (2020). Dynamics of Water and Abscisic Acid During Embryogeny and Embryo Drying in the Recalcitrant Seeds of *Vateria indica* L. *J. Plant Growth Regul.* 1–8 DOI 10.1007/s00344-020-10274-2. (IF- 4.169)

8. **G.P. Gayatri**, K.G. Ajith Kumar, Parvathy S. Nair, M. Somasekharan Pillai. (2021) GA/ABA Antagonism in the Physiology of Seed Germination in the Recalcitrant and Vulnerable Tree- *Vateria indica* L. Indian Journal of Agricultural Research. DOI: 10.18805/IJARE.A-5729. (IF- 0.37)
9. **Gayatri, G.P.** & Kumar, K.G. & Nair, Parvathy & Kumar, G. & Baiju, K.V. (2022). Phytohormone dynamics during embryogeny and embryo desiccation in the recalcitrant seeds of *Vateria indica* L. Israel Journal of Plant Sciences. 69. 1-9. 10.1163/22238980-bja10052. (IF- 0.80)
10. Parvathy S. Nair., Ajith Kumar, K.G. and **Gayatri, G. P.** (2022) Differential Influx of Natural Plant Growth Regulators during Embryogeny in the Recalcitrant Seeds of *Syzygium cumini* (L) Skeels. Indian Journal of Agricultural Research. DOI: 10.18805/IJARE.A-5904. (IF- 0.37)

Papers Presented

1. Participated and presented a paper entitled - FTIR Spectroscopic Analysis of Biochemicals Synthesised in the Mature, Germinated and Desiccated Seeds of *Vateria indica* L., in three days National seminar at Govt. Arts College, TVPM (Feb 2018).
2. Participated and presented a paper entitled "IAA levels associated with the developmental and desiccation stages of recalcitrant seeds of *Vateria indica* L. in the 4th International Seminar by SVASH 2018 (Dec 2018).
3. Participated and presented a paper entitled "Role of Plant Growth Regulators on seed germination" at Sree Ayyappa College, Nagercoil, Tamil Nadu in the one Day National Seminar on Current Trends and Underpinnings in Research(Aug 2019).
4. Participated and presented a paper entitled "Effect of Exogenous Application of Plant Growth regulators on the Physiology of Seed Germination in *Vateria indica* L. (White Pine). University College, Trivandrum in the 3 Day International Seminar on Life Sciences for Sustainable Development: Issues and Challenges (Oct 2019)
5. Participated and presented a paper entitled "Role of Phytohormones during Embryogeny and Germination in the Seeds of *Vateria indica* L." in the International Seminar on "Plant Science Research (ISPSR2022)" organized by Post Graduate & Research Department of Botany, Mahatma Gandhi College, Thiruvananthapuram (March 2022).