

## BIO-DATA

1. **Name of the Teacher** : KAVITHA C H
2. **Sex** : Female
3. **Date of Birth** : 16-11-1979.
4. **Permanent Address** : TC 22/656, Niralajh,  
MLR -22, Mangalam Lane,  
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5. **Mail ID-** [kavitha.ch@mic.ac.in](mailto:kavitha.ch@mic.ac.in)
6. **Phone no:** 9847569995
7. **Details of Academic Qualification** :

Qualification	Year of Passing	Grade	University/Board
MSc. Botany	2002	First Class	University of Kerala
B.Ed.	2004	First Class	University of Kerala
NET	2005		CSIR-UGC
PhD	2018		University of Kerala

8. **Present Post Held** : Assistant Professor -Stage 12
9. **Institution** : Mar Ivanios College (Autonomous),  
Thiruvananthapuram
10. **Work Experience**
  - Date of entry into service : 06-06-2011
  - Name of the institution: St John's College, Anchal, Kollam.
  - Period of service -From 2011-2024 – 13 years
  - Name of the present institution: Mar Ivanios College (Autonomous),  
Thiruvananthapuram
  - Date of joining: 05-06-2024
11. **Previous Experience:** Assistant Professor (on contract), Dept. of Botany, Mar Ivanios College Thiruvananthapuram from January 2010-May 2011. (1.5 years)
12. **Total teaching experience in years:** 14 years
13. **Areas of interest:** Plant Biochemistry
14. **Awards/Recognitions:** nil
15. **Projects awarded/completed:** nil
16. **Publications (in descending order):**

### List of International Publications

- Differential Antioxidant Isozyme Response from Desiccation Induced Oxidative Stress of the Forked Fern (*Dicranopteris linearis*). Advances in Environmental Biology 2017; 11:19-26.

- Histochemical Localization of Desiccation Induced Hydrogen Peroxide Production and Its Relation to H<sup>+</sup>ATPase in *Dicranopteris linearis*. International Journal of Applied Environmental Sciences 2017; 12:1585-1603.
- Desiccation- Induced Changes In Lipid Peroxidation Superoxide Level And Cell Membrane H<sup>+</sup>Atpase Activity In Forked Fern –*Dicranopteris linearis*. International Journal of Advanced Research 2016;3:588-93.

#### **List of National Publications**

- Allelopathic Effect of Aqueous Extracts of Bilimbi, Papaya and Tomato Fruits on Germination and Growth Behaviour of Mung Bean Seeds (*Vigna radiata* L.). Proceedings Provectus plantae '19. International conference on exploring the scope of plant genetic resources. 22-24th May .2019, Department of Botany, University of Kerala, Kariavattom, Thiruvananthapuram.
- Anatomical and Micromorphological Features of Desiccation Tolerant Forked Fern *Dicranopteris linearis* (Burm. F.) C.B.Clarke. Environment & Ecology 2017;35(4E):3702-08.
- Modulating Role for Antioxidant System in Desiccation Tolerance of *Dicranopteris linearis*. Indian Journal of Scientific Research 2017; 15:01-12.
- Evaluation of Nitric Oxide Content and DNA Damage of *Dicranopteris linearis* in Lieu of Desiccation Stress. Trends in Biosciences 2017;10: 3942-48.
- Photochemical efficacy analysis using chlorophyll fluorescence of *Dicranopteris linearis* in response to desiccation and rehydration stress. Bioscience Biotechnology Research Communications 2016;9:439-44.
- Analysis of desiccation and its tolerance of forked fern - *Dicranopteris linearis* (Burm.f.)C.B.Clarke. using Fourier Transform Infrared Spectroscopy Phytomorphology 2016;66:13-19
- Phenolic Compounds as Stress Markers in the Fern *Dicranopteris linearis* (Burm.F.) C.B.Clarke.: A Search. The Journal of Phytochemistry- Photon 2016;117:378-85.
- Dissimilitude Response of Peroxidases of *Dicranopteris linearis* (Burm.F.)C.B.Clarke. Against Desiccation and Rehydration Stress. IOSR Journal of Biotechnology and Biochemistry 2016;2:36-41.

#### **Presentations (in descending order):**

- Allelopathic effect of aqueous leaf extracts of invasive plant species *Chromolaena odorata* (L.) R.M. King & H.Rob., *Mimosa diplotricha* C. Wright and *Combretum indicum* (L.) Defilipps on germination and seedling growth of some widely cultivated vegetable crops. National Conference On Bioinvasions - Trends, Threats And Management. Organised by Kerala Biodiversity Board, 5th-6th December, 2022
- Desiccation stress-induced abscisic acid (ABA) accumulation triggers the increased generation of reactive oxygen species and up-regulates the activities of antioxidant enzymes in *Dicranopteris linearis* Burm.F. C.B.Clarke. 'National seminar on Modern trends in conservation, utilization and improvement of plant genetic resources' at Department of Botany, Kariavattom, November 2017.

- Desiccation induced expression of mitogen-activated protein kinase (MAPK) from *Dicranopteris linearis*. 27th Swadeshi Science Congress. November 2017.
- Differential expression of antioxidant enzyme responses of *Dicranopteris linearis* subjected to desiccation and rehydration stress. 4th Indian Biodiversity Congress. March, 2017.
- Electron microscopy in analyzing desiccation tolerance in *Dicranopteris linearis*: some observations. International seminar on “frontiers in genomics and Molecular Techniques”. March. 2017. Department of Zoology. University College, Thiruvananthapuram.
- Laser Induced chlorophyll fluorescence spectra of *Dicranopteris linearis* subjected to desiccation and rehydration stress. 3rd National Biodiversity Conference. February, 2017.
- Cytosolic peroxidase drought tolerant enzyme of forked fern - *Dicranopteris linearis* (Burm.f.) C.B. Clarke. its purification and characterization. 29th Kerala Science Congress. Mar Thoma College Thiruvalla. January, 2017.
- Partial Purification and characterization of Catalase from desiccation tolerant fern- *Dicranopteris linearis* (Burm.f.) C.B. Clarke. 104th Indian Science congress. SV University, Thirupathi, 2017.
- Reactive oxygen cycle in the forked fern – *Dicranopteris linearis* against desiccation and its tolerance mechanism. International seminar on new frontiers in cytogenetics & XIII Conference of the society of cytologists and geneticists. Department of Botany. University Of Kerala. Kariavattom, December 2016.
- Photochemical efficacy analysis using chlorophyll fluorescence of *Dicranopteris linearis* in responses to desiccation and rehydration stress. Indian Science Congress Coimbatore Chapter Sponsored National Level Symposium on Green Ecology for environmental security. Konganadu Arts & Science College, Coimbatore, October, 2016.
- Changes in primary metabolites, total free amino acids and proline content in *Dicranopteris linearis* in relation to desiccation rehydration stress. International conference on environmental sustainability for food security. ENFOSE -2016. Sree Ayyappa College for Women, Kanyakumari District, September 2016.
- Phenolic profiling of *Dicranopteris linearis* (Burm.f.) C.B. Clarke. During desiccation and rehydration stress. 28th Kerala Science Congress, January 2016, University of Calicut, Thenjipalam.
- Evaluation of cell membrane stability associated with desiccation tolerance in the forked fern- *Dicranopteris linearis*. 9th National seminar on Medicinal Plants. January 2016. Govt. Ayurveda College Pharmacognosy Unit, Poojappura, Thiruvananthapuram.
- Analysis of desiccation and its tolerance of forked fern- *Dicranopteris linearis* (Burm.f.) C.B. Clarke. using Fourier Transform Infrared Spectroscopy. 103rd Indian Science Congress. January 2016. University of Mysore.

- Polyphenol oxidase in *Dicranopteris linearis* following desiccation stress. National Seminar Advancement of biosystematics on biodiversity conservation'.October 2015. Department of Botany, Sree Narayana College,Varkala.
- Evaluation of desiccation rehydration stress on ultra-structure, relative water content and pigments of *Dicranopteris linearis* (Burm.f.) C.B.Clarke. National Seminar 'Insight into recent trends in biological sciences and technology'.September 2015. Department of Botany, University College, Thiruvananthapuram.
- Dissimilitude response of peroxidases against desiccation and rehydration stresses of *Dicranopteris linearis*. National Seminar on 'Management of bioresources in Western Ghats-A technological approach'. September 2015.SAS SNDP Yogam College, Konni.
- Diversity of pteridophytes of Ponmudi hills. UGC National Seminar on 'Biodiversity conservation threats and challenges. August 2015. Department of Zoology, University College, Thiruvananthapuram.
- Micromorphological features and reactive oxygen species signalling associated with desiccation tolerance mechanism in *Dicranopteris linearis* (Burm. f.) C.B.Clarke.27th Kerala Science Congress. January 2015, Alappuzha.
- Antimetastatic potentialities of *Dicranopteris linearis* extracts against SW 480 cancer cell lines.24th annual conference of Indian Association for Angiosperm Taxonomy (IAAT) and International Conference on trends in plant Systematics (TIPS). November 2014.

#### 17. MOOCS certification course details-

- 2-Week Faculty Development Programme on "MANAGING ONLINE CLASSES AND CO-CREATING MOOCS 3.0" from July 25 - August 10,2020. Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of MINISTRY OF HUMAN RESOURCE DEVELOPMENT PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING
- INTER-DISCIPLINARY ONLINE TWO - WEEK REFRESHER COURSE/FACULTY DEVELOPMENT PROGRAMME on "Managing Online Classes & Co- creating MOOCS 7.0" from 05 - 19 August, 2021. Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of MINISTRY OF EDUCATION PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING In collaboration with CMS COLLEGE (AUTONOMOUS) KOTTAYAM, KERALA