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Professional Experience

Appointed as Assistant Professor at Kerala Agricultural University in 2019, initially posted at the Agricultural Research Station, Thiruvalla, Pathanamthitta, Kerala. Prior to this, completed twelve years of teaching service as a Vocational Teacher in Agriculture under the Department of Vocational Higher Secondary Education, Government of Kerala. Currently serving as Assistant Professor (Horticulture) at the College of Agriculture, Vellayani, Kerala Agricultural University.

Research Experience

My research journey began with a focus on watershed management, serving as Research Investigator for the National Watershed Development Program for Rainfed Areas (NWDPA). This foundation was strengthened through my role as Junior Research Fellow (KSCSTE) on a project evaluating high-yielding, disease-resistant varieties of vegetable *Amaranthus*. I later worked as Senior Research Fellow on two ICAR Adhoc Schemes—one aimed at standardizing post-harvest management practices for cut flowers and orchids, and another exploring *Heliconia* as a novel cut flower crop. My interest in plant genetic resources, began during postgraduate research on the collection and characterization of *Cucumis melo* L. landraces, deepened at the Agricultural Research Station, Thiruvalla. There, I led key initiatives including planting material intensification and seed hub development for Upper Kuttanad, a strategic vegetable breeding program targeting yield and disease resistance and the enhancement of breeder seed production for newly released varieties. Additional contributions include involvement in the Geographical Indication (GI) application for *Kolinchi* (Greater Galangal) and trials of innovative organic amendments for improving problematic soils. My current research focuses on advancing soilless agriculture through hydroponic cultivation of high-value vegetables and spices, and the development of data-driven, Agro-Ecological Unit (AEU)-based Packages of Practices (PoP) for crops such as snake gourd.

Academic Qualification

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- Graduated in Agricultural Science from Kerala Agricultural University
 - Post Graduation in Horticulture (Vegetable Science) from Kerala Agricultural University
 - Currently pursuing Ph. D in Vegetable science (in -service)
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Area of Interest

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- Hitech agriculture and hydroponics
 - Evaluation of indigenous horticultural crops for yield and disease resistance
 - Plant genetic resource – collection, characterization, evaluation and utilization
 - Plant propagation and agrotechniques for horticultural crops
 - Transfer of technology *via* training and mass media
 - Diagnosis of field problems and advisory services
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Areas of Expertise

- Agricultural education and pedagogy
 - Vocational training and skill development
 - Agricultural research and development
 - Student mentorship and guidance
 - Curriculum Development
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Student Guidance (Major Advisor)

I. Within KAU

M. Sc.: 1

II. Research guidance of external students-2

Research Projects

I. Projects handled as Principal Investigator

1. Annual Plan Project 2020-21 'Intensification of planting material production by establishment of seed hub for Upper Kuttanad region'.
2. Network project on Breeding Vegetable crops for yield and resistance to disease - State plan project 2020-21.
3. State plan project 2021-22 (Station wise funding) 'Strengthening the breeder seed production of newly released varieties of vegetables'.
4. State plan project 2024-25 (Station wise funding) 'Evaluation of leafy greens for NFT hydroponic system'.

II. Projects handled as Associate / Co -PI

1. Project on "Characterization and registration of Kolinchi (Greater Galangal) as geographical indications" at IPR cell, KAU.
 2. Effect of soil application of organic nano NPK on growth and yield of snake ground in the riverine alluvium of Upper kuttanad.
 3. Evaluation of Sugarcane varieties and maintenance of promising cultures / varieties.
 4. Network project on Development of AEU based PoP recommendation for major crops of Kerala funded by Planning Board, Government of Kerala, India.
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Publications

- Journal articles: 10
 - Abstracts in seminars/conference/proceedings: 13
 - Chapters in books: 5
 - Leaflet: 6
 - Practical manual: 1
 - Contributor in reference text books: 3
 - Popular articles: 33
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Professional Attainments

- Recipient of best paper award during the Global Conference on 'Smart Horticulture for Prosperity and Nutritional Security' held at the College of Horticulture, UHS, Bagalkot

- Received 2nd prize for poster presentation during the International seminar on ‘Innovative Policies and Community led Solutions for Sustainable Urban and Peri-Urban Agriculture’ held at the College of Agriculture, Vellayani.
- Co-author of best oral paper presentation entitled ‘Machine learning based prediction and forecasting of major diseases in Black pepper using weather data’ during International seminar on ‘Innovative policies and community led solutions for sustainable urban and peri urban agriculture’ held at the College of Agriculture, Vellayani.

Membership in Professional Associations

- Life membership in Indian Society of Vegetable Science
- Life membership in Indian Academy of Horticultural Sciences
- Life membership in Indian Society of Root Crops
- The Indian Science Congress Association