

# Dr. Roy Stephen

## Dean of Faculty (Agriculture), College of Agriculture, Vellayani

### Address:

Trinity, TC 65/2085 (5)  
Chithranjali Studio Junction  
Thiruvallam  
Thiruvananthapuram, Kerala, 695027, India

### Phone:

+91 94475 86674

### Email:

[roy.stephen@kau.in](mailto:roy.stephen@kau.in)  
[roykau@gmail.com](mailto:roykau@gmail.com)

## Summary

I began my journey with Kerala Agricultural University at the Regional Agricultural Research Station in Pilicode, Kasaragod, in 1999. This was after a year of contributing as an Agricultural Scientist at the Indian Institute of Horticultural Research. Driven by a zeal for teaching, I have amassed over two decades of experience in this field. My role evolved over the years; I spent two years as the Associate Director of Research at RARS (Southern Zone), Vellayani, and I am currently the acting Dean of the Faculty at the College of Agriculture, Vellayani. During my time in the Department of Plant Physiology, I engaged in various institutional development initiatives including the technical cell, library development committee, career guidance center, and PTA. My research primarily revolves around thermosensitive genic male sterility in rice, focusing on abiotic stress management through pollen selection and selective fertilization to breed drought-tolerant rice varieties.

## Research Highlights

- Physiological and biochemical mechanisms of thermosensitive genic male sterility in rice
- Abiotic stress physiology with pollen selection and selective fertilization for developing water stress tolerant coconut hybrids, black pepper, and small cardamom.

## Experience

- Dean of Faculty, College of Agriculture, Vellayani (2022 onwards)
- Associate Director of Research, RARS (SZ), Vellayani (2020-2022)
- Joined Kerala Agricultural University as Assistant Professor (Plant Physiology) in the year 1999
- Indian Institute of Horticulture Research, Bangalore as Scientist, ARS (1998-1999)

## Education

- Graduated in Agricultural Science from Kerala Agricultural University (1992)
- Post Graduation in Plant Physiology from University of Agricultural Sciences, Bangalore (1995)
- Ph.D in Plant Physiology from Tamil Nadu Agricultural University, Coimbatore (1998)

## Area of Specialization

---

Male sterility, Stress physiology, pollen biology.

---

## Awards & Recognitions

---

1. Best Teacher Award Kerala Agricultural University in 2021.
  2. First Rank in India for Plant Physiology for Agricultural Research Service (ARS) by Agricultural Scientists Recruitment Board (ICAR) in 1996
  3. Outstanding Scientists award in Plant Science by IJTA 3rd International Conference on Agriculture, Horticulture and Plant Science held at New Delhi 2016
  4. Young Scientist Award for Agricultural Sciences by Kerala State Council for Science, Technology & Environment, Government of Kerala in 2003
  5. Vice-Chancellor G. S. Pathak's Prize for best Ph. D. student of the University in Agriculture by Tamil Nadu Agricultural University, Coimbatore in 1998
  6. Sri. S.R.P. Ponnuswamy Chettiar Prize with Shield for best Ph. D. student of the University in Agriculture by Tamil Nadu Agricultural University, Coimbatore in 1998
  7. Founder Chairman Karumuthu Thiagarajan Chettiar Medal for best Ph. D. student of the University in Agriculture by Tamil Nadu Agricultural University, Coimbatore in 1998
  8. Th. K. Muthuswamy Gounder Memorial Medal and Shield for best Ph. D. student of the University in Agriculture by Tamil Nadu Agricultural University, Coimbatore in 1998
  9. RaoBirendra Singh Medal for best Ph. D. student in Crop Physiology by Tamil Nadu Agricultural University, Coimbatore in 1998
  10. Indian Council of Agricultural Research (ICAR) Junior Research Fellowship (JRF) for Plant Physiology in 1992
  11. Indian Council of Agricultural Research (ICAR) Senior Research Fellowship (SRF) for Plant Physiology in 1996
  12. Council of Scientific & Industrial Research CSIR-UGC Junior Research Fellowship & Lectureship in Life Science in 1996
- 

## Research Projects

## Ongoing

---

1. Development of drought-tolerant cardamom hybrids through pollen selection and selective fertilization funded by the Directorate of Environment and Climate Change, Government of Kerala.
- 

## Completed

---

1. Effect of Exogenous application of GA on growth and yield of paddy funded by Exel Crop Care Pvt. Ltd, New Delhi.
2. Screening for water stress tolerance in coconut through pollen selection and selective fertilization funded by Kerala State Council for Science Technology and Environment, Government of Kerala, India.
3. Development of water stress tolerant coconut hybrids through pollen selection and selective fertilization funded by the International Foundation for Science, IFS Sweden.
4. Development of water stress tolerant black pepper hybrids through pollen selection and selective fertilization funded by Kerala State Council for Science Technology and Environment, Government of Kerala, India.
5. Marker-assisted transfer of thermosensitive genic male sterile gene to red rice background for hybrid rice production funded by Kerala Biotechnology Commission, Government of Kerala.
6. Marker-assisted introgression of thermosensitive genic male sterile genes to red rice background for stable sterility for hybrid seed production funded by Kerala Biotechnology Commission, Government of Kerala.
7. Standardization of hybrid rice production technique using thermosensitive genic male sterile system funded by State Plan Project, Government of Kerala.

## Publications

## Articles

---

1. Ambily Paul, C. Nandakumar and **Roy Stephen**. (2009) Extent of yield loss in coconut due to the infestation of coreidbug, *Paradasynus rostratus*. Journal of Plantation Crops
2. Anith K.N. and **Roy Stephen** (2009) Alginate encapsulated delivery of rhizobacteria for better root colonization and plant growth promotion of black pepper in the nursery. Journal of Plantation Crops
3. Manju,R.V., Soni,K.B., Heera,K.S., Bijila,P.V., **Roy Stephen**., Vighnesha., Krishna Prasad,B.T. and Viji,M.M (2007) Role of stomatal characteristics and mesophyll capacity on yield variation in Nendran clones.
4. Sreeja Rajendran, Viji, M.M., Manju, R.V. and **Roy Stephen** (2007) Physiological variations in chilli under the influence of growth regulators. International Journal of Tropical Agriculture.
5. Faizal, M.H., Anith, K.N., Prathapan, K.D., **Roy Stephen** and Faseela, K.M. (2006) Beetle - fungus association lead to death of gall wasp infested erythrina tree. Insect Environment.
6. **Roy Stephen**, Jayaprakash Naik. B and Haridass. (2004) In vitro pollen selection for water stress tolerance in coconut (*Cocos nucifera*). Journal of Plantation Crops.
7. Maibangsa. S. Thangaral. M and **Roy Stephen**. (1999) Alleviation of low irradiance stress in rice (*Oryza sativa* L.) by growth regulators. Ann Plant Physiology.
8. Udayakumar. M., Devendra. R. Nageswara, R.C. Wright. G.C. Aftab Hussain, I.S. Ramaswamy, G. Ashok. Gangadhar, G.C. **Roy Stephen** and Prasad. T.G. (1998) Measurement of transpiration efficiency under field conditions in grain legume crops. Indian Journal of Plant Physiology and Biochemistry.
9. Niya Celine, V. J., **Stephen, R.**, Manju, R. V., and Shabana, R. (2014) Phenological, Morpho-agronomic and floral characterization of promising thermosensitive genic male sterile rice (*Oryza sativa* L.) line suitable for Kerala. Journal of Plant Science Research.
10. Manju, R. V., Edison, L. K., Anu, K., and **Stephen, R.** (2014) Comparison of RNA extraction protocols for good quality RNA from Nendran banana leaves. Trends in Bioscience.
11. Niya Celine, V. J., **Stephen, R.**, Manju, R. V., and Shabana, R. (2014) Evaluation of thermosensitive genic male sterile line in rice suitable to Kerala through marker-assisted selection. Journal of Tropical Agriculture.
12. Jacob, L. Manju, R. V., **Stephen, R.**, Viji, M. M., and Edison, L. K. (2014) Stress-induced enhancement of secondary metabolite production in *Withaniasomnifera* (L.). International Journal of Tropical Agriculture.
13. Lini Jacob, Manju R. V., **Roy Stephen**, Viji M. M., and Lekshmi K. Edison. (2014) Alterations in withanolide production *Withaniasomnifera* (L.) Dunal in low light stress. The Journal of Plant Science Research.
14. Jacob, L., Manju, R. V., Stephen, R., Viji, M. M., and Raghunath, B. R. (2015) Effect of abiotic stress factors on growth, physiology and total withanolide production in *Withaniasomnifera* (L.) Dunal. Journal of Medicinal and Aromatic Plant Science.
15. Minu, M., Stephen, R., Manju, R. V., Reshma, R. B., and Viji, M. M. (2015) Effect of CO<sub>2</sub> enrichment on growth and development of Black pepper (*Piper longum* L.) varieties. Journal of Plant Science Research.
16. Aisha Renju N. A., **Stephen, R.**, and Manju, R. V. (2015) Evaluation of Selectively Fertilized Hybrids of Coconut (*Cocos nucifera* L.) for Water Use Efficiency under Moderate Water Stress. Journal of Plant Science Research.

17. Saravanan, R., **Stephen, R.**, Velumani, R., Sheela, M. N., Jayantikumar, M., Swarup, K. C. (2015) Evaluation of postharvest physiological deterioration in storage roots of cassava (*Manihot esculenta*) genotypes. Indian Journal of Agricultural Sciences.
18. Sreeja, R., Viji, M. M., Manju, R. V., **Stephen, R.**, and Deepa, S. (2016) Effect of certain growth regulators on flowering, fruit set, plant growth and yield components of chilli (*Capsicum annuum* L.). Advanced Life Science.
19. Sreeja, R., Viji, M. M., Manju, R. V., **Stephen, R.**, and Deepa, S. (2016) Physiological, biochemical and yield variations in chilli (*Capsicum annumm* L.) as influence by different growth regulators. Advanced Life Science.
20. Deepa, S., Manju, R. V., **Stephen, R.**, and Viji, M. M. (2016) Physiological analysis of coconut palms (*Cocos nucifera* L.) affected with foliar yellowing. Journal of Plant Science Research.
21. Deepa, S., Manju, R. V., **Stephen, R.**, and Viji, M. M. (2016) Mid whorl yellowing induced physiological and anatomical alterations in coconut palms (*Cocos nucifere* L.). Advanced Life Science.
22. Neethu Chandra, C., **Roy Stephen**, Manju, R. V., Niya Celine, Shabana. R., and Anila. (2016) TGMS line EC 720903 as a suitable female parent to Kerala through phonological study. Asian Journal of Plant Science Research.
23. **Roy Stephen**, Niya, C. V. J., Manju, R. V., Shabana, R., Vipin, M., Nisthar, E., Anila, B. S., and Neethu, C. (2016) Marker-assisted transfer of thermosensitive genic male sterile gene to red rice (*Oryza sativa* L.) lines. International Journal of Tropical Agriculture.
24. Gayathri Rajasekharan and **Roy Stephen**. (2018) Characterization of Thermosensitive Red Rice Line for its Suitability in the State of Kerala. Madras Agricultural Journal.
25. Gayathri R., **Roy S.**, Viji M. M., Beena R. and Manju R.V. (2018) Sterility modulation in TGMS system using plant growth regulators for hybrid rice production. International Journal of Agriculture Sciences.
26. **Roy Stephen**, Manju R. V., Lali R., Lini J. J., Anila B. S., Vipin Mohan and Gayathri R. (2018) Male gametophytic selection-a novel technique for water stress tolerance in black Pepper (*Piper nigrum*). International Journal of Agricultural Science.
27. Srikanth G. A., Manju R. V. **Roy S.** Viji M. M. Beena R. Geetha Lekshmi R. Manasa R. and Ghade R. (2019) Carbon dioxide enrichment induced modification in the developmental pattern of cowpea (*Vigna unguiculata* L.) variety Vellayani Jyothika. Journal of Agriculture Sciences.
28. R Rejeth , Ch L N Manikanta , R Beena , **Roy Stephen** , R V Manju , M M Viji. (2020) Water stress mediated root trait dynamics and identification of microsatellite markers associated with root traits in rice (*Oryza sativa* L.) *Physiol Mol Biol Plant* doi: 10.1007/s12298-020-00809.
29. Jacob John., Shirmila Jose and **Roy Stephen**. (2011) Investigations on the allelopathic compatibility of pepper with multipurpose trees for use as standard in home steads. Journal of Plantation Crops.
30. Smitha Basi., Swapna Alex., K. B.Soni and **Roy Stephen**. (2017) Potential of Auxin in inducing spike branching trait in black pepper. *Int. J. Curr. Microbiol. App. Sci.*
31. M. R.Anitha., S Lakshmi, **Roy Stephen** and Sajitha Rani. (2018) Physiology of fodder cowpea varieties as influenced by soil moisture stress levels. *Range Mgmt. and Agroforestry*.
32. R. Manasa., R.V. Manju., **Roy Stephen.**, M. M. Viji., R Beena and G. S. Sreekala. (2020) Growth and yield responses of Ginger (*Zingiber officinale* Rosc.) varieties to elevated CO<sub>2</sub> *Chemical Science Review and Letters*.

33. Y. S. Wagh., M. M. Viji., K. B. Soni., P. R. Jadav., S. C. Ekatpure R. V. Manju., **Roy Stephen** and R. Beena. (2020) Isolation of RNA from grains of medicinal rice "Njavara" using improved Trizol method. *Int. J. Curr. Microbiol. App. Sci.*
34. N. Nithya., R. Beena., **Roy Stephen.**, P. S. Abida., V. G. Jayalekshmi., M. M. Viji and R. V. Manju. (2020) Genetic variability heritability correlation coefficient and path analysis of morpho- physiological and yield related traits of rice under drought stress. *Chemical Science Review and Letters.*
35. N. Nithya., R. Beena., P. S. Abida., **Roy Stephen.**, V. G. Jayalekshmi., M. M. Viji and R. V. Manju. (2020) Genetic diversity and population structure analysis of bold type rice collection from southern India. *Cereal research communications.*
36. Ch. L. N. Manikanta. R. Beena, **Roy Stephen**, R. V. Manju, M. M. Viji and Swapna Alex. (2020) Physio morphological plasticity of rice (*Oryza sativa* L.) genotypes exposed to water stress. *Journal of tropical Agriculture.*
37. M. P. Raghunath, R. Beena, V. Mohan, M. M. Viji, R. V. Manju, **Roy Stephen.** (2021) High temperature stress mitigation in rice (*Oryza sativa* L.): foliar application of plant growth regulators and nutrients. *Journal of crop and weed.*
38. Amrutha Vijayakumar., Shanija Shaji, R. Beena, S. Sarada, T. Sajitha Rani, **Roy Stephen**, R. V. Manju, M. M. Viji. (2021) High temperature induced changes in quality and yield parameters of tomato (*Solanum lycopersicum* L) and similarity coefficients among genotypes using SSR markers. *Heliyon.*
39. Radha Beena, Silvas Kirubakaran, Nmarayanan Nithya, Alagu Manickavelu, Ramerswar Prasad Sah, Puthenpeedikal Salim Abida, Janardanan Sreekumar, Poolakkal Muhammed Jaslam, Rajendrakumar Rejeth, Vijalayam Gengamma Jayalekshmy, **Stephen Roy**, Ramakrishnan Vimala Manju, M. M. Viji and KHM Siddique. (2021) Association mapping of drought tolerance and agronomic traits in rice (*Oryza sativa* L.) landraces. *BMC plant Biol.*
40. M. Reshma, R. Beena., M. M. Viji., R. V. Manju and **S. Roy.** (2021) Validation of temperature induction response technique on combined effect of drought heat stress in rice (*Oryza sativa* L.). *Journal of crop and weed.*
41. Stephen K, M. M. Viji., R. V. Manju., and **Roy Stephen.** (2021) Mechanism of sugar signaling in plants. *Acta scientific agriculture.*
42. Geetha Jayalekshmi P.R., Philipose Joshua, **Roy Stephen** and Jayachandran Nair C.S. (2008) Developmental physiology and maturation studies on red banana (Musa AAA group). *Journal of Food Science and Technology.*
43. Raju Saravanan, Velumani Ravi, **Roy Stephen**, Sherif thajudin and James George. (2016) Post-harvest physiological deterioration of cassava (*Manihot esculenta*)-A review. *Indian Journal of Agricultural Science.*
44. Bhasi, Smitha & Alex, Swapna & Soni, K.B. & Stephen, Roy. (2017). Potential of Auxin in Inducing Spike Branching Trait in Black Pepper. *International Journal of Current Microbiology and Applied Sciences.* 6. 372-378. 10.20546/ijcmas.2017.608.050
45. Nithya, N. & Beena, R. & Ps, Abida & Sreekumar, J. & Stephen, Roy & Jayalekshmi, V. & Manju, R. & Manohar, Viji. (2020). Genetic diversity and population structure analysis of bold type rice collection from Southern India. *Cereal Research Communications.* 49. 10.1007/s42976-020-00099-w.
46. Manikanta, Ch. L. N. & Beena, R. & Stephen, Roy & Manohar, Viji & Manju, R. & Alex, Swapna. (2020). Physio morphological plasticity of rice (*Oryza sativa* L.) genotypes exposed to water-stress. *Journal of Tropical Agriculture.*
47. Wagh, Yogesh & Manohar, Viji & Soni, K. & Jadhav, Pritam & Chandrakant, Ekatpure & Manju, R. & Stephen, Roy & Beena, R.. (2020). Isolation of RNA from Grains of

- Medicinal Rice "Njavara" using Improved TRIzol Method. *International Journal of Current Microbiology and Applied Sciences*. 9. 2858-2866. 10.20546/ijcmas.2020.909.353.
48. Rejeth, R. & Manikanta, Ch L N & Beena, R. & Stephen, Roy & Manju, R. & Manohar, Viji. (2020). Water stress mediated root trait dynamics and identification of microsatellite markers associated with root traits in rice (*Oryza sativa* L.). *Physiology and Molecular Biology of Plants*. 26. 10.1007/s12298-020-00809-y.
49. R., Manasa & Manju, R & Stephen, Roy & Manohar, Viji & Beena, R. & Sreekala, G. (2020). Growth and Yield responses of Ginger (*Zingiber officinale* Rosc.) varieties to Elevated CO<sub>2</sub>. 10.37273/chesci.cs242050124
50. Gayathri R and Roy Stephen. (2021) Differential expression of signaling and transport genes in leaves and panicles regulates the development of pollen free anthers in TGMS red rice. *Cereal Research Communication* 49:465-473
51. Vijayakumar, Amrutha & Shaji, Shaniya & Beena, R. & Sarada, S & Sajitha, T & Stephen, Roy & Manju, R & Manohar, Viji. (2021). High temperature induced changes in quality and yield parameters of tomato (*Solanum lycopersicum* L.) and similarity coefficients among genotypes using SSR markers. *Heliyon*. 7. 10.1016/j.heliyon.2021.e05988.
52. Raghunath, M & Beena, R. & Mohan, V & Manohar, Viji & Manju, R & Stephen, Roy. (2021). High temperature stress mitigation in rice (*Oryza sativa* L.): Foliar application of plant growth regulators and nutrients. *Journal of Crop and Weed*. 17. 34-47. 10.22271/09746315.2021.v17.i1.1404.
53. [Reshma .P](#), Sreekala G.S., Deepa.S. [Nair, Roy Stephen, and Thomas George](#). 2022. Principal component analysis for yield and yield attributes in black pepper (*Piper nigrum* L.) *The Pharma Innovation Journal* 11(11): 1055-1062
54. Jose, Elizabeth & B., Soni & Alex, Swapna & P., Shalini & Beena, R. & Stephen, Roy. (2023). Molecular Frameworks of Nitrogen Response in Plants: A Review. *International Journal of Environment and Climate Change*. 13. 380-390. 10.9734/ijecc/2023/v13i123694.
55. Jose, Elizabeth & KB, Soni & Alex, Swapna & P., Shalini & V.G., Jayalekshmy & Stephen, Roy & A.G., Kiran & Dongare, Manjushri. (2023). Productivity and nitrogen use efficiency of rice under conventional and organic nutrition. *Environment Conservation Journal*. 24. 231-240. 10.36953/ECJ.23132599
56. Dongare, Manjushri & Alex, Swapna & Soni, K. & Sindura, K. & Nair, Deepa & Stephen, Roy & Jose, Elizabeth. (2023). Cross-species transferability of IRAP retrotransposon markers and polymorphism in black pepper (*Piper nigrum* L.). *Genetic Resources and Crop Evolution*. 70. 1-13. 10.1007/s10722-023-01590-z.
57. P., Afna & Stephen, Roy & Manohar, Viji & T., Vanaja & V., Manju & R., Vishnu. (2023). Physiological Assessment of Temperature Stress Tolerance in Selectively Fertilized Coconut Hybrids. *International Journal of Environment and Climate Change*. 13. 391-398. 10.9734/ijecc/2023/v13i123695.
58. Reshna, O.P. & Beena, R. & Johnson, Joy & Stephen, Roy & Manohar, Viji. (2023). Salinity Mitigation in Contrasting Rice Genotypes by the Root Endophyte *Piriformospora Indica* by Altering Biochemical and Physiological Traits. 10.2139/ssrn.4570824.

## Book Chapters and Other Publications

---

1. Thangaraj, M. Maibangsa, S. and **Roy Stephen. (1999)** Effect of foliar spray of growth regulators and botanicals on certain physiological characteristics and yield of rice. In Plant Physiology for Sustainable Agriculture ed. Srivastava G.C. Pointer Publishers.
2. Jacob John, Joy M., Sreekumar, K.M., Umamaheswaran, K. and Roy Stephen. (2007) Disorders in Coconut-based Cropping Systems. Volume I to V Coconut, Arecanut, Banana, Pepper, Cocoa, Vanilla, and Nutmeg. Kerala Agricultural University.
3. Dr. Roy Stephen, Dr. R V Manju.,Dr. Viji M M., Dr. Beena R., and Dr. B T Krishnaprasad. (2007) Practical manual Fundamentals of crop physiology (crps 1201). Kerala Agricultural University.
4. Dr. Roy Stephen and Dr. Sreekala G.S. (2021) Proceedings of the national webinar on spice Improvement, processing and marketing. Kerala Agricultural University. ISBN 978-81-9485508-4-7.
5. Dr. Roy Stephen and Gayathri R. (2019) Tactics of being an Agripreneur learning the rope Chapter: Nutrient deficiency Disorder in plants. Satish Serial Publishing House. ISBN 978-93-88020-480
6. Roy Stephen, A. Haridas. B.Jayaprakash Naik, P.C. Balakrishnan, R.V. Manju and M.M Viji. (2005) Pollen selection- A novel approach for drought tolerance in coconut. National seminar Kerala Agricultural University.
7. M. Thangaraj and Roy Stephen (1999) Physiological Basis of Heterosis in Rice

## **Professional Training (International & National)**

### **International Training**

---

1. Molecular Tools for Crop Improvement, International Crop Research Institute for the Semi-Arid Tropics ICRISAT- Hyderabad, from 10-05-2010 to 21-05-2010

### **National Training**

---

1. Foundation Course for Agricultural Research Scientists, National Academy for Agricultural Research Management, Hyderabad, Four months (1998)
2. Advanced Plant Molecular Biology Techniques, Centre of Advanced Studies in Biochemistry, Indian Agricultural Research Institute, New Delhi, Fifteen days ( 2002)
3. Use of Isotopes and Radiation in Agriculture, Nuclear Research Laboratory, IARI, New Delhi, One month (2002)
4. Application of Stable Isotopes to Study Processes for Crop Improvement, Department of Crop Physiology, University of Agricultural Sciences, Bangalore, from 02-12-2003 to 22-12-2003
5. Abiotic Stress Resistance in Crop Plants : Physiological and Molecular Advances, Water Technology Centre, Indian Agricultural Research Institute, New Delhi, from 01-

09-2004

to

21-09-2004

6. Molecular responses of plant adaptation to stress, Department of Crop Physiology, University of Agricultural Sciences, Bangalore, from 17-09-2007 to 08-10-2007
7. Advanced Biotechnology Training, The Energy and Resources Institute, New Delhi, from 08-11-2010 to 14-11-2010
8. Molecular Breeding for Rice Improvement, Directorate of Rice Research, Hyderabad, from 17-08-2011 to 30-08-2011
9. Current Approaches and Applications of Bioinformatics in Agricultural Research, Central Tuber Crop Research Institute, SreeKariyam, Thiruvananthapuram, from 28-03-2011 to 06-04-2011
10. Applications of Geo-informatics and Crop Simulation Models in Agricultural Management, National Academy for Agricultural Research Management, Hyderabad, 13-03-2012 to 26-03-2012
11. Molecular tools for Crop Improvement, Central Potato Research Institute Shimla, from 03-10-2014 to 20-10-2014

## **Student Guidance (Major Advisor)**

---

### **M. Sc.**

Within KAU: Completed: 11

### **Ph. D**

Within KAU: Completed: 3

Within KAU: Ongoing : 4

## **Other Institutional Responsibilities**

---

1. Dean of Faculty (Agriculture),

College of Agriculture, Vellayani KAU

From 2022 onwards

2. Associate Director of Research,  
Regional Agricultural Research Station, Vellayani KAU from 2020 to 2022
3. Programme Officer, National Service Scheme from 2006 to  
2012
4. Chairman, Library Development Committee from 2019 onwards
5. Member, College Library Advisory Committee from 2003 to  
2019
6. Officer i/c of Placement Cell from 2004 to 2010
7. Secretary, Parent Teachers Association from 2005 to  
2011
8. RUSA, Institutional Coordinator from 2014
9. Convener, Technical Cell of Institution from 2015 to  
2017
10. Member of Multidisciplinary Diagnostic Team from 2013  
onwards
11. Member of Senate of CUSAT from 2015 to 2019
12. Member of General Council of KAU from 2020 to 2023
13. Head of the Department of Plant Physiology 2006 to 2010  
and 2013 to 2016

## **Membership in Professional Associations**

---

1. Indian Society for Plant Physiology
2. Indian Society for Plant Physiology and Biochemistry
3. Indian Society for Biochemistry and Biotechnology
4. The Indian Science Congress Association