



## Summary

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Dr. Anuradha has obtained her Ph.D. in Biotechnology from Tamil Nadu Agricultural University, Coimbatore in 2011 with DBT JRF/SRF fellowship and Masters in Biotechnology from Tamil Nadu Agricultural University in 2005 with JNU fellowship. Area of specialization during doctoral research includes standardization of regeneration and genetic transformation protocol in Cassava. She has also cloned and characterized replicase genes of Indian and Srilanakan cassava mosaic virus from different parts of Tamilnadu and submitted these accessions in NCBI nucleotide database. The major focus during doctoral research was on acquiring virus resistance in cassava plants through RNA interference. She has constructed RNAi vectors specifically targeting the replicase genes of Indian and Srilanakan cassava mosaic virus and generated putative transgenic lines of cassava resistant to cassava mosaic virus. Before joining KAU, she has worked as Agricultural Research Scientist at Central Citrus Research Institute, Nagpur. During this period, she has worked in citrus germplasm characterization through RAPD markers and differential gene expression studies in Citrus root stocks for disease resistance. Current area of research interest are genome editing in plants for improved traits, epigenetic gene regulation in plants and gene cloning and expression.

## Research Highlights

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- Developed protocol for cyclic somatic embryogenesis in Indian cassava H-226.
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## Projects

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1. Network project on ‘ Development of micropropagation protocol for economically important tree crops’
2. Revolving Fund project on ‘Revenue generation through production of tissue culture raised plants and other biotechnology related activities’.

## Publications

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1. Sushmitha, T., Sajeena, A., Mathew, D. Joy, M., Radhakrishnan, N., V., Jacob John and **Anuradha, T.** 2023. First report of bacterial wilt of yardlong bean (*Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdc.) caused by *Kosakonia oryzae* in India. *J Plant Pathol.* <https://doi.org/10.1007/s42161-023-01476-0>
2. **Anuradha T.**, and K., Sameera. 2022. Molecular characterization and field distribution of Begomovirus associated with Cassava in Tamil Nadu. *Ann. Agric. Res.* 43(4):469-476.
3. **Anuradha, T.**, Kumar, K. K., Balasubramanian. 2015. Cyclic somatic embryogenesis of elite Indian Cassava variety -H 226. *Indian Journal of Biotechnology* 14: 5590565
4. **Anuradha, T.**, Kumar, K. K., Balasubramanian. 2016. Development of putative transgenic lines of

Cassava variety H-226. *African Journal of Biotechnology*. 15(13): 497-504.

5. **Anuradha T.**, and Prabha P. 2021. Construction of an *Agrobacterium* mediated RNAi genetic transformation vector targeting the Replicase Gene of *Indian cassava mosaic virus* and evaluation of their transformation ability in cassava immature leaf lobes. *Biotechnology Journal Internationale*. 25(2):17-24.

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## **Student Guidance (Major Advisor/ Advisory Committee member)**

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### **M. Sc.**

Within KAU: Completed: 2

## **Other Institutional Responsibilities**

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1. Currently acting as student Advisor/faculty mentor to 20 Undergraduate students.
2. Internal expert member of Institutional Biosafety Committee of College of Agriculture, Vellayani.

Student advisor to 20 undergraduate students

Internal expert member of Institutional Biosafety Committee of college of Agriculture, Vellayani

## **Membership in Professional Associations**

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1. Life member of Indian Society of citriculture
2. Life member of Biotech Research Society of India