

Dr. Beena Thomas

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Summary

Research areas of interest include crop improvement in vegetables, ornamental crops especially, orchids, gladiolus, anthurium and tube rose, pulses, and plant tissue culture. Teaching genetics and plant breeding courses for UG, PG, Ph.D. and Diploma students of Kerala Agricultural University. Currently guides PG and Ph.D. students as major advisor, in breeding of tomato, yard long bean, orchids, gladiolus, anthurium, tube rose and red gram. Experience in plant tissue culture. Resource person in trainings and seminars on topics related to commercial cultivation of ornamental crops and gardening.

Research Highlights

- Morpho-molecular characterization of commercially important orchids
- Protocol development for embryo culture of orchids and micropropagation of commercially important crops
- Developing water stress tolerant varieties in vegetable crops such as tomato and yard long bean.

Experience

Joined Kerala Agricultural University as Assistant Professor in the year 2011

Education

- Graduated in Agricultural Science from Kerala Agricultural University (1994)
 - Post Graduation in Genetics & Plant Breeding from Kerala Agricultural University (1997)
 - Ph.D in Genetics & Plant Breeding from Kerala Agricultural University (2008)
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Area of Specialization

Crop Improvement in vegetables, ornamental crops especially, orchids, gladiolus, anthurium and tube rose, pulses; Commercial cultivation of ornamental crops and plant tissue culture.

Awards & Recognitions

1. **Best Poster Award** in the 21st Kerala Science Congress, held at Kollam, Kerala, from 28-31 January, 2009 for the poster entitled **“Intra and intergeneric compatibility studies in monopodial orchids”**.

2. Award for research work (**National**)- **Best Poster Award** (II) in the National Conference on medicinal orchids: Sustainable use and benefit sharing for rural and tribal communities, Abstracts, Chandigarh, 2011.
3. Award for research work (**International**)- **Best Poster Award** in The International Seminar on Emerging Threats and Challenges to Biodiversity: Policy Framework for Sustainable Management, Tirupati, 2011.
4. **Best Oral Presentation Award (International Conference)** on Biosciences: State of the Art-Advancements Conducted by Society for Education and Scientific Research, Kumarakom, 2014
5. **Best oral presentation award** in virtual National Conference on ‘Underutilized Horticultural Genetic Resources: Conservation and Utilization (*NCUHGR-2022*), (as co-author), organized by Andaman Science Association in collaboration with ICAR-CIARI, Port Blair, during June 3-4,2022
6. **Best Teacher Award** for outstanding contribution in the field of Genetics and Plant Breeding on the occasion of 1st International Agriculture Conference on “ Natural Vs Organic Farming: In Context to Bharatiya Agriculture” on 24,25 and 26 December, 2023 Organized by Gujarat Natural Farming and Science University, Anand and Hindustan Agricultural Research Welfare Society and IIMTU, Meerut held at hybrid mode (Zoom), Bagadpur Krishi Bhawan, NH-24, Delhi Road, Moradabad , UP.

Research Projects

Ongoing

1. Development of novel hybrids of orchids and rapid multiplication through micropropagation, Funded by the Planning Board, Government of Kerala
 2. Standardization of Tissue Culture Media for the Micropropagation of Traditional and Dwarf Red Bananas, Funded by the Planning Board, Government of Kerala
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Completed

1. Network Project on development of hybrid vegetables and hi-tech production technologies, Funded by the Planning Board, Government of Kerala
 2. Establishment of a small nursery of ornamental crops, State Horticultural Mission
 3. Evaluation of Seedling Variability in selected varieties of *Anthurium andreanum*, Funded by the Planning Board, Government of Kerala
 4. Genetic Improvement of Commercially Important Anthuriums, Funded by the Planning Board, Government of Kerala
 5. Development and Evaluation of Anthurium Hybrids, Funded by the Planning Board, Government of Kerala
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Publications

Journal Articles

1. **Beena Thomas** and Sreekumar. S.G. 2001. **Combining ability for biological nitrogen fixation traits and yield components in blackgram (*Vigna mungo* (L.) Hepper).** *Journal of Tropical*

2. **Beena Thomas**, Arya.K., Divya Krishnan and Sreekumar. S.G.. 2007. **Heterosis for biological nitrogen fixation traits and yield components in blackgram (*Vigna mungo* (L.) Hepper).** *Legume Research*, 31:260-264
3. **Beena Thomas** and Lekha Rani, C. 2008. **Stigma and pollen parameters in selected monopodial orchid hybrids and species.** *Journal of Orchid Society of India*,22:31-34.
4. **Beena Thomas** and Lekha Rani, C.2008. **Assessment of floral characters in commercial varieties of monopodial orchids.** *Journal of Ornamental Horticulture*, 11:15-20.
5. **Beena Thomas** and Lekha Rani, C. 2009. **Analysis of vegetative and floral. traits in monopodial orchids.** *Journal of Orchid Society of India*. pp 79-86
6. **Beena Thomas**, Lekha Rani.C. and Asha T. Mathew. 2011. **Molecular Characterization in monopodial Orchid Hybrids.** *Indian Journal of Ornamental Horticulture* :26-34.
7. **Beena Thomas** and Lekha Rani. C. 2012. **Tissue culture media: Selection and refinement for a monopodial orchid hybrid.** *Journal of Orchid Society of India* 26:101-104.
8. Srinivas, B., **Thomas, B.**, Sathishkumar, S., and Gopi, R. 2016.**Variability and heritability estimates in Bird Chilli (*Capsicum frutescens* L.).** *Environ.Ecol.*35 (IA):248-252.
9. Srinivas, B.,**Thomas, B.**,and Rajashekar,P.2016. **Character association and path analysis studies in Bird Chilli (*Capsicum frutescens* L.).***Res. J. Agric. Sci.* 7(2) :355-360.
10. Sathishkumar, S., **Thomas, B.**, and Gopi, R. 2016. **Intra-variatal variability in Komadan Coconut (*Cocos nucifera* L.) Palms.** *Adv. Life Sci.* 5(12):5074-5078. 3.56.
11. Gopi, R., **Thomas, B.**, and Sathishkumar, S. 2016. **Genetic variability among diverse genotypes of *Anthurium andreanum* Linden.** *Adv. Life Sci.* 5(12):4886-4888. 3.56.
12. Thouseem N., **Thomas, B.** and Elizabeth, N. 2018. **Genetic Parameters in Seed Yield Components of Cowpea (*Vigna unguiculata* (L.) Walp.).** *Int J. Curr. Microbiol. App. Sci.* 7(2):2268-2274.
13. Elizabeth, N., **Thomas, B.** and Thouseem, N. 2018.**Evaluation of Tomato (*Solanum lycopersicum* L.) Genotypes under Water Stress Based on Yield and Physiological Parameters.** *Int J. Curr. Microbiol. App. Sci.* 7(1):214-225.
14. Anand, S., **Thomas, B.** and Sarma, G. R. 2019. **Genetic variability analysis for selection of high yielding and superior *Anthurium andreanum* Linden hybrids.** *J. Pharmacognosy and Phytochemistry.* SP(2) : 507-509.
15. Rahana, S.N. and **Thomas, B.** 2020. **Screening yard long bean genotypes for drought tolerant traits under field and polyhouse condition.** *Plant Arch.*20:346-348.

16. **Beena Thomas**, Lekha Rani, C. and George, R.M. 2020. **Genetic variability studies in selected orchid genotypes.** *The J. Orchid Soc. India*.34:57-60.
17. George,R.M., **Thomas, B.**, and Unni, M.A. 2020. **Genetic variability studies in Phalaenopsis orchids.** *J. Pharmacogn. Phytochem*.9(6):377-379.
18. Smera G. Santosh, **Beena Thomas**, Anand S. and Sarada S. 2020.**Studies on estimation of genetic parameters of anthurium (*Anthurium andreanum* Linden ex Andre) genotypes.** *Journal of Ornamental Horticulture*, 23 (2) :121-123.
19. Chippy A. K., **Thomas,B.** and Amrutha Unni, M. 2021. **Assessment of Tomato (*Solanum lycopersicum*) Genotypes for yield and yield contributing characters and hybrid development.** *Int.J.Curr.Microbiol.App.Sci.* 10(01): 1599-1608.
20. Chippy A K, **Thomas,B.**, Rahana S N and Amrutha Unni, M. 2021.**Determination of fruit quality parameters of ten tomato (*Solanum lycopersicum*) genotypes and their Hybrids.** *Journal of Pharmacognosy and Phytochemistry.* 10(1): 1621-1624.
21. Unni, M A, **Thomas, B.** and Chippy, A.K. 2021. **Review article on molecular breeding in *Dendrobium* orchids.** *Int. J. curr. Microbiol. App.Sci.* 10 (4):2319-7706
22. Priyanka Hulsure, **Beena Thomas**, **Arya K**, **Gayathri G**, Arya S Nair and Amritha Varanya. 2022. **Genetic analysis in grain cowpea (*Vigna unguiculata* (L.) Walp) for yield and quality 2022.** *The Pharma Innovation Journal*:11 (3):2394-2398.
23. **Beena Thomas**, Revathi B S, Sarada S and **Adheena Ram A.** 2022. **Genetic variability parameters of commercially superior *Anthurium andreanum* varieties and hybrids.** *The Pharma Innovation Journal*:11 (5):1988-1991.
24. Unni, M A, **Thomas, B.** George R M and Gopinath M P A. 2022. **Studies on genetic variability, heritability and genetic advance for the vegetative characters in *Dendrobium* orchids.** *The Pharma Innovation Journal*:11 (8):646- 648.
25. Revathi B S and **Beena Thomas.** 2022. **Role of polyploidy in orchid improvement.** *The Pharma Innovation Journal*:11 (6) :2394-2398.
26. Varghese, F., Sarada, S. and **Thomas B.** 2022.**Comparative performance of Yard long bean (*V. unguiculata* subsp. *Sesquipedalis* (L.) Verdcourt) Crosses for vegetative and yield characters under open field and rain shelter.** *Environment and Ecology* , 40 (3C).
27. Varghese, F., Sarada, S. and **Thomas B.** 2022.**Correlation studies in Yard long bean (*V. unguiculata* subsp. *Sesquipedalis* (L.) Verdcourt) Crosses under open field and rain shelter.** *Annals of Plant Soil and Research*, 24(4).

28. Chacko A., Jayalekshmy, V.G., Karthikeyan,K., **Thomas, B.**, Shanas, S., and Shahiba, A.M., 2023. **Gene Validation for Brown Plant Hopper Resistance in Rice Varieties Using SSR Markers**, *Int. J. Plant Soil Sci.* :35, (12), 1-8.
29. Reddy S.B., **Thomas B.**, Ankitha M.O., Anand S., and Jyothi, B.A. 2023. Association and path coefficient analysis among F2 segregating population of tomato (*Solanum lycopersicum* L.). *Int. J. Plant Soil Sci.*, 35 (18), pp. 656-662.
30. Reddy S.B., **Thomas B.**, Anand S., Ankitha M.O., and Jyothi, B.A. 2023. **Evaluation of genetic variability and Frequency Distribution in the F2 segregating population of tomato Cross Anagha x IIHR 2896**. *Biological Forum-An International Journal*, 15 (8): 111-115.
31. Shahiba, A.M., Jayalekshmy, V.G., Sajeena, A., **Thomas, B.** and Chacko, A.2024. **Molecular characterization of Fusarium and screening of cowpea [*Vigna unguiculata* (L.) Walp.] germplasms against Fusarium wilt (*Fusarium oxysporum* f.sp. *Tracheiphilum*)**. *Legume Research-An International Journal* :47 (4) :659-665.

Proceedings/ Abstracts

1. **Beena Thomas** and Lekha Rani, C. 2008. Analysis of biological traits in selected monopodial orchid hybrids and species. *National conference on Orchids: Science and Society*, April 10-12, Souvenir and Abstracts, Bangalore, Karnataka, India, p.109.
2. **Beena Thomas** and Lekha Rani, C. 2008. Selection and refinement of culture media for monopodial orchid hybrids. *National symposium on Orchids: Science and Art*, December 16-17, Souvenir and Abstracts, Chandigarh, India, p.60.
3. **Beena Thomas** and Lekha Rani, C. 2009. Intra and intergeneric compatibility studies in monopodial orchids. *21st Kerala Science Congress*, January 28-31, Extended Abstract, Kollam, Kerala, India, pp.88-90.
4. Lekha Rani, C., Udaya, V.P., and **Beena Thomas**. 2009. Compatibility studies in higher orchid hybrids of monopodial orchids. *21st Kerala Science Congress*, January 28-31, Extended Abstract, Kollam, Kerala, India, pp.91-93.
5. **Beena Thomas** and Lekha Rani, C. 2011. Important medicinal orchids of Kerala. *National conference on Medicinal Orchids: Sustainable use and benefit sharing for rural and tribal communities*, March 29-30, Abstracts, Chandigarh, India, p.22.
6. **Beena Thomas** and Lekha Rani, C. 2012. Variability studies for conservation of important monopodial orchids. *International Seminar on Emerging Threats and Challenges to Biodiversity: Policy Framework for Sustainable Management. 'ETCOB 2012'* , March 2-4, Souvenir, Tirupati, Andhra Pradesh, India. p.86.

7. Lekha Rani, C., **Beena Thomas**, and Mareen Abraham. 2012. Biological inventions in orchid seed germination. *International Seminar on Emerging Threats and Challenges to Biodiversity: Policy Framework for Sustainable Management*. 'ETCOB 2012', March 2-4, Souvenir, Tirupati, Andhra Pradesh, India. p.225.
8. V.R. Shajan, **Beena Thomas**, A. Sajeena and J.S. Bindhu. 2012. Performance of selected sugarcane clones under flooded situation and to red rot. *International symposium on New Paradigms in Sugarcane Research*, October 15-18, 2012, Coimbatore, India. p.128.
9. Sosamma Cheriyan, V.R. Shajan, A. Sajeena, **Beena Thomas** and J.S. Bindhu. 2012. GI registration of Central Travancore jaggery- A boon for Sugarcane farmers. *International symposium on New Paradigms in Sugarcane Research*, October 15-18, 2012, Coimbatore, India. p.370.
10. Sajeena A, Surendran M, Shajan V.R, **Beena Thomas** and Jessy M. Kuriakose. 2012. Reaction on sugarcane genotypes to red rot under flooded conditions. National Symposium on Heading Towards Molecular Horizons in Plant Pathology: Host Resistance, Pathogen Dynamics, Diagnostics and Management. November 16-17, 2012, Abstracts, Indian Phyto pathological Society (South zone), Sugarcane Breeding Institute (ICAR), Coimbatore, India. p.96.
11. **Beena Thomas**, V.R. Shajan, A. Sajeena, J.S. Bindhu, Sosamma Cheriyan and Jessy M. Kuriakose. 2012. Genetic analysis of important characters in selected sugarcane clones. *National Seminar on Improving Cane Productivity and Sugar Recovery to Sustain Sugar Industries*, Sugarcane Research Institute, Rajendra Agricultural university, Bihar, Pusa (Samastipur), November 27-29, 2012, p.48.
12. V.R. Shajan, **Beena Thomas**, A. Sajeena, J.S. Bindhu, Sosamma Cheriyan and Jessy M. Kuriakose. 2012. Evaluation of selected sugarcane clones under flood prone riverine tract of Kerala. *National Seminar on Improving Cane Productivity and Sugar Recovery to Sustain Sugar Industries*, Sugarcane Research Institute, Rajendra Agricultural university, Bihar, Pusa (Samastipur), November 27-29, 2012, p.49.
13. Sosamma Cheriyan, J.S. Bindhu, V.R. Shajan, **Beena Thomas** and A. Sajeena. 2012. Standardization of agro-techniques for selected varieties of sugarcane in Central Travancore for maximizing the yield and quality of jaggery. *National Seminar on Improving Cane Productivity and Sugar Recovery to Sustain Sugar Industries*, Sugarcane Research Institute, Rajendra Agricultural university, Bihar, Pusa (Samastipur), November 27-29, 2012, p.66.
14. J.S. Bindhu, Abraham Varghese, Reena Mathew, Sosamma Cheriyan, A. Sajeena, V.R. Shajan and **Beena Thomas**. 2012. Nutrient management techniques for sustaining sugarcane productivity. *National Seminar on Improving Cane Productivity and Sugar Recovery to Sustain Sugar Industries*, Sugarcane Research Institute, Rajendra Agricultural university, Bihar, Pusa (Samastipur), November 27-29, 2012, p.72.
15. A. Sajeena, V.R. Shajan, **Beena Thomas**, J.S. Bindhu, Jessy M. Kuriakose and Sosamma Cheriyan. 2012. Screening of sugarcane genotypes to red rot disease. *National Seminar on Improving Cane*

Productivity and Sugar Recovery to Sustain Sugar Industries, Sugarcane Research Institute, Rajendra Agricultural university, Bihar, Pusa (Samastipur), November 27-29, 2012, p.81.

16. **Beena Thomas** and Lekha Rani, C. 2013. In vitro culture for the development of monopodial orchid hybrid, Mokara Walter Oumae White x Aranthera Annie Black. *25th Kerala Science Congress*, January 29- February 1, Extended abstract, Thiruvananthapuram, Kerala, India, pp.86-88.
17. Lekha Rani, C. and **Beena Thomas**. 2013. Genetic diversity assessment through compatibility analysis in monopodial orchids. *World Biodiversity Congress*, November 26-30, Abstracts, Chiang Mai, Thailand, p.47.
18. **Beena Thomas** and Lekha Rani, C. 2014. Improvement of monopodial orchids through intra and intergeneric hybridization and in vitro seed culture. *National Conference on Orchids: Conservation, Improvement and Sustainable Development*, March 13-15, Souvenir and Abstracts, Thrissur, Kerala, p.60.
19. **Beena Thomas** and Lekha Rani, C. 2014. Compatibility analysis in commercially important monopodial orchids. *International conference on Biosciences: State- of- the- art advancements*, September 11-12, 2014, Abstracts, Kumarakam, Kerala. p.85.
20. Bandla Srinivas, **Beena Thomas** and K, Arya. 2014. Cluster analysis using dendrogram in bird chilli (*Capsicum frutescens* L.). *International conference on Biosciences: State- of- the- art advancements*, September 11-12, 2014, Abstracts, Kumarakam, Kerala. p.128.
21. Reshma Gopi., **Beena Thomas** and Sathish Kumar, S. 2016. D2 analysis in anthurium (*Anthurium andreanum* Lind.) In : *Abstracts of International symposium on succulent plants and other ornamentals.*, 24 -27, March, 2016, Kerala. International Society for Horticultural Science, Regional Agricultural Research Station, Ambalavayal.
22. **Beena Thomas** and Lekha Rani. 2016. Analysis of genetic parameters in commercially important monopodial orchid genotypes. In : *Abstracts of International symposium on succulents and other ornamentals.*, 24 -27, March, 2016, Kerala. International Society for Horticultural Science, Regional Agricultural Research Station, Ambalavayal, p.11.
23. Shahiba, A. M., **Thomas, B.** and Chacko, A. 2018. Identification of water stress tolerant amaranthus genotypes (*A. tricolor* L.) with high yield and quality. In: *Abstracts of 1st National Genetics Congress*, December 14-16, 2018, IARI, New Delhi.
24. Shahiba, A. M., **Thomas, B.** and Chacko, A. 2019. Genetic variability and correlation in different red amaranthus (*A. tricolor* L.) under water stress conditions. In: *Abstracts of Indian Plant Science Congress*, January, 23-25, 2019, Chennai.
25. Shahiba, A. M., **Thomas, B.** and Chacko, A. 2019. Evaluation of red amaranthus genotypes (*A. tricolor* L.) under water stress condition. In: *Abstracts of 31st Kerala Science Congress*. February 2-3, 2019, Fatima Mata College, Kollam.

26. Anand S., **Thomas B.** and Sarma G. R. 2019. Advances in genetic improvement for disease and pest resistance in *Anthurium* through transgenic technology. In: *Abstracts, National Seminar on Emerging Trends in Genomic research*; 22 February 2019, St. Thomas College, Thrissur.
27. Anand S., **Thomas B.** and Sarma G. R. 2019. Genetic variability analysis for selection of high yielding and superior *Anthurium andreanum* Linden. hybrids. In: *National Conference on Farmers Orientation Towards and Upgrading to Sustainable Agriculture- Focus 2019*, 23-24 February 2019, National College, Trichy
28. Anand S., **Thomas B.** and George C. 2019. Callus Mediated Regeneration Studies from Leaf Explants of *Anthurium andreanum* Linden Hybrids. In: *TNAU - Corteva Plant Sciences Symposium Series on “ Crop Genomics and Data Science: Challenges and Opportunities-2019”*, October 17-18, 2019, TNAU, Coimbatore.
29. Thouseem N, **Beena T.**, Namitha E. Anju M. J. 2019. Evaluation of cowpea [*Vigna unguiculata* (L.)Walp.]genotypes for yield. In: *TNAU - Corteva Plant Sciences Symposium Series on “ Crop Genomics and Data Science: Challenges and Opportunities-2019”*, October 17-18, 2019, TNAU, Coimbatore.
30. **Beena Thomas**, Revathi B S, Sarada S and Adheena Ram A.Genotypic Evaluation of Commercially Superior *Anthurium andreanum* Varieties and Hybrids. 2022. *Proceedings of National Symposium on Ornamental and Edible Horticulture, Emerging Challenges and Sustainable Goals*, 21-22,February, 2022, p.159.
31. Revathi B S and **Beena Thomas**. 2022. *In vivo* Polyploidy induction in *Dendrobium crumenatum* through Colchicin treatment. *Proceedings of National Symposium on Ornamental and Edible Horticulture, Emerging Challenges and Sustainable Goals*, 21-22, February, 2022, p.157.
32. Anand S., **Thomas B.**, Ankitha M.O. and Ashokan A. 2023. Character Heritability and Genetic Advances Analysis in High Yielding *Anthurium andreanum* Genotypes. In: *Book of Abstracts, Young Scholars Congress*; 5-6 January, 2023, KILA Campus, Thrissur.
33. **Beena Thomas.**, Aiswarya Raj P.T., Noru Raja Sekhar Reddy. 2023. Organic Cultivation of Ornamental Plants In Small Spaces. In :*International Agricultural Conference “Natural Vs Organic Farming In Context to Bhartiya Agriculture”*. December- 24-26, 2023.
34. Aiswarya Raj P.T., **Beena Thomas.**, Noru Raja Sekhar Reddy. 2023. Organic Plant Breeding For Sustainable Agriculture. In :*International Agricultural Conference “Natural Vs Organic Farming In Context to Bhartiya Agriculture”*.December- 24-26, 2023.
35. Noru Raja Sekhar Reddy., **Beena Thomas.**, Aiswarya Raj P.T. 2023. Farmer Training And Capacity Building By Participatory Plant Breeding. In :*International Agricultural Conference “Natural Vs Organic Farming In Context to Bhartiya Agriculture”*.December- 24-26, 2023.
36. Shirsat Mahesh Santosh., **Beena Thomas.**, and Visakh R L. 2023. Redgram: an ideal crop for sustainable agriculture and food security. In :*International Agricultural Conference “Natural Vs Organic Farming In Context to Bhartiya Agriculture”*.December- 24-26, 2023.

37. **Beena Thomas**, Vipina V., Ayana K., Aswini M.S., and Sheeja K. Raj. 2024. Refinement of tissue culture media for rapid micropropagation of traditional red banana: Boon to banana farmers. In: *Book of abstracts of AICSA 2024 KAU - Corteva international plant science symposium: Advanced technologies and innovative practices for climate smart agriculture: Bridging academia, industry and society* (BP 18) organised by College of Agriculture Vellayani, held on January 18 and 19.p28.
38. Aswini, M.S. and **Beena Thomas**. 2024. BP19: Morphological characterisation of *Oncidium* and equitant orchid spp. In: *Book of abstracts of AICSA 2024 KAU - Corteva international plant science symposium: Advanced technologies and innovative practices for climate smart agriculture: Bridging academia, industry and society* (BP 19) organised by College of Agriculture Vellayani, held on January 18 and 19.p29.
39. Aiswarya Raj , P.T. and **Beena Thomas**. 2024. Crop Health Management through Organic Plant Breeding. In: *Book of abstracts of AICSA 2024 KAU - Corteva international plant science symposium: Advanced technologies and innovative practices for climate smart agriculture: Bridging academia, industry and society* (CP 5) organised by College of Agriculture Vellayani, held on January 18 and 19.p18.
40. Chippy A.K., **Beena Thomas** and Sarada S. 2024. Expression Analysis of Moisture Stress Related Gene in Tomato (*Solanum lycopersicum*). In: *Book of abstracts of AICSA 2024 KAU - Corteva international plant science symposium: Advanced technologies and innovative practices for climate smart agriculture: Bridging academia, industry and society* (BP 4) organised by College of Agriculture Vellayani, held on January 18 and 19.p14.
41. **Beena Thomas.**, Aiswarya Raj P.T., Noru Raja Sekhar Reddy. 2024. UAIP43. Urban gardening: scope of indoor and outdoor ornamentals. In: *International seminar on “Sustainable urban agriculture systems and community resilient cities”* organized by Training Service Scheme, College of Agriculture, Vellayani, Kerala Agricultural University held on March- 22-23.
42. Aiswarya Raj P.T., **Beena Thomas.**, Noru Raja Sekhar Reddy. 2024. UAIP35. Hydroponics in ornamentals for urban gardening. In: *International seminar on “Sustainable urban agriculture systems and community resilient cities”* organized by Training Service Scheme, College of Agriculture, Vellayani, Kerala Agricultural University held on March- 22-23.
43. Noru Raja Sekhar Reddy., **Beena Thomas.**, Aiswarya Raj P.T. 2024. UAIP1. Sustainable urban agriculture: unlocking potential through vertical farming. In: *International seminar on “Sustainable urban agriculture systems and community resilient cities”* organized by Training Service Scheme, College of Agriculture, Vellayani, Kerala Agricultural University held on March- 22-23.

Popular Articles

1. **Beena Thomas**. 1994. Belladona. *Kerala Karshakan*, July 10, 1994, 19(39): 27-28.
2. **Beena Thomas**. 1994. Sappotta : Oru Utthama Phalavriksham. *Deshabhimani*, July 31, 1994, p.4.
3. **Beena Thomas**. 1994. Nithyakalyani. *Deshabhimani*, November 11, 1994, p.7.

4. **Beena Thomas.** 1995. Vanila. *Kerala Karshakan*, March 25, 1995, 12(40): 19 & 26.
5. **Beena Thomas**, Bobby Dale, and Dr. S T. Mercy. 1995. Alankarathin Anthurium. *Malayala manorama*, November 20, 1995, p.10.
6. **Beena Thomas.** 2006. Thekku: Thadiykum oushadhathinum. *Kalpadhenu*, July- Sept. 2006, 3(32): 30.
7. **Beena Thomas** and C, Lekha Rani. 2007. Orchids of medicinal importance. *Plant Horti Tech*, October- November, 2007, 7(5): 34-36.
8. **Dr.Beena Thomas.** 2011. Pullukalkkidayile madhurarajan. *Karshakasree*, Aug.2011, pp.42-44.
9. **Dr.Beena Thomas.** 2011. Sugarcane juice: A healthy drink. *Kisan world*, October, 2011, pp.22-24.
10. **Dr.Beena Thomas** and Dr.Lekha Rani C. 2011. Varna vismayamayi orchid sundharikal. *Keralakarshakan*, November, 2011, pp.52-55.
11. **Dr.Beena Thomas.** 2012. Aanadham, aadhayam- Poovum thenum. *Karshakasree*, May, 2012, pp.20-22.
12. **Dr.Beena Thomas.** 2012. Tuberose : Soundharyathinum sourabhyathinum. *Karshakan*, May, 2012, pp.20-22.
13. **Dr.Beena Thomas.** 2012. Orukkam namukkum oru udhyanam. Souveiner, Sunday school, CSI, Amaravela, 2012, pp.86-88.
14. **Dr.Beena Thomas**, Dr.Annamma George and Dr. Radhakrishnan N. V. 2013. Kullam thengukal undakunnath. *Keralakarshakan*, June, 2013, pp.34-35.
15. **Dr.Beena Thomas.** 2013. Flowering income at home. *Kerala karshakan e-journal*, June, 2013, pp.46-48.
16. **Dr.Beena Thomas** and Dr.Lekha Rani. 2013. Ethnomedical Aspects of Orchids and Their conservation. *Keralakarshakan e-journal*, October, 2013, pp.36-40.
17. **Dr. Beena Thomas.** 2014. Thippali- A medicinal spice. *Kerala karshakan e-journal*, April, 2014, pp.42-43.
18. Reshma Gopi, **Dr. Beena Thomas** and Sathishkumar S. 2015. More about the irresistible beauty. January, 2015, pp.32-35.
19. Roshin Mariam George and **Dr.Beena Thomas.** 2020. Growing and maintaining Phalaenopsis Orchids. *Kerala karshakan e journal*, sept. 2020.
20. Karthika Nair A.S and **Dr. Beena Thomas.** 2021. Gladiolus the Sword Lilly ‘Queen’. *Kerala karshakan e journal*, April, 2021.
21. Reshma Gopi and **Dr. Beena Thomas.** 2023. “Vilanireekshana Sangethathiloode Karshika Viplavathilekk”. *Krishi Jagaran*, March, 2023.
22. Reshma Gopi and **Dr. Beena Thomas.** 2023. “Adhunika Krishiyum Genithaka Maatta Sankethavum”. *Krishi Jagaran*, June, 2023.
23. Aswini M.S. and **Dr.Beena Thomas.** 2023. “Dancing Blooms in Garden”. *Kerala karshakan e journal*, November, 2023.

24. Noru Raja Sekhar Reddy and **Dr.Beena Thomas**. 2024. Nutrient Enrichment: Unveiling the Potential of Biofortified Crops. *Trends in Agriculture Science*. March, 2024, 3(3): 1586-1589.
25. Noru Raja Sekhar Reddy and **Dr.Beena Thomas**. 2024. AI Revolutionizing Farming: The Smart Agriculture. *Vigyan Varta*. 5(4): 214-217.

Leaflets

1. **Dr.Beena Thomas**, Dr.Radhakrishnan N.V. and Dr.Annamma George. 2013. Theng: inangalum thaikalude nadeelum paripalanavum. Coconut Research Station, Balaramapuram, Kerala Agricultural University.
2. Dr.Annamma George, Dr.Radhakrishnan N.V. and **Dr.Beena Thomas**. 2013. CRS: A Boon to coconut growers. Coconut Research Station, Balaramapuram, Kerala Agricultural University.
3. **Dr.Beena Thomas** and Reshma Gopi. 2017. Hybridization technique in Anthurium. Directorate of Extension, Kerala Agricultural University.
4. **Dr.Beena Thomas** and Reshma Gopi. 2017. Anthurium cultivation. Directorate of Extension, Kerala Agricultural University.

Booklet

1. Dr.Radhakrishnan N.V., **Dr.Beena Thomas**, and Dr.Annamma George. 2013. Thengukalile samyojitha keedaroga niyanthranam. Coconut Research Station, Balaramapuram, Kerala Agricultural University.

Books Published

1. **Dr.Beena Thomas** and Reshma Gopi. 2017. **Anthurium: Floral and Foliage varieties and their cultivation**. Directorate of Extension, Kerala Agricultural University, March, 2017, 19p.
2. **Dr.Beena Thomas** and Reshma Gopi. 2017. **Breeding methods and propagation in Anthurium**. Directorate of Extension, Kerala Agricultural University, March, 2017, 18p.
3. **Dr.Beena Thomas**, Amrutha Unni and Ayana K. 2022. **Namukkorukkam udhyanam** published as a part of Azadi Ka Amrit Mahotsav, Directorate of Extension, Kerala Agricultural University. 42p.

Other Publications (numbers)

Books	: 3
Book Chapter	: 1
Practical manuals	: 3
Leaflets	: 4
Research Papers	: 31
Abstracts in proceedings	: 43
Popular Articles	: 25

Student Guidance (Major Advisor/ Advisory Committee member)

I. Research guidance as Major Advisor

M. Sc.

Within KAU: Completed: 15, Ongoing: 4

Outside KAU: Completed : 2

BSc.- M.Sc. Integrated Biotechnology: Completed: 2

Ph. D : Within KAU: Completed: 4, Ongoing : 3

II. Research guidance as Advisory committee member

1.M.Sc. (Ag.)- 10 completed, 4 ongoing

2. B.Sc.- M.Sc. Integrated Biotechnology- 1 completed

3. Ph.D (Ag.)- 10 completed, 5 ongoing

Other Institutional Responsibilities

1. Currently acting as student Advisor/faculty mentor to 10 Undergraduate students.

Membership in Professional Associations

1. The Indian Society of Genetics & Plant Breeding,
2. Indian Society of Ornamental Horticulture
3. The Orchid Society of India.