

Dr. R. Yasodha

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**Education**

1989 Master of Science in Botany, Bharathiar University, Coimbatore
1990 Master of Philosophy in Botany, Bharathidasan University, Tiruchi
2005 Doctor of Philosophy in Botany, Bharathiar University, Coimbatore

Profession

Scientist G, Institute of Forest Genetics and Tree Breeding (01.07.2017 -present)
Scientist F, Institute of Forest Genetics and Tree Breeding (01.01.2012 to 30.06.2017)
Scientist E, Institute of Forest Genetics and Tree Breeding (01.01.2006 to 8.6.2012)
Scientist D, Institute of Forest Genetics and Tree Breeding (01.01.2002 to 01.01.2006)
Scientist C, Institute of Forest Genetics and Tree Breeding (31.07. 1997 to 31.12.2001)
Scientist B Institute of Forest Genetics and Tree Breeding (31.07.1992 to 30.07.1997)
Research Assistant Gr-I, Institute of Forest Genetics and Tree Breeding (26.11.1990 to 30.07.1992)

Research Interests

- Tissue culture and DNA markers

Selected Publications

- Maheswari Patturaj, Aiswarya Munusamy, Nithishkumar Kannan & Yasodha Ramasamy (2021) Progress and future perspectives of long non-coding RNAs in forest trees. *Biologia Futura*. doi.org/10.1007/s42977-021-00108-x.
- Maheswari Patturaj , A. Mayavel , Modhumita Ghosh Dasgupta , Binai Nagarajan , D. Rajasugunasekar , Veerasamy Sivakumar , Ramasamy Yasodha (2021) Genome Wide SNP Identification in Eucalyptus and its Application for Linkage Mapping and Adventitious Rooting Related QTL Analysis. *The Indian Forester*. 147 (11).
- Maheswari Patturaj, Aiswarya Munusamy, Nithishkumar Kannan, Ulaganathan Kandasamy, and Yasodha Ramasamy (2021) Chromosome-specific polymorphic SSR markers in tropical eucalypt species using low coverage whole genome sequences: systematic characterization and validation. *Genomics & Informatics*. doi: 10.5808/gi.21031.
- Yasodha R, Galeano E and Win TT (Eds) (2021) *The Teak Genome*. Springer International Publishing Switzerland AG, p. 265. doi: 10.1007/978-3-030-79311-1.
- Maheswari P, Kunhikannan C, Yasodha R (2021) Chloroplast genome analysis of Angiosperms and phylogenetic relationships among Lamiaceae members with particular reference to teak (*Tectona grandis* L.f). *Journal of Biosciences*. <https://doi.org/10.1007/s12038-021-00166-2>.

- Swathi Balakrishnan, Suma Arun Dev, Ambothi Rathnasamy Sakthi, Balasubramanian Vikashini, Reshma Bhasker T, Nochyil Sivan Magesh & Yasodha Ramasamy (2021). Gene-ecological zonation and population genetic structure of *Tectona grandis* L.f. in India revealed by genome-wide SSR markers. *Tree Genetics & Genomes* 17, 33 <https://doi.org/10.1007/s11295-021-01514-x>.
- Subashini V, Bachpai VKW, Mayavel A, Nagarajan B, Sivakumar V, Yasodha R (2018) Quantitative trait loci (QTL) for salinity tolerance traits in interspecific hybrids of *Eucalyptus*. *Indian Journal of Plant Physiology*. <https://doi.org/10.1007/s40502-018-0403-7>.
- Sumathi M, Bachpai VKW, Deeparaj B, Mayavel A, Dasgupta MG, Nagarajan B, Rajasugunasekar D, Sivakumar V, Yasodha R (2018) Quantitative trait loci mapping for stomatal traits in interspecific hybrids of *Eucalyptus*. *J Genet.* 97(1):323-329.
- Yasodha R, Vasudeva R, Balakrishnan S, Sakthi A. R., Nicodemus A, Nagarajan B, Rajashekar B, Bachpai VKW, Pillai PKC, Dev SA (2018) Draft genome of a high value tropical timber tree, Teak (*Tectona grandis* L. f): Insights into SSR diversity, phylogeny and conservation. *DNA Research* 25 (4), 409–419.
- Sumathi M, Bachpai VKW, Mayavel A, Dasgupta MG, Nagarajan B, Rajasugunasekar D, Sivakumar V, Yasodha R (2018) Genetic linkage map and QTL identification for adventitious rooting traits in red gum eucalypts. *3 Biotech*, 8(5):242. doi: 10.1007/s13205-018-1276-1. Epub 2018 May 8.
- Sumathi M, Yasodha R (2017) Microsatellite allele length variations in inter-specific hybrids of *Eucalyptus*. *Acta Botanica Croatica* 76 (1), 103-106.
- Shanthi K, Bachpai V. K. W., Anisha S., Ganesan M., Anithaa R. G., Subashini V., Chakravarthi M., Sivakumar V, Yasodha R (2015) Micropropagation of *Eucalyptus camaldulensis* for the production of rejuvenated stock plants for microcuttings propagation and genetic fidelity assessment. *New Forests*. DOI: 10.1007/s11056-014-9465-1.
- Modhumita Ghosh Dasgupta and Yasodha R (2014) DNA Markers in Tree Improvement of Tropical Plantation Species. In *Tree Biotechnology* (eds: K. G. Ramawat Jean-Michel Méridon M. R. Ahuja) CRC Press 2014, DOI: 10.1201/b16714-24.
- Sumathi M and Yasodha R (2014) Microsatellite resources of *Eucalyptus*: current status and future perspectives. *Botanical Studies* 2014, 55:73.
- Shanmugapriya A., Bachpai VKW., Ganesan M., Yasodha R. (2014) Association analysis for Vegetative Propagation Traits in *Eucalyptus tereticornis* and *Eucalyptus camaldulensis* Using Simple Sequence Repeat Markers. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* DOI 10.1007/s40011-014-0360-5.
- Shanmugapriya A. and Yasodha R. (2014) Unique Pattern Information Combinations for Clonal Discrimination in *Eucalyptus camaldulensis* using Microsatellite Markers. *Indian Journal of Biotechnology* Vol 13, pp 75-80.
- Subashini V., Shanmugapriya A and Yasodha R (2013) Hybrid purity assessment in *Eucalyptus* F1hybrids using microsatellite markers. *3 Biotech* 08/2013;DOI 10.1007/s13205-013-0161.
- Chezian P, Yasodha R, Ghosh Dasgupta M. (2012) Molecular Discrimination of Eucalypt Clones Using the ISSR Marker System. *Journal of Sustainable Forestry* 31 (6) 537-548.

- Arumugasundaram, S. , Ghosh, M, Veerasamy S, Yasodha R (2011) Species discrimination, population structure and linkage disequilibrium in *Eucalyptus camaldulensis* and *Eucalyptus tereticornis* using SSR markers. *PLoS ONE* 6:12, OI: 10.1371/journal.pone.0028252.
- Ghosh, M., Chezian, P., Sumathi, R., Yasodha, R (2011) Development of SCAR marker in *Casuarina equisetifolia* for species authentication. *Trees - Structure and Function* 25 (3) pp. 465-472.
- Yasodha R, Kamala S, Kalaiarasi K (2010) Anatomical and Biochemical Changes Associated with in vitro Rhizogenesis in *Dendrocalamus giganteus*. *Journal of Plant Biology and Biochemistry* 19, 217–222. <https://doi.org/10.1007/BF03263343>.

Awards

- Received (a team of six researchers) Forest Biotechnology award from ICFRE (awards for the excellence) for the year 2001-2002.

Patent

Obtained a **Patent** (a team of four researchers) on “A process for *in vitro* plantlet production of the bamboo, *Oxytenanthera stocksii*” The patent was granted on 31.08.2006 for a term of 20 years. The financial support was granted by the National Research Development Council (NRDC), New Delhi.

Consultancy

A consultancy was provided on DNA profiling of Acacia hybrids and Eucalyptus species was provided to Mysore paper mills Ltd., Bhadravathi, Karnataka during 2009 to 2010.

International Visits

- Study tour on tree crop improvement sponsored by MoEF/USAID/USFS to USA from 2-12 September 2014.
- Participated in XXIV IUFRO World Congress at Salt Lake City, Utah in USA held from 5-11 October 2014 with the theme of "Sustaining Forests, Sustaining People: The Role of Research".
- Participated in XXIII IUFRO World Congress at Seoul, Republic of Korea held from 23 to 28 August, 2010 with the theme of Forests for the future: Sustaining Society and the environment.
- FAO Fellowship on Forest Genetics, University of Melbourne, Australia, April 1995- July 1995 under World Bank-FREE Project.
