

PROJECT PROFILE

Title:	Characterization and Utilization of Fatty Liver Curing Medicinal Plants
Principal Investigator:	Dr. D. Thangamani, Scientist-E
Project Associate :	Smt. S. Lalitha, Chief Technical Officer
Starts and Completion dates :	2019-2022
Objectives	1. To survey and assemble genetic resources of <i>Breynia retusa</i>, <i>Seurinega virosa</i>, <i>Phyllanthus reticulatus</i>, <i>Entada scandens</i>, and <i>Ficus glomerata</i> 2. Characterization of the genetic resources 3. To conserve the genetic resources in field gene bank and seed bank 4. Preparation of value-added product for the treatment of fatty liver
Funding Agency	Tamil Nadu Forest Department
Total budget outlay:	Rs. 10.00 lakhs

SUMMARY

All the medicinal plants were examined for its phytochemical constitute which possesses various phytochemicals. *P. reticulatus*, *B. retusa*, *F. racemosa* rich with *polyphenols*, *F. virosa*, *E. scandens* selected for this project and it reduces the level of triglycerides, total cholesterol and LDL. There was constant increase in HDL level when administrated to rats. Thus the high phytochemical rich germplasm of all the medicinal plants were multiplied in VMG and the Germplasm were assembled in Thalamalai field of KVK, Myrada and in Pethikuttai, Mettupalayam.

Publications:

Journals

1. D. Thangamani, S. Poopathi Rajan, T. Arul Prakash, O.M. Mohammed Nawas and S.Lailtha, (2021) "Conservation of *Ficus racemosa*(Linn) wonderful feeder of wild animals". IIJRD/19/ v- 1/June 2021 ISSN: 2278 8670. Page no 210-218.

National and International conferences

1. D. Thangamani, S.PoopathiRajan, T.ArulPrakash ,K.Ramya, K.Harshini, J.Karunamoorthi and S. Lalitha, 2021. Novel *Securinegavirosa*- A traditional medicinal tree genetic resource need for conservation and management. Virtual International Conference on "Modern Biology and Environmental Management (ICMBEM-2021, 29th to 30th March, 2021)" PG & Research Department of Zoology, Vivekanandha College of Arts and Sciences for Women (Autonomous), Namakkal, Tamil Nadu, India.
2. D. Thangamani, T.Arul Prakash, S.PoopathiRajan, B. S. Priyanka, S.V Darwin, J.Karunamoorthi and S. Lalitha, 2021. Conservation of *Breyniaretusa* - An antioxidant rich genetic resource exploration for its active molecules. Virtual International Conference on "Modern Biology and Environmental Management (ICMBEM-2021, 29th to 30th March, 2021)" PG & Research Department of Zoology, Vivekanandha College of Arts and Sciences for Women (Autonomous), Namakkal, Tamil Nadu, India.
3. D.Thangamani, T.Arul Prakash, S.Poopathi Rajan and J.KarunaMoorthi, Conservation, Sustainable Management of Medicinal plant *Entadascandens* (L.) Benth for field gene bank and Seed bank. 2nd Virtual International Conference on "Sustainable development goals" (23rd to 24th April, 2021) PG & Research Department of Botany, Vivekananda College of Arts and Sciences for Women (Autonomous), Namakkal, Tamil Nadu, India and Vivekananda Arts and Science College, Salem, Tamilnadu, India.
4. D.Thangamani, S.Poopathi Rajan, T.Arul Prakash, O.M.Mohammed Nawas and S.Lalitha, 2021. Conservation of *Ficus racemosa*(Linn) wonderful feeder of wild animals.National conference on biodiversity conservation (28thjuly to 30thjuly, 2021), Department of Botany, Seva Bharati Maha vidyalaya, Kapgari, Jhargram, W.B. and Department of Botany, Lalgah Govt. College, Jhargram, W.B.
5. D.Thangamani, J.Karunamoorthi, S.Poopathi Rajan and T.Arul Prakash, 2022. Exploration of medicinal plant *Entadascandens* (L.) Benth. by its Phytoconstituents and conservation. Challenges and Opportunities in Agriculture, Horticulture, Environmental

& Biotechnological Science in Current Era (COAHEBS - 2022, 26.2.2022 & 27.2.2022) Department of Biotechnology & Microbiology, KALP LABORATORIES & kalpvriksha society - KVS for Plant Protection, Education & Social Welfare Destination for Skills Development Chaitanyalok colony Sonkh road, Mathura – 281003

6. S.PoopathiRajan, D.Thangamani, T.Arul Prakash and S. Lalitha, 2022. Ethnobiological traditional knowledge of giant liana *Entadascandens* (L.) Benth. and it's conservation. National conference on Ethnobiological Knowledge and biodiversity conservation (EKBC2022, 25th November to 36th November, 2022) Department of Botany, Lalgah Govt. College, Jhargram, W.B.
7. S.Poopathi Rajan, D.Thangamani, T. Arul Prakash and S. Lalitha, 2023. Collection and conservation of natural dye for fabric producing *Phyllanthus reticulatus* Poir. plant-NTFP species. National Conference (Virtual mode) on Value addition and marketing of NTFPs/ MAPs for livelihood security (NCVAM - 2023, 2nd - 3rd May 2023) ICFRE - Tropical Forest Research Institute, Jabalpur (M.P.).