#### वन आनुवंशिकी एवं वृक्ष प्रजनन संस्थान

# ICFRE- Institute of Forest Genetics & Tree Breeding कोयम्बत्त्र/Coimbatore

महाराष्ट्र के सामाजिक वानिकी कार्मिकों के लिए वन वृक्ष प्रजातियों के कायिक प्रवर्धन तकनीक पर

#### प्रशिक्षण

#### **Training Report on**

## **Vegetative Propagation Techniques of Forest Tree Species**

#### For Officials of Maharashtra Forest Department

**3-6 September 2023** 

The propagation of forest trees through vegetative means holds promise as a method for efficiently multiplying identified tree genetic resources. This technique preserves the genetic characteristics of the parent tree and plays a crucial role in the field of production forestry. The success of increasing tree and forest coverage over the coming decades hinges on the effective multiplication and distribution of high-quality planting stock. In this background, the ICFRE-Institute of Forest Genetics and Tree Breeding, Coimbatore conducted a three-days training on "Vegetative Propagation Techniques of Forest Tree Species" from 3-6 September for officials of Maharashtra Forest Department. Twenty nine participants including 6 Divisional forest officers, one Assistant Conservator of Forest and 22 Range Forest officers attended the training from Maharashtra. The training was conducted at ICFRE-IFGTB Campus based on the request of the Maharashtra Forest Department.

In the inaugural session, Dr. N.V.Mathish, Scientist G & Head, Division of Plant Biotechnology & Cytogenetics, ICFRE-IFGTB welcomed the participants. The overview of the training program was given by the Training coordinator, Dr. Rekha R.Warrier, Scientist F & Head, Division of Chemistry and Bio prospecting. The special address for the event was delivered by Dr. R. Yasodha Group Coordinator Research.

Dr. C. Kunhikannan, Director, ICFRE-IFGTB, delivered the inaugural address and highlighted the relevance of the present training and urged the participants to utilize the opportunity and fine tune the existing methods of vegetative multiplication for successful propagation. The session ended with vote of thanks by Smt. K. Shanthi, CTO & training in charge ICFRE-IFGTB.

The training session began with a lecture on the fundamentals of Clonal forestry by Dr. R. Yasodha, Scientist G & Group Co-ordinator Research, IFGTB. Following this, hands-on training was imparted in the vegetative propagation complex of IFGTB wherein the participants were exposed to the different facilities like Mother bed chamber, shade house and the essential requirements for mass multiplication of tree species. The participants were appraised on the concepts of selection of trees and data collection on tree characters. The participants were given hands-on experience in collection of cuttings from vegetative multiplication garden and coppice shoots. Practical session in the preparation of rooting media, rooting hormone preparation and application in different concentration and fungicide application were conducted to enable the participants to acquire knowledge on standardising optimal rooting hormone concentration. The role of cost effective mist less chambers and the requirements for successful rooting of different tree species were also enumerated. The trainees were trained in the selection of cuttings on the basis of maturity index to obtain maximum rooting during propagation in different species like teak, Melia dubia, Bamboo and Casuarina hybrids. Further, the process of composting of coir pith and formation of standard beds were also explained. Different types of grafting and air layering were also demonstrated. Dr. J. P. Jacob, Head Forest Protection Division, delivered a lecture on pest and diseases management in forest tree species. The participants interacted with resource persons throughout the training programme. They also visited Gass Forest Museum.

As a part of the training program, the participants visited TNPL, Karur, to acquire knowledge on commercial mass multiplication of forest tree species. The participants shared their views with Smt. Leela Rosi, Officer Plantation and Shri. Malaimuthu, Deputy Manager R&D. In the valedictory session, Dr. N. V. Mathish, Head, PBT&C presented the welcome address. The participants gave their feedback on the training program. Overall, they expressed their satisfaction of the training program. Smt. K. Shanthi, CTO, Training in charge, presented the report of the training programme. The Director, Dr. C. Kunhikannan in the valedictory address assured that the Institute would support Maharashtra Forest department in research activities. The training ended with vote of thanks by Smt. C.V. Vijayam, TO, Training in charge, IFGTB.

### Inaugural session



Hands on training





Field visit TNPL, Karur



Certificate distribution



Valedictory session

