#### TRAINING CUM DEMONSTRATION ON "BIO-FERTILIZER PRODUCTION AND APPLICATION IN NURSERY AND FIELD"

## Venue: Interpretation Hall, State Forest Department, Kolli Hills Range, Kolli Hills, Namakkal District, Tamil Nadu

Date: 23-10-2018

## Training Coordinator: Dr. V. Mohan, Scientist-G, Forest Protection Division, IFGTB, Coimbatore

## Funding Agency: Tamil Nadu State Planning Commission (TNSPC), Govt. of Tamil Nadu, Chennai

Bio-fertilizers are ready-to-use carrier based formulations of beneficial microorganisms which are applied to seed, root or soil. They mobilize the essential nutrients by their biological activity, and help to enrich the soil micro-flora and in turn the soil health. Major focus is on the production of efficient and sustainable bio-fertilizers for crop plants wherein; inorganic fertilizer application can be reduced significantly to avoid further pollution. The Institute of Forest Genetics and Tree Breeding (IFGTB) has identified different beneficial microbes such as Plant Growth Promoting Rhizobacteria (PGPR) and Arbuscular Mycorrhizal (AM) fungi from different agriculture and forest ecosystems in the Kolli Hills, Namakkal District, Tamil Nadu funded by the Tamil Nadu State Planning Commission (TNSPC), Govt. of Tamil Nadu. These beneficial microbes have been mass produced and applied to various economically important medicinal plants and forestry tree species and found enhanced growth and biomass in nursery. These beneficial microbes particularly, the Arbuscular Mycorrhizal (AM) fungi as bio-fertilizers are being utilized for application to different agricultural, horticultural and forestry crops for enhancement of productivity. To achieve this target as part of the research programme, the IFGTB has taken up a Training cum Demonstration on "Bio-fertilizer Production and Application Methods in Nursery and Field" to different stake holders of Kolli Hills, Namakkal District, Tamil Nadu. The training has been funded by TNSPC, Govt. of Tamil Nadu, and the first training has been conducted on 23-10-2018 at Interpretation Hall, State Forest Department, Kolli Hills Range, Kolli Hills, Namakkal District, Tamil Nadu. A total of 120 participants including SFD Officials, Farmers, Women Self Help Groups, Tribal Womenfolk, Forest Protection Committee members, Tree Growers and NGOs of Kolli Hills attended the training. A training manual on "Biofertilizers – Importance, Techniques, Production, Maintenance and Application in Nursery and Field" in Tamil was also supplied to all the participants.

Welcome address and overview of the training programme was delivered by Dr. V. Mohan, Scientist – G and Training Coordinator, IFGTB, Coimbatore. He explained about the applied research works carried out in Kolli Hills and reported different kinds of beneficial microbes in agriculture and forest ecosystems under the project funded by the Tamil Nadu State Planning Commission, Govt. of Tamil Nadu and also provided details about the importance of the training on bio-fertilizers. Shri. Sakthivel, Asst. Conservator of Forests, Namakkal, spoke on the importance of using organic manures and bio-fertilizers in food production.

The Chief Guest of the function, Dr. R. Kanchana, I.F.S., District Forest Officer, Namakkal Forest Division, released the training manual and inaugurated the training programme. During her inaugural address, she highlighted various causes of chemical fertilizers used in agriculture and horticulture production and they pose environmental hazards and different ill health problems to human kind. She suggested that use of organic manures and bio-fertilizers in agriculture, horticulture and forestry will not only improve the yield but also help in environmental protection. Dr. Kanchana also added that organically produced vegetables, fruits and food grains are available in the market for ready use by the people and this training will provide a good opportunity to the people of Kolli Hills to learn much about the different kinds of bio-fertilizers and their application methods. She requested that all the participants should utilize this training and learn various techniques about the use of bio-fertilizers and organic manures in their nursery and field. Finally, she thanked the Head, Land Use Division, State Planning Commission, Govt. of Tamil Nadu and the Director, Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore for providing funding to organize this training programme for the betterment of the people of Kolli Hills, Namakkal district.

Dr. V. Mohan, Training Coordinator made a power point presentation and explained in detail about different kinds of bio-fertilizers, their importance, methods of

production, maintenance, and application in nursery and field for better production. Hands on training about production and application of bio-fertilizers were also imparted to the participants during the training. Dr. V. Mohan and Dr. A. Balu answered the queries raised by participants relating to diseases and pests problem on agricultural and horticultural crops also during interactive session of the training.

The Chief Guest distributed the certificates and bio-fertilizer packets to all the participants. The training was ended with vote of thanks by Dr. A. Balu, Scientist-G and Head, Forest Protection Division, IFGTB, Coimbatore.



Welcome address by Dr. V. Mohan, Scientist-G and Training Co-ordinator, IFGTB Coimbatore



Felicitation address by Shri. Sakthivel, ACF, Namakkal Forest Division



Releasing Training Manual by the Chief Guest Dr. (Smt.) Kanchana, I.F.S., District Forest Officer, Namakkal, Tamil Nadu





Inaugural address by the Chief Guest Dr. (Smt.) R. Kanchana, I.F.S., District Forest Officer, Namakkal, Tamil Nadu







Participants (Farmers, Women Self Help Groups, Tree Growers and SFD Officials) attended the training at Interpretation Centre, Kolli Hills, Namakkal District, Tamil Nadu







Lecture about Bio-fertilizers and its application methods by Dr. V. Mohan, Scientist-G & Training Cordinator, IFGTB



Demonstration about AM fungal bio-fertilizer production by Dr. V. Mohan, Scientist-G & Training Coordinator, IFGTB





Interaction about Bio-fertilizers and their application and feedback from the participants



# AM fungal Bio-Fertilizers developed by IFGTB and supplied to all the participants attended the training at Kolli Hills, Namakkal District



Certificate and Bio-fertilizer distribution by the Chief Guest, Dr. (Smt.) R. Kanchana, I.F.S., District Forest Officer, Namakkal







Certificate and Bio-fertilizer distribution by the Chief Guest, Dr. (Smt.) Kanchana, I.F.S., District Forest Officer, Namakkal



Vote of Thanks by Dr. A. Balu, Scientist-G and Head, Forest Protection Division, IFGTB, Coimbatore



Training cum demonstration on "Bio-fertilizer production and application in nursery and field" held at Interpretation Centre, Kolli Hills Range, Kolli Hills, Namakkal District