## Institute of Forest Genetics and Tree Breeding Coimbatore-641 002

## 3<sup>rd</sup> Research Scholars' Meet 04-10-2018

The third meeting in the series of research scholar's presentations' was held on 04.10.2018 at 4.30 PM.



The Director, Dr. Mohit Gera, IFS, addressing the students, informed them about the interest shown by various colleges and universities in entering into MoU with the Institute to increase their footprint in research in forestry. He asked the scholars to utilise the facilities in the best possible way as it is an opportunity for them for their further career. Speaking on the need for specific contributions by the scholars in the facelift of the Institute, Director suggested initiating and maintaining bonsai plants in the Botanical Garden of IFGTB. He requested the Head, Forest Ecology and Climate Change Division, Dr C. Kunhikannan to plan the modalities for arranging a student corner in the Botanical Garden. Emphasising the need for a healthy social life in addition to the professional side, he suggested that the students could plan for a cultural evening, which would be co-ordinated by Dr Kannan CS Warrier. He also expressed concern over the low number of publications arising out of the research works carried out by the students. He advised the students to attempt one paper in six monthly intervals. Support in the form of data analysis, scientific writing could be provided by the Student Co-ordination team. It was suggested that a social media group could be formed for effective communication of information.

This was followed by the presentations. Shri S. Krishnamoorthy gave a very creative presentation of the pathological problems in Casuarinas. Simulating the pathological effects on the bamboo culms in the lawn, he made the audience get a real feel of the disease conditions in the field. He also demonstrated how disease free plants are selected in the field for trait based breeding programmes.



Mr Krishnamoorthy explains the process of pathogenesis in Casuarina using the models developed on the bamboo culms

Ms Prasanna delivered a talk on the phytodiversity of Singanallur lake. Introducing the audience about biodiversity, and the need for its conservation, she moved on to explain how the urban lake in Coimbatore, a home for many migratory birds is being adopted by the Corporation, for improving its biodiversity richness. IFGTB, which plays a role in the restoration of flora, attempted to understand the species richness as the first step. The Institute has identified about 400 species in the area, which is quite rich considering the human interferences including the presence of a railway track. She described the Miyawaki method of planting trees which involves planting different types of trees close together in a small pit. By closely planting many random trees in a small area it enriches the green cover and reinforces richness of the land. Answering to queries on the species adopted for planting,

she stated that care has been taken to ensure that species observed in the area have been introduced. She also offered suggestions for further protection of the urban landscape.

Mr. CH Shaju described the *Korangadu* system practised in Tamil Nadu. A unique system, *Korangadu* is recognized as Globally Important Agricultural Heritage System (GIAHS) by Food and Agriculture Organization of the United Nations (FAO). He informed the audience that this traditional grazing land can be seen only in the semiarid tract in the districts of Erode, Karur and Dindigul. A combination of grasses, tree legumes, fenced with live thorny shrubs, this is the breeding tract of "Kangeyam" cattle, native breeds of sheep ("Mayilambadi" breed) and goats. *Acacia leucophloea* is one tree legume, found naturalised in the area, which supports the system. A tradition ecosystem, this unique system is being supported through improvement of the tree legume by IFGTB.

The discussions on the presentations mainly focussed on the need for protecting our natural resources from the vagaries of climate change, enhance the carbon sequestration potential of our genetic resources and efforts for enhancing rural livelihood. There was active participation from the scientists and students. The meeting ended with the selection of three presenters for the next session.



Director addressing the students



Open Discussion



Ms Prasanna explaining the work at Singanallur Lake



Mr Shaju discussing on Korangadu systems