

Dr. S. Kedharnath Memorial Lecture (KML-2014)

Dr. S. Kedharnath Memorial Lecture was conducted in the Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore, on 9th June 2014. The programme was started with an invocation by Dr. Kannan C.S. Warriar, Scientist-E. Shri T. P. Raghunath, IFS, Group Co-ordinator (Research), welcomed the gathering. Dr. N. Krishna Kumar IFS, Director gave an introduction to Dr. S. Kedharnath Memorial Lecture. Dr. B. Nagarajan, Scientist-F and Organizing Secretary gave an overview on S. Kedharnath's contribution to Forest Genetics in India.

Dr. Om P. Rajora, Professor, Faculty of Forestry and Environmental Management, University of New Brunswick, Canada delivered the memorial lecture (2nd memorial lecture) on "*Sustainable Management of Forest Genetic Resources under Changing Climate and Environmental Conditions*". Prof. Rajora was a Scientist in the erstwhile Indo-Danish Project on Seed Procurement and Tree Improvement (IDPSPTI) functioned under the Forest Research Institute (FRI), Dehra Dun. He had started his research career under Dr. S. Kedharnath, in the Genetics Division of FRI, Dehra Dun.

During his talk, Prof. Rajora stressed the need to understand genetic/genomic basis of responses and adaptation of forest trees to changing climate and environmental conditions, so that measures to mitigate the negative impacts of climate and environmental changes could be developed. He opined that, forest genomics and tree improvement research and their applications provide excellent opportunities to address these crucial needs. He highlighted the Spruce Genomic Programme undertaken by his team in University of New Brunswick, Canada. Under this programme, they identified and characterized the genes expressed differently in response to elevated CO₂, drought and co-stressed

conditions in Black Spruce (*Picea mariana*) and studied their relationships with physiological traits. The mapping of quantitative trait loci for biomass allocation and eco-physiological traits related to growth and adaptation to climate change were also carried out in this species. He also explained the research work done in Red Spruce (*Picea rubens*) in which they identified genes under natural selection in response to air pollution and involved in local adaptation.

Dr. Om P. Rajora offered his technical support and guidance for developing similar research programmes on forest genomics in the context of climate change and physiological stress. He also underscored the need to conceptualize multi-institutional projects for the management of Forest Genetic Resources in India.

About 100 participants, including the Director, Officers, Scientists, Scientific Staff and Research Scholars of IFGTB; Director and Scientists from Salim Ali Centre for Ornithology and Natural History (SACON), Coimbatore, Head of Office, Botanical Survey of India (Southern Circle), Coimbatore, Principal, Forest School, Walayar, Kerala, Deputy General Manager, Tamilnadu Newsprint and Papers Ltd. (TNPL), Karur; faculty and students from Tamil Nadu Agricultural University (TNAU), Coimbatore, faculty and students from Vanavarayar Institute of Agriculture, Pollachi and students of local colleges / universities attended the memorial lecture.

Shri K. Rajnath and Smt. Pushpa Rajnath, the son and daughter-in-law of Dr. S. Kedharnath also participated in the programme.

The programme ended with vote of thanks proposed by Dr. K. R. Sasidharan, Scientist-E.



Invocation



Dr. N. Krishnakumar, IFS, Director addressing the gathering



**Shri T.P. Raghunath, IFS, Group Co-ordinator (Research)
delivering the welcome address**



Shri K. Rajnath, S/o Dr. S. Kedharnath addressing the gathering



Prof. Om P. Rajora, delivering Dr.S.Kedharnath Memorial Lecture-2014



View of the gathering