

**HYBRID BREEDING: RELEASE OF FULLSIB TEST SEEDLOTS OF  
EUCALYPTS AND CORYMBIA TO TAMIL NADU NEWSPRINT AND PAPERS  
LTD. and ITC LTD. BY IFGTB, COIMBATORE.**

The genus *Eucalyptus* and *Corymbia* comprises an array of forest genetic resources adapted to very different habitats. In the case of eucalyptus based on extensive provenance testing five sublines consisting forty provenances have been short-listed for Indian conditions. While testing in *Corymbia* is at its infancy there are reports of putative hybrids from FRI, Dehradun. This has been possible from past experience with the species in several countries to determine which seed sources are among the best for developing base and breeding populations. Paper mills such as Tamil Nadu Newsprint and Papers Ltd., (TNPL) and ITC Ltd., that are involved in large scale industrial forestry are on the constant lookout for genetically improved material that would provide higher biomass and yield under marginal land conditions. In the recent past short pedigreed clones of Eucalypts has gained popularity in Industrial forestry. Paper mill consortia in the country have raised the yield of Eucalyptus from 7m<sup>3</sup>/ha/yr derived of untested origin to 20m<sup>3</sup>/ha/yr from selected clones of short pedigree. To develop pedigrees in any given crop the time tested procedure is controlled hybridization.

During 1996, the Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore with the technical support of Australia Tree Seed Center (ATSC), CSIRO, Australia initiated a genetic improvement program in *E.tereticornis* and *E.camaldulensis* to widen the genetic base. Experiments were carried out to develop di-hybrid combinations such as *E.camaldulensis* x *E.tereticornis*, *E.tereticornis* x *E.grandis* and *E.tereticornis* x *E.alba* and *E.tereticornis* x *E.urophylla* were developed and tested in the R&D paper testing laboratories of Messrs TNPL Ltd., and Messrs. ITC Ltd., The uniqueness of the phenotypes and improved pulp yield of the dihybrids elicited interest in the above said consumers. Two collaborative research projects aiming production of dihybrid seeds in Eucalyptus and *Corymbia* were initiated by IFGTB with Messrs.TNPL ltd and Messrs.ITC Ltd., during 2010 and 2011 respectively. While TNPL is the largest profit running public corporate Messrs.ITC is largest and the oldest among the private run paper industries. The projects are being funded by the above said R&D units of the above said public and private corporate. The projects were envisaged to deliver hybrid seeds for developing high yield hybrid selections to support the ever increasing demand of paper pulp.

Very recently in order to improve the visibility of the Council Dr.V.K. Bahuguna IFS., the Director General of ICFRE has implemented the *'DIRECT TO CONSUMER PROGRAM'*. This is an effort to serve farming communities/forest based industries and other stake holders through ICFRE research findings. The DG has been constantly motivating Scientists to develop products for consumers and hand over them directly to user groups so that consumers can access products without any time delay. As a pioneering event IFGTB, Coimbatore has made effort to supply hybrid seeds to Industrial forestry to widen the scope of selection and improve productivity. The research programs are supported by the industries themselves.

The Director, IFGTB had convened a stakeholder's meeting on validation of Descriptors of Casuarinas and Eucalypts on June 15, 2012 funded by PPVFR, Government of India. In the presence of Dr. Dipal Roy Choudhury, PPVRA., Government of India and twelve other paper mills and forest development corporations dihybrid seedlots of Eucalyptus and *Corymbia* were handed over to the R&D of TNPL and ITC., Ltd.,. Dr. N. Krishnakumar, Director, IFGTB handed over eleven eucalyptus inter and intra specific hybrid seedlots to Mr.R.Seenivasan, Assistant General Manager, Plantations and Dr.P.Chezhan, Senior Manager Plantations, TNPL.,. Also, Director, IFGTB handed over six seedlots of *Corymbia torelliana* x *C.citriodora* to Dr. H. D. Kulkarni Principal Scientist, ITC., Bhadrachalam and his team consisting of Dr. Kamalakannan, Dr.Santhosh and Dr.Roby represented of the ITC R&D were also present. The ITC and TNPL collaborative research projects will be continuing until 2014. Dr. B. Nagarajan is the PI to both the projects, being a collaborative effort the industrial team of TNPL is led by Mr. Seenivasan, AGM plantations and the ITC collaborative team is led by Dr.Mohan Varghese.



**Dr. N. Krishna Kumar, Director, IFGTB handing over Eucalyptus hybrid seeds to Mr.R. Seenivasan, Assistant General Manager, Plantations TNPL Ltd.,**



**Dr. N. Krishna Kumar, Director, IFGTB handing over Corymbia hybrid seeds to the ITC R&D Team led by Dr. H.D. Kulkarni.**