







19-20 December 2011

National Symposium

on

Assessment & Conservation of Forest Genetic Resources through Biotechnological Interventions





Institute of Forest Productivity

(Indian Council of Forestry Research and Education) Aranyodaya, NH-23, Lalgutwa, Ranchi-835303

BACKGROUND

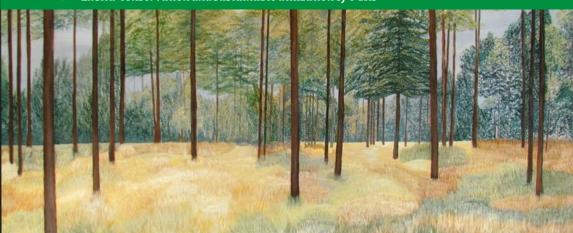
Forests are the single most important repositories of terrestrial genetic diversity. Forest tree species are typically long-lived, highly heterozygous organisms, which have evolved natural mechanisms to maintain high levels of intraspecific variation, such as high rates of outcrossing, and dispersal of pollen and seeds over wide areas. These mechanisms combined with native environments that are often variable, in both time and space, have constituted to evolution of forest tree species into some of the most genetically variable organisms in existence. Intraspecific genetic variation is needed to ensure the future adaptability of the species, as well as allowing for artificial selection and breeding programmes. Accordingly, benefits from forests and trees will only be sustained if forest genetic resources remain available.

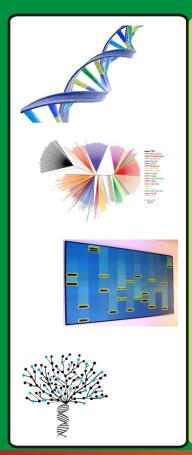
The high levels of genetic variation that are present within many tree species can be beneficially developed and used by foresters and tree growers. Species and provenances may be identified to provide some important goods and services required even without intensive selection and improvement or major modification of external environment. Genetic variability in forest trees serves as building blocks for future evolution, selection and human use in breeding for a wide range of sites and utilities. Therefore, forest genetic resources constitute an intergenerational recourse of vast social, economic and environmental importance. However, the threats to forest genetic resources are potent, immediate and continual including deforestation and changes in land use and management practices, pollution and climate change, as well as undocumented and uncontrolled movement of germplasm. Conservation of forest genetic diversity is essential for sustaining the productive value of the forests, and for maintaining the health and vitality of forest ecosystems and thereby maintaining their protective, environmental and cultural roles. Prudent and timely conservation measures and programmes based on best available information and basic conservation practices can make a vital contribution to conservation of forest genetic resources.

Advances in biotechnology, especially in the area of *in vitro* culture techniques and molecular biology provide some important tools for improved conservation and management of forest genetic resources. Rapid advances in DNA technology have stimulated the development of novel molecular technologies which allow the screening of germplasm for functional diversity and identify variation at an early developmental stage without the need for performing the time-consuming evaluation tests, such as pathogen resistance screening. Despite the progress made in recent years, there remain many unresolved questions especially in tropical broad-leaved species, which need immediate attention of the researchers. Hence, the Institute of Forest Productivity, Ranchi is organizing *"National Symposium on Assessment & Conservation of Forest Genetic Resources through Biotechnological Interventions"* on 19-20 December 2011. The event will also commemorate International Year of Forests 2011.

THEMES

- * Priorities, approaches and strategies for assessment and conservation of Forest Genetic Resources
- * Characterization of genetic diversity among and within populations/species using modern tools and techniques
- * Conservation of FGRs in their natural environment /habitats : Scientific and participatory management
- * Exsitu conservation and sustainable utilization of FGRs





About Ranchi

Ranchi the capitol city of Jharkhand is located on the southern part of the Chotanagpur plateau which forms the eastern edge of the Deccan plateau. Ranchi is endowed with ample forests and mineral resources, a prominent political, commercial, cultural and education hub of eastern India often referred to as the "City of Waterfalls", due to the presence of numerous large and small falls of around the close vicinity.

Located about 1170 kms from New Delhi and 446 km from Kolkata, the city is well connected to major cities of the country by road, rail and air. There is direct air connectivity from New Delhi, Kolkata and Mumbai.

Ranchi has a hilly topography and its combination with dense tropical forests ensures that it enjoys a comparatively moderate climate compared to the rest of the state. Previously, it was accorded a 'hill station' status during the British rule. The weather of Ranchi is expected to remain cold but pleasant with day and night temperatures ranging from 23° C to 10° C during the period of Symposium. The delegates are advised to bring some woolen clothing.

Boarding and Lodging

The participants will normally be housed in well furnished Rest House of the Institute or nearby institutions as per the availability of the accommodation. Those who wish to stay in hotels may either book their accommodation directly or seek the help of the organizers. A variety of hotels are available in Ranchi at tariff from Rs. 400 to 4000 per night.

CALL OF PAPERS

Papers are invited on the themes identified for the Symposium. Abstracts not exceeding 300 words including a concise title, names and affiliations of the author(s) and 4-5 key words; neatly typed on A-4 size paper (MS Word, 1.5 spacing and Times New Roman font throughout) must reach to Organizing Secretary (sanjaysingh@lycos.com; sanjaysingh@icfre.org) or Director, IFP Ranchi (dir-ifp@icfre.org) preferably through e-mail on or before 20th November 2011. Intimation about the accepted submissions will be provided before 25th November 2011. Full papers must be submitted before 5th December 2011.

Important Dates

1st Announcement: 1 October 2011 Abstract Submission: 20 November 2011 Abstract Acceptance: 25 November 2011 Full Paper Submission: 5 December 2011

About The Institute

The Institute of Forest productivity, Ranchi is a premier forestry research institution of eastern India under the aegis of Indian Council of Forestry Research and Education, Dehradun (Ministry of Environment and Forest, Government of India). The territorial jurisdiction of the institute encompasses states of Jharkhand, Bihar, West Bengal and Orissa with more than 20% of total geographical area of the country, six agro-ecological zones and eight main forest types. IFP is situated in picturesque surroundings at Lalgutwa on Ranchi-Gumla National highway (NH-23) about 8 km from Ranchi railway station and 12 km from Birsa Munda airport.

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DELEGATE REGISTRATION FORM

Name: Designation: Institution: Address:
City:
Theme:
Accommodation: YES/NO

SIGNATURE

Send the completed form along with the abstract on or before 20 November 2011 to The Organizing Secretary (sanjaysingh@lycos.com; sanjaysingh@icfre.org). Copies of the form may also be used.

REGISTRATION FEE

- A. Scientists/Officials/ Professionals: Rs.
- B. Research scholars/Students: Rs. 800
- C. Accompanying Person: Rs. 500

On Spot registration fee will be Rs. 1500 and Rs. 1000 for category A and B,

Contact the organizing Secretary for the mode of fee payment.

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