

## BACKGROUND

Conifers are the important class of the gymnosperms with 6 living families representing nearly 50 genera and more than 560 species and have been contributing immensely both to the productivity of forests and conservation of sites. Conifers are identified as erect evergreen trees to grow as dense forests, forming a characteristic feature of vegetation of the temperate climate. Some conifers like Junipers grow in extreme climatic and edaphic conditions, either beyond the limit of the tree line (*J. communis* var. *nana*), on rocks (*J. prostrata*) or in the arid cold desert (*J. macropoda*). Nonetheless, under suitable conditions they grow luxuriantly well and produce exceptionally higher yield. The group is also identified with the tallest (*Sequoia sempervirens*), oldest (*Pinus aristata*) and gigantic (*Sequoidendron giganteum*) trees. Whereas species like *Pinus gerardiana* yield highly priced edible nuts.

The common conifers like *Larix*, *Abies*, *Pinus* and *Cryptomeria* have particularly been improved genetically for productivity. But a large amount of endemism also exists in the group with some genera and species confined to Japan, China and the Himalayan region. At the same time about 140 species (16 %) of the group are known as threatened.

Amongst all forest species, conifers have maximally been improved genetically and enabled establishment and development of monocultures or plantations with high productivity. Utilization of heterosis through intra and inter specific hybridization has contributed immensely towards higher productivity. Japanese, Korean, and Siberian larch hybrids, and hybrids of pine in Korea have been in use for almost a century now. Hence it is imperative to review the progress of conifer breeding and improvement and also define the challenges that lie ahead.

The Symposia therefore would revolve around the following broad sessions :

Session I	:	Genetics and breeding
Session II	:	Role of molecular markers in improvement
Session III	:	Endangered species and conservation
Session IV	:	Silvicultural and management
Session V	:	Reproductive biology and seed orchards
Session VI	:	Industrial utilization

### Location and Climate :

Dehradun, the capital of the newly formed state of Uttaranchal, lies at the center of the Doon valley (about 600 m above msl), bounded by the Himalaya in the north and Shivaliks in the south. The city is approximately 260 km from New Delhi and is well connected through road, rail and air. The city is a proud host to numerous institutions and research centers of national importance such as Survey of India, Botanical Survey of India, Indian Institute of Remote Sensing and Indian Military Academy. The Forest Research Institute (FRI) is situated on the Chakrata road about 5 km from the railway station and has all the necessary facilities including guest house, hostels well-equipped seminar and conference hall. The weather during September is normally pleasant with temperature ranges of 15 to 30° C with occasional showers. Normally light clothing is required during this month but sometimes light woollens are required.

### Boarding/Lodging :

Accommodation is available in the FRI campus in the Rest Houses and Scientist Hostels at a nominal cost.

However, the participants who wish to stay in hotels will have to meet the cost of the stay. The organizers shall render assistance for reservation of the hotels, etc. Accommodation in the Guest House will be provided on first come first serve basis. There are good multi-cuisine hotels available in the city ranging from US\$ 40 to US\$ 100. (Please note that the registration fee does not include accommodation charges)

### Contact persons :

Dr. D. K. Khurana, Organising Secretary  
Dept. of Tree Improvement & Genetic Resources  
Dr. Y. S. Parmar University of Horticulture & Forestry  
Nauni-Solan-173 230, Himachal Pradesh, India

Phones : (91)-(1792)-252314 (Work), 229436 (Home)  
(91)-1792-252242, 252354 (FAX)  
E-mail : khuranasolan@yahoo.com or  
ists\_nauni@rediffmail.com

OR

Dr. H. S. Ginwal, Local Organising Secretary  
Head, Division of Genetics & Tree Propagation  
Forest Research Institute,  
P.O. IPE  
Dehradun - 248 195, Uttaranchal, India  
Phones : (91)-(135)-2755473 (Work), 2751766  
(Home) (91)-1792-252242, 252354 (FAX)  
E-mail : ginwalhs@icfre.org or  
ginwalhs@rediffmail.com

## Submission of Abstracts

Intending participants are invited to submit one page abstract (s) of the paper (s) and/or poster (s) in English for presentation at the symposium. The abstracts may please be sent by surface or electronic mail to the organizing secretary before **May 31, 2006** with following details:

- \* Title of paper
- \* Author (s)
- \* Address for correspondence (e-mail address)
- \* Name of the author/ presenting paper (underlined)
- \* Passport No., place of issue, date of issue, expiry date (for foreign delegates only)
- \* Affiliations of author (s)
- \* Abstract (300 words)
- \* Key words (4-5)

Full-length paper/articles for selected abstracts to be submitted positively by July 31, 2006 electronically (CD/ 3.5" floppy diskette) typed in Times New Roman (12 font size), along with a hard copy. The full-length papers/articles would be edited by the group of eminent researchers and published in the proceeding of the symposium.

### Registration Fee (nonrefundable/nontransferable)

Participants/delegates :	US\$ 150
Participants/delegates (SAARC countries) :	Rs 3000
Accompanying person :	US \$ 100

The registration fee may please be sent to the Organizing Secretary (Conifer-Asia-2006), Indian Society of Tree Scientists, UHF Campus, Nauli - Solan – 173 230, H.P. Registration fee includes symposium material, sessional tea and local transport. Boarding & lodging for the participants and the accompanying person(s) would be arranged on request with prior payment of at least one day in advance. However, the details of such a participant

should reach the organizers well in advance. Field trip to Pine forests of Mussorie, or Cedrus-Abies-Picea coniferous forest of Kullu-Manali-Rohtang Pass or Chandigarh-Shimla-Narkanda can be arranged on Participants request through Indian Tourism Development Corporation. The participants can visit the ITDC site for other tours and bookings.

### International Organizing Committee

Chairman	-	Prof. Don K Lee
Convener & Co-Chairman	-	Sh. R.P. S. Katwal
Members	-	Dr. J. S. Samra
	-	Dr. S. S. Negi
	-	Prof. P.K. Khosla
	-	Dr. P.L. Gautam
	-	Prof. Jagmohan Singh
	-	Prof. Bailian Lee
	-	Prof Mark J. Dieters
	-	Prof. Hong Jusheng
	-	Prof. Meng-Zhu Lu
	-	Prof. Zin-Suh Kim
Organising Secretary	-	Dr. D. K. Khurana

### National Organizing Committee

Chairman & Convener	-	Sh. R.P. S. Katwal
Co-Chairman	-	Dr. S. S. Negi
Members	-	Dr. J. S. Samra
	-	Prof. P.K. Khosla
	-	Sh. R. A. Singh
	-	Dr. P.L. Gautam
	-	Prof. Jagmohan Singh
	-	Dr. Mohinder Pal
	-	Dr. H. S. Ginwal
	-	Dr. P. S. Pathak
	-	Sh. Surinder Singh
	-	Dr. K. S. Verma
	-	Dr. S. D. Bhardwaj
Organising Secretary	-	Dr. D. K. Khurana



# IUFRO – ISTS – FRI International Symposium on Breeding and Improvement of Asian Conifers during 20<sup>th</sup> Century

11<sup>th</sup> to 13<sup>th</sup> September, 2006

at

Forest Research Institute, Dehradun, UA



Organized Under

IUFRO Working Party No. 2.02.23

(Breeding and Genetic Resources of Asian Conifers)

Organized by

Indian Society of Tree Scientists, Solan &  
Forest Research Institute, Dehradun