

14 - 18 November 2011
Porto Seguro, Bahia State, Brazil

IUFRO Working Group 2.08.03 Improvement and Culture of Eucalypts

"Joining silvicultural and genetic strategies to minimize *Eucalyptus* environmental stresses: from research to practice"

Invitation

Hi all!

We all know that the productivity of each rotation of *Eucalyptus* plantation worldwide has increased by 10 to 20%, as a result of major advances in silviculture and genetics. But, can we continue increasing yields for the next rotation, and the one beyond that? Yes, but only if we develop fundamentally new ways to combine silviculture and genetics research, and applied them via adequate planned operations on the lookout for economical, social and environmental sustainability.

So, we hope you can join the IUFRO *Eucalyptus* meeting in Porto Seguro, Bahia State, Brazil, for the next major opportunity to join in developing these new links between *Eucalyptus* silviculture and genetics.

As in previous IUFRO *Eucalyptus* meetings (Bordeaux 1990, Hobart 1995, Salvador 1997, Valdivia 2001, Aveiro 2004 and Durban 2007), this will be a great opportunity for scientists, foresters and plantation managers to lecture, discuss and foresee ways to improve our understanding and management of eucalypt forests.

Eucalypt plantations constitute approximately 15% of global plantations, and are being grown for a wide range of end-products for industrial and domestic uses. Currently, eucalypts are most often established replacing pasture or crops in tropical and subtropical areas, being a significant component of the carbon and water balances of these landscapes, with ecological, economical and social interfaces.

Eucalypt is the dominant and most productive planted forest in Brazil, covering around 3.5 million ha, of which 60% is certified according to international standards. Plantations are grown on short- and medium-rotations for the production of pulp, charcoal, fuelwood, reconstituted and solid wood. The Brazilian forestry sector produces approximately 4% of the gross domestic product and employs about 4.5 million people. At the early establishment of the forest plantations, on the second half of the sixties, the eucalypt yield was $10 \text{ m}^3 \text{ ha}^{-1} \text{ yr}^{-1}$, and many environmental problems were not adequately addressed. Now, four decades later, as result of investments in research and technology the average productivity is close to $40 \text{ m}^3 \text{ ha}^{-1} \text{ yr}^{-1}$, and eucalypts forests are included in a more systemic view, ranging from wood production to ecosystem biodiversity.

The Theme

Eucalypt forestry fulfils multiple functions in landscapes within different ecosystems, and in all of them, some level of environmental stress is present, as a physical (water, temperature, nutrients) or biological (pests, diseases and competing vegetation) constraint, or both. Beyond that, climate changes can cause the decline in forest productivity due to the amplification of such stresses. The search, test and selection of appropriate genotypes and site management practices, improving the resource-use-efficiency of the eucalyptus forests, are imperative for sustain productivity and maintain environmental services of these forests for the generations to come.

With all that in mind, the central goal of this Conference will be to highlight how silviculture and genetic knowledge can be used in a predictive way to guarantee the yield of the plantations, and health of the ecosystems in the long run, with extra challenges due to the future climate and economic uncertainties.

Technical Program

It will comprise formal sessions for each major theme related with eucalypt production: genetic, silviculture, ecophysiology, environment and economics. The synthesis and application of such concepts and researches into practical and predictive tools are, as said, an important aspiration of this conference. Each theme will be introduced by a keynote speaker presenting an overview of the subject area of that session, follow by oral presentations and posters. The conference

Field Trip

An one-day field trip to visit high productive Eucalyptus forests ($> 60 \text{ m}^3 \text{ ha}^{-1} \text{ yr}^{-1}$) will take place at the middle of the meeting (Wednesday), and for those able to stay longer, a post-meeting Brazilian *Eucalyptus* Field Trip is planned to expose the participants to direct contact with practices and experiences of local foresters and researchers, as well as our traditional landscapes and culture.

More Information

euciufo@esalq.usp.br

Soon will be available the webpage.

Conference Sponsors

